

City Council Report 915 I Street, 1<sup>st</sup> Floor Sacramento, CA 95814 www.cityofsacramento.org

File ID: 2019-01204

September 10, 2019

**Consent Item 19** 

## Title: Cooperative Purchase Agreement: Replacement Fire Apparatus [Published for 10-Day Review 08/29/2019]

Location: Citywide

**Recommendation:** Pass a Motion: 1) approving the use of the Public Procurement Authority/National Purchasing Partners Fire Rescue GPO (NPPGov FRGPO) cooperative purchase agreement with Pierce Manufacturing, Inc. (Contract No. VH11574) for the purchase of two pumper trucks from an authorized dealer, Golden State Fire Apparatus, Inc., for an amount not to exceed \$1,477,253; and 2) authorizing the City Manager or the City Manager's designee to execute the purchase specified above.

**Contact:** Alison Kerstetter, Program Specialist, (916) 808-1163; Mark Stevens, Fleet Manager, (916) 808-5869, Department of Public Works

Presenter: None

## Attachments:

1-Description/Analysis 2-Agreement

## **Description/Analysis**

**Issue Detail:** The Department of Public Works, Fleet Management Division, has a customer requirement to purchase two pumper trucks for the Sacramento Fire Department.

**Policy Considerations:** The recommendations in this report are in accordance with City Code Chapter 3.56 and Sacramento City Council Rules of Procedure, Chapter 7, Section E.2.d, which requires additional posting time for labor agreements and agreements greater than \$1 million. This item was published for 10-day review on August 29, 2019.

## Economic Impacts: None

**Environmental Considerations:** No environmental review is necessary because the recommendations in this report involve the purchase of vehicles and are not considered to be a project in accordance with Section 15378(b)(2) of the California Environmental Quality Act guidelines.

**Sustainability:** The recommended purchases are consistent with the updated Fleet Sustainability Policy, adopted by City Council on December 12, 2017 (Resolution No. 2017-0478).

## Commission/Committee Action: None

**Rationale for Recommendation:** After reviewing the available purchase options, the Fleet Management Division has determined that the NPPGov FRGPO cooperative purchase agreement with Pierce Manufacturing Inc. represents the most advantageous purchasing strategy. The contract was competitively bid nationally, and NPPGov FRGPO receives greater discounts from the manufacturer due to a higher purchase volume than the City would receive if issuing its own bid.

In an ongoing effort to maximize cost savings and staff resources, many government agencies share contracting efforts through cooperative purchasing. This procurement method increases pricing competitiveness and lowers capital costs through volume buying. When comparing the administrative costs of procurement, staff considers product research, source selection, specifications, advertising, staff reports, awarding, protest, and administration of the contract.

The City has used both regional and national cooperative purchase agreements to complement its own contracting initiatives. Cooperative purchasing enables City departments to evaluate a broader range of contracting opportunities and to share resources with other

jurisdictions. Cooperative purchasing also leverages internal and external resources to maximize cost savings opportunities for the City.

**Financial Considerations:** The recommended purchase, in a total amount not to exceed \$1,477,253 will be made from the Department of Public Works Fiscal Year (FY) 2019/20 operating budget (Fleet Fund, Fund 6501) and will be charged to the Fire Apparatus Equipment Project (F12000300). Sufficient funding exists in the Department of Public Works FY2019/20 operating budget and the Fire Apparatus Equipment Project (F12000300) to support the recommended purchases.

**Local Business Enterprise (LBE):** Pierce Manufacturing, Inc. is not a Local Business Enterprise. The minimum LBE participation requirement is waived for the City's use of cooperative purchase agreements that have been competitively bid, evaluated, and awarded by other governmental agencies that may or may not have similar LBE programs.





## **PROPOSAL PREPARED FOR**

**City of Sacramento** Pierce Manufacturing, Inc. Enforcer 1500 GPM Pumpers NPP Gov Fire Rescue GPO code 2.1 July 12, 2019

## SALES CONSULTANT

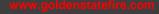
Ryan Wright Golden State Fire Apparatus, Inc. 7400 Reese Road Sacramento, CA 95828 916.330.1638 Office 916.613.3809 Cell ryan@goldenstatefire.com

## **PARTS, SERVICE & SUPPORT**

Golden State Emergency Vehicle Service, Inc. 7400 Reese Road Sacramento, CA 95828 916.330.1638 Office parts@goldenstatefire.com Page 4 of 221



## FIRE APPARATUS





## **PROPOSAL PREPARED FOR:**

**City of Sacramento** 5770 Freeport Blvd, Suite 2 Sacramento, CA 95822

Submitted Date:	July 12, 2019
Proposal Number:	90712-19
Expiration Date:	September 30, 2019
Sales Consultant:	Ryan Wright

We hereby propose and agree to furnish, after your acceptance of this proposal and the proper execution by the CITY OF SACRAMENTO, hereinafter called "Customer" and an officer of Golden State Fire Apparatus, Inc., hereinafter called "GSFA", the following fire apparatus and equipment, hereinafter called "Product":

#	Description		Unit Price	Extended Price
Α	Two (2) Pierce Manufacturing, Inc. Enforcer 1500 GPM Pumpers		738,680.68	1,477,361.36
В	Discount for NPP Gov FireRescue GPO model code 2.1		(32,300.00)	(64,600.00)
С	Discount For 100% Pre-Payment at Time of Order		(27,193.62)	(54,387.24)
<b>ENPPGov O</b>		SUBTOTAL	679,187.06	1,358,374.12
		8.75% State Sales Tax	59,428.87	118,857.74
		California Tire Fee	10.50	21.00

## PROPOSAL SUMMARY

This proposal includes the following items in accordance with the specifications hereto attached:

- Fire apparatus and equipment
- 100% performance bond
- Factory final inspection trip
- Pre-delivery inspection/services by GSFA
- Delivery to GSFA service center in Sacramento
- Final delivery from service center to Customer
- Demonstration and familiarization of the Product

738,626.43

1,477,252.86

California Tire Fee

GRAND TOTAL

## **PRODUCT COMPLETION**

Product shall be built in accordance with the specifications hereto attached, delays due to acts of God, strikes, war, or intentional conflict, failures to obtain chassis, materials, unusual weather conditions or other causes beyond GSFA's control not preventing, within approximately <u>365 to 395 CALENDAR DAYS</u> after receipt of this order and the acceptance thereof at our Sacramento, California office. Within thirty (30) calendar days after receipt of this order and acceptance thereof, GSFA shall submit to Customer a production schedule including tentative pre-construction conference, final inspection and final delivery dates.

## DELIVERY LOCATION

Product shall be shipped in accordance with the specifications hereto attached and be delivered to you at **<u>SACRAMENTO</u>**. **<u>CALIFORNIA</u>**. Proof of insurance must be demonstrated by the Customer to GSFA prior to transferring of the Product(s).

## **TERMS AND CONDITIONS**

**1. Payment Terms, 100% Pre-Payment at Time of Order** – If applicable, Customer shall pay the Grand Total within fifteen (15) calendar days of date on invoice to GSFA. Proposed delivery timeframe for the Product shall not begin until full payment is received. If payment is late, a daily finance charge of \$250.00 may be added to the final invoice until such payment is received. If payment is not made, \$54,155.88 plus state sales tax shall be added to the final invoice and due GSFA at time of delivery. Due to insurance liability, the Product(s) will not be left at the Customer's location without full acceptance and payment or prior written agreement between the Customer and GSFA.

**2. Multiple Unit Purchase** – If applicable, for any multiple unit purchase the Grand Total pricing is only valid if the quantity of Products being proposed are purchased at the same time, on the same Purchase Order (PO) or signed contract.

**3. State Sales Tax** – A sale occurs when the Customer takes title to or possession of an item (not when payment is received by GSFA). Consequently, this proposal is subject to the applicable state sales tax rate in effect when the Product is delivered to the Customer per the delivery terms. Customer is responsible for payment of any additional taxes required, likewise Customer is entitled to a refund if the tax rate is lowered!

4. Purchase Orders – If the Customer elects to issue a Purchase Order (PO) it shall be made out to: Golden State Fire Apparatus, Inc. – 7400 Reese Road – Sacramento, CA 95828.

**5. Proposal Expiration** – Unless accepted by the expiration date above, GSFA reserves the right to withdraw this proposal.

6. Cancellation/Termination – In the event this proposal is accepted and a signed Purchase Order (PO) or signed contract is issued and then cancelled or terminated by Customer before completion, GSFA may charge a cancellation fee. The following charge schedule based on costs incurred may be applied: (a) 10% of the Purchase Price after order is accepted and entered by GSFA; (b) 20% of the Purchase Price after completion of approval drawings, and; (c) 50% of the Purchase Price upon any material requisition. The cancellation fee shall increase accordingly as costs are incurred as the order progresses through engineering and into manufacturing. GSFA endeavors to mitigate any such costs through the sale of such Product to another purchaser; however, the Customer shall remain liable for the difference between the Purchase Price and, if applicable, the sale price obtained by GSFA upon sale of the Product to another purchaser, plus any costs incurred by GSFA to conduct any such sale.

**7. Stock / Demo Units** – If applicable, all stock/demo units are available for sale on an as is, first come and first served basis. The first Customer to issue a signed Purchase Order (PO) or signed contract shall obtain the Product!

8. Proposal Acceptance Statement – To ensure the above stated terms and conditions of this proposal and the specifications hereto attached are understood and adhered to, GSFA requires an authorized individual from the Customer to sign and date this proposal and include it with any Purchase Order (PO). Upon signing of this proposal, the stated terms and conditions of this proposal and the specifications hereto attached shall be considered binding and accepted by the Customer. No additional terms or conditions shall be binding upon GSFA unless agreed to in writing and signed by a duly authorized officer of GSFA. The terms and acceptance of this proposal shall be governed by the laws of the State of California.

Thank you for allowing Golden State Fire Apparatus, Inc. the opportunity to provide this proposal. If you have any questions regarding the options presented or need additional options please contact me.

Sincerely,

Ryan Wright Golden State Fire Apparatus, Inc.

I, \_\_\_\_\_\_, the authorized representative of <u>CITY OF SACRAMENTO</u>, agree to purchase the proposed Product(s) and agree to the terms and conditions of this proposal and the specifications hereto attached.

SIGNATURE: \_\_\_\_\_

DATE: \_

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Pierce.
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Customer: City of Depart	Sacramento Fire Bid Number: tment	622
Representative Wright,	t, Ryan Job Number:	
Requirements Manager:	Organization	: Golden State Fire Apparatus, Inc
•	er 1500 GPM Pumpers (D	
Chassis: Enforce	er Chassis	
Body: Pumpe	er, Medium, Galvanneal, 2nd Gen	
OptionCode Type Option	ProposalText	
0766611 Boiler Plates	s, Pumper Golden State Fire App Pierce® triple comb will describe in detail proposal will indicate proof of compliance w advertised specificati PIERCE MANUFACT one philosophy, "BUII reflected, in the final p Pierce Manufacturing has bu 33,900 on Pierce cus applications. Our App situated on approxima feet of floor space siti Our beliefs in high ett everyone with whom tenets by which we al convicted of price fixii market. Pierce has only one b product that meets yo In accordance with th the fire department, n Images and illustrativ publication, but are su reference only, and n standard equipment. <b>GENERAL DESIGN</b> To control quality, ens custom cab, chassis, painted in Pierce own weldment, the pumph system. <b>QUALITY AND WO</b> Pierce has set the pa building the highest q beginning and we der American Welding Sc welding follows Amer welding of aluminum. requirements for struu 7000 and is performe employees classified codes upon hire and d Society certified weld Pierce Manufacturing 9001. These standard specify the quality sysis installation and servic in addition to the Qua program to insure the That is just part of ou To demonstrate the q departments/municipz <b>DELIVERY</b> The apparatus will be while the apparatus will be while the apparatus sid remair and maintenance of tf <b>MANUAL AND SEF</b> At time of delivery, co provided. A permaner and type of fluids requilubrication, pump prin <b>SAFETY VIDEO</b> At the time of delivery vide	<ul> <li>URING was founded in 1913. Since then we have been building bodies wit LD THE FINEST". Our skilled craftsmen take pride in their work, which is rorduct. We have been building fire apparatus since the early "forties" givin over 75 years of experience in the fire apparatus market. Pierce will and put into service more than 62,500 apparatus, including more than tom chassis designed and built specifically for fire and emergency leton, Wisconsin facility has over 870,000 total square feet of floor space ately 105 acres of land. Our Bradenton, Florida facility has 300,000 square lated on approximately 38 acres of land.</li> <li>Incal standards are carried through in all of our commitments and to we do business. Honesty, Integrity, Accountability and Citizenship are glob. I live and work. Consequently, we neither engage in, nor have we ever bee ray, bid rigging, or collusion in any domestic or international fire apparatus variand of fire apparatus "Pierce", ensuring you are receiving top of the line our specification.</li> <li>e current edition of NFPA 1901 standards, this proposal will specify whether anufacturer, or apparatus dealership will provide required loose equipment en material in this proposal are as accurate as known at the time of labject to change without notice. Images and illustrative material is for any include optional equipment and accessories and may not include all edited and used manufacturing facilities. This includes, but not limited to the cab iouse module assembly, the chassis assembly, the body and the electrical RKMANSHP</li> <li>ce for quality and workmanship in the fire apparatus field. Our tradition of uality units with craftsmen second to none has been the rule right from the monstrate that ongoing commitment by: Ensuring all steel welding follows. Curret Welding Society standards A5.20-E7071. Furthermore, all as welders are tested and certified to meet the American welding. All aluminur ican Welding Society and ANSI D1.2-2003 requirements of ISO is sponsored by the Internation</li></ul>

ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus when fully loaded will not have less than 25 percent nor more than 50 percent on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle. The apparatus will meet NFPA 1901 acceleration and braking requirements.

## SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by Golden State Emergency Vehicle Service Inc by operating a Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within twenty five (25) miles of the fire department.

In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

Service parts for the apparatus being proposed can be found via Pierceparts.com which, is an interactive online tool that delivers information regarding your specific apparatus as well as the opportunity to register for training classes.

As a Pierce customer you have the ability to view the complete bill of materials for your specific apparatus, including assembly drawings, piece part drawings, and beneficial parts notations. You will also have the ability to search the complete Pierce item master through a parts search function which offers all Pierce SKU's and descriptions offered on all Pierce apparatus. Published component catalogs, which include proprietary systems along with an extensive operators manual library is available for easy reference.

Pierce Manufacturing maintains a dedicated service and warranty staff of over 35 personnel, dedicated to customer support, which also maintains a 24 hour 7 day a week toll free hot line, four (4) on staff EVTs, and offers hands-on repair and maintenance training classes multiple times a year.

#### LIABILITY

The successful bidder will defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the apparatus or any appliance furnished under the contract. INSURANCE PROVIDED BY BIDDER

## COMMERCIAL GENERAL LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of commercial general liability insurance:

## Each Occurrence \$1,000,000

Products/Completed Operations Aggregate \$1,000,000

Personal and Advertising Injury \$1,000,000

#### General Aggregate \$2,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form and will include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy will include Owner as an additional insured when required by written contract.

#### COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The successful bidder will, during the performance of the contract, keep in force at least the following minimum limits of commercial automobile liability insurance and coverage will be written on a Commercial Automobile liability form: Each Accident Combined Single Limit: \$1,000,000

## UMBRELLA/EXCESS LIABILITY INSURANCE

The successful bidder will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of umbrella liability insurance:

## Aggregate: \$3,000,000

Each Occurrence: \$3,000,000

The umbrella policy will be written on an occurrence basis and at a minimum provide excess to the bidder's General Liability and Automobile Liability policies. The required limits can be provided by one (1) or more policies provided all other insurance requirements are met.

Coverage will be provided by a carrier(s) rated A- or better by A.M. Best.

All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described polices be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as certificate holder.

## INSURANCE PROVIDED BY MANUFACTURER

#### PRODUCT LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following minimum limits of Product Liability insurance:

## Each Occurrence \$1,000,000

Products/Completed Operations Aggregate \$1,000,000

Coverage will be written on a Commercial General Liability form. The policy will be written on an occurrence form. The manufacturer's policy will include the owner as additional insured when required by written contract between the Owner and a Pierce authorized dealer.

## UMBRELLA/EXCESS LIABILITY INSURANCE

The manufacturer will, during the performance of the contract and for three (3) years following acceptance of the product, keep in force at least the following management 221

		limits of umbrella liability insurance: Each Occurrence: \$25,000,000 Aggregate: \$25,000,000 The umbrella policy will be written on an occurrence basis and provide excess to the manufacturer's General Liability/Products policies. The required limits can be provided by one (1) or more policies provided all other insurance requirements are met. Coverage will be provided by a carrier(s) rated A- or better by A.M. Best. All policies will provide a 30-day notice of cancellation to the named insured. The Certificate of Insurance will provide the following cancellation clause: Should any of the above described polices be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. Manufacturer agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with the bid. The certificate will show the purchaser as the certificate holder.
0661794	Single Source Compliance	SINGLE SOURCE MANUFACTURER Pierce Manufacturing, Inc. provides an integrated approach to the design and manufacture of our products that delivers superior apparatus and a dedicated support team. From our facilities, the chassis, cab weldment, cab, pumphouse (including the sheet metal enclosure, valve controls, piping and operators panel) and body will be entirely designed, tested, and hand assembled to the customer's exact specifications. The electrical system either hardwired or multiplexed, will be both designed and integrated by Pierce Manufacturing. The warranties relative to these major components (excluding component warranties such as engine, transmission, axles, pump, etc.) will be provided by Pierce as a single source manufacturer. Pierce's single source solution adds value by providing a fully engineered product that offers durability, reliability, maintainability, performance, and a high level of quality.
0584456	Manufacture Location, Appleton, Wisconsin	Your apparatus will be manufactured in Appleton, Wisconsin.
0584452	RFP Location: Appleton, Wisconsin	
0588609	Vehicle Destination, US	
0670275	Unit to be Similar in some Aspects, Excluding Pump Panel	<b>SPECIAL INSTRUCTIONS</b> The apparatus being proposed will be designed and built to match the 32603, 31139. However, some variation may be necessary due to changes in our manufacturing processes or our product offering. Revisions in NFPA guidelines and/or other regulations may also affect our ability to match the previous unit.
0610784	Comply NFPA 1901 Changes Effective Jan 1, 2016, With Exceptions	<ul> <li>NFPA 2016 STANDARDS</li> <li>This unit will comply with the NFPA standards effective January 1, 2016, except for fire department directed exceptions. These exceptions will be set forth in the Statement of Exceptions.</li> <li>Certification of slip resistance of all stepping, standing and walking surfaces will be supplied with delivery of the apparatus.</li> <li>All horizontal surfaces designated as a standing or walking surface that are greater than 48.00° above the ground must be defined by a 1.00° wide line along its outside perimeter. Perimeter markings and designated access paths to destination points will be identified on the customer approval print and are shown as approximate. Actual location(s) will be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. Access paths may require the operation of devices and equipment such as the aerial device or ladder rack.</li> <li>A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.</li> <li>The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.</li> <li>An official of the company will designate, in writing, who is qualified to witness and certify test results.</li> </ul>
0533347	Pumper/Pumper with Aerial Device Fire Apparatus	
0588611	Vehicle Certification, Pumper	

0661778		Agency, Apparatus Certification, Pumper/Tanker, U.L.	<ul> <li>NFPA COMPLIANCY</li> <li>Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Fire department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA".</li> <li>VEHICLE INSPECTION PROGRAM CERTIFICATION</li> <li>To assure the vehicle is built to current NFPA standards, the apparatus, in its entirety, will be third-party, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition of NFPA 1901. The certification will include: all design, production, operational, and performance testing of not only the apparatus, but those components that are installed on the apparatus.</li> <li>A placard will be affixed in the driver's side area stating the third party agency, the date, the standard and the certificate number of the whole vehicle audit.</li> <li>PUMP TEST</li> <li>Underwriters Laboratory (UL) will test, approved, and certify the pump. The test results and the pump manufacturer's certification of hydrostatic test; the engine manufacturer's certified brake horsepower curve; and the pump manufacturer's record of pump construction details will be forwarded to the Fire Department.</li> <li>GENERATOR TEST</li> <li>If the unit has a generator, Underwriters Laboratory (UL) will test, approved, and certify the generator. The test results will be provided to the Fire Department at the time of delivery.</li> <li><b>BEATHING AIR TEST</b></li> <li>If the unit has breathing air, Pierce Manufacturing will draw an air sample from the air system and have the sample certified that the air quality meets the requirements of NFPA 1989, Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection.</li> </ul>
000000	STF	GSFA, Final Insp, ATW Factory, Major Airport, 4 Days and 3 nights	<b>FINAL INSPECTION FACTORY TRIP</b> A final inspection trip to the manufacturing facility will be provided for six (6) Customer representative(s). The intent of this trip is to ensure that the apparatus is built to specification and to detect any deficiencies that require correction. The final inspection trip will have a duration of four (4) days and three (3) nights and be scheduled at times mutually agreed upon between Golden State Fire Apparatus (GSFA). and the Customer. Costs for airfare, lodging, meals and ground transportation while at the manufacturers location will be the responsibility of GSFA. Air travel will be from one of the following airports: Sacramento, San Francisco or San Jose. Costs such as Customer incidentals while traveling to the factory will be the responsibility of the Customer. Flight reservations are non-refundable and in the event of a cancellation, which may include not only the original ticket cost but also any change or cancellation fees imposed by the airline and/ or travel agency. Flight reservations are also non-transferable.
0799172		FLEET CUSTOMER	
0007289		Delivery	<b>DELIVERY</b> Said apparatus and equipment will be built and shipped in accordance with the specifications hereto. Delays due to strikes, war or international conflict, failures to obtain chassis, materials, or other causes beyond our control not preventing, within about working days after receipt of this order and the acceptance thereof at our office at Appleton, Wisconsin, and to be delivered to you at . The specifications herein contained will form a part of the final contract and are subject to changes desired by the purchaser, provided such alterations are interlined prior to the acceptance by the company of the order to purchase, and provided such alterations do not materially affect the cost of the construction of the apparatus. The proposal for fire apparatus conforms with all Federal Department of Transportation (DOT) rules and regulations in effect at the time of bid and with all National Fire Protection Association (NFPA) Guidelines for Automotive Fire Apparatus as published at the time of bid, except as modified by customer specifications. Any increased costs incurred by first party because of future changes in or additions to said DOT or NFPA standards will be passed along to the customers as an addition to the price set forth above.
0092138		Highly Customized Product (HCP)	<b>PRODUCT CHANGES AND IMPROVEMENTS</b> Our components and processes, as described in this proposal document, are as accurate as known at the time of bid submission, but are subject to change for the purpose of product or process improvements, or changes in industry standards providing the change does not affect the meaning or definition of the bid specifications.
0620361		Consortium, GPO	
0537375		Unit of Measure, US Gallons	

0030006		<b>BID BOND NOT REQUESTED</b> A bid bond will not be included. If requested, the following will apply: All bidders will provide a bid bond as security for the bid in the form of a 5% bid bond to accompany their bid. This bid bond will be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond will be issued by an authorized representative of the Surety Company and will be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond will include language, which assures that the bidder/principal will give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract. Notwithstanding any document or assertion to the contrary, any surety bond related to the sale of a vehicle will apply only to the Basic One (1) Year Limited Warranty for such vehicle. Any surety bond related to the sale of a vehicle will not apply to any other warranties that are included within this bid (OEM or otherwise) or to the warranties (if any) of any third party of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. In the event of any contradiction or inconsistency between this provision and any other document or assertion, this provision will prevail.
0582800	Payment Bond	PERFORMANCE BOND, 1 YEAR The successful bidder will furnish a Performance and Payment bond (Bond) equal to 100 percent of the total contract amount within 30 days of the notice of award. Such Bond will be in a form acceptable to the Owner and issued by a surety company included within the Department of Treasury's Listing of Approved Sureties (Department Circular 570) with a minimum A.M. Best Financial Strength Rating of A and Size Category of XV. In the event of a bond issued by a surety of a lesser Size Category, a minimum Financial Strength rating of A+ is required. Bidder and Bidder's surety agree that the Bond issued hereunder, whether expressly stated or not, also includes the surety's guarantee of the vehicle manufacturer's Basic One (1) Year Limited Warranty period included within this proposal. Owner agrees that the penal amount of this bond will be simultaneously amended to 25 percent of the total contract amount upon satisfactory acceptance and delivery of the vehicle(s) included herein. Notwithstanding anything contained within this contract to the contrary, the surety's liability for any warranties of any type will not exceed one (1) year from the date of such satisfactory acceptance and delivery, or the actual Basic One (1) Year Limited Warranty period, whichever is shorter.
000007	Approval Drawing	APPROVAL DRAWING A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc. A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.
0544889	Drawing, Pump Operators Panel, 1 Drawing, 2 Unit Order	<b>PUMP OPERATOR'S PANEL DRAWING</b> A detailed drawing to scale of the pump operator's panel will be provided for approval prior to construction. This drawing will include all of the gauges and controls located on the pump operator's panel. This is a multiple unit order, and the customer will receive one (1) hard copy drawing total for all the units.
0002928	Electrical Diagrams	<b>ELECTRICAL WIRING DIAGRAMS</b> Two (2) electrical wiring diagrams, prepared for the model of chassis and body, will be provided.
0649754		<b>ENFORCER CHASSIS</b> The Pierce Enforcer <sup>™</sup> is the custom chassis developed exclusively for the fire service. Chassis provided will be a new, tilt-type custom fire apparatus. The chassis will be manufactured in the apparatus body builder's facility eliminating any split responsibility. The chassis will be designed and manufactured for heavy-duty service, with adequate strength, capacity for the intended load to be sustained, and the type of service required. The chassis will be the manufacturer's first line tilt cab.
0021007	Maximum Overall Height	<b>MAXIMUM OVERALL HEIGHT</b> The maximum overall height of the apparatus will be 114.00" to the top of the truck, 123.00" to the top of the monitor.
0021010	Maximum Overall Length	MAXIMUM OVERALL LENGTH The maximum overall length of the apparatus will be 367.25".
0000110	Wheelbase	WHEELBASE The wheelbase of the vehicle will be 187.50" .

0000070	GVW Rating	GVW RATING The gross vehicle weight rating will be 43,500 lbs .
0649713	Frame Rails, 10.25" x 3.50" x .375", Saber FR/Enf	<b>FRAME</b> The chassis frame will be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the apparatus. The side rails will be heat-treated steel measuring 10.25" x 3.50" x .375". Each rail will have a section modulus of 16.00 cubic inches, yield strength of 120,000 psi, and a resisting bending moment (rbm) of 1,921,069 inch-pounds.
0020018	Frame Liner Not Req'd	
0630705	Axle, Front, Oshkosh TAK-4, Non Drive, 19,500 lb, Enforcer	<ul> <li>FRONT NON DRIVE AXLE</li> <li>The Oshkosh TAK-4® front axle will be of the independent suspension design with a ground rating of 19,500 lb.</li> <li>Upper and lower control arms will be used on each side of the axle. Upper control arm castings will be made of 100,000-psi yield strength 8630 steel and the lower control arm casting will be made of 55,000-psi yield ductile iron.</li> <li>The center cross members and side plates will be constructed out of 80,000-psi yield strength steel.</li> <li>Each control arm will be mounted to the center section using elastomer bushings. These rubber bushings will rotate on low friction plain bearings and be lubricated for life. Each bushing will also have a flange end to absorb longitudinal impact loads, reducing noise and vibrations.</li> <li>There will be nine (9) grease fittings supplied, one (1) on each control arm pivot and one (1) on the steering gear extension.</li> <li>The upper control arm will be shorter than the lower arm so that wheel end geometry provides positive camber when deflected below rated load and negative camber above rated load.</li> <li>Camber at load will be zero degrees for optimum tire life.</li> <li>The ball joint bearing will be of low friction design and be maintenance free.</li> <li>Toe links that are adjustable for alignment of the wheel to the center of the chassis will be provided.</li> <li>The wheel ends must have little to no bump steer when the chassis encounters a hole or obstacle.</li> <li>The steering linkage will provide proper steering angles for the inside and outside wheel, based on the vehicle wheelbase.</li> <li>The aske will have a third party certified turning angle of 45 degrees.</li> <li>Front discharge, front suction, or aluminum wheels will not infringe on this cramp angle.</li> </ul>
0030264	Suspension, Front TAK-4, 19,500 lb, Qtm/AXT/Imp/Vel/Dash CF/Enf	<ul> <li>FRONT SUSPENSION</li> <li>Front Oshkosh TAK-4™ independent suspension will be provided with a minimum ground rating of 19,500 lb.</li> <li>The independent suspension system will be designed to provide maximum ride comfort. The design will allow the vehicle to travel at highway speeds over improved road surfaces and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.</li> <li>Each wheel will have torsion bar type spring. In addition, each front wheel end will also have energy absorbing jounce bumpers to prevent bottoming of the suspension. The suspension design will be such that there is at least 10.00" of total wheel travel and a minimum of 3.75" before suspension bottoms.</li> <li>The torsion bar anchor lock system allows for simple lean adjustments, without the use of shims. One can adjust for a lean within 15 minutes per side. Anchor adjustment design is such that it allows for ride height adjustment on each side.</li> <li>The independent suspension was put through a durability test that simulated 140,000 miles of inner city driving.</li> </ul>
0087572	Shock Absorbers, KONI, TAK-4, Qtm/AXT/Imp/Vel/DCF/Enf	FRONT SHOCK ABSORBERS KONI heavy-duty telescoping shock absorbers will be provided on the front suspension.
0000322	Oil Seals, Front Axle	<b>FRONT OIL SEALS</b> Oil seals with viewing window will be provided on the front axle.
0677584	Tires, Front, Goodyear, G296 MSA, 385/65R22.50, 18 ply, Fire Service Load Rating	FRONT TIRES Front tires will be Goodyear 385/65R22.5 radials, 18 ply G296 MSA tread, rated for 20,050 lb maximum axle load and 68 mph maximum speed.
0019611	Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot	The tires will be mounted on Alcoa 22.50" x 12.25" polished aluminum disc type wheels with a ten $(10)$ stud, 11.25" bolt circle.
0530458	Axle, Rear, Meritor RS24-160, 24,000 lb, Saber/Enforcer	REAR AXLE The rear axle will be a Meritor™, Model RS-24-160, with a capacity of 24,000 lb.

0544253	Top Speed of Vehicle, 68 MPH	<b>TOP SPEED OF VEHICLE</b> A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 68 mph.
0555350	Suspen, Rear, Hendrickson FMX 242 EX, Air Ride, 24,000 lb	REAR SUSPENSION Rear suspension will be a Hendrickson FMX 242 EX, air ride with a ground rating of 24,000 lb. The suspension will have the following features: - Heavy-duty shock absorbers to protect air springs from overextension - Heavy-duty torque rods and bushings - Premium, heavy-duty rubber bushings require no lubrication - Integrated stabilizer design results in greater stability - Low spring rate air springs for excellent ride quality - Dual height control valves to maintain level vehicle from side to side
0000485	Oil Seals, Rear Axle	<b>REAR OIL SEALS</b> Oil seals will be provided on the rear axle(s).
0782552	Tires, Rear, Goodyear, Endurance RSA, 12R22.50, LRH, Single	<b>REAR TIRES</b> Rear tires will be four (4) Goodyear 12R22.50 radials, load range H, Endurance RSA highway tread, rated for 27,120 lb maximum axle load and 75 mph maximum speed.
0019625	Wheels, Rear, Alcoa, 22.50" x 8.25", Aluminum, Hub Pilot, Single	The tires will be mounted on Alcoa 22.50" x 8.25" polished aluminum disc wheels with a ten (10) stud 11.25" bolt circle.
0568081	Tire Balancing, Counteract Beads	<b>TIRE BALANCE</b> All tires will be balanced with Counteract balancing beads. The beads will be inserted into the tire and eliminate the need for wheel weights.
0620570	Tire Pressure Monitoring, RealWheels, AirSecure, Valve Cap, Single Axle	TIRE PRESSURE MANAGEMENT There will be a RealWheels LED AirSecure <sup>™</sup> tire alert pressure management system provided, that will monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires. The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 10 and 200 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops 5 to 8 psi. Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start to flash.
0002045	Mud Flaps, w/logo front & rear	<b>MUD FLAPS</b> Mud flaps with a Pierce logo will be installed behind the front and rear wheels.
0544802	Chocks, Wheel, SAC-44-E, Folding	WHEEL CHOCKS There will be one (1) pair of folding Ziamatic, Model SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle provided.
0544806	Mounting Brackets, Chocks, SAC-44- E, Folding, Horizontal	WHEEL CHOCK BRACKETS There will be one (1) pair of Zico, Model SQCH-44-H, horizontal mounting wheel chock brackets provided for the Ziamatic, Model SAC-44-E, folding wheel chocks. The brackets will be made of aluminum and consist of a quick release spring loaded rod to hold the wheel chocks in place. The brackets will be mounted forward of the left side rear tire.
0010670	ABS Wabco Brake System, Single rear axle	ANTI-LOCK BRAKE SYSTEM The vehicle will be equipped with a Meritor WABCO 4S4M, anti-lock braking system. The ABS will provide a 4-channel anti-lock braking control on both the front and rear wheels. A digitally controlled system that utilizes microprocessor technology will control the anti-lock braking system. Each wheel will be monitored by the system. When any particular wheel begins to lockup, a signal will be sent to the control unit. This control unit then will reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.
0652082	Brakes, Meritor, EX225, 17", Disc Plus, TAK-4	BRAKES The service brake system will be full air type. The front brake calipers will be Meritor® DiscPlus™ EX225 air disc type. The brake rotors will be 17.00" ventilated.
0509206	Brakes, Meritor, EX225, Disc Plus, Rear, Single Axle	The rear brakes will be Meritor <sup>™</sup> , Disc Plus, Model EX225, disc operated with automatic slack adjusters and a 17.00" ventilated rotor for improved stopping distance.
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0020784	Air Compressor, Brake, Cummins/Wabco 18.7 CFM	BRAKE SYSTEM AIR COMPRESSOR The air compressor will be a Cummins/WABCO with 18.7 cubic feet per minute output.
0644232	Brake Reservoirs, 4,272 Cubic Inch Minimum Capacity, Saber FR/Enforcer	<b>BRAKE SYSTEM</b> The brake system will include: Brake treadle valve Heated automatic moisture ejector on air dryer Total air system minimum capacity of 4,272 cubic inches Two (2) air pressure gauges with a red warning light and an audible alarm, that activates when air pressure falls below 60 psi Spring set parking brake system Parking brake operated by a push-pull style control valve A parking "brake on" indicator light on instrument panel Park brake relay/inversion and anti-compounding valve, in conjunction with a double check valve system, with an automatic spring brake application at 40 psi A pressure protection valve to prevent all air operated accessories from drawing air from the air system when the system pressure drops below 80 psi (550 kPa) 1/4 turn drain valves on each air tank The air tank will be primed and painted to meet a minimum 750 hour salt spray test. To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets.
0587034	Air Dryer, Bendix, AD-IP w/Heat, 2010	- Bendix AD-IP air dryer with heater and coalescing filter
0542809	Brake Lines, Wire Braided	<b>BRAKE LINES</b> Wire braided reinforced rubber brake lines will be provided for the chassis air brake system. This also includes the brake lines between the frame and brake chambers. The brake lines will not be painted. Coupler fittings for chassis brake lines will be installed forward of the front axle. They will be a separation point for those air lines going to the cab. The air lines going into the cab will be nylon wrapped in loom.
0000858	Inlet/Outlet, Air, w/Disconnect Fitting	AIR INLET/OUTLET One (1) air inlet/outlet will be installed with the female coupling located on the driver side pump panel. This system will tie into the "wet" tank of the brake system and include a check valve in the inlet line and an 85 psi pressure protection valve in the outlet line. The air outlet will be controlled by a needle valve. A mating male fitting will be provided with the loose equipment. The air inlet will allow a shoreline air hose to be connected to the vehicle. This will allow station air to be supplied to the brake system of the vehicle to insure constant air pressure.
0630460	Moisture Ejector, Manual, Remote Mounted, Enforcer/Saber FR	<ul> <li>MANUAL MOISTURE EJECTOR(S)</li> <li>Manual moisture ejectors for a single axle pumper reservoir capacity will be installed in the brake system.</li> <li>The moisture ejector(s) will be remote mounted on the driver side of vehicle, as close to the edge of vehicle as possible.</li> <li>A loop will be provided at the moisture ejector, to allow for ease of pulling the drain.</li> <li>Each moisture ejector will have a label directly under the ejector, stating air tank drain.</li> <li>Nylon tubing, .38" diameter, will be routed from the air tank to the moisture ejector. The nylon tubing will be covered with protective split loom.</li> <li>The moisture ejector(s) will be provided on the each tank reservoir(s).</li> </ul>

0795472	Engine, Cummins L9, 450 hp, 1250 Ib-ft, W/OBD, EPA 2017, Saber FR/Enforcer	ENGINE The chassis will be powered by an electronically controlled engine as described below: Make: Cummins Model: L9 Power: 450 hp at 2100 rpm Torque: 1250 lb-ft at 1400 rpm Governed Speed: 2200 rpm Emissions Level: EPA 2017 Fuel: Diesel Cylinders: Six (6) Displacement: 543 cubic inches (8.9L) Starter: Delco 39MT™ Fuel Filters: Spin-on style primary filter with water separator and water-in-fuel sensor. Secondary spin-on style filter. The engine will include On-board diagnostics (OBD), which provides self diagnostic and reporting. The system will give the owner or repair technician access to state of health information for various vehicle sub systems. The system will monitor vehicle systems, engine and after treatment. The system will illuminate a malfunction indicator light on the dash console if a problem is detected.
0001244	High Idle w/Electronic Engine, Custom	<b>HIGH IDLE</b> A high idle switch will be provided, inside the cab, on the instrument panel, that will automatically maintain a preset engine rpm. A switch will be installed, at the cab instrument panel, for activation/deactivation. The high idle will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided, adjacent to the switch. The light will illuminate when the above conditions are met. The light will be labeled "OK to Engage High Idle."
0687994	Engine Brake, Jacobs Compression Brake, Cummins Engine	ENGINE BRAKE A Jacobs® engine brake is to be installed with the controls located on the instrument panel within easy reach of the driver. The driver will be able to turn the engine brake system on/off and have a high, medium and low setting. The engine brake will activate when the system is on and the throttle is released. The high setting of the brake application will activate and work simultaneously with the variable geometry turbo (VGT) provided on the engine. The engine brake will be installed in such a manner that when the engine brake is slowing the vehicle the brake lights are activated. The ABS system will automatically disengage the auxiliary braking device, when required.
0644227	Clutch, Fan, Air Actuated, Saber FR/Enforcer	<b>CLUTCH FAN</b> A fan clutch will be provided. The fan clutch will be automatic when the pump transmission is in "Road" position, and constantly engaged when in "Pump" position.
0655637	Engine Foot Throttle Control, Engage in Pump Mode	<b>THROTTLE CONTROL</b> An engine foot throttle control will be provided for use while in pump mode. The parking brake must be enabled for this operation.
0640477	Air Intake, Metal Screen, Saber FR/Enforcer	<b>ENGINE AIR INTAKE</b> The engine air intake will be located above the engine cooling package. It will draw fresh air from the front of the apparatus through the radiator grille. A stainless steel metal screen will be installed at the inlet of the air intake system that will meet NFPA 1901 requirements. The air cleaner and stainless steel screen will be easily accessible by tilting the cab.
0794761	Exhaust System, 4", 2017 L9 Engine, Horizontal, Right Side	<b>EXHAUST SYSTEM</b> The exhaust system will be stainless steel from the turbo to the engine's aftertreatment device, and will be 4.00" in diameter. The exhaust system will include a single module aftertreatment device to meet current EPA standards. An insulation wrap will be provided on all exhaust pipes between the turbo and aftertreatment device to minimize the heat loss to the aftertreatment device . The exhaust will terminate horizontally ahead of the right side rear wheels. A tailpipe diffuser will be provided to reduce the temperature of the exhaust as it exits. Heat deflector shields will be provided to isolate chassis and body components from the heat of the tailpipe diffuser.

0777582	SP	Exhaust, Modified Angled To Rear - Flush With Rubrail, Approval Req'd	<b>EXHAUST MODIFICATION</b> The exhaust pipe shall be brought out from under the body and angled to the rear. The diffuser will not be cut straight to the body, and the outer edge shall be flush with the body rubrail. There shall be a minimum of 2.50" from the exhaust pipe to the under side of the body heat shield. The last 7.00" of the exhaust shall be free of hangers and/or clamps.
0610195	SP	Diffuser, Exhaust, Modified For Extraction, 4"x5"x7"x5"	<b>EXHAUST MODIFICATION</b> The exhaust diffuser will be reduced to 5.00" in the center to accommodate the fire department's air recovery system. There will be a minimum of 4.00" clearance around the diffuser for proper cooling.
0788765		Radiator, Saber FR/Enforcer	<ul> <li><b>PADIATOR</b></li> <li>The radiator and the complete cooling system will meet or exceed NFPA and engine manufacturer cooling system standards.</li> <li>For maximum corrosion resistance and cooling performance, the entire radiator core will be constructed using long life aluminum alloy. The radiator core will consist of aluminum fins, having a serpentine design, brazed to aluminum tubes.</li> <li>The radiator core will have a minimum front area of 1060 square inches.</li> <li>Supply tank will be made of heavy duty glass-reinforced nylon and the return tank will be mode of aluminum. Both tanks will be crimped onto the core assembly. Using header tabs and a compression gasket to complete the radiator core assembly. There will be a full steel frame around the inserts to enhance cooling system durability and reliability.</li> <li>The radiator will be compatible with commercial antifreeze solutions.</li> <li>The radiator assembly will be isolated from the chassis frame rails with rubber isolators to prevent the development of leaks caused by twisting or straining when the apparatus operates over uncent there in.</li> <li>The radiator will include a de-aeration/expansion tank. For visual coolant level inspection, the radiator will have a built-in sight glass. The radiator will be equipped with a 15 psi pressure relief co.</li> <li>A drain port will be located at the lowest point of the cooling system and/or the bottom of the radiator to permit complete flushing of the coolant from the system.</li> </ul>
0001090		Cooling Hoses, Rubber	<b>COOLANT LINES</b> Gates, or Goodyear, rubber hose will be used for all engine coolant lines installed by Pierce Manufacturing. Hose clamps will be stainless steel constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.
0698626		Fuel Tank, 50 Gallon, Left Side Fill, Aluminum	<ul> <li>FUEL TANK</li> <li>A 50 gallon fuel tank will be provided and mounted at the rear of the chassis. The tank will be constructed of aluminum. It will be painted job color It will be equipped with swash partitions and a vent. To eliminate the effects of corrosion, the fuel tank will be mounted with stainless steel straps. (no exception).</li> <li>A .75" drain plug will be provided in a low point of the tank for drainage.</li> <li>A fill inlet will be located on the left hand side of the body and be covered with a hinged, spring loaded, stainless steel door that is marked "Ultra Low Sulfur - Diesel Fuel Only".</li> <li>A .50" diameter vent will be provided running from top of tank to just below fuel fill inlet. The tank will meet all FHWA 393.67 requirements including a fill capacity of 95 percent of tank volume.</li> </ul>
0001129		Lines, Fuel	All fuel lines will be provided as recommended by the engine manufacturer.
0770723		DEF Tank, 8.0 Gallon, LS Fill, Rear of Rear Axle, Triple Door	<ul> <li>DIESEL EXHAUST FLUID TANK</li> <li>An 8.0 gallon diesel exhaust fluid (DEF) tank will be provided and mounted in the driver's side body rearward of the rear axle.</li> <li>A 0.50° drain plug will be provided in a low point of the tank for drainage.</li> <li>A fill inlet will be provided and marked "Diesel Exhaust Fluid Only". The fill inlet will be located adjacent to the engine fuel inlet behind a triple, painted door on the left side of the vehicle. There will be a South Co. C2 non locking latch provided.</li> <li>The tank will meet the engine manufacturers requirement for 10 percent expansion space in the event of tank freezing.</li> <li>The tank will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.</li> </ul>
0552793		Not Required, Fuel Priming Pump	
0552712		Not Required, Shutoff Valve, Fuel Line	
0553019		Cooler, Engine Fuel, Imp/Vel, AXT/Qtm/Sab/DCF/SFR/Enf	FUEL COOLER An air to fuel cooler will be installed in the engine fuel return line. Page 16 of 221

0665235	Door, Fuel Fill with Cap Holder, No Chain	The fuel filler door will include a holder for the fuel fill cap.
0642572	Trans, Allison 5th Gen, 3000 EVS P, w/Prognostics, Imp/Vel/DCF/SFR/Ent	<ul> <li>TRANSMISSION</li> <li>An Allison 5th generation, Model EVS 3000P, electronic torque converting automatic transmission will be provided.</li> <li>The transmission will be equipped with prognostics to monitor oil life, filter life, and transmission health. A wrench icon on the shift selector's digital display will indicate when service is due.</li> <li>Two (2) PTO openings will be located on both sides of converter housing (positions 4 o'clock and 8 o'clock) as viewed from the rear.</li> <li>A transmission temperature gauge with red light and audible alarm will be installed on the cab dash.</li> </ul>
0625329	Transmission, Shifter, 5-Spd, Push Button, 3000 EVS	TRANSMISSION SHIFTER A five (5)-speed push button shift module will be mounted to right of driver on console. Shift position indicator will be indirectly lit for after dark operation. The transmission ratio will be: 1st 3.49 to 1.00 2nd 1.86 to 1.00 3rd 1.41 to 1.00 4th 1.00 to 1.00 5th 0.75 to 1.00 R 5.03 to 1.00
0684459	Transmission Oil Cooler, Modine, External	<b>TRANSMISSION COOLER</b> A Modine plate and fin transmission oil cooler will be provided using engine coolant to control the transmission oil temperature.
0090176	Mode, Downshift, Aggressive downshift to 3rd, w/engine brake, 5 speed	<b>DOWNSHIFT MODE (w/engine brake)</b> The transmission will be provided with an aggressive downshift mode. This will provide earlier transmission downshifts to 3rd gear, resulting in improved engine braking performance.
0027843	Fluid, 3000 Series Trans, Allison Approved TES-295 Synthetic, IPOS, Custom	<b>TRANSMISSION FLUID</b> The transmission will be provided with TranSynd, or other Allison approved TES-295 heavy duty synthetic transmission fluid.
0001370	Driveline, Spicer 1710	<b>DRIVELINE</b> Drivelines will be a heavy-duty metal tube and be equipped with Spicer® 1710 universal joints. The shafts will be dynamically balanced before installation. A splined slip joint will be provided in each driveshaft where the driveline design requires it. The slip joint will be coated with Glidecoat® or equivalent.
0669988	Steering, Sheppard M110 w/Tilt, TAK-4, Eaton Pump, w/Cooler	<b>STEERING</b> Dual Sheppard, Model M110, steering gears, with integral heavy-duty power steering, will be provided. For reduced system temperatures, the power steering will incorporate an air to oil cooler and an Eaton, Model VN20, hydraulic pump with integral pressure and flow control. All power steering lines will have wire braded lines with crimped fittings. A tilt and telescopic steering column will be provided to improve fit for a broader range of driver configurations.
0605356	Steering Wheel, 4 Spoke without Controls, Saber FR/Enforcer	<b>STEERING WHEEL</b> The steering wheel will be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.
0550144	Logo/Emblem, on Horn Button	LOGO AND CUSTOMER DESIGNATION ON HORN BUTTON The steering wheel will have an emblem containing the Pierce logo and customer name. The emblem will have three (3) rows of text for the customer's department name. There will be a maximum of eight (8) characters in the first row, 11 characters in the second row and 11 characters in the third row. The first row of text will be: CITY The second row of text will be: OF The third row of text will be: SACRAMENTO

0606186	Bumper, Non-Extended, Saber FR/Enforcer	<ul> <li>BUMPER</li> <li>A one (1) piece, ten (10) gauge 304-2B polished stainless steel bumper, minimum of 10.00" high, will be attached to the front of the chassis frame.</li> <li>A 9.00" formed steel channel will be mounted directly behind bumper for additional strength.</li> <li>GRAVEL PAN</li> <li>A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and cab face.</li> </ul>
0614646	No Lift & Tow Package, Imp/Vel, AXT, SFR/Enf	
0049963	Tow Eyes, Painted Black, Below Deck	<b>TOW EYES</b> Two (2) painted steel tow eyes will be installed under the bumper and attached to the front frame members. The tow eyes will be designed and positioned to allow up to a 6,000 lb straight horizontal pull in line with the centerline of the vehicle. The tow eyes will not be used for lifting of the apparatus. The inner and outer edges of the tow eyes will have a .25" radius. The tow eyes will be painted black.
0012300	Bracket, License Plate, Frt Bumper Non-Illuminated	LICENSE PLATE BRACKET A non-illuminated license plate bracket will be mounted on the front bumper. The bracket will be formed from bright stainless steel.

#### САВ

The Enforcer cab will be designed specifically for the fire service and manufactured by the chassis builder.

The cab will be built by the apparatus manufacturer in a facility located on the manufacturer's premises.

For reasons of structural integrity and enhanced occupant protection, the cab will be a heavy duty design, constructed to the following minimal standards.

The cab will have 12 main vertical structural members located in the A-pillar (front cab corner posts), B-pillar (side center posts), C-pillar (rear corner posts), and rear wall areas. The A-pillar will be constructed of solid A356-T5 aluminum castings. The B-pillar and C-pillar will be constructed from 0.13" wall extrusions. The rear wall will be constructed of two (2) 2.00" x 2.00" outer aluminum extrusions and two (2) 2.00" x 1.00" inner aluminum extrusions. All main vertical structural members will run from the floor to 4.625" x 3.864" x 0.090" thick roof extrusions to provide a cage-like structure with the A-pillar and roof extrusions being welded into a 0.25" thick corner casting at each of the front corners of the roof assembly.

The front of the cab will be constructed of a  $0.13^{\circ}$  firewall plate, covered with a  $0.090^{\circ}$  front skin (for a total thickness of  $0.22^{\circ}$ ), and reinforced with a full width x  $0.50^{\circ}$  thick cross-cab support located just below the windshield and fully welded to the engine tunnel. The cross-cab support will run the full width of the cab and weld to each A-pillar, the  $0.13^{\circ}$  firewall plate, and the front skin.

The cab floors will be constructed of 0.125" thick aluminum plate and reinforced at the firewall with an additional 0.25" thick cross-floor support providing a total thickness of 0.375" of structural material at the front floor area. The front floor area will also be supported with two (2) triangular 0.30" wall extrusions that also provides the mounting point for the cab lift. This tubing will run from the floor wireway of the cab to the engine tunnel side plates, creating the structure to support the forces created when lifting the cab.

The cab will be 96.00" wide (outside door skin to outside door skin) to maintain maximum maneuverability.

The overall height (from the cab roof to the ground) of approximately 99.00". The overall height listed will be calculated based on a truck configuration with the lowest suspension weight rating, the smallest diameter tires for the suspension, no water weight, no loose equipment weight, and no personnel weight. Larger tires, wheels, and suspension will increase the overall height listed. The floor to ceiling height inside the crew cab will be 54.50" in the center and outboard positions. The crew cab floor will measure 46.00" from the rear wall to the back side of the rear facing seat risers.

The medium block engine tunnel, at the rearward highest point (knee level), will measure 61.50" to the rear wall. The big block engine tunnel will measure 51.50" to the rear wall.

The crew cab will be a totally enclosed design with the interior area completely open to improve visibility and verbal communication between the occupants.

The cab will be a full tilt cab style.

A 3-point cab mount system with rubber isolators will improve ride quality by isolating chassis vibrations from the cab.

## CAB ROOF DRIP RAIL

For enhanced protection from inclement weather, a drip rail will be furnished on the sides of the cab. The drip rail will be painted to match the cab roof, and bonded to the sides of the cab. The drip rail will extend the full length of the cab roof.

## INTERIOR CAB INSULATION

The cab will include 1.00" insulation in the ceiling, 1.50" insulation in the side walls, and 2.00" insulation in the rear wall to maximize acoustic absorption and thermal insulation.

## FENDER LINERS

Full circular inner fender liners in the wheel wells will be provided.

## PANORAMIC WINDSHIELD

A one (1)-piece safety glass windshield will be provided with over 2,775 square inches of clear viewing area. The windshield will be full width and will provide the occupants with a panoramic view. The windshield will consist of three (3) layers: outer light, middle safety laminate, and inner light. The outer light layer will provide superior chip resistance. The middle safety laminate layer will provide yet another chip resistant layer. The cab windshield will be bonded to the aluminum windshield frame using a urethane adhesive. A custom frit pattern will be applied on the outside perimeter of the windshield for a finished automotive appearance.

## WINDSHIELD WIPERS

Three (3) electric windshield wipers with washer will be provided that meet FMVSS and SAE requirements.

The washer reservoir will be able to be filled without raising the cab.

0612879 SP Engine Tunnel, ISL, Foil Insulation, **ENGINE TUNNEL** Saber FR/Enforcer Engine hood side walls will be constructed of 0.375" aluminum. The top will be constructed of 0.125" aluminum and will be tapered at the top to allow for more driver and passenger elbow room. The engine hood will be insulated for protection from heat and sound. Perforated foil faced insulation will be provided on the inside of the engine tunnel to reduce noise. The noise insulation keeps the dBA level within the limits stated in the current NFPA 1901 standards. The engine tunnel will be no higher than 17.00" off the crew cab floor. 0633594 Rear Wall, Interior, Adjustable INTERIOR CREW CAB REAR WALL ADJUSTABLE SEATING (PATENT PENDING) The interior rear wall of the crew cab will have mounting holes every 2.75" to allow for Seating adjustability of the forward facing crew cab seating along the rear wall. Seats will be adjustable with use of simple hand tools allowing departments flexibility of their seating arrangement should their department needs change.

0632103		Rear Wall, Exterior, Cab, Saber FR/Enforcer	<b>CAB REAR WALL EXTERIOR COVERING</b> The exterior surface of the rear wall of the cab will be overlaid with bright aluminum treadplate except for areas that are not typically visible when the cab is lowered .
0639726		Cab Lift, Elec/Hyd, Manual Override, Unlocked Ind Light, Saber FR/Enforcer	<ul> <li>CAB LIFT</li> <li>A hydraulic cab lift system will be provided consisting of an electric powered hydraulic pump, dual lift cylinders, and necessary hoses and valves.</li> <li>Hydraulic pump will have a manual override for backup in the event of electrical failure.</li> <li>Lift controls will be located on the right side pump panel or front area of the body in a convenient location. A "cab unlocked" indicator light will be located at the controls that will indicate when the cab is not in the locked position for safe road travel.</li> <li>The cab will be capable of tilting 43 degrees to accommodate engine maintenance and removal.</li> <li>The cab will be locked down by a 2-point normally closed spring loaded hook type latch that fully engages after the cab has been lowered. The system will be hydraulically actuated to release the normally closed locks when the cab lift control is in the raised position and cab lift system is under pressure. When the cab is completely lowered and system pressure has been relieved, the spring loaded latch mechanisms will return to the normally closed and locked position.</li> <li>For hydraulic cylinders will be equipped with a velocity fuse that protects the cab from accidentally descending when the chanical stay arm will be provided that must be manually put in place on the left side between the chassis and cab frame when the cab is in the raised position. This device will be manually stowed to its original position before the cab can be lowered.</li> <li>Cab Lift Interlock</li> <li>The cab lift system will be interlocked to the parking brake. The cab tilt mechanism will be active only when the parking brake is set and the ignition switch is in the on position. If the parking brake is released, the cab tilt mechanism will be disabled.</li> </ul>
0550343		Special Circuit, Cab Tilt w/o Ignition Switch	<b>CAB TILT CIRCUIT</b> The cab tilt mechanism will be operational with the battery switch on and with parking brake set.
0695930		Grille, Bright Finished, Front of Cab, Dash CF/Enforcer	<b>GRILLE</b> A bright finished aluminum mesh grille screen, inserted behind a bright finished grille surround, will be provided on the front center of the cab.
0769753		Emblem, American Flag Painted on Cab Grille, All Custom Chassis	<b>CAB GRILLE DESIGN</b> An American flag design will be painted on the cab grille.
0648912		Scuffplates, S/S At Cab Door Jambs and Handrails	<b>DOOR JAMB SCUFFPLATES</b> All cab door jambs will be furnished with a brushed stainless steel scuffplate, mounted on the striker side of the jamb and include the area behind the cab door handrails.
0758591	SP	Caulk, Cab/Crew Cab Stepwell Edge, Aluminum Treadplate	<b>CAB AND CREW CAB STEPWELL CAULK</b> The cab and crew cab stepwell aluminum treadplate shall have edges sealed with caulk. The cab stepwell area shall be caulked at the rearward edge along the fender curve at the treadplate transition. The crew cab stepwell area shall be caulked at the forward edge along the fender curve at the treadplate transition.
0643412		Seal, Caulk Top Edge, Exterior Cab Rear Wall	<b>CAULK TOP EDGE OF REAR WALL SCUFFPLATE</b> The top edge of the scuffplate on the back wall of the cab will be caulked to prevent water from leaking behind it.
0529034		Scuffplates, S/S Corner Guard, Brushed, Rear Cab Corners	SCUFFPLATES, REAR CAB CORNER GUARDS Both rear cab corners will be furnished with a full height, brushed stainless steel corner guard scuffplate. The guard will extend 1.00" from the corner to protect paint from damage when pulling items (such as booster hose) around the cab.
0647932		Not Required, Trim, S/S Band, Across Cab Face, AXT/Dash CF/Saber/Enforcer	
0015440		No Chrome Molding, On side of cab	
0521669		Mirrors, Retrac, West Coast Style, Htd/Rmt, w/Htd/Rmt Convex	MIRRORS A Retrac, Model 613423, dual vision, motorized, west coast style mirror, with chrome finish, will be mounted on each side of the front cab door with spring loaded retractable arms. The flat glass and convex glass will be heated and adjustable with remote control within reach of the driver.

0648173	Door, Full Height, Saber FR/Enforcer 4-Door Cab, Level Roof	<b>DOORS</b> To enhance entry and egress to the cab, the forward cab doors will be a minimum of 37.50" wide x 75.50" high. The crew cab doors will be located on the sides of the cab and will be constructed in the same manner as the forward cab doors. The crew cab door openings will be a minimum of 34.30" wide x 75.50" high. The forward cab and crew cab doors will be constructed of extruded aluminum with a nominal material thickness of 0.093". The exterior door skins will be constructed from 0.090" aluminum. A customized, vertical, pull-down type door handle will be provided on the exterior of each cab door. The exterior handle will be designed specifically for the fire service to prevent accidental activation, and will provide 4.00" wide x 2.00" deep hand clearance for ease of use with heavy gloved hands. Each door will also be provided with an interior flush, open style paddle handle that will be readily operable from fore and aft positions, and be designed to prevent accidental activation. The interior handles will provide 4.00" wide x 1.25" deep hand clearance for ease of use with heavy gloved hands. The cab doors will be provided with both interior (rotary knob) and exterior (keyed) locks exceeding FMVSS standards. The keys will be Model 751. The locks will be capable of activating when the doors are open or closed. The doors will remain locked if locks are activated when the doors are opened, then closed. A full length, heavy duty, stainless steel, piano-type hinge with a 0.38" pin and 11 gauge leaf will be provided on the inside of each cab door for ease of entry. A red webbed grab handle will be provided on the inside of each cab door stop strap. The grab handles will be securely mounted. The cab steps at each cab door location will be located inside the cab doors to protect the steps from weather elements.
0655543	Door Panel, Brushed Stainless Steel, Saber/Enforcer 4-Door Cab	<b>Door Panels</b> The inner cab door panels will be constructed out of brushed stainless steel.
0630636	Controls, Electric Roll-Up Windows, 4dr, 4 Driver Controls, Saber FR/Enforcer	<b>ELECTRIC OPERATED CAB DOOR WINDOWS</b> All four (4) cab doors will be equipped with electric operated windows with one (1) flush mounted automotive style switch on each door. The driver's door will have four (4) switches, one (1) to control each door window. Each switch will allow intermittent or auto down operation for ease of use. Auto down operation will be actuated by holding the window down switch for approximately 1 second.
0633615	Steps, 4-Door Cab, Reduced Bottom Step, Saber FR/Enforcer	<b>CAB STEPS</b> The forward cab and crew cab access steps will be a full size two (2) step design to provide largest possible stepping surfaces for safe ingress and egress. The bottom steps will be designed with a grip pattern punched into bright aluminum treadplate material to provide support, slip resistance, and drainage. The bottom steps will be a bolt-in design to minimize repair costs should they need to be replaced. The forward cab steps will be a minimum 25.00" wide, and the crew cab steps will be 21.65" wide with an 8.00" minimum depth. The inside cab steps will not exceed 16.50" in height. The vertical surfaces of the step well will be aluminum treadplate.
0770200	Handrail, Exterior, Hansen, Knurled, Alum, LED Backlit, 4-Door Cab	<b>CAB EXTERIOR HANDRAILS</b> A Hansen knurled aluminum handrail will be provided adjacent to each cab and crew cab door opening to assist during cab ingress and egress. Each handrail will be provided with red LED lights. The lights will be activated when the parking brake is applied. The LED lights may be load managed.
0634786	Lights, Cab and Crew Cab Access Steps, P25, LED w/Bezel, 1Lt Per Step 6lts	<b>STEP LIGHTS</b> There shall be six (6) white LED step lights installed for cab and crew cab access steps. One (1) light for the driver's access steps. Two (2) lights for the driver's side crew cab access steps. Two (2) lights for the passenger's side crew cab access steps. One (1) light for the passenger's side access step. In order to ensure exceptional illumination, each light shall provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light. The lights shall be activated when the battery switch is on and the adjacent door is opened.
0583698	Fenders, S/S on cab, Extra Wide, Saber/Enf	FENDER CROWNS Stainless steel fender crowns will be installed at the cab wheel openings.
0042105	No Windows, Side of Crew Cab	
0786279	Window Tint, Crew Cab Door, Right Side, Privacy Dark Gray	Window Tint The rollup window in the right side crew cab door will be tinted privacy dark gray.

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0786290		Window Tint, Crew Cab Door, Left Side, Privacy Dark Gray	Window Tint The rollup window in the left side crew cab door will be tinted privacy dark gray.
0628873		Compt, Storage, 12.75 W x 24 H x 15 D, (1) Ea Side C/C, Dbl Pan, 70" SFR/Enf	<b>STORAGE COMPARTMENTS</b> Provided on each side of the cab, to the rear of the crew cab access doors, will be a storage compartment. The compartments will be approximately 12.75" wide x 24.00" high x 15.00" deep. The doors will be painted aluminum, double pan construction with one (1) D-ring slam latch. A chain for each exterior door will be used as a doorstop. The compartment interior will be painted spatter gray. <b>Compartment Light</b> There will be two (2) white Amdor, LED strip lights provided, one (1) each hinged side of compartment door openings.
0798178		Matting, Turtle Tile, Auxiliary Compartment	MATTING IN AUXILIARY COMPARTMENT Turtle Tile vinyl matting will be provided in two (2) auxiliary compartment(s) located lower rear cab compts. Tile color will be black no ramp. The matting will be 0.50" thick and be cross bonded by 0.25" diameter ribbed sections spaced for aeration.
0604171		Scuffplate, Brushed S/S, Bottom of Door Frame, Each	<b>DOOR FRAME SCUFFPLATE</b> There will be two (2) scuffplate(s) provided for the bottom of the door frame of both aux cab compts. Each scuffplate will be brushed stainless steel with a 0.38" lip down.
0649105		Scuffplate, Brushed S/S, Inner Door Pan, Ext'd Cab Compts, Pair	<b>SCUFFPLATE</b> A full-height brushed stainless steel scuffplate shall be installed on the inside of each of the extended cab compartment door pans.
0756861	SP		WORK SURFACE ON ENGINE TUNNEL There shall be a work surface provided on the engine tunnel. The work surface shall cover the entire engine tunnel, terminating at the rear facing cabinet, and follow the width of the engine tunnel. It shall be constructed of 0.25" aluminum. The beginning of the work surface will be spaced 1.00" off the top surface of the engine tunnel. The work surface will be flat from the front of the engine tunnel up to the rear facing cabinet. The work surface will be open on the sides to allow for equipment to be mounted underneath it. The mounting surface will be painted to match the cab interior.
0664381		Bracket, PAC, Ironslok, PN K5003	HALLIGAN TOOL/AXE MOUNTING BRACKET(S) There will be one (1) PAC Ironslok, P/N 5003, mounting bracket(s) provided. They will be located inside the cab outboard of the PS outboard forward facing seat against the rear wall. See photo #0664381.
0602809		Hook, Coat, Heavy Duty, Non-NFPA 2016	<b>COAT HOOK(S), HEAVY DUTY</b> There will be two (2) coat hooks supplied and installed one (1) on each rear facing cabinet (specific location to be determined at pre-construction). These hooks will be for coat storage only and will include a warning label mounted in the crew cab. NFPA 1901, 2016 edition, section 14.1.10.2 requires all equipment not required to be used during an emergency response, with the exception of SCBA units, will not be mounted in a driving or crew area unless it is contained in a fully enclosed and latched compartment capable of containing the contents when a 9G force is applied in the longitudinal axis of the vehicle or a 3G force is applied in any other direction, or the equipment is mounted in a bracket(s) that can contain the equipment when the equipment when it is subjected to 9G or 3G force. Per fire department specification and request for this coat hook, this apparatus will be non-compliant to NFPA 1901 standards effective at time of contract execution.
0606278		Tray, Equipment Mounting, Aluminum, Lip, Size	<b>EQUIPMENT MOUNTING TRAY(S)</b> There will be two (2) tray(s) for mounting of equipment located on top of the heater/defroster blister and rearward of the DS and PS rear facing cabinets (see photo). Each tray will have a 2.00" lip on four (4) sides. The size of the tray(s) shall be 19.50" W x 5.00"D. Each tray will be fabricated from aluminum and will be dual action sander finish. Tray not intended for storage of loose equipment. Items stored on tray will be permanently attached to meet NFPA requirements.
0750565	SP	Computer Docking, Havis, DS-DELL- 602, Motion Adapter	<b>COMPUTER DOCKING STATION</b> There will be one (1) Docking station(s) without pass-through antenna and internal power supply for Dell Latitude 12 tablet located as directed at pre-construction. The docking station will be mounted to a tilt swivel motion device. The following Havis components will be provided for each: One (1) DS-DELL-602 docking station One (1) C-MD-112 tilt swivel motion device One (1) C-HDM-134 base
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0750824	Cab Interior, Vinyl Headliner, Saber FR/Enforcer, CARE	<ul> <li>CAB INTERIOR</li> <li>The cab interior will be constructed of primarily metal (painted aluminum) to withstand the severe duty cycles of the fire service.</li> <li>The officer side dash will be a flat faced design to provide easy maintenance and will be constructed out of painted aluminum.</li> <li>The instrument cluster will be surrounded with a high impact ABS plastic contoured to the same shape of the instrument cluster.</li> <li>The engine tunnel will be padded and covered, on the top and sides, with black 36 ounce leather grain vinyl resistant to oil, grease, and mildew.</li> <li>For durability and ease of maintenance, the cab interior side walls will be painted aluminum. The rear wall will be painted aluminum.</li> <li>The headliner will be installed in both forward and rear cab sections. Headliner material will be vinyl. A sound barrier will be part of its composition. Material will be installed on an aluminum sheet and securely fastened to interior cab ceiling.</li> <li>The forward portion of the cab headliner will permit easy access for service of electrical wiring or other maintenance needs.</li> <li>All wiring will be placed in metal raceways.</li> <li>CAB INTERIOR UPHOLSTERY</li> <li>The cab interior upholstery will be 36 oz black vinyl.</li> </ul>
0753903	Cab Interior, Paint Color, Saber FR/Enforcer	<b>CAB INTERIOR PAINT</b> The cab interior metal surfaces, excluding the rear heater panels, will be painted black, vinyl texture paint. The rear heater panels will be painted black, vinyl textured paint.
0052100	Floor, Rubber Padded, Cab & Crew Cab, Saber/Enforcer	<b>CAB FLOOR</b> The cab and crew cab floor areas will be covered with Polydamp <sup>™</sup> acoustical floor mat consisting of a black pyramid rubber facing and closed cell foam decoupler. The top surface of the material has a series of raised pyramid shapes evenly spaced, which offer a superior grip surface. Additionally, the material has a 0.25" thick closed cell foam (no water absorption) which offers a sound dampening material for reducing sound levels.
0644195	Heater/Defroster, Saber FR/Enforcer	<b>CAB DEFROSTER</b> To provide maximum defrost and heating performance, a 43,500 BTU heater-defroster unit with 350 CFM of air flow will be provided inside the cab. The defroster unit will be strategically located under the center forward portion of the vacuum formed instrument panel. For easy access, a removable vacuum formed cover will be installed over the defroster unit. The defroster will include an integral aluminum frame air filter, high performance dual scroll blowers, and ducts designed to provide maximum defrosting capabilities for the 1-piece windshield. The defroster ventilation will be built into the design of the cab dash instrument panel and will be easily removable for maintenance. The defroster will be capable of clearing 98 percent of the windshield and side glass when tested under conditions where the cab has been cold soaked at 0 degrees Fahrenheit for 10 hours, and a 2 ounce per square inch layer of frost/ice has been able to build up on the exterior windshield. The defroster system will meet or exceed SAE J382 requirements. <b>CAB/CREW CAB HEATER</b> Two (2) 44,180 BTU auxiliary heaters with 276 CFM (each unit) of air flow will be provided inside the crew cab, one (1) in each outboard rear-facing seat riser. The heaters will include high performance dual scroll blowers, one (1) for each unit. Outlets for the heaters will be located below each rear facing seat riser and below the fronts of the driver and passenger seats, for efficient airflow. An extruded aluminum plenum will be incorporated in the cab structure that will transfer heat to the forward cab seating positions. The heater/defroster and cerw cab heaters will be controlled by a single integral electronic control panel. The heater/defroster and rear simultaneously. The control panel will include variable adjustment for temperature and fan control, and be conveniently located on the dash in clear view of the driver. The control panel will include highly visible, progressive LED indicators for both fan speed and temperature.

0644194		Air Conditioning, Saber FR/Enforcer	AIR CONDITIONING A high performance, customized air conditioning system will be furnished inside the cab and crew cab. The air conditioning system will be capable of cooling the average cab temperature from 100 degrees Fahrenheit to 75 degrees Fahrenheit within 30 minutes at 50 percent relative humidity. The cooling performance test will be run only after the cab has been heat soaked at 100 degrees Fahrenheit for a minimum of 4 hours. A radiator mounted condenser with a 59,644 BTU output that meets and exceed the performance specification will be installed. One (1) evaporator unit will be installed in the center roof with two (2) cores, one (1) for the cab and one (1) for the crew cab. The evaporator unit will have an adequate BTU rating to meet the performance specifications. Adjustable air outlets will be strategically located on the evaporator cover per the following: Four (4) will be directed towards the driver's location Four (4) will be directed towards the crew cab area The air conditioner refrigerant will be R-134A and will be installed by a certified technician. The air conditioner refrigerant will be R-134A and will be installed by a certified technician. The air conditioner refrigerant will be adjustment for temperature and fan control and be conveniently located on the dash in clear view of the driver. <b>Gravity Drain Tubes</b> Two (2) condensate drain tubes will be provided for the air conditioning evaporator. The drip pan will have two (2) drain tubes plumbed separately to allow for the condensate to exit the drip pan. No pumps will be provided.
0639675		Sun Visor, Smoked Lexan, AXT, Dash CF, Imp/Vel, Saber FR/Enforcer	<b>SUN VISORS</b> Two (2) smoked Lexan <sup>™</sup> sun visors provided. The sun visors will be located above the windshield with one (1) mounted on each side of the cab. There will be a black plastic thumb latch provided to help secure each sun visor in the stowed position.
0634328		Grab Handles, Driver and Officer Door Posts, Saber FR/Enforcer	<b>GRAB HANDLES</b> A black rubber covered grab handle will be mounted on the door post of the driver and officer's side cab door to assist in entering the cab. The grab handles will be securely mounted to the post area between the door and windshield.
0583938		Lights, Engine Compt, Custom, Auto Sw, WIn 3SC0CDCR, 3" LED, Trim	<b>ENGINE COMPARTMENT LIGHTS</b> There will be two (2) Whelen, Model 3SC0CDCR, 12 volt DC, 3.00" white LED light(s) with Whelen, Model 3FLANGEC, chrome flange kit(s) installed under the cab to be used as engine compartment illumination. These light(s) will be activated automatically when the cab is raised.
0631830		Fluid Check Access, Saber FR/Enforcer, Arrow XT	ACCESS TO ENGINE DIPSTICKS For access to the engine oil and transmission fluid dipsticks, there will be a door on the engine tunnel, inside the crew cab. The door will be on the rear wall of the engine tunnel, on the vertical surface. The engine oil dipstick will allow for checking only. The transmission dipstick will allow for both checking and filling. The door will have a rubber seal for thermal and acoustic insulation. One (1) flush latch will be provided on the access door.
0530840		Box, Storage, Aluminum, Latex Gloves	<b>STORAGE BOX</b> There will be two (2) storage box(es) designed to hold and dispense boxes of latex gloves provided. Each box will be constructed of aluminum and located one on each side of the forward facing crew cab seat riser - horizontal with opening on top. Each storage box will be 10.00" wide x 5.00" high x 3.50" deep and painted to match the cab interior. A slot will be provided on the top of each box to dispense the gloves.
0599959		Straps, Velcro, Map Box, Custom Chassis	VELCRO STRAP(S) FOR MAP BOX There will be two (2) Velcro® strap(s) installed at final inspection .
0002508		Map Box, 3 Bin/30 deg Slant, Custom Chassis	<b>MAP BOX</b> There will be one (1) map box(es) with three (3) bins, open at top. The map box(es) will be installed at final inspection. The map box(es) will be divided into three (3) bins, each being 12.50" wide x 3.00" high x 12.00" deep. Each bin will slant 30 degrees from horizontal. The map box(es) will be constructed of 0.125" aluminum and will be painted to match the cab interior.
0768268	SP	Map Pocket, Painted, 13.00" W x 14.00" H x 4.00" D, Each	<b>MAP POCKET(S)</b> There will be one (1) map pocket(s) installed as directed at pre-construction. Each pocket will be 13.00" wide x 14.00" high x 4.00" deep and painted to match compartment interior.

0583039		Not Required, Side Roll and Frontal Impact Protection	
0622618		Seating Capacity, 5 Seats	SEATING CAPACITY The seating capacity in the cab will be five (5).
0764118	SP	Seat, Driver, Bostrom, Pacifica, Air Ride, High Back, Saber FR/Enforcer	<b>DRIVER SEAT</b> A H.O. Bostrom, Pacifica, air suspension high back seat will be provided in the cab for the driver. For increased convenience, the seat will include a manual control to adjust the horizontal position (6.00" travel) and vertical position (4.00" of travel). To provide flexibility for multiple driver configurations, the seat will have a reclining back, adjustable from 15 degrees back to 45 degrees forward. A deluxe contoured 20.00" cushion and an adjustable lumbar support will be provided. To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled. The seat will be furnished with a 3-point, shoulder type seat belt.
0632916		Seat, Officer, Bostrom Sierra, Fixed, High Back, Saber FR/Enforcer	<b>OFFICER SEAT</b> A H.O. Bostrom, Sierra, fixed seat will be provided in the cab for the officer. For optimal comfort, the seat will be provided with 17.00" deep cushion. The seat back will be a high back style with 9 degree fixed recline angle. The seat will be furnished with a 3-point, shoulder type seat belt.
0620420		Radio Compartment, Below Non-Air Ride Seat, Saber FR/Enforcer	<b>RADIO COMPARTMENT</b> A radio compartment will be provided under the officer's seat. The inside compartment dimensions will be 16.00" wide x 7.50" high x 15.00" deep, with the back of the compartment angled up to match the cab structure. A drop-down door with a chrome plated lift and turn latch will be provided for access. The compartment will be constructed of smooth aluminum and painted to match the cab interior.
0749765	SP	Cabinet, Rear Fcng, LS, 22 W x 34 H x 23 D,Ext Acc Only,Sp Mtg,Sp Lt Loc,SFR/Enf	REAR FACING LEFT SIDE CABINET A rear facing cabinet will be provided in the crew cab at the left side outboard position. The cabinet will be mounted off the edge of the seat riser so that it is even with the crew cab door frame. The cabinet will be 22.00" wide x 34.00" high x 23.00" deep. The cabinet will be 22.00" wide x 34.00" high x 23.00" deep. The cabinet will include one (1) infinitely adjustable shelf with a 1.25" up-turned lippainted to match the cab interior. The cabinet will provide access only from outside the cab with one (1) double pan door painted to match the cab exterior with a non-locking D-ring latch. The door will be located on the side of the cab over the wheelwell. A pneumatic stay arm will be provided as a door stop. The clear door opening will be 17.00" wide x 29.25" high. The cabinet will be constructed of smooth aluminum and painted to match the cab interior. <b>Cabinet Light</b> There will be one (1) white Amdor LED strip light installed on the left side of the exterior cabinet door opening and one (1) white Amdor LED strip light installed on the right side of the exterior cabinet door opening. The lighting will be located LIGHTS TO BE VERTICAL BEHIND THE SHELF TRACK, POINTING INTO THE CABINET, ON BOTH LEFT AND RIGHT SIDE. The lighting will be controlled by an automatic door switch.
0102783		Not Required, Seat, Rr Facing C/C, Center	
0749764	SP	Cabinet, Rear Fcng, RS, 22 W x 34 H x 22 D,Ext Acc Only,Sp Mtg,Sp Lt Loc,SFR/Enf	REAR FACING RIGHT SIDE CABINET A rear facing cabinet will be provided in the crew cab at the right side outboard position. The cabinet will be mounted off the edge of the seat riser so that it is flush with the crew cab door jamb. The cabinet will be 22.00" wide x 34.00" high x 22.00" deep. The cabinet will provide access from outside the cab only with a one (1) double pan door painted to match the cab exterior with a non-locking D-ring latch having a clear door opening of 17.00" wide x 29.25" high. The door will be located on the side of the cab over the wheelwell. A pneumatic stay arm will be provided as a door stop. The cabinet will include one (1) infinitely adjustable shelf with a 1.25" up-turned lippainted to match the cab interior. The cabinet will be provided with a brushed stainless steel scuffplate on the lower door frame. The cabinet will be constructed of smooth aluminum and painted to match the cab interior. <b>Cabinet Light</b> There will be one (1) white Amdor LED strip light installed on the left side of the exterior cabinet door opening. The lighting will be located VERTICALLY BEHIND THE SHELF TRACK ON THE LEFT AND RIGHT SIDE, TO POINT INTO THE CABINET. The lights will be controlled by an automatic door switch.

0749839	SP	Seat, Fwd Fcng C/C, DS Outbrd, Bostrom, Hi-Back, Foldup, 17" Btm,5.5" IB,SFR/Enf	FORWARD FACING DRIVER SIDE OUTBOARD SEAT There will be one (1) forward facing, HO Bostrom Sierra foldup high back seat provided at the driver side outboard position in the crew cab. For optimal comfort, and to maximize accessibility to the crew cab, the seat will be provided with 17.00" deep cushion. The seat back will be a high- back style with 0 degree fixed recline angle. The seat will be moved an additional 5.50" inboard from the standard location. The seat will be furnished with a 3-point, shoulder type seat belt.
0632609		Seat, Forward Facing C/C, Center, (1) Bostrom Sierra, Hi-Back, Saber FR/Enforcer	<b>FORWARD FACING CENTER SEAT</b> There will be one (1) forward facing, HO Bostrom Sierra high back seat provided at the center position in the crew cab. For optimal comfort, the seat will be provided with 17.00" deep cushion. The seat back will be a high-back style with 9 degree fixed recline angle. The seat will be furnished with a 3-point, shoulder type seat belt.
0749841	SP	Seat, Fwd Fcng C/C, PS Outard, Bostrom, Hi-Back, Foldup, 17" Btm,5.5" IB,SFR/Enf	FORWARD FACING PASSENGER SIDE OUTBOARD SEAT There will be one (1) forward facing, HO Bostrom Sierra foldup high back seat provided at the passenger side outboard position in the crew cab. For optimal comfort, and to maximize accessibility to the crew cab, the seat will be provided with 17.00" deep cushion. The seat back will be a high-back style with 0 degree fixed recline angle. The seat will be moved an additional 5.50" inboard from the standard location. The seat will be furnished with a 3-point, shoulder type seat belt.
0651182		Scuffplate, Cabinet, Interior Door Pan, Cab	<b>DOOR PAN SCUFFPLATE</b> There will be a brushed stainless steel scuffplate on the interior door pan of two (2) cabinet door (s) located both external ems doors.
0617401		Matting, Turtle Tile, No Trim, EMS Compt	<b>MATTING IN EMS COMPARTMENT</b> Vinyl grating will be provided in two (2) EMS compartments, one in each rear facing EMS compartment Tile color will be black. The vinyl grating will be 0.50" thick and be cross bonded by 0.25" diameter ribbed sections spaced for aeration. The trim edge will not be installed at the edge of the tile.
0617410		Matting, Turtle Tile, EMS Compt, Shelving, 0.75" Thick	<b>MATTING IN EMS COMPARTMENT</b> Turtle Tile vinyl matting will be provided in two (2) EMS compartment shelves, one in each rear facing EMS compartment. Tile color will be black.
0756860	SP	Cabinet, Rear Facing, Top Eng Tnl, 42 W x 16 H x 14 D, Lap, Vent,Tray,SFR/Enf	<ul> <li>REAR FACING CENTER CABINET</li> <li>A rear facing cabinet will be provided on the top rear of the engine tunnel.</li> <li>The cabinet will be 42.00" wide x 16.00" high x 14.00" deep with one (1) drop down door, painted to match the cab interior with two (2) locking flush lift and turn latches with #1250 keys facing the crew cab. Gas cylinders will be provided to hold the door in the open position.</li> <li>There will be a 1.00" lip provided on the top of the cabinet.</li> <li>The cabinet will include louvers provided on the door of the cabinet for ventilation.</li> <li>An adjustable 1.00" thick poly tray will be provided in the cabinet.</li> <li>The cabinet will be constructed of smooth aluminum and painted to match the cab interior.</li> <li>Cabinet Light</li> <li>There will be one (1) white Amdor LED strip light installed horizontally above the interior cabinet door opening. The light will be controlled by an automatic door switch</li> </ul>
0042359		Upholstery, Seats In Cab, All Vinyl, CARE	<b>SEAT UPHOLSTERY</b> All seat upholstery will be 46 ounce leather grain black vinyl resistant to oil, grease and mildew. The cab will have five (5) seating positions.
0511471		No SCBA Brackets Required In Cab Seats, Imp/Vel, AXT 2010, Qtm 2010 Dash CF	
0603866		Seat Belt, Dual Retractor, ReadyReach, Saber FR/Enforcer	<ul> <li>SEAT BELTS</li> <li>All cab and tiller cab (if applicable) seating positions will have red seat belts. To provide quick, easy use for occupants wearing bunker gear, the female buckle and seat belt webbing length will meet or exceed the current edition of NFPA 1901 and CAN/ULC - S515 standards. The 3-point shoulder type seat belts will include height adjustment. This adjustment will optimize the belts effectiveness and comfort for the seated firefighter. The 3-point shoulder type seat belts will also include the ReadyReach D-loop assembly to the shoulder belt system. The ReadyReach feature adds an extender arm to the D-loop location placing the D-loop in a closer, easier to reach location.</li> <li>To ensure safe operation, the seats will be equipped with seat belt sensors in the seat cushion and belt receptacle that shall activate an alarm indicating a seat is occupied but not buckled.</li> </ul>

Helmet Storage, Provided by Fire Department, NFPA 2016	NFPA 1901, 2016 edition, section 14.1.7.4.1 requires a location for helmet sta	
Lights, Dome, Weldon Dual LED 4 Lts		
Portable Hand Light, Provided by Fire Dept, Pumper NFPA 2016 Classification	NFPA 1901, 2016 edition, section 5.9.4 requires two portable hand lights more fastened to the apparatus.	
	There will be 12v Streamlight, model #44001, Vulcan lights mounted one on e	
Cab Instruments, Black Gauges, Black Bezels, Enforcer MUX	telltale indicator lamps, control switches, alarms, and a diagnostic panel. The instrument panel controls and switches will be identified by a label adjacent to Actuation of the headlight switch will illuminate the labels in low light conditior lamps will not be illuminated unless necessary. The cab instruments and cont conveniently located within the forward cab section, forward of the driver. The and switch panels are designed to be removable for ease of service and low of <b>GAUGES</b>	function of the o each item. Is. Telltale indicator rrols will be gauge assembly cost of ownership.
	Amber indicator light in gauge dial	Page 27 of 221
	Department, NFPA 2016 Lights, Dome, Weldon Dual LED 4 Lts Portable Hand Light, Provided by Fire Dept, Pumper NFPA 2016 Classification Handlight, Streamlight, Vulcan 44001 Yellow, 12v Charger Base, shoulder strap Cab Instruments, Black Gauges,	There is no helmet storage on the apparatus as manufactured. The fire depart location for storage of Helmes. Lis

All gauges will perform prove out at initial power-up to ensure proper performance. INDICATOR LAMPS To promote safety, the following telltale indicator lamps will be located on the instrument panel in clear view of the driver. The indicator lamps will be "dead-front" design that is only visible when active. The colored indicator lights will have descriptive text or symbols. The following amber telltale lamps will be present: Low coolant Trac cntl (traction control) (where applicable Check engin Check trans (check transmission Aux brake overheat (Auxiliary brake overheat Air rest (air restriction) Caution (triangle symbol) Water in fuel DPF (engine diesel particulate filter regeneration) Trailer ABS (where applicable) Wait to start (where applicable) HET (engine high exhaust temperature) (where applicable) ABS (antilock brake system) MIL (engine emissions system malfunction indicator lamp) (where applicable) Side roll fault (where applicable) Front air bag fault (where applicable) The following red telltale lamps will be present: Warning (stop sign symbol) Seat belt Parking brake Stop engine Rack down The following green telltale lamps will be provided: Left turn Right turn Battery on The following blue telltale lamp will be provided: High beam

#### AĽARMS

Audible steady tone warning alarm: A steady audible tone alarm will be provided whenever a warning message is present.

Audible pulsing tone caution alarm: A pulsing audible tone alarm (chime/chirp) will be provided whenever a caution message is present without a warning message being present. Alarm silence: Any active audible alarm will be able to be silenced by holding the ignition switch at the top position for three (3) to five (5) seconds. For improved safety, silenced audible alarms will intermittently chirp every 30 seconds until the alarm condition no longer exists. The intermittent chirp will act as a reminder to the operator that a caution or warning condition still

exists. Any new warning or caution condition will enable the steady or pulsing tones respectively. INDICATOR LAMP AND ALARM PROVE-OUT

A system will be provided which automatically tests telltale indicator lights and alarms located on the cab instrument panel. Telltale indicators and alarms will perform prove-out at initial power-up to ensure proper performance.

## CONTROL SWITCHES

For ease of use, the following controls will be provided immediately adjacent to the cab instrument panel within easy reach of the driver. All switches will have backlit labels for low light applications.

Headlight/Parking light switch: A three (3)-position maintained rocker switch will be provided. The first switch position will deactivate all parking and headlights. The second switch position will activate the parking lights. The third switch will activate the headlights.

Panel back lighting intensity control switch: A three (3)-position momentary rocker switch will be provided. Pressing the top half of the switch, "Panel Up" increases the panel back lighting intensity and pressing the bottom half of the switch, "Panel Down" decreases the panel back lighting intensity. Pressing the half or bottom half of the switch several times will allow back lighting intensity to be gradually varied from minimum to maximum intensity level for ease of use.

Ignition switch: A three (3)-position maintained/momentary rocker switch will be provided. The first switch position will turn off and deactivate vehicle ignition. The second switch position will activate vehicle ignition and will perform prove-out on the telltale indicators and alarms for 3 to 5 seconds after the switch is turned on. A green indicator lamp is activated with vehicle ignition. The third momentary position will temporarily silence all active cab alarms. An alarm "chirp" may continue as long as alarm condition exists. Switching ignition to off position will terminate the alarm silence feature and reset function of cab alarm system.

Engine start switch: A two (2)-position momentary rocker switch will be provided. The first switch position is the default switch position. The second switch position will activate the vehicle's engine. The switch actuator is designed to prevent accidental activation. Hazard switch will be provided on the instrument panel or on the steering column. Heater, defroster, and optional air conditioning control panel: A control panel with membrane switches will be provided to control heater/defroster temperature and heater, defroster, and air conditioning fan speeds. A green LED status bar will indicate the relative temperature and fan speed settings.

Turn signal arm: A self-canceling turn signal with high beam headlight and windshield wiper/washer controls will be provided. The windshield wiper control will have high, low, and intermittent modes.

Parking brake control: An air actuated push/pull park brake control valve will be provided. Chassis horn control: Activation of the chassis horn control will be provided through the center of the steering wheel.

High idle engagement switch: A momentary rocker switch with integral indicator lamp will be provided. The switch will activate and deactivate the high idle function. The "OK To Engage High Idle indicator lamp must be active for the high idle function to engage. A green indicator lamp integral to the high idle engagement switch will indicate when the

		high idle function is engaged. "OK To Engage High Idle" indicator lamp: A green indicator light will be provided next to the high idle activation switch to indicate that the interlocks have been met to allow high idle engagement. Emergency switching will be controlled by multiple individual warning light switches for various groups or areas of emergency warning lights. An Emergency Master switch provided on the instrument panel that enables or disables all individual warning light switches is included. An additional "Emergency Master" button will be provided on the lower left hand corner of the gauge panel to allow convenient control of the "Emergency Master" system from inside the driver's door when standing on the ground. CUSTOM SWITCH PANELS The design of cab instrumentation will allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There will be positions for up to four (4) switch panels in the lower instrument console and up to six (6) switch panels in the overhead visor console. All switches have backlit labels for low light conditions. DIAGNOSTIC PANEL A diagnostic panel will be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel will allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches will allow ABS systems to provide blink codes should a problem exist. The diagnostic port ABS diagnostic port (0) Command Zone USB diagnostic port ABS diagnostic port (0) A digital four (4)-row by 20-character dot matrix display will be integral to the gauge panel. The upper left section will display the olowing, along with other configuration specific information: Odometer T
0509511	Air Restriction Indicator, Imp/Vel, AXT, Dash CF, Enf MUX	AIR RESTRICTION INDICATOR A high air restriction warning indicator light LCD message with amber warning indicator and audible alarm shall be provided.
0668061	Light, Do Not Move Apparatus, WIn VTX609R Red LED	<b>"DO NOT MOVE APPARATUS" INDICATOR</b> There will be a Whelen, Model VTX609R, red LED indicator light with chrome trim located in the driving compartment. This light will be illuminated automatically per the current NFPA requirements. The light will be labeled "Do Not Move Apparatus If Light Is On."

The same circuit that activates the Do Not Move Apparatus indicator will activate a pulsing alarm when the parking brake is released.

0509042		Messages, Open Door/Do Not Move Truck, MUX w/Color Display	DO NOT MOVE TRUCK MESSAGES Messages will be displayed on the Command Zone <sup>™</sup> , color display located within sight of the driver whenever the Do Not Move Truck light is active. The messages will designate the item or items not in the stowed for vehicle travel position (parking brake disengaged). The following messages will be displayed (where applicable): Do Not Move Truck DS Cab Door Open (Driver Side Cab Door Open) PS Cab Door Open (Passenger's Side Cab Door Open) DS Crew Cab Door Open (Driver Side Crew Cab Door Open) PS Cab Door Open (Passenger's Side Crew Cab Door Open) PS Crew Cab Door Open (Passenger's Side Body Door Open) PS Body Door Open (Passenger's Side Body Door Open) PS Body Door Open (Passenger's Side Body Door Open) PS Ladder Rack Down (Driver Side Ladder Rack Down) PS Ladder Rack Down (Passenger Side Ladder Rack Down) Deck Gun Not Stowed Lt Tower Not Stowed (Light Tower Not Stowed) Fold Tank Not Stowed (Aerial Device Not Stowed) Stabilizer Not Stowed Steps Not Stowed Aarial Not Stowed Any other device that is opened, extended, or deployed that creates a hazard or is likely to cause major damage to the apparatus if the apparatus is moved will be displayed as a caution message after the parking brake is disengaged.
0611683		Switching, Cab Instrument Lower Console & Overhead, Membrane, Enforcer WiFi MUX	SWITCH PANELS The emergency light switch panel will have a master switch for ease of use plus individual switches for selective control. Each switch panel will contain eight (8) membrane-type switches each rated for one million (1,000,000) cycles. Panels containing less than eight (8) switch assignments will include non-functioning black appliqués. The built-in switch panels will be located in the lower console or overhead console of the cab. Additional switch panel(s) will be located in the overhead position(s) above the windshield or in designated locations on the lower instrument panel layout. The switches will be membrane-type and also act as an integral indicator light. For quick, visual indication the entire surface of the switch will be illuminated white whenever back lighting is activated and illuminated green whenever the switch is active. An active illuminated switch will flash when interlock requirements are not met or device is actively being load managed. For ease of use, a two (2)-ply, scratch resistant laser engraved Gravoply label indicating the use of each switch will be placed in the center of the switch. The label will allow light to pass through the letters for ease of use in low light conditions.
0644179		Wiper Control, 2-Speed with Intermittent, Saber FR/Enforcer	WIPER CONTROL Wiper control will consist of a two (2)-speed windshield wiper control with intermittent feature and windshield washer controls.
0748251	SP	Wiring, Spare, 60A 12V DC Sacramento Fire Department, 6 Ga.	<ul> <li>SPARE CIRCUIT</li> <li>There will be one (1) pair of 6 gauge wires, including a positive and a negative, installed on the apparatus originating at the right side batteries.</li> <li>The above wires will include the following:</li> <li>The 6 gauge positive wire will be connected directly to one of the positive power terminals on the right side battery bank. The wire will be protected by a Blue Sea part number 5006100 fuse block with 60 amp fuse.</li> <li>The 6 gauge negative wire will be connected to the frame ground closest to the right side batteries, the same location as the right side batteries are grounded to the frame.</li> <li>The positive power wire and the negative wire shall run uninterrupted to the radio compartment located, positive power wire and negative wire shall run uninterrupted from battery power and frame ground, terminating inside radio compartment (#756860) with 6' of slack wire and heat shrinkable butt splicing. ALL WIRING TO BE RUN IN STANDARD RACEWAYS. The wires will terminate with a 6' pigtail and heat shrinkable butt splices.</li> <li>Wires will be sized to 125% of the protection.</li> </ul>
0787001		Wiring, Spare, 4.8 A 12V DC, USB Termination Blue Sea 1045 2nd	SPARE CIRCUIT There will be two (2) dual USB fast charge socket mounts installed on the apparatus. The above wires will have the following features: The positive wire will be connected directly to the battery power. The negative wire will be connected to ground. Wires will be protected to 4.8 amps at 12 volts DC. The USB socket mount will be one (1) each side rear facing cabinet, one rear vertical surface (edge closest to crew cab seating positions) in the lower outboard corner 3.00" up from heater/defroster box (SEE PHOTO TITLED "FIRE FIGHTER DUAL USB"). Termination will be a Blue Sea Systems part number 1045 dual USB charger socket. Wires will be sized to 125% of the protection. This circuit(s) may be load managed when the parking brake is applied.

0797189		Wiring, Spare, 4.8 A 12V DC, USB Termination Blue Sea 1045 1st	SPARE CIRCUIT         There will be two (2) dual USB fast charge socket mounts installed on the apparatus.         The above wires will have the following features:         The positive wire will be connected directly to the battery power.         The negative wire will be connected or ground.         Wires will be protected to 4.8 amps at 12 volts DC.         The USB socket mount will be one to the left of the officer below the chrome push buttons (SEE PHOTO 5933) and one on top of the engine tunnel below the HVAC controls (SEE PHOTO 5910).         Termination will be a Blue Sea Systems part number 1045 dual USB charger socket.         Wires will be sized to 125% of the protection.         This circuit(s) may be load managed when the parking brake is applied.
0774256	SP	Radio, AM/FM/CD, Panasonic, Antenna, Speakers	<ul> <li>RADIO WITH CD PLAYER</li> <li>A Panasonic AM/FM stereo radio with compact disc player will be included.</li> <li>The compact disc stereo radio will be mounted within reach of the driver.</li> <li>The quantity of the speakers will be one (1) pair of 5.25" speakers in the cab and one (1) pair of 5.25" speakers in the crew cab.</li> <li>The cab speakers will be located per special instructions, AM/FM radio speaker for the driver and officer are to be located AFT of the David Clark box per photo IMG_9047.JPG. The crewcab speakers will be located in the standard location if selected.</li> <li>The roof mounted antenna will be mounted on the driver's side of the cab behind the side lightbar (option 0605741) and 8" inboard from side of cab, match 32603.</li> </ul>
0798604	SP	Wiring, Secure Seat Cushion and Buckle Wiring	SECURE SEAT WIRING All wiring going to seat cushion and seat belt buckle will be in loom and secure to the seat area.
0615386		Vehicle Information Center, 7" Color Display, Touchscreen, MUX	INFORMATION CENTER         An information center employing a 7.0° diagonal touch screen color LCD display will be encased in an ABS plastic housing.         The information center will have the following specifications:         Operate in temperatures from -40 to 185 degrees Fahrenheit         An Optical Gel will be placed between the LCD and protective lens         Five weather resistant user interface switches         Grey with black accents         Sunlight Readable         Linux operating system         Minimum of 1000nits rated display         Display can be changed to an available foreign language         A LCD display integral to the cab gauge panel will be included as outlined in the cab         Instrumentation area.         Programmed to read US Customary <b>GENERAL SCREEN DESIGN</b> Where possible, background colors will be used to provide "At a Glance" vehicle information. If         in formation provided on a screen is within acceptable limits, a green background will be used.         If a caution or warning situation arises the following will occur:         An amber background/text color will indicate a varning condition         The information center will utilize an "Alert Center" to display text messages for audible alarm to sound. If more than one (1) text message occurs, the messages will cycle every second until the problem(s) have been resolved. The background color or the "Alert Center" will change to indicate the severity of the "warning" message.

HVAC switch panels. PAGE SCREEN The page screen will display the following and allow the user to progress into other screens for further functionality: Diagnostics Faults Listed by order of occurrence Allows to sort by system Interlock Throttle Interlocks Pump Interlocks (if equipped) Aerial Interlocks (if equipped) PTO Interlocks (if equipped) Load Manager A list of items to be load managed will be provided. The list will provide a description of the load. The lower the priority numbers the earlier the device will be shed should a low voltage condition occur. The screen will indicate if a load has been shed (disabled) or not shed. "At a glance" color features are utilized on this screen. Systems Command Zone Module type and ID number Module Version Input or output number Circuit number connected to that input or output Status of the input or output Power and Constant Current module diagnostic information Foam (if equipped) Pressure Controller (if equipped) Generator Frequency (if equipped) Live Data General Truck Data Maintenance Engine oil and filter Transmission oil and filter Pump oil (if equipped) Foam (if equipped) Aerial (if equipped) Setup Clock Setup Date & Time 12 or 24 hour format Set time and date Backlight Daytime Night time Sensitivity Unit Selection Home Screen Virtual Button Setup On Scene Screen Setup Configure Video Mode Set Video Contrast Set Video Color Set Video Tint Do Not Move The screen will indicate the approximate location and type of item that is open or is not stowed for travel. The actual status of the following devices will be indicate Driver Side Cab Door Passenger's Side Cab Door Driver Side Crew Cab Door Passenger's Side Crew Cab Door Driver Side Body Doors Passenger's Side Body Doors Rear Body Door(s) Ladder Rack (if applicable) Deck Gun (if applicable) Light Tower (if applicable) Hatch Door (if applicable) Stabilizers (if applicable) Steps (if applicable) Notifications View Active Alarms Shows a list of all active alarms including date and time of the occurrence is shown with each alarm Silence Alarms - All alarms are silenced Timer Screen HVAC (if equipped) Tire Information (if equipped) Ascendant Set Up Confirmation (if equipped) Button functions and button labels may change with each screen.

0606247		Vehicle Data Recorder w/CZ Display Seat Belt Monitor	<ul> <li>VEHICLE DATA RECORDER</li> <li>There will be a vehicle data recorder (VDR) capable of reading and storing vehicle information provided.</li> <li>The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A USB cable can be used to connect the VDR to a laptop to retrieve required information. The program to download the information from the VDR will be available to download on-line.</li> <li>The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:</li> <li>Vehicle Speed - NPH</li> <li>Acceleration - MPH/sec</li> <li>Deceleration - MPH/sec</li> <li>Despeed - RPM</li> <li>Engine Throttle Position - % of Full Throttle</li> <li>ABS Event - On/Off</li> <li>Seat Bett Buckled Status - Yes/No by Position</li> <li>Seat Bett Monitoring System</li> <li>A seat belt monitoring System (SBMS) will be provided on the Command Zone™ color display.</li> <li>The SBMS will be capable of monitoring up to 10 seating positions indicating the status of each seat position per the following:</li> <li>Seat Occupied &amp; Buckled = Green LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Red LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned ILED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Red LED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned ILED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned ILED indicator with audible alarm</li> <li>No Occupant &amp; Buckled = Ned ILED indicator with audible alarm</li> <li>No Occupan</li></ul>
0757069	SP	Intercom, David Clark, 5-Pos, 2-Dual Radio, (D, O, 2RPTT.1st Radio), 3C	INTERCOM SYSTEM A five (5) position David Clark, Model U3800, intercom system with dual radio interface capability at the driver and officer positions with two (2) remote push to transmit buttons located on the driver's side, on the left side vertical surface below the transmission shifter (SEE APPROVED 32603 IP-1 FOR DETAILED LOCATION) will be provided. Three (3) crew cab positions at three (3) forward facing seats will have radio listen / intercom only. The following components will be supplied with this system: Two (2) U3816 Radio Interface Modules (Driver, Officer) One (1) PPT kit for the left side first radio One (1) PPT kit for the left side first radio One (1) U3800 Intercom Unit (2 Crew) One (1) C3820 Power Cable One (1) U3801 Remote Headset Station (1 Crew) All necessary station cables and connectors
0637058		David Clark Universal Radio Interfaces Included with Single/Dual System	<b>RADIO / INTERCOM INTERFACE INCLUDED</b> All radio interfaced stations will have universal radio interfaces installed. The interface wiring will be routed within the cab to radio interface cables from each U3816 David Clark box, to include the Kenwood VHF and Motorola 800, shall terminate in the radio compartment (#756860). Where exposed. Radio interface cables shall be protected with plastic loom .
0597914		Headset, David Clark, H3442 Under Helmet, Flex Mic	UNDER THE HELMET HEADSET There will be five (5) under the helmet, headset(s) provided driver, officer and 3 crew. Each David Clark, Model H3442, headset will feature: 5' Coiled cord Noise cancelling electric microphone Flexible microphone boom rotates 200 degrees for left or right dress Microphone on/off button Comfort Gel Earseals 23 dB noise reduction
0681408		Hangers For Headsets, NFPA, Each	<b>HEADSET HANGERS</b> There will be five (5) headset hanger(s) installed driver's seat, officer's seat, driver's side outboard forward facing seat and rear, center, forward facing seat. The hanger(s) will meet NFPA 1901, Section 14.1.11, requirement for equipment mounting.
0559185		Install Customer Provided Handlight Charger(s)	HANDLIGHT CHARGER INSTALLATION There will be four (4) customer supplied handlight chargers(s) sent to the apparatus manufacturers preferred installer to be installed (1) near driver on map box, (1) on engine tunnel near officer, (1) on DS rear facing cabinet near door and (1) on PS rear facing cabinet near door. See photos 0559185 1 through 4 Specific shipping requirements will be followed. Page 33 of 221

0752681	SP	Antenna, Panorama, 5-in-1, MiMo,2G/3G/4G, MiMo WiFi, GPS	<b>COMBO ANTENNA</b> There will be one (1) Panorama, LP-IN-1958-* bolt on, low profile 5-in-1 antenna(s) installed on the cab roof. The antenna(s) will be white. The 5 meter 16.00' cables will be routed within the cab to inside the center rear facing "radio cabinet" (option 0756860). NOTE THE ANTENNA IS TO BE FORWARD OF THE PS CREW CAB LIGHTBAR (SEE PHOTO FOR SPECIFIC LOCATION). There will be two (2) cellular cables with SMA connectors, there will be two (2) WiFi cables with reverse SMA connectors and one (1) GPS cable with a SMA connector.
0750401	SP	Special CZIII WiFi Antenna Location, Sacramento Pmpr	<b>SPECIAL WIFI ANTENNA MOUNT LOCATION</b> The Command Zone advanced electronics WiFi-GPS antenna will be relocated from its standard right crewcab roof location to centered left to right, middle of the cab roof, behind the lightbar. When relocating this antenna it must be located a minimum of nine (9) inches away from any other metallic object.
0660489		Antenna Mount, Custom Chassis, Fill in Blank Mounting and Cable Locations	<b>RADIO ANTENNA MOUNT</b> There will be four (4) standard 1.125", 18 thread, NMO type antenna mounting base(s) installed at least 18"from antennas/objects. All antenna cabling should be loosely run with minimal bending, and encased in protective loom in areas of abrasive or sharp object. SEE PHOTO FOR SPECIFIC PLACEMENT OF ANTENNA STUBS on the cab roof with high efficiency, low loss, coaxial cable(s) routed within the cab / crew area to inside the center rear facing "radio cabinet" (option 0756860) . A weatherproof cap will be installed on the mount.
0653520		Camera, Pierce, Mux, R, RS Cameras	<ul> <li>VEHICLE CAMERA SYSTEM</li> <li>There will be a color vehicle camera system provided with the following:</li> <li>One (1) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse.</li> <li>One (1) camera located on the right side of the apparatus, pointing rearward, displayed automatically with the right side turn signal.</li> <li>The camera images will be displayed on the driver's vehicle information center display. Audio from the microphone on the rear camera will be emitted by an amplified speaker with volume control located behind the driver seat.</li> <li>The following components will be included:</li> <li>One (1) CS134404CI Side camera</li> <li>One (1) Amplified speaker (if applicable)</li> <li>All necessary cables</li> </ul>
0511071		Guard, 4-Way, Rear Vision Camera	VEHICLE CAMERA GUARD There will be one (1) aluminum treadplate guard(s) fastened over the vehicle camera(s) located centered at the rear below the hosebed and in between the handrails .
0755423	SP	Pierce Command Zone, Advanced Electronics & Ctrl Sys, Enf, WiFi, Sacramento Pmpr	ELECTRICAL POWER CONTROL SYSTEM The primary power distribution will be located forward of the officer's seating position and be easily accessible while standing on the ground for simplified maintenance and troubleshooting. Additional electrical distribution centers will be provided throughout the vehicle to house the vehicle's electrical power, circuit protection, and control components. The electrical distribution centers will be located strategically throughout the vehicle to minimize wire length. For ease of maintenance, all electrical distribution centers will be easily accessible. Distribution centers located throughout the vehicle will contain battery powered studs for supplying customer installed equipment thus providing a lower cost of ownership. The distribution center under the rear tailboard shall be sized to fit four Command Zone modules and shall be mounted centered under the tailboard as high and as far forward as practical. Circuit protection devices, which conform to SAE standards, will be utilized to protect electrical circuits. All circuit protection devices will be rated per NFPA requirements to prevent wire and component damage when subjected to extreme current overload. General protection circuit breakers will be type-I automatic reset (continuously resetting). When required, automotive type fuses will be tutized to protect electronic equipment. Control relays and solenoid will have a direct current rating of 125 percent of the maximum current for which the circuit is protected per NFPA. <b>SOLD-STATE CONTROL SYSTEM</b> A solid-state electronics based control system will be utilized to achieve advanced operation and control system will comply with SAE J1939-11 recommended practices. The control system will operate as a master-slave system whereas the main control module instructs all other system components. The system will contain patented Mission Critical software that maintains critical vehicle operations in the unlikely event of a main control module instructs all other system components. Th

parameters

Complete operating and troubleshooting manuals USB connection to the main control module for advanced troubleshooting

To assure long life and operation in a broad range of environmental conditions, the solid-state

control system modules will meet the following specifications: Module circuit board will meet SAE J771 specifications

Operating temperature from -40C to +70C

Storage temperature from -40C to +70C

Vibration to 50g

IP67 rated enclosure (Totally protected against dust and also protected against the effect of temporary immersion between 15 centimeters and one (1) meter)

Operating voltage from eight (8) volts to 16 volts DC

The main controller will activate status indicators and audible alarms designed to provide warning of problems before they become critical.

#### **CIRCUIT PROTECTION AND CONTROL DIAGRAM**

Copies of all job-specific, computer network input and output (I/O) connections will be provided with each chassis. The sheets will indicate the function of each module connection point, circuit protection information (where applicable), wire numbers, wire colors and load management information

#### **ON-BOARD ELECTRICAL SYSTEM DIAGNOSTICS**

Advanced on-board diagnostic messages will be provided to support rapid troubleshooting of the electrical power and control system. The diagnostic messages will be displayed on the information center located at the driver's position.

The on-board information center will include the following diagnostic information:

Text description of active warning or caution alarms

Simplified warning indicators

Amber caution indication with intermittent alarm

Red warning indication with steady tone alarm **PROGNOSTICS** 

A software based vehicle tool will be provided to predict remaining life of the vehicles critical fluid and events.

The system will send automatic indications to the Command Zone. color display and/or wireless enabled device to proactively alert of upcoming service intervals.

Prognostics will include:

Engine oil and filter

Transmission oil and filter

Pump oil (if equipped)

Foam oil (if equipped)

# Aerial oil and filter (if equipped) ADVANCED DIAGNOSTICS

An advanced, Windows-based, diagnostic software program will be provided for this control system. The software will provide troubleshooting tools to service technicians equipped with a Windows-based computer or wireless enabled device.

The service and maintenance software will be easy to understand and use and have the ability to view system input/output (I/O) information.

#### **TECH MODULE WITH WIFI**

An in cab module will provide WiFi wireless interface and data logging capability. The WiFi interface will comply with IEEE 802.11 b/g/n capabilities while communicating at 2.4 Gigahertz. The module will provide an external antenna connection allowing a line of site communication range of up to 300 feet with a roof mounted antenna.

The module will transmit a password protected web page to a WiFi enabled device (i.e. most smart phones, tablets or laptops) allowing two levels of user interaction. The firefighter level will allow vehicle monitoring of the vehicle and firefighting systems on the apparatus. The technician level will allow diagnostic access to inputs and outputs installed on the Command Zone, control and information system.

The data logging capability will record faults from the engine, transmission, ABS and Command Zone, control and information systems as they occur. No other data will be recorded at the time the fault occurs. The data logger will provide up to 2 Gigabytes of data storage.

A USB connection will be provided on the Tech Module. It will provide a means to download data logger information and update software in the device.

#### INDICATOR LIGHT AND ALARM PROVE-OUT SYSTEM

A system will be provided which automatically tests basic indicator lights and alarms located on the cab instrument panel.

#### VOLTAGE MONITOR SYSTEM

A voltage monitoring system will be provided to indicate the status of the battery system connected to the vehicle's electrical load. The system will provide visual and audible warning

when the system voltage is below or above optimum levels. The alarm will activate if the system falls below 11.8 volts DC for more than two (2) minutes.

#### POWER AND GROUND STUDS

Spare circuits will be provided in the primary distribution center for two-way radio equipment. The spare circuits will consist of the following:

One (1) 12-volt DC, 30 amp battery direct spare

One (1) 12-volt DC ground and un-fused switched battery stud located in or adjacent to the power distribution center

## **ENHANCED SOFTWARE**

The solid-state control system will include the following software enhancements:

All perimeter lights and scene lights (where applicable) will be deactivated when the parking brake is released.

Cab and crew cab dome lights will remain on for ten (10) seconds for improved visibility after the doors close. The dome lights will dim after ten (10) seconds or immediately if the vehicle is put into gear.

Cab and crew cab perimeter lights will remain on for ten (10) seconds for improved visibility after the doors close. The dome lights will dim after ten (10) seconds or immediately if the vehicle is put into gear.

#### **EMI/RFI PROTECTION**

To prevent erroneous signals from crosstalk contamination and interference, the electrical system will meet, at a minimum, SAE J551/2, thus reducing undesired electromagnetic arRagelia5 of 221 frequency emissions. An advanced electrical system will be used to ensure radiated and conducted electromagnetic interference (EMI) or radio frequency interference (RFI) emissions are suppressed at their source.

The apparatus will have the ability to operate in the electromagnetic environment typically found in fire ground operations to ensure clean operations. The electrical system will meet, without exceptions, electromagnetic susceptibility conforming to SAE J1113/25 Region 1, Class C EMR for 10Khz-1GHz to 100 Volts/Meter. The vehicle OEM, upon request, will provide EMC testing reports from testing conducted on an entire apparatus and will certify that the vehicle meets SAE J551/2 and SAE J1113/25 Region 1, Class C EMR for 10Khz-1GHz to 100 Volts/Meter requirements.

EMI/RFI susceptibility will be controlled by applying appropriate circuit designs and shielding. The electrical system will be designed for full compatibility with low-level control signals and high-powered two-way radio communication systems. Harness and cable routing will be given careful attention to minimize the potential for conducting and radiated EMI/RFI susceptibility.

0624253	Electrical System, Enforcer MUX	<ul> <li>ELECTRICAL</li> <li>All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run, in loom or conduit, where exposed and have grommets where wire passes through sheet metal.</li> <li>Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00° intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.</li> <li>Electrical wiring and equipment will be installed utilizing the following guidelines:</li> <li>All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.</li> <li>Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area will be defined as any location outside of the cab or body.</li> <li>Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.</li> <li>Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).</li> <li>All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.</li> <li>All electrical terminals in exposed areas will have silicon (1890) applied completely over the metal potion of t</li></ul>
0079211	Batteries, (6) Exide Grp 31, 950 CCA each, Threaded Stud	BATTERY SYSTEM There will be six (6) 12 volt Exide®, Model 31S950X3W, batteries that include the following features will be provided: 950 CCA, cold cranking amps 190 amp reserve capacity High cycle Group 31 Rating of 5700 CCA at 0 degrees Fahrenheit -140 minutes of reserve capacity Threaded stainless steel studs Each battery case will be a black polypropylene material with a vertically ribbed container for increased vibration resistance. The cover will be manifold vented with a central venting location to allow a 45 degree tilt capacity. The inside of each battery will consist of a "maintenance free" grid construction with poly wrapped separators and a flooded epoxy bottom anchoring for maximum vibration resistance.
0008621	Battery System, Single Start, All Custom Chassis	BATTERY SYSTEM There will be a single starting system with an ignition switch and starter button provided and located on the cab instrument panel. MASTER BATTERY SWITCH There will be a master battery switch provided within the cab within easy reach of the driver to activate the battery system. An indicator light will be provided on the instrument panel to notify the driver of the status of the battery system.

0002698	Battery Compartment, Saber/Enforcer	<ul> <li>BATTERY COMPARTMENTS</li> <li>Batteries will be placed on non-corrosive mats and stored in well ventilated compartments located under the cab.</li> <li>Heavy-duty, 2/0 gauge, color coded battery cables will be provided. Battery terminal connections will be coated with anti-corrosion compound.</li> <li>Battery solenoid terminal connections will be encapsulated with semi-permanent rubberized compound.</li> <li>JUMPER STUDS</li> <li>One (1) set of battery jumper studs with plastic color-coded covers will be included on the battery compartments.</li> </ul>
0593502	Charger, Sngl Sys, Newmar, EV-40, 023-5353-1 Indicator	<b>BATTERY CHARGER</b> There will be a Newmar, Model EV-40, battery charger with a Newmar, Model 023-5353-1, meter indicating the state of charge. The vehicle battery output will be capable of supplying up to 40 amps for charging the batteries. The charger will include a 15 amp battery saver connection to charge hand lights, batteries, radios or power a 12 volt compressor. The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.
0779452	Location, Charger, Cab EMS Compt, Back Wall	The battery charger will be located on the back wall of the EMS compartment, located on the forward side of the compartment, behind the driver seat.
0536099	Location, Bat Chrg Ind, Driver's Step Area	The battery charger indicator will be located in the driver's step area.
0016857	Shoreline, 20A 120V, Kussmaul Auto Eject, 091-55-20-120, Super	AUTO EJECT FOR SHORELINE There will be one (1) Kussmaul <sup>™</sup> , Model 091-55-20-120, 20 amp 120 volt AC shoreline inlet(s) provided to operate the dedicated 120 volt AC circuits on the apparatus. The shoreline inlet(s) will include red weatherproof flip up cover(s). There will be a release solenoid wired to the vehicle's starter to eject the AC connector when the engine is starting. The shoreline(s) will be connected to the battery charger. There will be a mating connector body supplied with the loose equipment. There will be a label installed near the inlet(s) that state the following: Line Voltage Current Ratting (amps) Phase Frequency
0026800	Shoreline Location	The shoreline receptacle will be located on the driver side of cab, to the front of cab door.
0121711	Alternator, 320 amp, Leece-Neville 4962PA, Sgl Sys	ALTERNATOR A Leece-Neville, Model 4962PA, alternator will be provided. It will have a rated output current of 320 amps, as measured by SAE method J56. The alternator will feature an integral, self diagnostic regulator and rectifier. The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output.
0550970	Fan, 12v, Electrical Component Cooling	<b>ELECTRICAL COOLING FAN</b> There will be three (3) 12v electrical cooling fan to be located rear vertical wall of the radio compartment option #756860 one each in the upper corner and one centered – all up as high as possible). The fan will vent the heat outward. Fan to be wired to the battery switch.

#### ELECTRONIC LOAD MANAGER

An electronic load management (ELM) system will be provided that monitors the vehicles 12-volt electrical system, automatically reducing the electrical load in the event of a low voltage condition, and automatically restoring the shed electrical loads when a low voltage condition expires. This ensures the integrity of the electrical system.

For improved reliability and ease of use, the load manager system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load management tasks. Load management systems which require additional components will not be allowed.

The system will include the following features:

System voltage monitoring.

A shed load will remain inactive for a minimum of five minutes to prevent the load from cycling on and off.

Sixteen available electronic load shedding levels.

Priority levels can be set for individual outputs.

High Idle to activate before any electric loads are shed and deactivate with the service brake. If enabled:

"Load Man Hi-Idle On" will display on the information center.

Hi-Idle will not activate until 30 seconds after engine start up.

Individual switch "on" indicator to flash when the particular load has been shed.

The information center indicates system voltage.

The information center, where applicable, includes a "Load Manager" screen indicating the following:

Load managed items list, with priority levels and item condition.

Individual load managed item condition:

ON = not shed

SHED = shed

# SEQUENCER

A sequencer will be provided that automatically activates and deactivates vehicle loads in a preset sequence thereby protecting the alternator from power surges. This sequencer operation will allow a gradual increase or decrease in alternator output, rather than loading or dumping the entire 12 volt load to prolong the life of the alternator.

For improved reliability and ease of use, the load sequencing system will be an integral part of the vehicle's solid state control system requiring no additional components to perform load sequencing tasks. Load sequencing systems which require additional components will not be allowed.

Emergency light sequencing will operate in conjunction with the emergency master light switch. When the emergency master switch is activated, the emergency lights will be activated one by one at half-second intervals. Sequenced emergency light switch indicators will flash while waiting for activation.

When the emergency master switch is deactivated, the sequencer will deactivate the warning light loads in the reverse order.

Sequencing of the following items will also occur, in conjunction with the ignition switch, at halfsecond intervals:

Cab Heater and Air Conditioning Crew Cab Heater (if applicable) Crew Cab Air Conditioning (if applicable)

Exhaust Fans (if applicable)

Third Evaporator (if applicable)

0783153	Headlights, Rect LED, JW Spkr Evo 2, AXT/DCF/Enf/Imp/Sab/Vel	<b>HEADLIGHTS</b> There will be four (4) JW Speaker®, Model 8800, 4" x 6" rectangular LED lights mounted in the front quad style, chrome housing on each side of the cab grille: the outside light on each side will contain a part number 055***1 low beam module the inside light on each side will contain a part number 055***1 high beam module the headlight to include chrome bezels The low beam lights will be activated when the headlight switch is on. The high beam and low beam lights will be activated when the headlight switch and the high beam switch is activated.
0648426	Light, Directional, Wln 60A00TAR Arrow, Common Bzl, Above Headlts,Sab/Enf	<b>DIRECTIONAL LIGHTS</b> There will be two (2) Whelen, Model 60A00T*R, amber LED populated arrow directional lights provided on the front of the cab, above the headlights. Each light will be housed in the same quad common bezel as the front warning light. The lens color(s) to be the same as the LEDs.
0648293	Light, Directional, Wln 60A00TAR LED Arrow, 15 Degree Angle Bracket, Addt'l	ADDITIONAL DIRECTIONAL LIGHT There will be two (2) Whelen, Model 60A00TAR, amber LED populated arrow directional lights provided exterior back of the cab, one (1) on each side. Each light will be surface mounted in a 15 degree angle bracket.
0620054	Light, Directional/Marker, Intermediate, Weldon 9186-8580-29 LED 2lts	<b>INTERMEDIATE LIGHT</b> There will be two (2) Weldon, Model 9186-8580-29, amber LED turn signal marker lights furnished, one (1) each side, in the rear fender panel. The light will double as a turn signal and marker light.
0782103	Lights, Clearance/Marker/ID, Front, Included with Visor Scene Light	CAB CLEARANCE/MARKER/ID LIGHTS The front identification and clearance lights will be included in the front visor scene light.

0647899	Lights, Directional/Marker, Cab Front Side, Weldon 9186-8580-29 LED, Sab/Enf	<b>FRONT CAB SIDE DIRECTIONAL/MARKER LIGHTS</b> There will be two (2) Weldon, Model 9186-8580-29, amber LED lights installed front of the cab door, one (1) on each side of the cab. The lights will activate as marker lights with the headlight switch and directional lights with the corresponding directional circuit.
0090155	Lights, Clearance/Marker/ID, Rear, Truck-Lite 35200R LED 7Lts	<b>REAR CLEARANCE/MARKER/ID LIGHTING</b> There will be three (3) Truck-Lite®, Model 35200R, LED lights used as identification lights located at the rear of the apparatus per the following: As close as practical to the vertical centerline Centers spaced not less than 6.00" or more than 12.00" apart Red in color All at the same height There will be two (2) Truck-Lite, Model 35200R, LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following: To indicate the overall width of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the rear All at the same height There will be two (2) Truck-Lite, Model 35200R, LED lights installed on the side of the apparatus used as clearance lights located at the rear of the apparatus per the following: To isolate the overall width of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the rear All at the same height There will be two (2) Truck-Lite, Model 35200R, LED lights installed on the side of the apparatus as marker lights as close to the rear as practical per the following: To indicate the overall length of the vehicle One (1) each side of the vertical centerline As near the top as practical Red in color To be visible from the side All at the same height There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground. Per FMVSS 108 and CMVSS 108 requirements.
0564683	Lights, Tail, Wln M6BTT* Red LED Stop/Tail & M6T* Amber LED Dir Arw For Hsg	<b>REAR FMVSS LIGHTING</b> The rear stop/tail and directional LED lighting will consist of the following: Two (2) Whelen®, Model M6BTT, red LED stop/tail lights Two (2) Whelen, Model M6T, amber LED arrow turn lights The lights shall be provided with color lenses. The lights will be mounted in a polished combination housing.
0561471	Lights, Backup, WIn M6BUW, LED, For Tail Lt Housing	There will be two (2) Whelen Model M6BUW, LED backup lights provided in the tail light housing.
0664481	Bracket, License Plate & Light, P25 LED	LICENSE PLATE BRACKET There will be one (1) license plate bracket mounted on the rear of the body. A white LED light will illuminate the license plate. A polished stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.
0556842	Bezels, Wln, (2) M6 Chrome Pierce, For mtg (4) Wln M6 lights	LIGHTING BEZEL There will be two (2) Whelen, Model M6FCV4P, four (4) place chromed ABS housings with Pierce logos provided for the rear M6 series stop/tail, directional, back up, scene lights or warning lights.
0589905	Alarm, Back-up Warning, PRECO 1040	<b>BACK-UP ALARM</b> A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.
0036400	Interlock, NFPA Midship Lts Disable w/Pump in Gear	<b>INTERLOCK NFPA MIDSHIP LIGHTS</b> The NFPA midship lights will be disabled when the pump is put into gear. The lights will be disabled to allow the pump operator to work at the pump panels without the interference from the flashing lights.
0564535	Light, Marker, Britax Rubber Arm, Model L427.203.L12 LED, Red/Amb, Qty/Loc	MARKER LIGHTS There will be one (1) pair of amber and red, Britax, Model L427.203.L12, LED marker lights with rubber arm, located one (1) each side at the rear of the body aft of the D1/P1 roll-up doors. The amber lens will face the front and the red lens will face the rear of the truck and be the most rearward marker light. These lights will be activated with the running lights of the vehicle. Page 39 of 221

0578264	Flash Pattern, California Title13, LED Warning Lights	WARNING LIGHT FLASH PATTERN The flash pattern of all the exterior warning lights will be set to meet the certified California, Title XIII flash pattern by either the light manufacturer's default flash pattern or by a conversion change to the certified flash pattern.
0769420	Lights, Perimeter Cab, Amdor AY-LB- 12HW020 LED 4Dr	• CAB PERIMETER SCENE LIGHTS There will be four (4) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" white LED strip lights provided, one (1) for each cab door. These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.
0769572	Lights, Perimeter Pump House, Amdor AY-LB-12HW020 LED 2lts	<b>PUMP HOUSE PERIMETER LIGHTS</b> There will be two (2) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" LED weatherproof strip lights with brackets provided under the pump panel running boards, one (1) each side. If the combination of options in the vehicle does not permit clearance for a 20.00" light, a 12.00" version of the Amdor light will be installed. The lights will be controlled by the same means as the body perimeter lights.
0770056	Lights, Perimeter Body, Amdor AY- LB-12HW020 LED 2lts, Rear Step	<b>BODY PERIMETER SCENE LIGHTS</b> There will be two (2) Amdor, Model AY-LB-12HW020, 350 lumens, 20.00" long, white LED's, 12 volt DC lights provided at the rear step area of the body, one (1) each side shining to the rear. The perimeter scene lights will be activated when a switch within reach of the driver is activated and the parking brake is applied.
0566799	Lights, Step, P25 LED 4lts, Ign, Parking Brake Activated	<b>STEP LIGHTS</b> There will be four (4) white LED, step lights provided. One (1) step light will be provided on each side, on the front compartment face and two (2) step lights at the rear to illuminate the tailboard. In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light. These step lights will be actuated when the ignition switch is on and the parking brake is set. All other steps on the apparatus will be illuminated per the current edition of NFPA 1901.
0696870	Lights, Side Scene, TecNiq, E960 LED, Stainless 1st Pr	SCENE LIGHTS There will be one (1) pair of TecNiq, Model E960, LED scene light(s) with stainless steel housing, installed on the side of the apparatus, one (1) each side aft of rear wheelwells. A control for the light(s) selected above will be the following: a switch at the driver's side switch panel no additional switch location no additional switch location These lights may be load managed when the parking brake is set.
0603108	Light, HiViz FT-MB-24-TRGWA-FT-*, 31.11" 2nd	<ul> <li>12 VOLT LIGHTING</li> <li>There will be one (1) HiViz, part number FT-MB-24-TRGWA-FT-**, 2.56" high x 31.11" long x 3.31" deep 8,880 lumens 12 volt DC LED light(s) installed with TRGWA adjustable tilt mounts located PS body flange as high as possible, centered over rear wheel, need to have cover over wire. The lights will be supplied with with a combination of flood and spot optics. The black.</li> <li>The light(s) selected above will be controlled by a switch at the driver's side switch panel and by a switch at the driver's side pump panel.</li> <li>These light(s) may be load managed when the parking brake is applied.</li> </ul>
0603109	Light, HiViz FT-MB-24-TRGWA-FT-*, 31.11" 1st	<ul> <li>12 VOLT LIGHTING</li> <li>There will be one (1) HiViz, part number FT-MB-24-TRGWA-FT-**, 2.56" high x 31.11" long x 3.31" deep 8,880 lumens 12 volt DC LED light(s) installed with TRGWA adjustable tilt mounts located DS body flange as high as possible, centered over rear wheel, need to have cover over wire. The lights will be supplied with with a combination of flood and spot optics. The black.</li> <li>The light(s) selected above will be controlled by a switch at the driver's side switch panel and by a switch at the driver's side pump panel.</li> <li>These light(s) may be load managed when the parking brake is applied.</li> </ul>

0634174	Light, HiViz FT-MB-2.18-FT, 20.50", 2nd	<b>12 VOLT LIGHTING</b> There will be one (1) HiViz FIRETECH, Model FT-MB2-18-FT, 20.50" 12 volt DC LED light(s) with FireTech combination spot/flood optics and adjustable pedestal mounting brackets, will be mounted PS crew cab centered under the Whelen side lightbar per AD print. The color of the light housing will be white. The light(s) selected above will be controlled by the following: from the same switches provided to activate other scene lights. no additional switch location. no additional switch location. These light(s) may be load managed when the parking brake is applied.
0634175	Light, HiViz FT-MB-2.18-FT, 20.50", 1st	<b>12 VOLT LIGHTING</b> There will be one (1) HiViz FIRETECH, Model FT-MB2-18-FT, 20.50" 12 volt DC LED light(s) with FireTech combination spot/flood optics and adjustable pedestal mounting brackets, will be mounted DS crew cab centered under the Whelen side lightbar per AD print. The color of the light housing will be white. The light(s) selected above will be controlled by the following: from the same switches provided to activate other scene lights no additional switch location no additional switch location These light(s) may be load managed when the parking brake is applied.
0774476	Light, Roof Mt, HiViz LED, FT-B-80- ML-*, Cnt Feature	<b>12 VOLT LIGHTING</b> There will be a HiViz Model FT-B-80-ML-*, 2.56" high x 82.75" long x 3.31" deep 31,680 raw lumens 12 volt DC light provided on the front cab roof as far forward as practical. The light will include white scene LEDs, two (2) amber LEDs as clearance lights and three (3) amber LEDs as identification lights. The painted parts of the light housing and brackets to be white. The clearance and identification LEDs will be activated with the headlight switch. The scene LEDs will be activated when the battery switch is on, the parking brake is applied and by a switch at the driver's side switch panel and by a switch at the driver's side pump panel. The white LEDs may be load managed when the parking brake is applied.
0532358	Not Required, Deck Lights, Other Hose Bed & Rear Lighting	
0645639	Lights, Rear Scene, Wln, PELCC LED, 45 Deg Flange	<b>REAR SCENE LIGHTS</b> There will be two (2) Whelen, Model PELCC, white 12 volt DC LED scene lights with 45 degree chrome housing installed at the rear of the apparatus, below the stop/tail/warning assembly at the rear of the body, one (1) each side. The lights will be controlled when the parking brake is applied.
0086038	Switch(es), 12VDC, Connect to Fill in Blank	<b>SWITCH, ADDITIONAL</b> Additional 12V switch(es) will be provided. There will be one (1) switch located in the cab, labeled 'rear scene' to control the REAR SCENE lights. Note options 591872 (rear upper scene), 696870 (body fender lights) and 645639 (NFPA rear work lights).
0626449	Light, Wln, 12V NP6B* Nano Pioneer Series LED, Bail Mount 2nd	<b>12 VOLT LIGHTING</b> There will be one (1) Whelen Model NP6B*, 1,800 lumens 12 volt DC LED floodlight(s) and bail bracket to be located passenger side on the cab roof, as far forward as possible and under the lightbar towards the outboard side and angled at 45 degrees outwards per 32603. The painted parts of this light assembly to be white. The light(s) selected above will be controlled by the following: from the same switches provided to activate other scene lights. no additional switch location. no additional switch location. These light(s) may be load managed when the parking brake is applied.
0626453	Light, Wln, 12V NP6B* Nano Pioneer Series LED, Bail Mount 1st	<b>12 VOLT LIGHTING</b> There will be one (1) Whelen Model NP6B*, 1,800 lumens 12 volt DC LED floodlight(s) and bail bracket to be located driver side on the cab roof, as far forward as possible and under the lightbar towards the outboard side and angled at 45 degrees outwards per 32603. The painted parts of this light assembly to be white. The light(s) selected above will be controlled by the following: from the same switches provided to activate other scene lights. no additional switch location. no additional switch location. These light(s) may be load managed when the parking brake is applied.

0768474	Lights, Hose Bed, Below Aluminum Cover, Amdor AY-LB-12HW040, 40" LED 4lts	LIGHTS BELOW HOSE BED COVER There will be four (4) Amdor Model AY-LB-12HW040, 700 lumens, 40.00" white LED lights provided to illuminate the hose bed area. Two (2) LED light strips will be installed on the driver's side hose bed cover 30.00" from the front and rear of the hose bed, as close to the hinge as practical. Two (2) LED light strips will be installed on the passenger's side hose bed cover 30.00" from the front and rear of the hose bed, as close to the hinge as practical. The lights will be activated when the battery switch is on, and when the hosebed cover is raised.
0709438	Light, Walking Surf, FRP Flood, LED	WALKING SURFACE LIGHT There will be Model FRP, 4" round black 12 volt DC LED floodlight(s) with bolt mount provided to illuminate the entire designated walking surface on top of the body. The light(s) will be activated when the body step lights are on.
0060111	Pumper, Medium, Galvanneal, 2nd Gen	
0554271	Body Skirt Height, 20"	
0028244	Tank, Water, 500 Gallon, Poly, Med	<ul> <li>WATER TANK</li> <li>Booster tank will have a capacity of 500 gallons and be constructed of polypropylene plastic by United Plastic Fabricating, Incorporated.</li> <li>Tank joints and seams will be nitrogen welded inside and out.</li> <li>Tank will be baffled in accordance with NFPA Bulletin 1901 requirements.</li> <li>Baffles will have vent openings at both the top and bottom to permit movement of air and water between compartments.</li> <li>Longitudinal partitions will be constructed of .38" polypropylene plastic and will extend from the bottom of the tank through the top cover to allow for positive welding.</li> <li>Transverse partitions will extend from 4.00" off the bottom of the tank to the underside of the top cover.</li> <li>All partitions will interlock and will be welded to the tank bottom and sides.</li> <li>Tank top will be constructed of .50" polypropylene. It will be recessed .38" and will be welded to the tank sides and the longitudinal partitions.</li> <li>Tank top will be sufficiently supported to keep it rigid during fast filling conditions.</li> <li>Construction will include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two (2) of the dowels will be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes.</li> <li>A sump that will be sized dependent on the tank to pump plumbing will be provided at the bottom of the water tank.</li> <li>Sump will include a drain plug and the tank outlet.</li> <li>Tank will be installed in a fabricated cradle assembly constructed of structural steel.</li> <li>Sufficient in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on.</li> <li>Stops or other provision will be provided to prevent an empty tank from bouncing excessively while moving vehicle.</li> </ul>
0003405	Overflow, 4.00" Water Tank, Poly	Fill tower will be constructed of .50" polypropylene and will be a minimum of 8.00" wide x 14.00" long. Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover. An overflow pipe, constructed of 4.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.
0028104	Foam Cell Required	
0633066	Sleeve, Through Tank	<b>SLEEVE, PLUMBING, THROUGH TANK</b> Two (2) sleeves will be provided in the water tank for a 3.00" pipe to the rear.
0553729	Not Required, Restraint, Water Tank, Heavy Duty	
0003429	Not Required, Direct Tank Fill	
0003424	Not Required, Dump Valve	
0048710	Not Required, Jet Assist	

0030007		Not Required, Dump Valve Chute	
0514778		Not Required, Switch, Tank Dump Master	
0126632		Hose Bed, Galv, Pumper	<ul> <li>HOSE BED</li> <li>The hose bed will be fabricated of 12-gauge galvanneal steel.</li> <li>The sides will not form any portion of the fender compartments.</li> <li>Upper and rear edges of side panels will have a double break for rigidity.</li> <li>The upper inside area of the beavertails will be covered with brushed stainless steel to prevent damage to painted surface when hose is removed.</li> <li>Flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats will be a minimum of 0.50" x 4.50" with spacing between slats for hose ventilation.</li> </ul>
0003482		Hose Bed Capacity, Additional	Hose bed will accommodate (from left to right): 600' x 3.00" D.J.C.R.L   500' x 2.50" D.J.C.R.L   1000' x 5.00" D.J.C.R.L.
0022407		Divider, Hose Bed, Unpainted, Special Height	<ul> <li>HOSE BED DIVIDER</li> <li>Two (2) adjustable hosebed dividers will be furnished for separating hose.</li> <li>The height of the hose bed divider(s) will be 24.00".</li> <li>Each divider will be constructed of a .125" brushed aluminum sheet fitted and fastened into a slotted, 1.50" diameter radiused extrusion along the top, bottom, and rear edge.</li> <li>Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.</li> <li>Divider will be installed on all bolts in the hose bed which have exposed threads.</li> </ul>
0774491	SP	Compt, Backboard, Bottom of 4-Way Hose Bed Cover, Welded & Velcro Strap, DA	<b>BACKBOARD COMPARTMENT</b> One (1) backboard compartment will be fabricated with an unpainted DA finish and welded to the underside of the bright aluminum treadplate hose bed cover, on the passenger's side. Compartment(s) size will be actual inside dimensions of trough 74"L x 18"W x 3"T and will have a velcro strap at the end to hold the backboards in place. The front of the compartment will be tapered to allow hose couplings to flow smoothly past it.
0010133		Cross-Divider, Hose Bed	A cross-divider will be provided just behind the fill tower. The divider will be bolted to the side sheet.
0779959	SP	Divider, Hose Bed, .25" Sheet, Unpainted, Special Height 15", Notched	There will be one (1) additional hose bed dividers furnished. Each divider will be constructed of a .25" brushed aluminum sheet. The divider will be 15.00" tall. The rear 24.00" of the divider will be notched out to the base of the divider. Partition will be installed and located See sketch in Job Photo's. Divider to be on driver's side of hosebed Divider will be held in place by tightening two (2) bolts, one (1) at each end. Acorn nuts will be installed on all bolts in the hose bed which have exposed threads. Flat surfaces will be sanded for uniform appearance or constructed of brushed aluminum.
0748157	SP	Special Grating Substruture, Hose Bed, Wider Flat Bar	HOSE BED GRATING SUBSTRUCTURE The hose bed grating substructure will be modified with wider flat bar to it in order to help prevent wear to the water tank below it.
0524555	SP	Cover, Hose Bed, Alum Tread, T-Bar, RS Open, Stay Arm, Metal End Gas Cylinders	A two (2) section hose bed cover, constructed of .125" bright aluminum treadplate will be furnished. The cover will be hinged with full length stainless steel piano hinge. The sides will be slanted down with the center of the cover supported by a stationary bridgework support. The cover will be reinforced so that it can support the weight of a man walking on the cover. The cover will be designed with the right cover opening first. If access to water tank fill tower is blocked by the hose bed cover, then a hinged door will be provided in it so that tank may be filled without raising cover doors. Chrome grab handles and four (4) gas filled cylinders with metal ends will be provided to assist in opening and closing the cover. A positive stay arm will be provided at the front of the cover.
0748261	SP	Flap, Rear of Alum Hose Bed Cover, Split/Velcro, Attached to Cover, Stayput	<b>HOSEBED END FLAP</b> A pair of red vinyl flaps will be installed on the rear, one for each of the aluminum treadplate hose bed covers. The vinyl covers will be installed directly to the aluminum treadplate cover. An aluminum angle will be attached to the bottom of the aluminum cover that extends approximately 2.00° past the bridgework. The vinyl cover will be attached to the inside of this aluminum angle. The vinyl flap must be able to move with the aluminum cover while it is being raised and lowered. The flaps will have Velcro® fastener at the center split. A total of four (4) shock cord and stay put fasteners with orange pull tabs will be provided below the base of the hose bed. There will be two (2) per flap.

0013512	Running Boards, 12.75" Deep	<b>RUNNING BOARDS</b> Running boards will be fabricated of .125" bright aluminum treadplate. Each running board will be supported by a welded 2.00" square tubing and channel assembly, which will be bolted to the pump compartment substructure. Running boards will be 12.75" deep and spaced .50" away from the pump panel. A splash guard will be provided above the running board treadplate.
0689621	Tailboard, 16" Deep	<b>TAILBOARD</b> The tailboard will also be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly. The tailboard area will be 16.00" deep. The exterior side will be flanged down and in for increased rigidity of tailboard structure.
0690037	Wall, Rear, Smooth Aluminum/Body Material	<b>REAR WALL, SMOOTH ALUMINUM/BODY MATERIAL</b> The rear facing surfaces of the center rear wall will be smooth aluminum. The bulkheads, the surface to the rear of the side body compartments, will be smooth and the same material as the body. Any inboard facing surfaces below the height of the hosebed will be aluminum diamondplate .
0003531	Tow Bar, Under Tailboard	<b>TOW BAR</b> A tow bar will be installed under the tailboard at center of truck. Tow bar will be fabricated of 1.00" CRS bar rolled into a 3.00" radius. Tow bar assembly will be constructed of .38" structural angle. When force is applied to the bar, it will be transmitted to the frame rail. Tow bar assembly will be designed and positioned to allow up to a 30-degree upward angled pull of 17,000 lb, or a 20,000 lb straight horizontal pull in line with the centerline of the vehicle. Tow bar design will have been fully tested and evaluated using strain gauge testing and finite element analysis techniques.
0612233	Hose Restraint, Running Board, Velcro Straps, Special Length	<b>RUNNING BOARD HOSE RESTRAINT</b> A pair of 2.00" wide black nylon straps with Velcro fasteners will be provided for each hose tray to secure the hose during travel. The straps will be 20.00", permanently attached to the outboard edge, so when open the straps fall to the ground and not in the tray" in length. There will be Two (2) hose trays located one (1) in each side running board.
0014123	Tray, Hose, Running Board, Special Capacity, FIB	<b>HOSE TRAY</b> Two (2) hose trays will be recessed in the passenger side running board. Capacity of the tray will be 30' x 5.00" in the LEFT SIDE tray and 50' x 5.00" in the RIGHT SIDE. Rubber matting will be installed on the floor of the tray to provide proper ventilation.

## COMPARTMENTATION

Body and compartments will be fabricated of galvanneal steel.

Side compartments will be an integral assembly with the rear fenders.

Circular fender liners will be provided for prevention of rust pockets and ease of maintenance. Side compartment flooring will be 12 gauge and of the sweep out design, with the floor higher than the compartment door lip.

The side compartment door opening will be framed by flanging the edges in 1.75" and bending out again .75" to form an angle.

Drip protection will be provided above the doors by means of bright aluminum extrusion, formed bright aluminum treadplate, or polished stainless steel.

The top of the compartment will be covered with bright aluminum treadplate rolled over the edges on the front, rear, and outward side. These covers will have the corners TIG welded. Side compartment covers will be separate from the compartment tops.

Front facing compartment walls will be covered with bright aluminum treadplate.

All screws and bolts which protrude into a compartment will have acorn nuts on the ends to prevent injury.

#### UNDERBODY SUPPORT SYSTEM

Due to the severe loading requirements of this pumper, a method of body and compartment support suitable for the intended load will be provided.

The backbone of the support system will be the chassis frame rails, which is the strongest component of the chassis and designed for sustaining maximum loads.

The support system will include .375" thick steel vertical angle supports bolted to the chassis frame rails with .625" diameter bolts.

Attached to the bottom of the steel vertical angles will be horizontal angles, with gussets welded to the vertical members, which extend to the outside edge of the body.

A steel frame will be mounted on the top of these supports to create a floating substructure, which results in a 500 lb equipment support rating per lower compartment.

The floating substructure will be separated from the horizontal members with neoprene elastomer isolators. These isolators will reduce the natural flex stress of the chassis from being transmitted to the body.

The isolators will have a broad load range, proven viability in vehicular applications, be of a fail safe design and allow for all necessary movement in three (3) transitional and rotational modes. The neoprene isolators will be installed in a modified V three (3)-point mounting pattern to reduce the natural flex of the chassis being transmitted to the body.

# AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

#### LOUVERS

Louvers will be stamped into compartment walls to provide the proper airflow inside the body compartments and to prevent water from dripping into the compartment. Where these louvers are provided, they will be formed into the metal and not added to the compartment as a separate plate.

#### TESTING OF BODY DESIGN

Body structural analysis has been fully tested. Proven engineering and test techniques such as finite element analysis, model analysis, stress coating and strain gauging have been performed with special attention given to fatigue, life and structural integrity of the cab, body and substructure.

The body will be tested while loaded to its greatest in-service weight.

The criteria used during the testing procedure will include:

- Raising opposite corners of the vehicle tires 9.00", simulating the twisting a truck may experience when driving over a curb.

- Making a 90 degree turn while at 20 mph, simulating aggressive driving conditions.

- Driving the vehicle at 35 mph on a washboard road.

- Driving the vehicle at 55 mph on a smooth road.

- Accelerating the vehicle fully, until reaching the approximate speed of 45 mph, on rough pavement.

Evidence of actual testing techniques will be made available upon request.

0023650

LS 152" Rollup, Full Height Front & Rear. FDLER

# t & LEFT SIDE COMPARTMENTATION

The left side compartmentation will consist of three rollup door compartments. A full height, rollup door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 34.50" wide x 66.63" high x 25.88" deep in the lower 25.00" of the compartment and 12.00" deep in the remaining upper portion. The clear door opening will be a minimum of 28.75" wide x 56.88" high.

A rollup door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 66.50" wide x 32.88" high x 12.00" deep. The clear door opening will be a minimum of 58.25" wide x 23.13" high.

A full height, rollup door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.75" wide x 67.63" high x 25.88" deep in the lower 26.00" of height and 12.00" deep in the remaining upper section of the compartment. The clear door opening will be a minimum of 44.75" wide x 57.88" high.

The interior height of the compartments will be measured from the compartment floor to the ceiling. The spool of the rollup door at the top of the compartment takes up some usable space. The depth of the compartments will be measured from the back wall to the inside of the door frame.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

0073657	RS 152" Rollup, Low, FDLER	<ul> <li>RIGHT SIDE COMPARTMENTATION</li> <li>The right side compartmentation will consist of two rollup door compartments.</li> <li>A rollup door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 34.50" wide x 32.63" high x 25.88" deep in the lower 25.00" of the compartment and 12.00" deep in the remaining upper portion. The clear door opening will be a minimum of 28.75" wide x 22.88" high.</li> <li>A rollup door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.75" wide x 33.63" high x 25.88" deep in the lower 26.00" of height and 12.00" deep in the remaining upper section of the compartment. The clear door opening will be a minimum of 44.75" wide x 23.88" high.</li> <li>The interior height of the compartments will be measured from the compartment floor to the ceiling. The spool of the rollup door at the top of the compartment takes up some usable space. The depth of the compartments will be measured from the back wall to the inside of the door frame.</li> <li>Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.</li> </ul>
0594005	Doors, Rollup, Amdor, Side Compartments	<ul> <li>SDE COMPARTMENT ROLLUP DOOR(S)</li> <li>There will be five (5) compartment doors installed on the side compartments, double faced, aluminum construction, satin aluminum and manufactured by AMDOR™ brand rollup doors. Door(s) will be constructed using 1.00" extruded double wall aluminum slats which will feature a flat smooth interior surface to provide maximum protection against equipment hang-up. The slats will be connected with a structural driven ball and socket hinge designed to provide maximum curtain diaphragm strength. Mounting and adjusting the curtain will be done with a clip system that connects the curtain to the balancer drum allowing for easy tension adjustment without tools. The slats will be mounted in reusable slat shoes with positive snap-lock securement. Each slat will incorporate weather tight recessed dual durometer seals. One (1) fin will be designed to locate the seal within the extrusion. The second will serve as a wiping seal which will also allow for compression to prevent water ingression.</li> <li>The doors will be mounted in a one (1)-piece aluminum side frame with recessed side seals to minimize seal damage during equipment deployment. All seals including side frames, top gutters and bottom panel are to be manufactured utilizing non-marring materials.</li> <li>Bottom panel flange of rollup door will be equipped with two (2) cut-outs to allow for easier access with gloved hands.</li> <li>A polished stainless steel lift bar to be provided for each roll-up door. The lift bar will be located at the bottom of door with striker latches installed at the base of the side frames. Side frame mounted door strikers will include support beneath the stainless steel lift bar to prevent door curtain bounce, improve bottom seal life expectancy and to avoid false door ajar signals.</li> <li>All injection molded rollup door wear components will be constructed of Type 6 nylon.</li> <li>Each rollup door will have a 3.00 inch diameter balancer/tensioner drum to assist in lifting the door.</li> <l< td=""></l<></ul>
0083700	Compt, Rear, Rollup, 37.75" FF, 25.88" Deep	<b>REAR COMPARTMENTATION</b> A roll-up door compartment above the rear tailboard will be provided. The interior dimensions of this compartment will be 40.00" wide x 40.63" high x 25.88" deep. The spool of the rollup door at the top of the compartment takes up some usable space. The depth of the compartment will be calculated with the compartment door closed. A louvered, removable access panel will be furnished on the back wall of the compartment. The rear compartment will be open into the rear side compartments. The clear door opening of this compartment will be a minimum of 33.25" wide x 30.88" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.
0594003	Door, Amdor, Rollup, Rear Compartment	<section-header></section-header>

0761700 SP	Body Modification, 4" Reduced Depth Rear Compt	BODY MODIFICATION FROM STANDARD The following body modifications will be required for the installation of a single axle air ride suspension: - Rear compartment will be 4.00" shorter in depth. - Special water tank mounting required if applicable.
0749785 SP	Weather Strip, Location	<b>WEATHER STRIP</b> Weather stripping will be provided located both the ds air bottle doors that includes the def fill and the rearward air bottle door that includes the fuel fill, weather stripping to go on the door where it lines up with these openings
0019845	Guard, Drip Pan, S/S, Rollup Door	<b>DOOR GUARD</b> There will be six (6) compartment doors that will include a guard/drip pan designed to protect the roll-up door from damage when in the retracted position and contain any water spray. The guard will be fabricated from stainless steel and installed all body compartments.
0659353	Lights, Compt, Amdor AY-9220 LED, Dual Light Strip	<b>COMPARTMENT LIGHTING</b> There will be six (6) compartments with Amdor, Model AY-9220, white 12 volt DC LED compartment light strips. The lights will be mounted with mechanical fasteners. There will be two (2) strip lights installed vertically in each compartment opening per the latest NFPA requirements. The lights will be activated when the battery switch is on and the respective compartment door is opened.
0003977	Floor, Hinged for Access, Aluminum Treadplate, Left Side	ACCESS PANEL The bright aluminum treadplate flooring on the left side of the cargo compartment will be hinged with quarter turn latches for access to the pump and plumbing.
0687135	Shelf Tracks, Unpainted	<b>MOUNTING TRACKS</b> There will be six (6) sets of tracks for mounting shelf(s) in LS1, LS2, LS3, RS1, RS2 and B1. These tracks will be installed vertically to support the adjustable shelf(s), and will be full height of the compartment. The tracks will be unpainted with a natural finish.
0600350	Shelves, Adj, 500 lb Capacity, Full Width/Depth, Predefined Locations	ADJUSTABLE SHELVES There will be eight (8) shelves with a capacity of 500 lb provided. The shelf construction will consist of .188" aluminum painted spatter gray with 2.00" sides. Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track. The shelves will be held in place by .12" thick stamped plated brackets and bolts. The location(s) will be in RS1 centered between the floor and the ceiling, in RS2 centered between the floor and the ceiling, in LS2 centered between the floor and ceiling, in B1 centered between the floor and ceiling, in LS3 in the upper third, in LS3 in the upper third, in LS1 in the upper third to the left of the partition and in LS1 in the upper third to the left of the partition.
0709690	Tray, 250 lb Slide-out, 2" Sides - Adj. Height, Predefined Locations	<ul> <li>SLIDE-OUT ADJUSTABLE HEIGHT TRAY</li> <li>There will be one (1) slide-out tray provided.</li> <li>Each tray will have 2.00" high sides and a minimum capacity rating of 250 lb in the extended position.</li> <li>Each tray will be constructed of aluminum painted spatter gray.</li> <li>Each tray will be mounted on a pair of side mounted slides. The slide mechanisms will have ball bearings for ease of operation and years of dependable service. The slides will be mounted to shelf tracks to allow the tray to be adjustable up and down within the designated mounting location.</li> <li>An automatic lock will be provided for both the in and out tray positions. The lock trip mechanism will be located at the front of the tray and will be easily operated with a gloved hand. The location(s) will be in LS3 in the lower third</li> </ul>
0647045	Tray, Floor Mounted, Slide-Out, Full Width/Full Depth, 500lb, 2.00" Sides, 2G	<ul> <li>SLIDE-OUT FLOOR MOUNTED TRAY</li> <li>There will be one (1) floor mounted slide-out tray(s) with 2.00" sides provided D1 Per Photo 146, 152. Each tray will be rated for up to 500lb in the extended position. The tray(s) will be constructed of a minimum .13" aluminum with welded corners. The finish will be painted spatter gray.</li> <li>The trays will be designed for maximum compartment width and depth.</li> <li>There will be two undermount-roller bearing type slides rated at 250lb each provided. The pair of slides will have a safety factor rating of 2.</li> <li>To ensure years of dependable service, the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B177.</li> <li>To ensure years of easy operation, the slides will require no more than a 50lb force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition.</li> <li>Proof of compliance will be provided for both the "in" and "out" positions. The trip mechanism for the locks will be located at the front of the tray for ease of use with a gloved hand.</li> </ul>

0799343	SP	Bracket, SCBA, Zico SC-50-H-6-SF, with PHS	AIR BOTTLE HOLDERS There shall be one (1) Ziamatic, Model SC-50-H-6-SF, SCBA holder(s) with PHS (positive holding strap) provided. The bracket(s) shall be located LS1 as directed at pre-construction.
0651204	SP	Hook, Coat, Heavy Duty, Mounted in Compartment	<b>HEAVY DUTY COAT HOOK(S) IN COMPARTMENT</b> There will be three (3) coat hooks supplied and installed LS3 (specific location to be determined at pre-construction).
0751496	SP	Interior Compartment Layout, Shelf Heights	INTERIOR COMPARTMENT INFORMATION There shall be special shelf and trays heights, see layout in 32995 job efolder, COMPT LAYOUT, SHELF DIMENSIONS. *NOTE ALL DIMENSIONS SHOWN ARE FROM THE COMPARTMENT FLOOR TO THE BOTTOM SIDE OF THE SHELF OR TRAY.
0659383		Matting, Turtle Tile w/Ramp, Compt Floors	<b>MATTING, COMPARTMENT FLOOR</b> Turtle Tile compartment matting will be provided in five (5) compartments on the compartment floor. The locations are, D2, D3, R1, P1 & P2 Per Photo #6826, 6835, 6846, 6849 The Turtle Tile will be black and the leading edge of the matting will include the beveled edge. The beveled edge will be black .
0028026		Matting, Turtle Tile, Compt Shelving only	MATTING, COMPARTMENT SHELVING Turtle Tile compartment matting will be provided in ten (10) shelves. The locations are, all adjustable shelves (8 total) and all slide-out trays (2 total) Per Photo #6826, 6835, 6846, 6849 The color of the Turtle Tile will be black.
0096116		Partition, Vertical Compartment, Special Height	VERTICAL COMPARTMENT PARTITION One (1) partition will be bolted in in LS1, 20.00" from the REAR door frame starting at the top of the compartment and extending to the compartment transition only. Each partition will be the start at ceiling right below roll-up door and extend down 22.00" vertical height of the compartment. Each partition will be painted spatter gray to match compartment interior.
0786109		Warm Water Rinse Outlet, 18 Gallon Tank, Cargo Area, CARE	<ul> <li>WARM WATER RINSE OUTLET</li> <li>A warm water rinse outlet and 0.75" valve will be provided on the lower left side pump control panel. The outlet will terminate with 0.75" MGHT threads and a cap. The end user will supply fittings for connecting to this outlet.</li> <li>An 18 gallon tank for providing water to this outlet will be installed in the pump house cargo area. A 2.1gpm @ 40psi, 12vdc water pump will provide water from the tank to the outlet. A switch with a green "ON" indicator light for turning on/off this water pump will be located near the outlet. The water pump will automatically shut off when the low level float switch is triggered. The water tank will be filled with an inlet located on the lower pump operator's panel. This inlet will terminate with 0.75" FGHT-S threads and a plug. An in-line water strainer will be provided. A water tank overflow will be supplied on the tank and it will dump to the ground.</li> <li>The water in the tank will be heated by two (2) replaceable electric probes. One (1) 110v, 1000w probe will be powered by the shoreline power. A switch with a green "ON" indicator light for turning on/off this probe will be located as directed at pre-construction . One (1) 12v 600w probe will be powered by the storeline power. A switch with a green "ON" indicator light for turning on/off this probe will be located as directed at pre-construction . The probes will be installed in the water tank as low as possible. A temperature thermostat and/or probe will be installed in the water tank and wired to the electric probes to maintain the water tank above the probes to shut off the heater probes when the float switch is triggered due to low water levels. Al red indicator light will be provided on the pump operators panel near the outlet that indicates that this low water level float switch is triggered due to low water levels. All of the meater probes when the float switch is triggered due to low water levels. All of the terms installed on the water tank will be located that will all</li></ul>
0024016		Rub Rail, Aluminum Extruded, Side & Rear of Body	<b>RUB RAIL</b> Bottom edge of the side and rear of the body compartments will be trimmed with a bright aluminum extruded rub rail. Trim will be 2.12" high with 1.38" flanges turned outward for rigidity. The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.
0784811		Fender Crowns, Rear, Stainless, w/Removable Liner	<ul> <li>BODY FENDER CROWNS</li> <li>Polished stainless steel fender crowns will be provided around the rear wheel openings with a dielectric barrier will be provided between the fender crown and the fender sheet metal to prevent corrosion.</li> <li>The fender crowns will be held in place with stainless steel screws that thread directly into a composite nut and not directly into the parent body sheet metal to eliminate dissimilar metals contact and greatly reduce the chance for corrosion. Rubber welting will be provided between the body and crown.</li> <li>BODY FENDER LINER</li> <li>A painted fender liner will be provided. The liners will be removable to aid in the maintenance of rear suspension components.</li> </ul>

0519849	Not Required, Hose, Hard Suction	HARD SUCTION HOSE Hard suction hose will not be required.
0626229	Handrails, Side Pump Panels, Per Print	HANDRAILS The handrails will be 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface. Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces. Drain holes will be provided in the bottom of all vertically mounted handrails. Handrails will be provided to meet NFPA 1901 section 15.8 requirements. The handrails will be installed as noted on the sales drawing.
0004126	Handrails, Beavertail, Standard	HANDRAILS One (1) vertical handrail, not less than 29.00" long, will be located on each rear beavertail.
0030332	Handrails, Rear, (2) Below Hose Bed, One Each Side	Two (2) horizontal handrails will be provided below the hose bed at the rear of the apparatus, one each side.
0064150	Handrail, Extra - 20-30" Long	- Two (2) handrails will be provided mounted on the top rear of the hosebed cover on each side, 7" forward from rear with bolts.
0622393	Compt, Air Pack in Fender Panel	AIR PACK STORAGE A total of three (3) air pack compartment(s) will be provided and located (1) DS forward of rear axle, (1) PS forward of rear axle and (1) PS aft of rear axle. The air pack compartment(s) will be tapered to match the profile of the space available in the fender. The compartment(s) will be approximately 15.50" wide at the top and 5.00" wide at the bottom for the wheel cutout. The compartment(s) will be 15.50" tall at the body side compartment and 6.00" tall at the wheel cutout. The compartment(s) will be 26.00" deep and have a drain hole. Inside the compartment, black Dura-Surf friction reducing material will be provided. A painted stainless steel hinged door with a Southco raised trigger C2 chrome lever latch will be provided to contain the air pack. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.
0529131	Storage Bin, Air Bottle, Unpainted Brushed Finish	<b>AIR BOTTLE STORAGE BIN</b> A storage bin will be provided for storage of four (4) air bottles. This storage bin will be installed B1 to be determined at pre-construction. Each separate air bottle storage compartment will be 7.50" square x 23.00" deep. The storage bin will be formed out of aluminum and the flooring lined with rubber. The storage bins will be provided with an unpainted brushed finish on the inside and outside surfaces.
0650780	Storage Bin, Extinguishers, Special Size, Strap	<b>EXTINGUISHER STORAGE BIN</b> A storage bin will be provided for storage of hand held fire extinguishers. This storage bin will be installed LS1 bolted to the floor mounted slide-out tray as directed at pre-construction. The bin will contain slots for storage of two (2) extinguishers. The slots for the extinguisher(s) within bin will be ACTUAL BOTTLE DIMENSIONS are 24" tall and 7" diameter at the base. The storage bin will be formed out of aluminum with the floor of each slot lined with Dura-surf. A strap will be provided across the front of each slot to help contain the extinguisher. The slots within the bin will be configured 1 wide by 2 high .
0004225	Ladder, 24' Duo-Safety 900A 2- Section	<b>EXTENSION LADDER</b> There will be a 24' two-section aluminum Duo-Safety Series 900-A extension ladder provided.
0004230	Ladder, 14' Duo-Safety 775A Roof	<b>ROOF LADDER</b> There will be a 14' aluminum Duo-Safety Series 775-A roof ladder provided.
0004300	Brackets, Adjustable, RS	<b>LADDER BRACKETS</b> The ladders will be installed on the right side of the hose body in lined brackets and held in place by chrome plated, quarter-turn spring loaded clamps. The clamps will be such that when the roof ladder is removed, the clamps can be moved a half turn to hold the extension ladder in place. The ladder brackets will be adjustable up and down.
0068708	Ladder, 10' Duo-Safety Folding 585A, w/Mtg Tube Inboard Side of Ladder Bracket	<b>FOLDING LADDER</b> One (1) 10.00' aluminum, Series 585-A, Duo-Safety folding ladder will be provided. The mounting tube will be installed on the inside of the side sheet ladder mounting brackets. A stop will be provided to keep the ladder from sliding forward in the bracket. A nylon strap will be provided at the rear of the tube to retain the ladder.
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0505999			<b>PIKE POLE, 10'</b> One (1) pike pole, Fire Hooks Unlimited, Model NYFG-10, 10' long New Yorker style hook with a ram knob end, will be provided and located in the pike pole tube .
0547754		Not Required, Pike, Pole, 8'	
0552649		Pike Pole, 6' Fire Hooks Unlimited, New York Roof Hook, Steel, Pry End, RH-6	<b>6 FT PIKE POLE</b> There will be one (1) Fire Hooks Unlimited NY roof hook RH-6, 6 foot pike pole(s) with steel handles and pry end provided in pike pole tube.
0762449	SP	Compt, Long Tools, Btwn Tank & Side Sheet/Below Tank Tee, Left Side	<b>LONG TOOL STORAGE</b> One (1) compartment will be provided below the tank tee between the tank and side sheet on the left side. The compartment will be roughly ACTUAL SIZE of the bolt cutters are $36^{\circ}$ long x $9^{\circ}$ wide at the handle and 1.5" thick. Please make clear inside dimensions of the compartment $37^{\circ}$ L x $10^{\circ}$ W x 2.5"H in size. A door will be provided at the rear of the compartment for access. The door will be made of polished stainless steel with a Southco raised trigger C2 chrome latch. The door will be hinged along the inboard edge.
0058193		Tubes, Alum, Pike Pole Storage, Spcl Notch, NY PP Head	<b>PIKE POLE STORAGE</b> Aluminum tubing will be used for the storage of two (2) pike poles and will be located behind the ladders on the side sheet, passenger's side. If the head of a pike pole can come in contact with a painted surface, a stainless steel scuffplate will be provided. The pike pole tube will be notched to allow a New York style pike pole to fit into the tube.
0531401		Label, Special Information	LABEL There will be one (1) label(s) provided affixed to the adjustable shelf in LS2 compartment with the following information: PRY BAR.
0593083		Step, Folding, Front of Body, Left Side Only, w/LED, Trident	<b>STEP</b> A folding step will be provided on the left side front bulkhead. The step will be a bright finished, non-skid step with a luminescent coating that is rechargeable from any light source and can hold a charge for up to 24 hours. The step will incorporate an LED light to illuminate the stepping surface. The step can be used as a hand hold with two openings wide enough for a gloved hand.
0592995		Steps, Combo Folding Trident w/LED & Corner, Rear Body	<b>REAR STEPS</b> Aluminum treadplate corner steps and bright finished, non-skid folding steps will be provided at the rear. The folding steps will have a a luminescent coating that is rechargeable from any light source and can hold a charge for up to 24 hours. Each folding step will incorporate an LED light to illuminate the stepping surface. The folding steps can be used as a hand hold with two openings wide enough for a gloved hand. All steps will provide adequate surface for stepping.
0592990		Step, Folding - Extra, Body Only, Luminescent w/LED, Trident	Two (2) additional folding steps will be located drivers side above the standard step The step(s) will be bright finished, non-skid, with a luminescent coating. The luminescent coating is rechargeable from any light source and can hold a charge for up to 24 hours. Each step will incorporate an LED light to illuminate the stepping surface. The step(s) can be used as a hand hold with two openings wide enough for a gloved hand.
0004425		Pump, Waterous, CSU, 1500 GPM, Single Stage	<ul> <li>PUMP</li> <li>Pump will be a Waterous CSU, 1500 gpm single (1) stage midship mounted centrifugal type.</li> <li>Pump will be the class "A" type.</li> <li>Pump will deliver the percentage of rated discharge at pressures indicated below: <ul> <li>100% of rated capacity at 150 psi net pump pressure.</li> <li>70% of rated capacity at 200 psi net pump pressure.</li> <li>50% of rated capacity at 250 psi net pump pressure.</li> <li>50% of rated capacity at 250 psi net pump pressure.</li> </ul> </li> <li>Pump body will be close-grained gray iron, bronze fitted, and horizontally split in two (2) sections for easy removal of the entire impeller shaft assembly (including wear rings).</li> <li>Pump will be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping.</li> <li>Pump case halves will be bolted together on a single horizontal face to minimize chance of leakage and facilitate ease of reassembly. No end flanges will be used.</li> <li>Discharge manifold of the pump will be cast as an integral part of the pump body assembly and will provide a minimum of three (3) 3.50" openings for flexibility in providing various discharge outlets for maximum efficiency.</li> <li>The three (3) 3.50" openings will be located as follows: one (1) outlet to the right of the pump, one (1) outlet to the left of the pump, and one (1) outlet directly on top of the discharge manifold.</li> <li>Impeller shaft will be stainless steel, accurately ground to size. It will be supported at each end by sealed, anti-friction ball bearings for rigid precise support. Impeller will have flame plated hubs assuring maximum pump life and efficiency despite any presence of abrasive matter in the water supply.</li> <li>Bearings will be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings will be used.</li> </ul>
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0004482	Seal, Mechanical, Waterous	Pump will be equipped with a self-adjusting, maintenance-free, mechanical shaft seal. The mechanical seal will consist of a flat, highly polished, spring fed carbon ring that rotates with the impeller shaft. The carbon ring will press against a highly polished stainless steel stationary ring that is sealed within the pump body. In addition, a throttling ring will be pressed into the steel chamber cover, providing a very small clearance around the rotating shaft in the event of a mechanical seal failure. The pump performance will not deteriorate, nor will the pump lose prime, while drafting if the seal fails during pump operation. Wear rings will be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.
0559769	Trans, Pump, Waterous C20 Series	<b>PUMP TRANSMISSION</b> The pump transmission will be made of a three (3) piece, aluminum, horizontally split casing. Power transfer to pump will be through a high strength Morse HY-VO silent drive chain. By the use of a chain rather than gears, 50% of the sprocket will be accepting or transmitting torque, compared to two (2) or three (3) teeth doing all the work. Drive shafts will be 2.35" diameter hardened and ground alloy steel and supported by ball bearings. The case will be designed to eliminate the need for water cooling.
0635600	Pumping Mode, Stationary Only	<b>PUMPING MODE</b> An interlock system will be provided to ensure that the pump drive system components are properly engaged so that the apparatus can be safely operated. The interlock system will be designed to allow stationary pumping only.
0605126	Pump Shift, Air w/Manual Override, Split Shaft, Interlocked, Waterous	AIR PUMP SHIFT Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control will also be located on the left side pump panel. Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump". Another green indicator light will be installed adjacent to the hand throttle on the pump panel and indicate either the pump is engaged and the road transmission is in pump gear, or the road transmission is in neutral and the pump is not engaged. This indicator light will be labeled "Warning: Do not open throttle unless light is on". The pump shift will be interlocked to prevent the pump from being shifted out of gear when the chassis transmission is in gear to meet NFPA requirements. The pump shift control in the cab will be illuminated to meet NFPA requirements.
0003148	Transmission Lock-up, EVS	<b>TRANSMISSION LOCK-UP</b> The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control in the cab is activated.
0004547	Auxiliary Cooling System	AUXILIARY COOLING SYSTEM A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be cylindrical type and will be a separate unit. The heat exchanger will be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger will be plumbed to the master drain valve.
0014486	Not Required, Transfer Valve, Stage Pump	
0777622	Valve, Relief Intake, Elkhart, w/Pressure Features	INTAKE RELIEF VALVE - PUMP An Elkhart Style 40 relief valve will be installed on the suction side of the pump preset at 175 psig. The relief valve will have a working range of 75 psig to 250 psig. The outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag. The relief valve pressure control will be located behind an access door at the right side pump panel.

0546803	Controller, Pressure, Class 1 Total Pressure Governor (TPG)	<ul> <li>PRESSURE GOVERNOR</li> <li>This apparatus will be equipped with a Class1 "Total Pressure Governor" engine/pump governor/throttle system that is connected directly to the Electronic Control Module (ECM) mounted on the engine. The "Total Pressure Governor" is to operate as a pressure sensor (regulating) governor (PSG).</li> <li>A special preset feature will permit a predetermined pressure of RPM to be set. The preset pressure or RPM will be displayed on the message display of the "Total Pressure Governor". The preset will be easily adjustable by the operator</li> <li>The pressure sensor governor system will be operable only after the vehicle parking brake has been set, the transmission is the pumping mode, and the fire pump has been engaged.</li> <li>The pressure sensor governor system will have two (2) modes of operation: pressure mode or rpm mode.</li> <li>When in the pressure mode, the PSG system will automatically maintain the discharge pressure set by the operator regardless of flow (within engine/pump operating capabilities).</li> <li>In the rpm mode, the PSG system will automatically maintain a set engine speed, regardless of engine load (within engine operation capabilities).</li> <li>A pump cavitation protection feature will be provided which will return the engine to idle should the pump cavitate.</li> <li>The pressure controller will incorporate monitoring for engine coolant temperature, oil pressure, and battery voltage.</li> </ul>
0641743	Primer, Waterous, VPO Motor, (1) VAP Valve, (1) Push Button Control	<ul> <li>PRIMER SYSTEM</li> <li>A Waterous electric pump priming system conforming to standards outlined in the current edition of NFPA 1901 will be furnished with the apparatus.</li> <li>One (1) VPO electric motor driven rotary vane primer will be provided.</li> <li>One (1) VAP vacuum activated priming valve will be plumbed main pump.</li> <li>One (1) momentary push-button control will be located at the pump operator's panel.</li> <li>The push button control system control will operate an electric priming motor and the priming valve will automatically open during priming and close when the primer is deactivated.</li> </ul>
0658368	Thermal Relief Valve, OPM, w/Red Warning Light, Waterous Pump	<b>THERMAL RELIEF VALVE</b> A Waterous Overheat Protection Manager (OPM) will be included on the pump that monitors pump water temperature and opens to relieve water to cool the pump when the temperature of the pump water exceeds 140 Degrees F (60 C) and a red warning light that is triggered when the water in the pump reaches 180 F (82 C). The warning light will act as an additional protection device if the temperature in the pump keeps rising after the valve opens. The warning light with a test switch will be mounted on the pump operator panel. The discharge line will be plumbed to ground.
0780364	Manuals, Pump, (2) Total, Electronic Copies	<b>PUMP MANUALS</b> There will be a total of two (2) pump manuals provided by the pump manufacturer and furnished with the apparatus. The manuals will be provided by the pump manufacturer in the form of two (2) electronic copies. Each manual will cover pump operation, maintenance, and parts.
0603129	Plumbing, Stainless Steel and Hose, Single Stage Pump	<ul> <li>PLUMBING, STAINLESS STEEL AND HOSE</li> <li>All inlet and outlet lines will be plumbed with either stainless steel pipe, flexible polypropylene tubing or synthetic rubber hose reinforced with hi-tensile polyester braid. All hose's will be equipped with brass or stainless steel couplings. All stainless steel hard plumbing will be a minimum of a schedule 10 wall thickness.</li> <li>Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.</li> <li>Plumbing manifold bodies will be ductile cast iron or stainless steel.</li> <li>All piping lines are to be drained through a master drain valve or will be equipped with individual drain valves. All drain lines will be of flexible polypropylene tubing.</li> <li>All piping, hose and fittings will have a minimum of a 500 PSI hydrodynamic pressure rating.</li> </ul>
0795135	Plumbing, Stainless Steel, w/Foam System	<b>FOAM SYSTEM PLUMBING</b> All piping that is in contact with the foam concentrate or foam/water solution will be stainless steel. The fittings will be stainless steel or brass. Cast iron pump manifolds will be allowed.
0004645	Inlets, 6.00" - 1250 GPM or Larger Pump	<b>MAIN PUMP INLETS</b> A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.
0602447	Cap, Main Pump Inlet, Provided by Dealer, NFPA 2016	MAIN PUMP INLET CAP PROVIDED BY DEALER NFPA 1901, 2016 edition, section 16.6.8 requires all intakes to be provided with caps, plugs, or closures capable of withstanding a hydrostatic gauge pressure of 500 psi. The caps are not on the apparatus as manufactured. The dealer will provide both caps for the main pump inlets.

0014650	Pump Suction Tube(s), Short, All	SHORT SUCTION TUBE(S) The suction tube(s) on the water pump will have short suction tube(s) installed to allow for installation of adapters, elbows or intake valves without excessive overhang.
0084610	Valves, Akron 8000 series- All	VALVES All ball valves will be Akron® Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve. Valves will have a <b>ten (10) year</b> warranty.
0004660	Inlet, Left Side, 2.50"	<b>LEFT SIDE INLET</b> There will be one (1) auxiliary inlet with a 2.50" valve at the left side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter. The auxiliary inlet will be provided with a strainer, chrome swivel and plug.
0004680	Inlet, Right Side, 2.50"	<b>RIGHT SIDE INLET</b> There will be one (1) auxiliary inlet with a 2.50" valve at the right side pump panel, terminating with a 2.50" (F) National Standard hose thread adapter. The auxiliary inlet will be provided with a strainer, chrome swivel and plug.
0004686	Valve, Inlet(s) Recess Behind Panel, Side Cntrl	The location of the valve for the two (2) inlets will be behind the pump panel.
0034720	Anode, Zinc, Pair, Pump Inlets	<b>ANODE, INLET</b> A pair of sacrificial zinc anodes will be provided in the water pump inlets to protect the pump from corrosion.
0004700	Control, Inlet, at Valve	<b>INLET CONTROL</b> The side auxiliary inlet(s) will incorporate a quarter-turn ball valve with the control located at the inlet valve. The valve operating mechanism will indicate the position of the valve.
0092569	No Rear Inlet (Large Dia) Requested	
0092696	Not Required, Cap, Rear Inlet	
0064116	No Rear Inlet Actuation Required	
0009648	No Rear Intake Relief Valve Required on Rear Inlet	
0092568	No Rear Auxiliary Inlet Requested	
0563738	Valve, .75" Bleeder, Aux. Side Inlet, Swing Handle	<b>INLET BLEEDER VALVE</b> A 0.75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a swing style handle control extended to the outside of the panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders will be routed below the chassis frame rails.
0024751	Tank to Pump, (1) 3.50" Valve, 3.00" Plumbing, Waterous Valve	<b>TANK TO PUMP</b> The booster tank will be connected to the intake side of the pump with 3.00" piping and a quarter turn 3.50" Waterous valve with the control remotely located at the operator's panel. Tank to pump line will run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing. A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.
0004905	Outlet, Tank Fill, 1.50"	<b>TANK REFILL</b> A 1.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

0004940	Outlet, Left Side, 2.50"	<b>LEFT SIDE DISCHARGE OUTLETS</b> There will be two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.
0092570	Not Required, Outlets, Left Side Additional	
0004945	Outlet, Right Side, 2.50"	<b>RIGHT SIDE DISCHARGE OUTLETS</b> There will be one (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" (M) National Standard hose thread adapter.
0092571	Not Required, Outlets, Right Side Additional	
0766070	Outlet, 4" w/4" Valve, Right Side, Akron 9333 Elec Controller	LARGE DIAMETER DISCHARGE OUTLET There will be a 4.00" discharge outlet with a 4.00" electric valve installed on the right side of the apparatus, terminating with 4.00" MNST threads. There will be an Akron 9333 electric valve controller provided on the pump operators panel. The electric control must be of a true position feedback design, requiring no clutches in the motor or current limiting. The unit must be completely sealed with momentary open, close as well and an optional one touch full open feature to operate the valve actuator. The controller will provide position indication on a full color, backlit LCD display. It will have manual adjustment of the brightness as well as an auto dimming option. PRESURE GAUGE(S) Analog pressure gauge(s) shall be located near the electric valve controller(s). The gauges shall match the rest of the analog gauges provided on the pump operator's panel.
0092572	Not Required, Outlet, Front	
0004995	Outlet, Rear, 2.50"	<b>REAR DISCHARGE OUTLET</b> There will be two (2) discharge outlets piped to the rear of the hose bed, one (1) each side, installed so proper clearance is provided for spanner wrenches or adapters. Plumbing will consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel.
0092574	Not Required, Outlet, Rear, Additional	
0092573	Not Required, Outlet, Hose Bed/Running Board Tray	
0752097	Caps/Plugs for 1.00" to 3.00" Discharges/Inlets, Chain	DISCHARGECAPS/ INLET PLUGS Chrome plated, rocker lug, caps with chain will be furnished for all discharge outlets 1.00" thru 3.00" in size, besides the pre-connected hose outlets. Chrome plated, rocker lug, plugs with chain will be furnished for all auxiliary inlets 1.00" thru 3.00" in size. The caps and plugs will incorporate a thread design to automatically relieve stored pressure in the line when disconnected (no exception).
0563739	Valve, 0.75" Bleeder, Discharges, Swing Handle	<b>OUTLET BLEEDER VALVE</b> A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application. The valves will be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.
0065091	Elbow, Left Side Outlets, 30 Degree, 2.50" FNST x 2.50" MNST, VLH	LEFT SIDE OUTLET ELBOWS The 2.50" discharge outlets, located on the left side pump panel, will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 30 degree elbow. The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.
0035094	Not Required, Elbow, Left Side Outlets, Additional	

0085096		Elbow, Right Side Outlets, 30 Degree, 2.5" FNST x 2.5" MNST, VLH	<b>RIGHT SIDE OUTLET ELBOWS</b> The 2.50" discharge outlets, located on the right side pump panel, will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 30 degree elbow. The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.
0089584		Not Required, Elbow, Right Side Outlets, Additional	
0040286		Elbow, Rear Outlets, 30 Degree, 2.50" FNST x 2.50" MNST, VLH	<b>REAR OUTLET ELBOWS</b> The 2.50" discharge outlets, located at the rear of the apparatus, will be furnished with a 2.50" (F) National Standard hose thread x 2.50" (M) National Standard hose thread, chrome plated, 30 degree elbow. The elbow will be Pierce VLH, which incorporates an exclusive thread design to automatically relieve stored pressure in the line when disconnected.
0085695		Not Required, Elbow, Rear Outlets, Large, Additional	
0602442		Elbow and Cap, Large Dia Outlet, Provided by Dealer, NFPA 2016	<b>LARGE DIAMETER OUTLET ELBOW/CAP PROVIDED BY DEALER</b> NFPA 1901, 2016 edition, section 16.7.7 requires any 2.00" or larger discharge outlet that is located more than 42.00" off the ground and to which hose is to be connected and that is not in a hose storage area will be supplied with a sweep elbow of at least 30 degrees downward. NFPA 1901, 2016 edition, section 16.7.4 requires all discharge outlet connections, except connections to which a hose will be pre-connected, will be equipped with caps or closures capable of withstanding a hydrostatic gauge pressure of 100 psi over the maximum pump close- off pressure or 500 psi, whichever is greater. The elbow(s) and cap are not on the apparatus as manufactured. The dealer will provide the elbow(s) and cap.
0062133		Control, Outlets, Manual, Pierce HW if applicable	<b>DISCHARGE OUTLET CONTROLS</b> The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve. If a handwheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel handwheel with a dial position indicator built in to the center of the handwheel.
0749628	SP	Riser, Elkhart 8298EX, "The Pipe", Mounting Bracket 8298EX-MB	MOUNTING BRACKET FOR MONITOR An Elkhart Model 8298EX 2.0 monitor extension pipe will be provided. An Elkhart Model 8298EX-MB mounting bracket will be supplied and mounted mount the Elkhart mounitng bracket for "the pipe" on the front wall of the deluge directly in line with the deluge plumbing, match 32995.
0749701	SP	Mounting Bracket, Model 8297 MB for Elkhart "Stinger"	<b>MOUNTING BRACKET FOR MONITOR</b> An Elkhart Model 8297MB mounting bracket, for the monitor portable base unit, will be provided and mounted LS1 to match job 32995 01-03.
0753326	SP	Outlet, 3.00" Deluge w/Dual Ctrl, LG HW's, Akron Valve	<ul> <li>DELUGE RISER, w/DUAL CONTROL</li> <li>Three (3) inch deluge riser plumbing shall be installed and routed above the pump in such a manner that a monitor can be mounted and used effectively.</li> <li>The riser plumbing shall be gated and controlled at the pump operator's panel by a large handwheel control with position indicator.</li> <li>A second large handwheel control without position indicator shall be provided above the pump adjacent to the outlet.</li> <li>Plumbing shall consist of 3.00" piping and a 3.00" valve.</li> <li>Piping shall be installed securely so no movement develops when the line is charged.</li> </ul>
0543570		Monitor, Elkhart Stinger 8297-51, 5" Storz Inlet, Portable Base	<b>MONITOR</b> An Elkhart Model 8297 "Stinger" monitor will be properly installed on the deluge riser. This monitor will include both a fixed base and a portable base with a 5.00" Storz inlet. The monitor will be painted as provided by monitor manufacturer.
0046998		Nozzle, Elkhart SM-1250, Manual, ST-194 Tips and 282A shaper	MONITOR NOZZLE An Elkhart #SM-1250 Select-O-Matic manual pattern control master stream nozzle will be provided. Also included is an Elkhart ST-194 Quad stack tips and 282A shaper.
0544561		Mount, Elkhart #8298 (for Elkhart Stinger), Adapter, Flange	MONITOR MOUNTING BASE An Elkhart Model 8298 deck mount base for an Elkhart "Stinger" monitor will be properly installed on the deluge riser via the 3.00" four bolt flange. This base will be painted to match the body. Page 55 of 221

0029210		Crosslays Sngl Sheet, (2+) 1.50", Spl. Cap/Arrangement	CROSSLAY HOSE BEDS, 1.50" Three (3) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying FORWARD CROSSLAY: 150' x 1.75" SINGLE STACK with clear inside of 7.00"   MIDDLE CROSSLAY: 200' x 1.75" DOUBLE STACK with clear inside of 7.00"   REAR CROSSLAY: 300' x 1.75" DOUBLE STACK with clear inside of 7.00" and will be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve. Outlets to be equipped with a 1.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus. The crosslay controls will be at the pump operator's panel. The center crosslay dividers will be fabricated of .25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish. Vertical scutfplates, constructed of stainless steel, will be provided at the front and rear ends of the bod on each side of vehicle. Crosslay bed flooring will consist of removable perforated brushed aluminum.
0029196		Not Required, 2.50" Crosslay	
0029260		Not Required, Speedlays	
0500535		Not Required, Hose Restraint, Crosslay/Speedlay	
0590877		Hose Restraint, Crosslay/Deadlay, Aluminum Treadplate, Top Only	<b>CROSSLAY/DEADLAY HOSE RESTRAINT</b> An aluminum treadplate cover, hinged at the front will be installed over the top of the crosslay/deadlay(s). It will include a latch at each end of the cover to hold it securely in place, a chrome grab handle at each end for opening and closing the cover and a foam rubber gasket where the cover comes into contact to a painted surface. The cover will be provided with rubber latch hold open device.
0056195		Crosslays, 9.00" Lower Than Standard	CROSSLAY 9.00" LOWER THAN STD The crosslays will be lowered 9.00" from standard.
0753644	SP	Flap, Crosslay Ends, Vinyl, Shock Cord, Stay Put, Orange Pull Tabs	<b>CROSSLAY COVER</b> A red vinyl cover with shock cord and stay put fasteners with a orange pull tab will be provided over the ends of the crosslay hose beds.
0511256		Reel, Booster Steel - Over Pump, Right Side, NPSH Fitting	<b>BOOSTER HOSE REEL</b> A Hannay electric rewind booster hose reel will be installed over the pump in a recessed open compartment on the right side of the apparatus. The exterior finish of the reel will be painted job color matching the body exterior. A polished stainless steel roller and guide assembly will be mounted on the reel side of the apparatus. Discharge control will be provided at the pump operator's panel. Plumbing to the reel will consist of 1.50" Aeroquip hose and a 1.50" valve. The reel will include NPSH threaded couplings.
0522296		Switch, Reel Rewind - 1 Reel w/(1) Stirrup & (2) Push	Reel motor will be protected from overload with a 50 amp automatic reset circuit breaker. One (1) foot actuated, stirrup type, electric rewind control (switch) will be installed on the passenger's side below the running board or below the body compartment. Two (2) push-button switches will be provided on the pump panels, one (1) switch each side.
0638707		Hose, Booster - 150' of 1.00"/800 PSI, 1" NPSH Couplings (50'+50'+50')	Booster hose, 1.00" diameter and 150 feet in length, with chrome plated Barway, or equal couplings will be provided. The couplings will have 1" NPSH threads. The hose will be coupled in three (3) sections. Three 50' sections will be provided. Working pressure of the booster hose will be a minimum of 800 psi.
0017858		Capacity, Hose Reel 150' of 1"	Capacity of the hose reel will be 150 feet of 1.00" booster hose.
0007428		Nozzle for Booster Reel Not Req'd	
0021954		Cutout for Reel Access, One, w/ S/S Trim	<b>HOSEREEL ACCESS</b> A cutout will be provided in the side sheet next to the booster hose reel. This cutout will allow access to the hose and provide a window to view the reel. Stainless steel trim will be mounted horizontally and vertically around the cutout.

0085328		Nozzle Cup, Zico w/Bracket	<b>NOZZLE CUP AND BRACKET</b> A Zico nozzle cup and chrome plated mounting bracket will be provided for storage of the booster reel nozzle. There will be one (1) provided. The nozzle cup(s) will have a 3-1/2" inside diameter and will be located on the PS pumphouse per photo 0085328.
0622237		Roller Assembly, Additional	There will be one (1) additional polished stainless steel roller and guide assembly mounted on top of the driver's side pump module side sheet .
0007293		Foam Sys, FoamPro 2001 (Single Agent)	<ul> <li>FOAM CONCENTRATE PROPORTIONING SYSTEM</li> <li>A Hypro FoamPro®, Model 2001, foam system will be provided as the means for the proportioning of foam concentrate into the water stream. The FoamPro is an electronic, fully automatic, variable speed, direct injection, discharge side foam proportioning system. This system will be capable of handling Class A foam concentrates, as well as most Class B foam concentrates.</li> <li>The foam system will be plumbed to five (5) discharges. The discharges capable of dispensing foam will be reel, both 1.50° crosslays, one (1) 2.50° discharge on the left pump panel and one (1) 2.50° discharge DS REAR.</li> <li>The foam proportioning system operation will be based on a direct measurement of water flows, and remain consistent within the specified flow and pressure. The system will be equipped with a digital electronic control display on the pump panel. Incorporated within the control display will be a microprocessor, which receives input from the system flow meter while also monitoring the foam concentrate pump output. The microprocessor will compare the values of the water flow versus the foam flow, to ensure the proportion rate is accurate.</li> <li>One (1) paddle wheel will be installed to monitor all foam discharges.</li> <li>Push button control for the foam proportioning rate will allow a ratio from .1 percent to 3 percent in .1 percent increments.</li> <li>The rated capacity of this system will be 85 gpm at 3 percent and 500 gpm at .5 percent.</li> <li>A.2.5 gpm @ 150 psi, positive displacement foam pump will be powered by a 1/2 hp 12 vdc electric motor.</li> <li>One (1) check valve will be installed in the plumbing to prevent foam from contaminating the water pump. The check valve will be approved by the foam system manufacturer.</li> </ul>
0012126		Not Required, CAF Compressor	
0552517		Not Required, Refill, Foam Tank	
0031896		Demonstration, Foam System, Dealer Provided	
0005446		Foam Cell, 20 Gallon, Not Reduce Water	<b>FOAM TANK</b> The foam tank will be an integral portion of the polypropylene water tank. The cell will have a capacity of 20 gallons of foam with the intended use of Class A foam. The foam cell will not reduce the capacity of the water tank. The foam cell will have a screen in the fill dome and a breather in the lid.
0748166	SP	Drain, 1.00" Foam Tank #1, Terminate 3/4" MGH	<b>FOAM TANK DRAIN</b> The foam tank drain will be a 1.00" drain valve and terminate with a 3/4" MGH fitting.
0091079		Not Required, Foam Tank #2	
0091112		Not Required, Foam Tank #2 Drain	

# PUMP COMPARTMENT

The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. It will be a fabricated assembly of steel tubing, angles and channels which supports both the fire pump and the side running boards.

The pump compartment will be mounted on the chassis frame rails with rubber biscuits in a four Point partiern to allow for chassis frame twist. Pump compartment, pump, plumbing and gauge panels will be removable from the chassis in a

single assembly

## **PUMP MOUNTING**

Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump

## PUMP CONTROL PANELS (Side Control)

All pump controls and gauges will be located at the left side of the apparatus and properly marked.

The pump panel on the right side is removable with lift and turn type fasteners. The left side is fastened with screws

The control panels will be 48.00" wide.

The gauge and control panels will be two (2) separate panels for ease of maintenance. The side gauge panel will be hinged at the bottom with a full length stainless steel hinge. The fasteners used to hold the panel in the upright position will be quarter turn type. Vinyl covered cable or chains will be used to hold the gauge panel in the dropped position. Polished stainless steel trim collars will be installed around all inlets and outlets.

All push/pull valve controls will have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods will be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls will be capable of locking in any position. The control rods will pull straight out of the panel and will be equipped with universal joints to eliminate binding.

The identification tag for each valve control will be recessed in the face of the tee handle. All discharge outlets will have color coded identification tags, with each discharge having its own unique color. Color coding will include the labeling of the outlet and the drain for each corresponding discharge.

All line pressure gauges will be mounted in individual chrome plated castings with the identification tag recessed in the casting below the gauge. All remaining identification tags will be mounted on the pump panel in chrome plated bezels. Mounting of the castings and identification bezels will be done with a threaded peg cast on the back side of the bezel or screws.

0615641	Pump Panel Configuration, Similar to Control Zone	<b>PUMP PANEL CONFIGURATION</b> The pump panel configuration layout will be ergonomically efficient and systematically organized.
0005525	Material, Pump Panels, Side Control Brushed Stainless	<b>PUMP AND GAUGE PANEL</b> The pump and gauge panels will be constructed of stainless steel with a brushed finish. A polished aluminum trim molding will be provided on both sides of the pump panel.
0005578	Panel, Pump Access - Right Side Only	The right side pump panel will be removable and fastened with swell type fasteners.
0035501	Pump House Structure, Std Height	
0005945	Light, Pump Compt	<b>PUMP COMPARTMENT LIGHT</b> A pump compartment light will be provided inside the right side pump enclosure and accessible through a door on the pump panel. A .125" weep hole will be provided in each light lens, preventing moisture retention.
0586438	Gauges, Engine - Pump Panel, IAT Pressure Controller	<ul> <li>PUMP PANEL GAUGES AND CONTROLS</li> <li>The following will be provided on the pump and gauge panels in a neat and orderly fashion.</li> <li>These gauges will be in addition to what is provided with the pressure controller.</li> <li>Engine Oil Pressure Gauge: With visual and audible warning</li> <li>Engine Water Temperature Gauge: With visual and audible warning</li> <li>Tachometer: Electric</li> <li>Master Pump Drain Control</li> <li>Voltmeter</li> <li>Fuel</li> </ul>
0005601	Throttle Included w/ Pressure Controller	
0562824	Indicator Lights @ Pump Panel, Electronic Engines, IAT Pressure Controller	INDICATOR LIGHTS @ PUMP PANEL The following indicator lights will be provided at the pump panel. These will be in addition to the indicators included with the pressure controller. - Check Transmission Warning Indicator Light - Stop Engine Warning Indicator Light - Check Engine Warning Indicator Light.

0614370	SP	Access Hole, LS & RS Panel, Customer Provided MIV Valve	<b>LEFT &amp; RIGHT SIDE PUMP PANEL ACCESS HOLE</b> The left and right side pump panels will be provided with an access hole and grommet for the customer provided MIV drain hose.
0005780		Control, Air Horn At Pump Panel w/Button	<b>AIR HORN BUTTON</b> An air horn control button will be provided at the pump operator's control panel. This button will be properly labeled and put within easy reach of the operator.
0066121		Drains, LS, Keep Area Under Main Inlet Clear	<b>DRAINS, LEFT SIDE</b> The drains on the left side pump panel will be located to keep the area under the main pump inlet clear for customer installed piston intake valve.
0081262		Drains, RS, Keep Area Under Main Inlet Clear	<b>RIGHT SIDE DRAINS</b> The drains on the right side pump panel will be located to keep the area under the main pump inlet clear for customer installed piston intake valve.
0514231		Pump Panel Trim Rings, Oversized for Valve Removal, LS, Only	<b>OUTLET TRIM RINGS</b> The left side discharges and auxiliary inlet valves will be recessed behind the panel and have larger holes provided in the pump panel to facilitate removal of the valves without removing the complete pump panel. Stainless steel trim plates will be provided to trim the holes.
0556650	SP	Switch Panel, Pump Panel, Layout Info	TOP TO BOTTOM: #1 Light, #2 Panel Light Switch, #3 Front Floodlight, #4 Driver Side Scene Lights, #5 Passenger Side Scene Lights, #6 Air Horn.
0001493		Tag, Special Wording, Discharge	<b>SPECIAL LABEL</b> There will be one (1) special label/s provided and installed Label 2.50" crosslay. Each label will be worded as follows, No. 3 Crosslay.
0001750		Tag, Special Colors	<b>COLOR CODED NAME TAGS</b> There will be 11 outlet discharges with special color coded name tags. These tags will be used for labeling the discharge pressure gauges, controls, outlets and drains. No. 1 Crosslay = Yellow No. 2 Crosslay = White No. 3 Crosslay = Gray Deluge = Burgundy DS Rear Discharge = Brown PS Rear Discharge = Light Purple Reel = Beige No. 1 DS Discharge = Red No. 2 PS Discharge = Orange No. 3 DS Discharge = Blue PS LDH = Green.
0005690		Gauges, 6.00" Master, Class 1, 30"-0 -600psi	<ul> <li>VACUUM AND PRESSURE GAUGES         The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated ©.         The gauges will be a minimum of 6.00" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.         The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel.         Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and polished stainless steel plugs. They will be marked with a label.     </li> </ul>
0008637		Gauge, 2.50" Pressure, Class 1, Special	<b>PRESSURE GAUGES</b> The individual "line" pressure gauges for the discharges will be interlube filled and manufactured by Class 1©. They will be a minimum of 2.50" in diameter and the dial will have white faces with black markings. Gauges will have a pressure rating of 30.00" 0-400 psi. The individual pressure gauge will be installed as close to the outlet control as practical.

0062586	Gauge, Water Level, Class 1, Pierce Std	WATER LEVEL GAUGE There will be an electronic water level gauge provided on the operator's panel that registers water level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The water level indicators will be as follows: 100 percent = Green 75 percent = Yellow 25 percent = Yellow Refill = Red The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the water tank is empty. The level measurement will be based on the sensing of head pressure of the fluid in the tank. The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from water and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The field calibratable display measures head pressure to accurately show the tank level.
0062992	Gauge, Foam Level, (1) Tank, Class 1, 5lt	FOAM LEVEL GAUGE An electronic foam level gauge will be provided on the operator's panel that registers foam level by means of five (5) colored LED lights. The lights will be durable, ultra-bright five (5) LED design viewable through 180 degrees. The foam level indicators will be as follows: 100 percent = Green 75 percent = Yellow 25 percent = Yellow 25 percent = Yellow Refill = Red The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the foam tank is empty. The level measurement will be based on the sensing of head pressure of the fluid in the tank. The display will be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design will provide complete protection from foam and environmental elements. An industrial pressure transducer will be mounted to the outside of the tank. The display will be able to be calibrated in the field and will measure head pressure to accurately show the tank level.
0656224	Light Shield/Step 8", S/S Undr Crs, LED w/P25 LED Step Light	<ul> <li>STEP/LIGHT SHIELD</li> <li>There will be a polished, 16 gauge stainless steel light shield installed under the crosslays. This shield will be properly reinforced to support the crosslay hose weight.</li> <li>There will be 12 volt DC white LED light(s) installed under the stainless steel light shield.</li> <li>These lights will be activated when the battery switch is on and the pump panel light switch is on.</li> <li>There will be an aluminum treadplate stepping surface no less than 8.00" deep and properly reinforced to support a man's weight, installed over the pump operators main panel.</li> <li>There will be 12 volt DC white LED lights installed under the step to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated by the pump panel light switch. Additional lights will be included every 18.00" depending on the size of the pump house.</li> <li>One (1) pump panel light will come on when the pump is in ok to pump mode.</li> <li>There will be a green pump engaged indicator light activated on at the operator's panel when the pump is shifted into gear from inside the cab.</li> <li>There will be one (1) white LED, step light provided above this step. In order to ensure exceptional illumination, each step light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inch distance below the light. The step light will be activated by the pump panel light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.</li> </ul>
0546331	Air Horn, (1) Grover, Stutter Tone, 24.50" Long, In Bumper	<b>AIR HORN SYSTEM</b> One (1) chrome finish, stutter tone, Grover, Model 1510, air horn approximately 24.50" long will be provided and recessed in the front bumper. The air horn system will be piped to the air brake system wet tank utilizing 0.38" tubing. A pressure protection valve will be installed to prevent the loss of air in the brake system.
0606839	Location, Air Horn, Bumper, Left Side, Outside Frame, Inboard (Pos #6)	<b>Air Horn Location</b> The air horn will be located on the left side of the bumper, just outside of the frame rail.
0036061	Control, Air Horn, DS Ft Sw, PS Push Button Engine Tunnel	<b>AIR HORN CONTROL</b> The air horn will be actuated by a chrome push button switch located on the officer side of the engine tunnel and by a foot switch on the driver's side.
0550598	Siren, Wln 295HFS2 Remote, Single Amp	ELECTRONIC SIREN A Whelen, Model 295HFS2, electronic remote siren with noise canceling microphone will be provided. This siren to be active when the battery switch is on and that emergency master switch is on. Page 60 of 221
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0510206	Location, Elect Siren, Recessed Overhead In Console	Electronic siren head will be recessed in the overhead console above the engine tunnel in the center.
0076156	Control, Elec Siren, Head Only	The electronic siren will be controlled on the siren head only. No horn button or foot switches will be provided.
0601306	Speaker, (1) Wln, SA315P, w/Pierce Polished Stainless Steel Grille, 100 watt	<b>SPEAKER</b> There will be one (1) Whelen®, Model SA315P, black nylon composite, 100-watt, speaker with through bumper mounting brackets and polished stainless steel grille provided. The speaker will be connected to the siren amplifier.
0601555	Location, Speaker, Frt Bumper, Recessed, Left Side, Outside Frame,Outbrd (Pos 7)	The speaker will be recessed in the left side of the front bumper, towards the outside.
0779165	Siren, Federal Q2B, Bat Dir	<b>AUXILIARY MECHANICAL SIREN</b> There will be a Federal Signal Model Q2B mechanical siren furnished on the front of the apparatus. The siren will be energized from a battery direct circuit through a 2-gauge cable to a solenoid that is energized from the emergency master switch. Additional customer selectable controls will be included for the momentary activation of this siren. There will be a momentary siren brake switch provided in the cab on the switch panel.
0006097	Location of Siren, Recessed in Bumper	The mechanical siren will be recessed in the front bumper in the center. The siren will be properly supported using the bumper framework.
0026170	Control, Mech Siren, DS Foot Sw, PS Push Button	<b>MECHANICAL SIREN CONTROL</b> The mechanical siren WIII be actuated by a push button located on the officer's side instrument panel and by a foot switch on the driver's side.
0798603	Lightbar, WIn, Freedom IV-D, 81", RRRRWsrR_Opt_RsrWRRRRR	<ul> <li>FRONT ZONE UPPER WARNING LIGHTS</li> <li>There will be one (1) 81.00° Whelen® Freedom IV™ lightbar mounted on the cab roof.</li> <li>The lightbar will include the following:</li> <li>One (1) red flashing LED module in the driver's side rear corner position.</li> <li>One (1) red flashing LED module in the driver's side front corner position.</li> <li>One (1) red flashing LED module in the driver's side front position.</li> <li>One (1) red flashing LED module in the driver's side front position.</li> <li>One (1) red flashing LED module in the driver's side front position.</li> <li>One (1) red flashing LED module in the driver's side fourt position.</li> <li>One (1) red flashing LED module in the driver's side fourt front position.</li> <li>One (1) red flashing LED module in the driver's side fourt front position.</li> <li>One (1) red flashing LED module in the driver's side fourt front position.</li> <li>One (1) red flashing LED module in the driver's side fourt front position.</li> <li>One (1) red flashing LED module in the driver's side fourt front position.</li> <li>One (1) red flashing LED module in the passenger's side fourt front position.</li> <li>One (1) 795 LED traffic light controller sent to national standard high priority in the center positions.</li> <li>Open in the passenger's side sixth front position.</li> <li>One (1) red flashing LED module in the passenger's side fourt front position.</li> <li>One (1) white flashing LED module in the passenger's side fourt front position.</li> <li>One (1) red flashing LED module in the passenger's side forst pront position.</li> <li>One (1) red flashing LED module in the passenger's side fort corner position.</li> <li>One (1) red flashing LED module in the passenger's side fort corner position.</li> <li>One (1) red flashing LED module in the passenger's side fort position.</li> <li>One (1) red flashing LED module in the passenger's side fort corner position.</li> <li>One (1) red flashing LED module in the passenger's side fort corner position.</li> <li< td=""></li<></ul>
0605741	Lightbars, Wln, Freedom IV, 2-21.5", RRRR RRRR	SIDE WARNING LIGHTS There will be two (2) 21.50" Whelen Freedom IV LED lightbars mounted on the roof, one (1) on each side, over the crew cab doors. Each lightbar will include the following: One (1) red flashing LED module in the outside rear corner position. One (1) red flashing LED module in the rear outside position. One (1) red flashing LED module in the front outside position. One (1) red flashing LED module in the front outside position. One (1) red flashing LED module in the front outside position. One (1) red flashing LED module in the outside front corner position. There will be clear lenses and colored filters included on the lightbar. There will be a switch in the cab on the switch panel to control the lightbars. These lights may be load managed when the parking brake is applied.

0540383	Lights, Front Zone, WIn M6* LED, Colored Lens, In Common Bezel	FRONT ZONE LOWER LIGHTS There will be two (2) Whelen, Model M6*, LED flashing warning lights installed on the cab face above the headlights, in a common bezel with the directional lights. The driver's side front warning light to be red. The passenger's side front warning light to be red. Both lights will include a lens that is the same color as the LED's. There will be a switch located in the cab on the switch panel to control the lights.
0653937	Flasher, Headlight Alternating	<b>HEADLIGHT FLASHER</b> The high beam headlights will flash alternately between the left and right side. There will be a switch installed in the cab on the switch panel to control the high beam flash. This switch will be live when the battery switch and the emergency master switches are on. The flashing will automatically cancel when the hi-beam headlight switch is activated or when the parking brake is set.
0540687	Lights, Side Zone Lower, Wln M6* LED, Colored Lens, 3pr, Ovr 25	<ul> <li>SIDE ZONE LOWER LIGHTING</li> <li>There will be six (6) Whelen®, Model M6*, flashing LED warning lights with chrome trim installed per the following:</li> <li>Two (2) lights, one (1) each side on the front cab corner. The side front lights to be red.</li> <li>Two (2) lights, one (1) each side of cab rearward of crew cab doors. The side middle lights to be red.</li> <li>Two (2) lights, one (1) each side on the rear fender panel. The side rear lights to be red.</li> <li>The lights will include lenses that is the same color of the LEDs.</li> <li>There will be a switch in the cab on the switch panel to control the lights.</li> </ul>
0672937	Lights, Side, WIn WIONSMC* LED, Chrome Flange, Mounted In Rub Rail, 1st	<b>SIDE WARNING LIGHTS</b> There will be four (4) Whelen, Model WIONSMC* LED light(s) provided and located in the body rub rails one (1) each mounted in the rubrail and centered below the following compartments: D1, D3, P1 and P3. The lights will NOT be mounted with the rubber gasket behind the light which will allow the light(s) to fit in the rub rails. The color of each light will be red LED with a clear lens. Each light will be provided with a chrome plated ABS flange. The light(s) will be activated with the side warning switch.
0564654	Lights, Rear Zone Lower, Wln M6* LED, Colored Lens, For Tail Light Housing	<b>REAR ZONE LOWER LIGHTING</b> There will be two (2) Whelen®, Model M6*, LED flashing warning lights will be located at the rear of the apparatus. The driver's side rear light to be red The passenger's side rear light to be red Both lights will include a lens that is the same color as the LED's. There will be a switch located in the cab on the switch panel to control the lights.
0591872	Light, Rear Zone Upper, Wln B6MLRZP, LED/LED Rear Scene	REAR OF HOSEBED WARNING LIGHTS There will be two (2) Whelen, Model B6MLRZP, combination LED beacon and LED scene light provided at the rear of the truck, one (1) each side. Each beacon will contain flashing LED warning light in a 360 degree arrangement and a LED scene light mounted in a polished aluminum housing. The LED beacons will be red with both domes red. These beacons will be mounted so that the scene lights face to the rear. There will be two (2) switches provided to activate these lights One (1) switch in the cab will control both beacons. One (1) switch in the cab will control both rear facing scene lights. The scene lights may be load managed when the parking brake is set.
0006551	Not Required, Lights, Rear Upper Zone Blocking	
0056610	Mtg, Rear Warn Lts, Low Mount, S/S brkts	The rear warning lights will be mounted on stainless steel brackets with all wiring totally enclosed. These brackets will also support the clearance/marker lights. The rear deck lights will be mounted on the beavertail flange to keep the overall height as low as possible.
0762435	Light, Traffic Directing, WIn TAL85, 46.87" Long LED, Lens Feature	<b>TRAFFIC DIRECTING LIGHT</b> There will be one (1) Whelen® Model TAL85 46.87" long x 2.87" high x 2.25" deep, amber LED traffic directing light installed at the rear of the apparatus. The lens color will be the same color as the LED's. The control head will be included with this installation. The control head will be energized when the battery switch is on. The auxiliary flash to be activated when the emergency master switch is on.
0529860	Location, Traf Dir Lt, Surface Mounted Over Rear Door	This traffic directing light will be surface mounted over the rear door, at the rear of the apparatus as high as practical.

0530280		Location, Traf Dir Lt Controller, Overhead Switch Panel DS Center	The traffic directing light control head will be located in the driver side overhead switch panel in the center panel position.
0781579		Receptacle, 15/20A 120V 3-Pr 3-Wr, NEMA 5-20R SB Dup, 1st, Interior Cab	<b>120 VOLT RECEPTACLE</b> There will be one (1), 15/20 amp 120 volt AC three (3) wire straight blade duplex receptacle(s) with interior stainless steel wall plate(s), installed mounted high and rear ward in compartment P1. See photo. The NEMA configuration for the receptacle(s) will be 5-20R. The receptacle(s) will be powered from the shoreline inlet. There will be a label installed near the receptacle(s) that state the following: Line Voltage Current Ratting (amps) Phase Frequency Power Source
0519934		Not Required, Brand, Hydraulic Tool System	
0750454	SP	Holder Assembly, Triple, w/(1) Hydrant and (2) Spanner Wrenches, Red Head 148-3	two (2) triple holder assembly, Red Head #148-3, with two (2) 101 spanner wrenches and one (1) 105 hydrant wrench shall be provided as directed at pre-construction.
0007150		Bag of Nuts and Bolts	<b>LOOSE EQUIPMENT</b> The following equipment will be furnished with the completed unit: - One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.
0751930	SP	Holder Assembly, w/ Spanner Wrenches, Kochek KS34	<b>SPANNER HOLDER ASSEMBLY</b> There will be one (1) spanner and holder assembly, Kochek KS34-P18-P09, with four (4) KS3 universal spanner wrenches, and one (1) CAA19 holder provided. The holder assembly will be mounted as directed at pre-construction.
0602517		NFPA Required Loose Equipment, Pumper, NFPA 2016, Provided by Dealer	<ul> <li>SPEA REQUIRED LOOSE EQUIPMENT PROVIDED BY DEALER</li> <li>The following loose equipment as outlined in NFPA 1901, 2016 edition, section 5.9.3 and 5.9.4 will be provided by the dealer.</li> <li>300 ft (00 m) of 2.50° (65 mm) or larger fire hose.</li> <li>400 ft (120 m) of 1.50° (38 mm), 1.75° (45 mm), or 2.0° (52 mm) fire hose.</li> <li>401 ft (120 m) of 1.50° (38 mm), 1.75° (45 mm), or 2.0° shuff that flows a minimum of 250 gm.</li> <li>401 ft (120 m) of 1.50° (38 mm) anozzle with 2.50° shuff that flows a minimum of 250 gm.</li> <li>401 ft (120 m) of 1.50° (36 mm) anozzle with 2.50° shuff that flows a minimum of 250 gm.</li> <li>401 should be not a brackets fastened to the apparatus or stored in containers supplied by the SCBA mountacture.</li> <li>401 should be not a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in a bracket fastened to the apparatus or stored in apper with National Hose threads.</li> <li>401 (110 km attire apper apparative for each sating postion, each vest to comply with ANSINS A 207, Standard for High Visibility Public Safety Vests, and have a five-point breaksup fastened to the upper divide apper with a 60° (152 mm) from the top fastened to the stoulders, two (2) at</li></ul>

0519913	Not Required, Soft Suction Hose	SOFT SUCTION HOSE There will be no soft suction hose provided.
0027023	No Strainer Required	
0602531	Extinguisher, Dry Chemical, Pumper, NFPA 2016, Provided by Dealer	DRY CHEMICAL EXTINGUISHER PROVIDED BY DEALER NFPA 1901, 2016 edition, section 5.9.4 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus. The extinguisher is not on the apparatus as manufactured. The dealer will provide and mount the extinguisher.
0602359	Extinguisher, 2.5 Gal. Pressurized Water, Pumper, NFPA 2016, Provided by Dealer	WATER EXTINGUISHER PROVIDED BY DEALER NFPA 1901, 2016 edition, section 5.9.4 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus. The extinguisher is not on the apparatus as manufactured. The dealer will provide and mount the extinguisher.
0602678	Axe, Flathead, Pumper, Provided by Dealer, NFPA 2016	<b>FLATHEAD AXE PROVIDED BY DEALER</b> NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) flathead axe mounted in a bracket fastened to the apparatus. The axe is not on the apparatus as manufactured. The dealer will provide and mount the axe.
0602668	Axe, Pickhead, Pumper, Provided by Dealer, NFPA 2016	<b>PICKHEAD AXE PROVIDED BY DEALER</b> NFPA 1901, 2016 edition, Section 5.9.4 requires one (1) pickhead axe mounted in a bracket fastened to the apparatus. The axe is not on the apparatus as manufactured. The dealer will provide and mount the axe.

# Paint, Two Tone, Cab, Special Paint PAINT - BODY PAINTED TO MATCH CAB

The exterior custom cab and body painting procedure will consist of a seven (7) step finishing process as follows:

Manual Surface Preparation - All exposed metal surfaces on the custom cab and body will be thoroughly cleaned and prepared for painting. Imperfections on the exterior surfaces will be removed and sanded to a smooth finish. Exterior seams will be sealed before painting. Exterior surfaces that will not be painted include; chrome plating, polished stainless steel, anodized aluminum and bright aluminum treadplate.

<u>Chemical Cleaning and Pretreatment</u> - All surfaces will be chemically cleaned to remove dirt, oil, grease, and metal oxides to ensure the subsequent coatings bond well. The aluminum surfaces will be properly cleaned and treated using a high pressure, high temperature 4 step Acid Etch process. The steel and stainless surfaces will be properly cleaned and treated using a high temperature 3 step process specifically designed for steel or stainless. The chemical treatment converts the metal surface to a passive condition to help prevent corrosion. A final pure water rinse will be applied to all metal surfaces.

<u>Surfacer Primer</u> - The Surfacer Primer will be applied to a chemically treated metal surface to provide a strong corrosion protective basecoat. A minimum thickness of 2 mils of Surfacer Primer is applied to surfaces that require a Critical aesthetic finish. The Surfacer Primer is a two-component high solids urethane that has excellent sanding properties and an extra smooth finish when sanded.

<u>Finish Sanding</u> - The Surfacer Primer will be sanded with a fine grit abrasive to achieve an ultrasmooth finish. This sanding process is critical to produce the smooth mirror like finish in the topcoat.

<u>Sealer Primer</u> - The Sealer Primer is applied prior to the Basecoat in all areas that have not been previously primed with the Surfacer Primer. The Sealer Primer is a two-component high solids urethane that goes on smooth and provides excellent gloss hold out when topcoated. Base<u>coat Paint</u> - Two coats of a high performance, two component high solids polyurethane basecoat will be applied. The Basecoat will be applied to a thickness that will achieve the proper color match. The Basecoat will be used in conjunction with a urethane clear coat to provide protection from the environment.

Clear Coat - Two (2) coats of Clear Coat will be applied over the Basecoat color. The Clear Coat is a two-component high solids urethane that provides superior gloss and durability to the exterior surfaces. Lap style and roll-up doors will be Clear Coated to match the body. Paint warranty for the roll-up doors will be provided by the roll-up door manufacture.

Each batch of basecoat color is checked for a proper match before painting of the cab and the body. After the cab and body are painted, the color is verified again to make sure that it matches the color standard. Electronic color measuring equipment is used to compare the color sample to the color standard entered into the computer. Color specifications are used to determine the color match. A Delta E reading is used to determine a good color match within each family color. All removable items such as brackets, compartment doors, door hinges, and trim will be removed and separately if required, to ensure paint behind all mounted items. Body assemblies that

cannot be finish painted after assembly will be finish painted before assembly. Pierce Manufacturing paint finish quality levels for critical areas of the apparatus (cab front and sides, body sides and doors, and boom lettering panels) meet or exceed the Cadillac/General

Motors GMW15777 global paint requirements. Orange peel levels meet or exceed the #6 A.C.T.standard in critical areas. These requirements are met in order for the exterior paint finish to be considered acceptable. The Pierce Manufacturing written paint standards will be available upon request.

The cab will be two-tone, with the roof section painted #20 White Upper and lower section of the cab and body painted #356 RED Lower.

## PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current State regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

Topcoats and primers will be chrome and lead free.

Metal treatment chemicals will be chrome free. The wastewater generated in the metal treatment process will be treated on-site to remove any other heavy metals.

Particulate emission collection from sanding operations will have a 99.99% efficiency factor. Particulate emissions from painting operations will be collected by a dry filter or water wash

process. If the dry filter is used, it will have an efficiency rating of 98.00%. Water wash systems will be 99.97% efficient

Water from water wash booths will be reused. Solids will be removed on a continual basis to keep the water clean.

Paint wastes are disposed of in an environmentally safe manner.

Empty metal paint containers will be to recover the metal.

Solvents used in clean-up operations will be recycled on-site or sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Contractor will, upon demand, present evidence that the manufacturing facility meets the above conditions and that it is in compliance with his State EPA

rules and regulations.

0646897	Paint Chassis Frame Assy, E-Coat, Standard	PAINT CHASSIS FRAME ASSEMBLY         The chassis frame assembly will be finished with a single system black top coat before the installation of the cab and body, and before installation of the engine and transmission assembly, air brake lines, electrical wire harnesses, etc.         Components treated with epoxy E-coat protection prior to paint:         Two (2) C-channel frame rails         Components that are included with the chassis frame assembly that will be painted not e-coated are:         Cross members         Axles         Suspensions         Steering gear         Battry boxes         Bumper extension weldment         Frame extensions         Body support substructure (front and rear)         Pump house substructure         Air tanks         Steel fuel tank         Castings         Individual piece parts used in chassis and body assembly         The extension will meet the technical properties shown.
0693797	No Paint Required, Aluminum Front Wheels	
0693792	No Paint Required, Aluminum Rear Wheels	
0648060	Paint, Axle Hubs, Front and Rear, Job Color	<b>PAINT AXLE ENDS</b> The front and rear axle hubs will painted to match the primary exterior color of the apparatus The color will be #356 RED.
0007230	Compartment, Painted, Spatter Gray	<b>COMPARTMENT INTERIOR PAINT</b> The interior of all compartments will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.
0544124	Reflective Band, 1"-4"-1"	<b>REFLECTIVE STRIPES</b> Three (3) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" white stripe at the top with a 1.00" gap then a 4.00" white stripe with a 1.00" gap and a 1.00" white stripe on the bottom.
0007356	Reflective across Cab Face	The reflective band provided on the cab face will be at the headlight level.
0536954	Stripe, Chevron, Rear, Diamond Grade, Pumper	<b>REAR CHEVRON STRIPING</b> There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The rear surface, excluding the rear compartment door, will be covered. The colors will be red and fluorescent yellow green diamond grade. Each stripe will be 6.00" in width. This will meet the requirements of the current edition of NFPA 1901, which states that 50% of the rear surface will be covered with chevron striping.
0027341	Jog, In Reflective Stripe, Single or Multiple	<b>JOG(S) IN REFLECTIVE BAND</b> The reflective band located on each side of the apparatus body will contain one (1) jog(s) and will be angled at approximately a 45 degrees when installed.
0087349	Stripe, Reflective, 4" Inside Compt Door	<b>REFLECTIVE STRIPE INSIDE COMPARTMENT DOOR</b> A 4.00"white reflective stripe will be provided inside two (2) compartment doors. inside each EMS compartment door
0065687	Stripe, Reflective, Cab Doors Interior	<b>CAB DOOR REFLECTIVE STRIPE</b> A 6.00" x 16.00" white reflective stripe will be provided across the interior of each cab door. The stripe will be located approximately 1.00" up from the bottom, on the door panel. This stripe will meet the NFPA 1901 requirement.
0017773	Stripe, Gold Leaf, Side of Body, Over Fender Only, Single Axle	<b>BODY STRIPE</b> There will be a genuine gold leaf stripe provided on each side of the body, over the fender.

0027285	Stripe, Gold Leaf, Side of Cab, Low and Over Fender	<b>CAB STRIPE</b> There will be a genuine gold leaf stripe on each side of the cab, low and over the fender.
0027372	Lettering Specifications, (GOLD STAR Process)	<b>LETTERING</b> The lettering will be totally encapsulated between two (2) layers of clear vinyl.
0686428	Lettering, Gold Leaf, 3.00", (41-60)	<b>LETTERING</b> Forty-one (41) to sixty (60) genuine gold leaf lettering, 3.00" high, with outline and shade will be provided.
0684004	Lettering, Vinyl, 12.00", Each	<b>LETTERING</b> There will be non-reflective vinyl lettering, 12.00" high, with no outline or shade provided. There will be two (2) letters provided.
0684017	Lettering, Vinyl, 9.00", Each	<b>LETTERING</b> There will be non-reflective vinyl lettering, 9.00" high, with no outline or shade provided. There will be ten (10) letters provided.
0684058	Lettering, Vinyl, 2.00", (41-60)	<b>LETTERING</b> Forty-one (41) to sixty (60) non-reflective vinyl lettering, 2.00" high, with no outline or shade will be provided.
0685985	Lettering, Reflective, 12.00", Each	<b>LETTERING</b> There will be reflective lettering, 12.00" high, with outline and shade provided. There will be two (2) letters provided.
0685993	Lettering, Reflective, 10.00", Each	<b>LETTERING</b> There will be reflective lettering, 10.00" high, with no outline or shade provided. There will be four (4) letters provided.
0686002	Lettering, Reflective, 8.00", Each	<b>LETTERING</b> There will be reflective lettering, 8.00" high, with no outline or shade provided. There will be two (2) letters provided.
0686013	Lettering, Reflective, 6.00", Each	<b>LETTERING</b> There will be reflective lettering, 6.00" high, with outline and shade provided. There will be six (6) letters provided.
0686042	Lettering, Reflective, 2.00", Each	<b>LETTERING</b> There will be reflective lettering, 2.00" high, with outline and shade provided. There will be 14 letters provided.
0686048	Lettering, Reflective, 1.00", Each	<b>LETTERING</b> There will be reflective lettering, 1.00" high, with no outline or shade provided. There will be 15 letters provided.
0686084	Lettering, Reflective, 3.00", Each	<b>LETTERING</b> There will be reflective lettering, 3.00" high, with outline and shade provided. There will be 24 letters provided.
0037228	Lettering, Reflective, "Dial 911" Inset in Reflective Band, Pair	<b>REFLECTIVE INSET LETTERING, "DIAL 911"</b> Two sets of ruby red "inset" reflective lettering, "DIAL 911", will be supplied and installed inset in reflective band . The reflective stripe will stop and "DIAL 911" will be placed within the break of the stripe. "DIAL" will be vertical and as tall as the stripe. The "911" will be horizontal and as tall as the stripe.
0563768	Lettering, Reflective, "Keep Back 300 Feet"	<b>REFLECTIVE LETTERING</b> There will be one (1) set/s of reflective lettering, "KEEP BACK 300 FEET", supplied and installed on the R1 - NOTE THE LETTERING IS ACTUALLY TO READ "KEEP BACK 343" HOWEVER I AM TO USE THIS OPTION PER THE PIERCE RESPONSE IN THREAD NUMBER 592- EP300377-7. The lettering will be ruby red in color and 4.00" in size.

0527677	SP	Emblem, Per Quote, Sacramento	<b>DEPT. EMBLEM</b> There will be (1) one pair of vinyl emblems applied between the cab and crew cab doors. Emblems will be approximately 7.00" x 7.00" per graphics quote.
0529004	SP	Emblem, Per Quote, Sacramento Single Emblem	<b>DEPT. EMBLEM</b> There will be (1) one of vinyl emblem applied drivers side rear compartment bulkhead up high Emblems will be approximately 7.00" x 7.00" per graphics quote.
0022652		Emblem, Maltese Cross, Gold Leaf, 15"-17", Pair	MALTESE CROSS INSTALLATION There will be one (1) pair of maltese crosses, comprised of genuine gold leaf material, provided and installed on cab doors .
0666386		Emblem, Flag, Generic, Each	<b>EMBLEM</b> There will be two (2) emblem(s), approximately 5.00" - 8.00" wide in size, installed behind crew cab door upper portion - size to be 5" x 7". The emblem will be modeled after the department submitted information (art, patch, etc).
0032773		Manuals, Two (2), Fire Apparatus Parts, & (1) CD, Custom Chassis	<ul> <li>MANUAL, FIRE APPARATUS PARTS</li> <li>Two (2) custom parts manuals for the complete fire apparatus will be provided in hard copy with the completed unit.</li> <li>One (1) compact disc (CD) will also be provided that will include all of the information from the above manual.</li> <li>The manual will contain the following: <ul> <li>Job number</li> <li>Part numbers with full descriptions</li> <li>Table of contents</li> </ul> </li> <li>Parts section sorted in functional groups reflecting a major system, component, or assembly</li> <li>Parts section sorted in Alphabetical order</li> <li>Instructions on how to locate parts</li> <li>The manual will be specifically written for the chassis and body model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.</li> </ul> <li>SERVICE PARTS INTERNET SITE The service parts information included in this manual is also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.</li>
0032421		Manuals, (2) Chassis Service, (1) CD, Custom	<ul> <li>MANUALS, CHASSIS SERVICE</li> <li>Two (2) chassis service manuals containing parts and service information on major components will be provided with the completed unit.</li> <li>One (1) compact disk (CD) will also be provided that will include all of the information from the above manual.</li> <li>The manuals will contain the following sections: <ul> <li>Job number</li> <li>Table of contents</li> <li>Troubleshooting</li> <li>Front Axle/Suspension</li> <li>Brakes</li> <li>Engine</li> <li>Tires</li> <li>Wheels</li> <li>Cab</li> <li>Electrical, DC</li> <li>Air Systems</li> <li>Plumbing</li> <li>Appendix</li> </ul> </li> <li>The manual will be specifically written for the chassis model being purchased. It will not be a generic manual for a multitude of different chassis and bodies.</li> </ul>
0029551		Manuals, Two (2) Chassis Operation, & (1) Compact Disc, Custom	MANUALS, CHASSIS OPERATION Two (2) chassis operation manuals will be provided. One (1) compact disk (CD) will also be provided that will include all of the information from the above manual.
0030008		Warranty, Basic, 1 Year, Apparatus, WA0008	<b>ONE (1) YEAR MATERIAL AND WORKMANSHIP</b> A Pierce basic apparatus limited warranty certificate, WA0008, is included with this proposal.
0696698		Warranty, Engine, Cummins, 5 Year, WA0181	<b>ENGINE WARRANTY</b> A Cummins <b>five (5) year</b> limited engine warranty will be provided. A limited warranty certificate, WA0181, is included with this proposal.

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0684953	Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	<b>STEERING GEAR WARRANTY</b> A Sheppard <b>three (3) year</b> limited steering gear warranty shall be provided. A copy of the warranty certificate shall be submitted with the bid package.
0596017	Warranty, Frame, 50 Year, Custom Chassis, WA0013	<b>FIFTY (50) YEAR STRUCTURAL INTEGRITY</b> The Pierce custom chassis frame limited warranty certificate, WA0013, is included with this proposal.
0595698	Warranty, Axle, 3 Year, TAK-4, WA0050	<b>FRONT AXLE THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY</b> The Pierce TAK-4 suspension limited warranty certificate, WA0050, is included with this proposal.
0777368	Warranty, Axle, 2 Year, Meritor, General Service, WA0328	<b>REAR AXLE TWO (2) YEAR MATERIAL AND WORKMANSHIP WARRANTY</b> A Meritor axle limited warranty certificate, WA0046, is included with this proposal.
0652758	Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	ABS BRAKE SYSTEM THREE (3) YEAR MATERIAL AND WORKMANSHIP WARRANTY A Meritor Wabco <sup>TM</sup> ABS brake system limited warranty certificate, WA0232, is included with this proposal.
0019914	Warranty, Structure, 10 Year, Custom Cab, WA0012	TEN (10) YEAR STRUCTURAL INTEGRITY The Pierce custom cab limited warranty certificate, WA0012, is included with this proposal.
0595813	Warranty, Paint, 10 Year, Cab, Pro- Rate, WA0055	<b>TEN (10) YEAR PRO-RATED PAINT AND CORROSION</b> A Pierce cab limited pro-rated paint warranty certificate, WA0055, is included with this proposal.
0524627	Warranty, Electronics, 5 Year, MUX, WA0014	FIVE (5) YEAR MATERIAL AND WORKMANSHIP The Pierce Command Zone electronics limited warranty certificate, WA0014, is included with this proposal.
0695416	Warranty, Pierce Camera System, WA0188	CAMERA SYSTEM WARRANTY A Pierce fifty four (54) monthwarranty will be provided for the camera system.
0708760	Warranty, Not Applicable, LED Strip Lights	<b>COMPARTMENT LIGHT WARRANTY</b> The compartment lights will not offer an extended warranty.
0046369	Warranty, 5-year EVS Transmission, Standard Custom, WA0187	<b>TRANSMISSION WARRANTY</b> The transmission will have a <b>five (5) year/unlimited mileage</b> warranty covering 100 percent parts and labor. The warranty will be provided by Allison Transmission. Note: The transmission cooler is not covered under any extended warranty you may be getting on your Allison Transmission. Please review your Allison Transmission warranty for coverage limitations.
0685945	Warranty, Transmission Cooler, WA0216	<b>TRANSMISSION COOLER WARRANTY</b> The transmission cooler will carry a five (5) year parts and labor warranty (exclusive to the transmission cooler). In addition, a collateral damage warranty will also be in effect for the first three (3) years of the warranty coverage and will not exceed \$10,000 per occurrence. A copy of the warranty certificate will be submitted with the bid package.
0688798	Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	, WATER TANK WARRANTY A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.
0596025	Warranty, Structure, 10 Year, Body, WA0009	<b>TEN (10) YEAR STRUCTURAL INTEGRITY</b> The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.
0693126	Warranty, AMDOR, Roll-up Door, 10 Year/5 Year Painted, WA0185	<b>ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY</b> An AMDOR roll-up door limited warranty will be provided. The roll-up door will be warranted against manufacturing defects for a period of <b>ten (10) years</b> . A <b>five (5) year</b> limited warranty will be provided on painted roll up doors. The limited warranty certificate, WA0185, is included with this proposal.
0063510	Warranty, Pump, Waterous, 5 Year Parts, WA0225	<b>PUMP WARRANTY</b> A Waterous pump limited warranty certificate, WA0225, is included with this proposal. Page 69 of 221

0648675	Warranty, 10 Year S/S Pumbing, WA0035	<b>TEN (10) YEAR PUMP PLUMBING WARRANTY</b> The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.
0641372	Warranty, Foam System, Not Available	
0595820	Warranty, Paint, 10 Year, Body, Pro- Rate, WA0057	<b>TEN (10) YEAR PRO-RATED PAINT AND CORROSION</b> A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.
0595421	Warranty, Goldstar, 3 Year, Apparatus, WA0018	<b>THREE (3) YEAR MATERIAL AND WORKMANSHIP</b> The Pierce Goldstar gold leaf lamination limited warranty limited warranty certificate, WA0018, is included with this proposal.
0683627	Certification, Vehicle Stability, CD0156	<b>VEHICLE STABILITY CERTIFICATION</b> The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.
0777618	Certification, Engine Installation, Saber FR/Enf, Cummins L9, 2017,CD0155/CD0158	<b>ENGINE INSTALLATION CERTIFICATION</b> The fire apparatus manufacturer will provide a certification, along with a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The certification will be provided at the time of bid.
0686786	Certification, Power Steering, CD0098	<b>POWER STEERING CERTIFICATION</b> The fire apparatus manufacturer will provide a certification stating the power steering system as installed meets the requirements of the component supplier. The certification will be provided at the time of bid.
0631980	Certification, Cab Integrity, Saber FR/Enforcer, CD0130	<ul> <li>CAB INTEGRITY CERTIFICATION</li> <li>The fire apparatus manufacturer will provide a cab crash test certification with this proposal. The certification will state that a specimen representing the substantial structural configuration of the cab has been tested and certified by an independent third party test facility. Testing events will be documented with photographs, real-time and high-speed video, vehicle accelerometers, cart accelerometers, and a laser speed trap. The fire apparatus manufacturer will provide a state licensed professional engineer to witness and certify all testing events. Testing will meet or exceed the requirements below:</li> <li>European Occupant Protection Standard ECE Regulation No.29.</li> <li>SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.</li> <li>Roof Crush</li> <li>The cab will be subjected to a roof crush force of 22,500 lb. This value meets the ECE 29 criteria, and is equivalent to the front axle rating up to a maximum of ten (10) metric tons.</li> <li>Side Impact</li> <li>The same cab will be subjected to dynamic preload where a 13,275-lb moving barrier is slammed into the side of the cab at 5.50 mph, striking with an impact of 13,000 ft-lb of force. This test is part of the SAE J2422 test procedure and more closely represents the forces a cab will see in a rollover incident.</li> <li>Fontal Impact</li> <li>The same cab will withstand a frontal impact of 32,600 ft-lb of force using a moving barrier in accordance with SAE J2420.</li> <li>Additional Frontal Impact</li> <li>The same cab will withstand a frontal impact of 65,200 ft-lb of force using a moving barrier. (Twice the force required by SAE J2420)</li> <li>The same cab will withstand al tests without any measurable intrusion into the survival space of the occupant area.</li> </ul>
0631973	Certification, Cab Door Durability, Saber FR/Enforcer, CD0137	<b>CAB DOOR DURABILITY CERTIFICATION</b> Robust cab doors help protect occupants. Cab doors will survive a 200,000 cycle door slam test where the slamming force exceeds 20 G's of deceleration. The bidder will certify that the sample doors similar to those provided on the apparatus have been tested and have met these criteria without structural damage, latch malfunction, or significant component wear.
0631978	Certification, Windshield Wiper Durability, Saber FR/Enforcer, CD0132	WINDSHIELD WIPER DURABILITY CERTIFICATION Visibility during inclement weather is essential to safe apparatus performance. Windshield wipers will survive a 3 million cycle durability test in accordance with section 6.2 of SAE J198 <i>Windshield</i> <i>Wiper Systems - Trucks, Buses and Multipurpose Vehicles.</i> The bidder will certify that the wiper system design has been tested and that the wiper system has met these criteria.

0631974	Certification, Electric Window Durability, Saber FR/Enforcer, CD0133	<b>ELECTRIC WINDOW DURABILITY CERTIFICATION</b> Cab window roll-up systems can cause maintenance problems if not designed for long service life. The window regulator design will complete 30,000 complete up-down cycles and still function normally when finished. The bidder will certify that sample doors and windows similar to those provided on the apparatus have been tested and have met these criteria without malfunction or significant component wear.
0631977	Certification, Seat Belt Anchors and Mounting, Saber FR/Enforcer, CD0134	<ul> <li>SEAT BELT ANCHOR STRENGTH</li> <li>Seat belt attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat belt anchor design will withstand 3000 lb of pull on both the lap and shoulder belt in accordance with FMVSS 571.210 Seat Belt Assembly Anchorages. The bidder will certify that each anchor design was pull tested to the required force and met the appropriate criteria.</li> <li>SEAT MOUNTING STRENGTH</li> <li>Seat attachment strength is regulated by Federal Motor Vehicle Safety Standards and should be validated through testing. Each seat mounting design will be tested to withstand 20 G's of force in accordance with FMVSS 571.207 Seating Systems. The bidder will certify, at time of delivery, that each seat mount and cab structure design was pull tested to the required force and met the appropriate criteria.</li> </ul>
0631976	Certification, Cab Heater and Defroster, Saber FR/Enforcer, CD0131	<b>CAB DEFROSTER CERTIFICATION</b> Visibility during inclement weather is essential to safe apparatus performance. The defroster system will clear the required windshield zones in accordance with SAE J381 Windshield Defrosting Systems Test Procedure And Performance Requirements - Trucks, Buses, And Multipurpose Vehicles. <i>The bidder will certify that the defrost system design has been tested in a cold chamber and passes the SAE J381 criteria.</i> <b>CAB HEATER CERTIFICATION</b> Good cab heat performance and regulation provides a more effective working environment for personnel, whether in-transit, or at a scene. The cab heaters will warm the cab 77 degrees Fahrenheit from a cold-soak, within 30 minutes when tested using the coolant supply methods found in SAE J381. The bidder will certify, at time of delivery, that a substantially similar cab has been tested and has met these criteria.
0631971	Certification, Cab Air Conditioning Performance, Saber FR/Enforcer, CD0135	<b>CAB AIR CONDITIONING PERFORMANCE CERTIFICATION</b> Good cab air conditioning temperature and air flow performance keeps occupants comfortable, reduces humidity, and provides a climate for recuperation while at the scene. The cab air conditioning system will cool the cab from a heat-soaked condition at 100 degrees Fahrenheit to an average of 78 degrees Fahrenheit in 30 minutes. The bidder will certify that a substantially similar cab has been tested and has met these criteria.
0545073	Amp Draw Report, NFPA Current Edition	<ul> <li>AMP DRAW REPORT</li> <li>The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.</li> <li>The manufacturer of the apparatus will provide the following:</li> <li>Documentation of the electrical system performance tests.</li> <li>A written load analysis, which will include the following:</li> <li>The nameplate rating of the alternator.</li> <li>The alternator rating under the conditions specified per:</li> <li>Applicable NFPA 1901 or 1906 (Current Edition).</li> <li>The minimum continuous load of each component that is specified per:</li> <li>Applicable NFPA 1901 or 1906 (Current Edition).</li> <li>Additional loads that, when added to the minimum continuous load, determine the total connected load.</li> <li>Each individual intermittent load.</li> <li>All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).</li> </ul>
0002758	Amp Draw, NFPA/ULC Radio Allowance	
0799248	Appleton/Florida BTO	
0000018	PUMPER, 2ND GEN	
0000012	PIERCE CHASSIS	
0004713	ENGINE, OTHER	
0046395	EVS 3000 Series TRANSMISSION	Page 71 of 221

0020011	WATEROUS PUMP
0020009	POLY TANK
0028048	FOAM SYSTEM
0020006	SIDE CONTROL
0020007	AKRON VALVES
0020015	ABS SYSTEM
0658751	PUMPER BASE

### LOOSE EQUIPMENT

The following loose equipment list is <u>PER UNIT</u> and will be provided by the sales organization and prior to final delivery:

# DESCRIPTION 1 Intake Relief Valve: BALL IN	MANUFACTURER & MODEL	QTY	
1 Intake Relief Valve: BALL IN			
1 Intake Relief Valve: BALL IN			
5.0STORZ SWIVEL X 6.0F SW			
SHORT HANDLE NO CAP	ABSSI-INA	2	
2 631 2.5 NHFRL X 2.5 NHM P 60 DEGREE ANGLE ELBOW	PYROLITE 06310005 AKR	1	
3 LDH Water Thief: (2) 2.5M	gated w/ Elkhart #9843 / part		
opt LDH, 11671000 storz 5.0			
F/S alum, 11671000 storz 5	.0 w/ loc	1	
F/S alum			
4 "The Pipe": 18" Deck gun ex	xtension Elkhart #8298EX		
		1	
5 <b>"The Pipe"</b> - Truck mount	Elkart #8298	1	
		1	
6 "The Pipe": mounting brack	ket Elkhart #82998EX-MB	1	
		-	
7 Stinger Portable Monitor: swivel storz inlet, stream sh			
quad stacked tips, 10' safety		1	
8 Stinger Mounting Bracket	Elkhart #8297MB		
5 Stinger Mounting Drucket		1	
9 Master Stream Nozzle:	300- Elkhart SM-1250		
1250gpm		1	
10 Anchor Kit: anchor kit ram ,	/ 8297 Elkhart #81204 / part	1	
mntr	#81460001	T	
11 2.5 NH MERCURY MONITO	R ONLY - 34430003 AKR	1	
NO NOZZLE		-	
12 MOUNT BRACKET - MERCU MONITOR	<b>RY</b> 34430001 AKR	1	
13 2.5 NH 500 GPM MERCURY	<b>NOZZLE</b> 44450001 AKR	+	
		1	
14 Hydrant Gate Valve: X-86-A	A 2.5 FNH Elkhart #X-86A / part		
x 2.5 MNH alum	#00381101	1	
15 2.5" Water Thief: BG-104-A	water Elkhart BG-104A / part		
thief	#03728001	1	
16 <b>1.5" Gated Wye:</b> B-100-LA,		1	
x (2) 1.5 MNH alum	#03726001	-	
17 2.5 NHFRL 0-300# ENCASED	D LINE 15525N RED HEAD	1	
GAUGE	l ant		
18 B-100-A 2.5 F x (2) 1.5 M w/ 63069001 swvl 2.5 NH O/B0	• •		
alum, 10829001 nipple 1.5		1	
100-A, 99454201 handle ST	5	1	
black alum, 99401012 no pr	-		
19 <b>1 3/4" Chief Nozzle tip:</b> Mic	#02507301		
150@50, free swivel base, s			
stainless steel teeth, yellow		3	
(Tanklines)			
20 1 3/4" Chief Nozzle tip: Mic	d-range		
150@50, free swivel base, s	pinning	_	
stainloss staal taath arrest	Elkhart Chief XD #04XD0101	2	
stainless steel teeth, orange (SacPack)	, bamper		

21	1 3/4" Shut-off: 1.5" shut off, free		
	swivel base, no slug, bale color black		
22	<b>1 " Shut-off:</b> SB-275-GA 1.0 FXM NPSH P/G w/ pistol grip (BOOSTER REEL)	Elkhart # SB-275-GA / part #00709101	1
23	1 1/8" Hand line tip: (high rise nozzle)	Elkhart 188 XD #66766007	1
24	1 1/4" Hand line tip: (2.5" Attack line)	Elkhart 188 XD #66768007	2
25	<b>7/8" Hand line tip:</b> (TANK LINE / SAC PACK)	Elkhart 187XD #66755007	5
26	Stream Shaper: 281-A 1.5 NH stream shaper (HIGH RISE)	Elkhart #281A / part #03476301	1
27	<b>2 1/2" Chief Nozzle tip:</b> high-range 250@50, 1.5" swivel base, spinning stainless steel teeth, yellow bumper	Elkhart- Chief XD #04XD0251	2
28	<b>2 1/2" Chief Nozzle tip:</b> 4000-22 1.5/2.5 swvl w/ opt tip, 99470801 swvl 2.5 NH R/L alum, 69053001 stem 250 gpm @ 50 psi for 4000-20 HC, 99448927 teeth spinning sub 2, 99448076 bumper (orange) <b>HIGH</b> <b>RISE</b>	Elkhart # 4000-22 / part #0400022F-51060101	1
29	<b>2 1/2" Shut-off:</b> 2.5" free swivel base, 1.5" outlet, no slug, bale color black	Elkhart-XD #0069XD02	2
30	<b>2 1/2" Jumbo ball shut-off:</b> Jumbo ball shut-off: Double cut away ball (HIGH RISE)	Elkhart # JB-275-A / part #00170001	1
31	1 1/2" Forestry Shut-off: BALL SHUTOFF 1.5"	Cascade # 40711	2
32	<b>1 1/2" Forestry nozzle:</b> NOZZLE, RANGER 1½" NH	Cascade # 10902	2
33	1" Forestry nozzle: NOZZLE, RANGER 1"NH 10-30GPM (Booster Line)	Cascade # 10921NH	1
34	<b>1" Forestry nozzle:</b> NOZZLE 30GPM 1"NPSH	Cascade # 40663NPSH	2
35	3 LB. POWER DRIVE DEAD BLOW HAMMER WITH SUPER CGRIP	10030 NUP	1
36	SELH 5STZ X 4.5 NHFLH 30 DEGREE ELBOW ADAPTER	SELH50S45N	2
37	S36 S STZ X 2.5 NHM STORZ TO RIGID MALE ADAPTER	S3650S25N	1
38	SELH 5 STZ X 2.5 NHFLH 30 DEGREE ELBOW ADAPTER	SELH50S25N	2
39	5STZ X 4NHF RL LTWT 30DEG ELBOW ADPTR, CHROME	SKE54RC KOCHEK	1
40	5STZCHROME STORZ CAP WITH CHAIN	CC507-C KOCHEK	1
41	56 - 4.5 NHFLH X 2.5 NHM ADAPTER	5645N25N	1
42	2.5 NH RIG RL F X 1.5 NH M EXTENDED FIRE ENGIN RED	37R2515-2-P07-L KOCHEK	1

43	1.5 NH M MOUNTING PLATE KBRITE	MM1501-KBR	5
44	35 - 2.5 NHFRL X 2.5 NHFRL DOUBLE FEMALE SWIVEL ADAPTER	3525N25N	3
45	36 - 2.5 NHM X 2.5 NHM ROCKER LUG DOUBLE MALE ADAPTER	3625N25N	2
46	37 - 2.5 NHFRL X 1.5 NHM ADAPTER	3725N15N	4
47	2.5" NHF X 1.5" NHMK CHROME ADAPTER	37R2515C KOCHEK	2
48	35 - 1.5 NHFRL X 1.5 NHFRL DOUBLE FEMALE SWIVEL ADAPTER	3515N15N	1
49	36 - 1.5 NHM X 1.5 NHM ROCKER LUG DOUBLE MALE ADAPTER	3615N15N	1
50	1.5 N CHR RL CAP W/ CHAIN	CC1552C KOCHEK	2
51	1.5 NHFRL CAP W/ CHAIN	C15N	4
52	37 - 2.5 NHFRL X 0.75 GHTM ADAPTER	3725N75G	1
53	SET OF 4: 4, 5 STORZ X UNIVERSAL SPANNER WRENCH WITH HOLDER	KS34 KOCHEK	1
54	TRIPLE HOLDER; W/ WRENCHES KIT	1483 RED HEAD	2
55	Spanner Wrenches (EXTRA) Universal Spanner SPANNER WRENCH	Red Head # 101	2
56	HOLE TYPE SPANNER WRENCH	103 RED HEAD	2
57	2.5 NHF X (2) 1.5 NHM FRSTRY WYE VLV	WV25NH15NH SH PROD	1
58	37 - 4.5 NHFRL X 2.5 NHM ADAPTER	3745N25N	1
59	Forestry Hose Tee: TEE VALVE 1.5X1.5 NHX1NPSH	Cascade #11151NPSH	2
60	FOAM PAIL WRENCH	UFCW ZICO	1
61	HOSE ROLLER	HHR-2 HAR	1
62	Forestry hose clamp: HOSE CLAMP, 1.5"	Cascade # 11213	3
63	FSV500 5 GAL VINYL PACKPK SMOKECHASER - FEDCO PUMP	179011V INDIAN	1
64	1 1/2" swivel gasket: GASKET, SWIVEL 1.5"	Cascade # 12103	5
65	2 1/2" swivel gasket: GASKET, SWIVEL 2.5"	Cascade # 12105	5
66	4 1/2" swivel gasket: GASKET, SWIVEL 4.5"	Cascade # 12109	5
67	5" Storz gasket: GASKET,STORZ 5" PRESSURE	Cascade # 11592	5
68	<b>5" Storz gasket:</b> GASKET,STORZ 5" SUCTION	Cascade # 11594	5
69	8314178 - 1.5 NH SJ TAIL GASKET	14012	5
70	1.75" SJ TAIL GASKET	14140	5
71	<b>2 1/2" tall gasket:</b> GASKET, TAIL 2.5" THIN	Cascade # 12124	5
72	Coupling mount: 1 1/2"	Zico # CM 1.5	1
73	373 - 1.5" EZLOK NOZZLE HOLDER	03730003 AKR	2
74	Coupling Mount: 2 1/2"	Zico CM 2.5	3
75	E-Z LOK NOZZLE HOLDER2.5"NH	03730004 AKR	3
76	QUIC MOUNT 5STZ	SCM5 ZICO	7
77	Coupling Mount Extension	CME1 ZICO	1
78	IRONSLOK	K5005 PERF ADV	1

79	HOLDING BRACKET	HB1 FIRE HOOKS	2
80	Glove Dispenser: single glove holder	Bowman # GB1- single S.S	2
81	Nozzle Cup Mount: (Elkhart 4000-03 w/ PG)	Zico # 3070-130-000	1
82	Cup Mount Bracket: Zico # 3070-135-000		1
83	SFD Map Box: painted w/ piano hinge	Pierce MFG	1
84	Hydrant Bucket: canvas w/ plastic bottom	Husky 82003N11, 18" Water- Resistant Contractor/DIY Tool Bag with Shoulder Strap	1
85	78 - 36' HOSE AND LADDER STRAP	00780001 AKR	2
86	Fire Fighter Drop Bag	First In # 97063	4
87	Quick Attack Bag: (RED) w/ carrying handle & shoulder strap	First-In: Quick Attack Bag # 97041R	1
88	Metro-Pak Strap	JS Canvas	2
89	2.5" HOSE PACK HIGH RISE STRAPS 25"	JS Canvas	9
90	Hose Belts	SFD Utility Shop	2
91	Spyder gear pack-Sac City custom spec: AC Custom Spyder Gear Pack W/ MOLLE System, Harness, acessory pocket,hose clamp pouch,personal equipment pouch, no shelter pouch and adapter straps for Go Pack preinstalled.	SG210AC	4
92	DROPPER HOSE PACK, 2-100' ROLLS	DHP-2502-BK WOLF PK	3
93	WATER CAN / EXTINGUISHER HARNESS CARRYING SYSTEM	CH-312 FIRE HOOKS	1
94	Duct Tape: 1.88 in. x 60 yds. Silver All-Purpose Duct Tape	Duck Pro SKU #1002982275	1
95	SP2L #2 SQUARE POINT SHOVEL WITH 48" HANDLE	69148 NUP	1
96	FIRETOOL, US - SC, FOREST SERVICE, ATT	USF6 AMES	1
97	32" 6# POLISHED PICKHEAD FIREFIGHTER AXE WITH FIBERGLASS HANDLE	32PF-6 FIRE AXE	2
98	6' All-Purpose Hook: w/D-Handle	Fire Hooks Unlimited # APH-6' w/ D-handle	1
99	Pike Pole, 10' FG Handle	Fire Hooks Unlimited # NTFG- 10'	1
100	Marrying strap	MS1 FIRE HOOKS	1
101	30" HOOLIGAN TOOL FORGED STEEL	22000680 PARATECH	2
102	36" 8# POLISHED FLATHEAD FIREFIGHTER AXE WITH FIBERGLASS HANDLE	36FF-8 FIRE AXE	1
103	New Generation Fire Shelter	Anchor Industries (Large) ANC-9003051	4
104	18" C-CUT GENERAL PURPOSE CUTTER	0090MC HKP	1
105	GEN PURPOSE CUTTER 36"	0390MC HKP	1
106	Carry-All: DEBRIS CARRIER	Cascade # 24316	1

107	BIG EASY GLO WITH EASY CONSISTING OF: (1) EASY WEDGE CARRY CASE		
108	48" 10# PINCHPOINT STEEL CROWBAR	100PP	1
109	Traffic cones: 30" (75cm) Extreme PRO 5 PAC, 5 Pack PROfessional Series Light-Up Cones	Pack-A-Cone: Item# PAC-512-30 www.packacone.cone	1
110	RED HIGH INTENSITY STROBE KIT	12000 LIGHTMAN	1
111	AMBER HIGH INTENSITY STROBE KIT	13000 LIGHTMAN	1
112	20 MINUTE RED FUSEE, NO SPIKE OR STAND, 36 PER	7200 ORION	1
113	SL20L LED RECH NIMH FLASHLIGHT 12V DC	20702 STRMLIT	4
114	Boxlite: w/charger	<b>Str</b> eamlight #Vulcan w/exit lights yellow	2
115	Barrier Tape: " Fire Line Do Not Cross" (Barricade Tape, Yellow/Black, 1000ft x 3In)	Grainger # 4ACD5	2
116	Barrier Tape: Barricade Tape, Danger, Red, 1000 ft, Poly	Grainger # 21YH37	1
117	Clip Board: Posse Bottom Opening Box, Silver	Galls: #CP033 SIL	1
118	2.5 GAL 2A WATER FIRE EXTINGUISHER	240 AMEREX	1
119	20 # ABC EXTINGUISHER	A411 AMEREX	1
120	3.75# PULASKI MATTOCK AX 36" WOOD HNDL - 38PE136	375MA	1
121	Handle: Yellow Fiberglass Handle, Length 58"	Grainger# Tough Guy 1NFF5	1
122	<b>Broom:</b> Wire Push Broom, Block Size 18", Hardwood Block Material	Grainger# Tough Guy 3U775	1
123	SINGLE UNIVERSAL RADIO CHEST HARNESS GEN 2	RH6100 TRUE NORTH	4
124	Radio Integration Straps : True North Harness Integration Straps, 4 straps PER PACK, Grey	True North Gear: Grey - Item: TN-RH500	4
125	PFD'S	PF1800 - MUSTANG UNIVERSAL SWIFTWATER RESCUE PFD COLOR BLACK	4
126	Knife / Scabbard	KN7000 - RQ3 KNIFE THE EDGE COLOR HI VIS	4
127	Whistle, w/ lanyard	WH7945 - WHISTLE-FOX 40 FLEX COIL	4
128	Rescue Helmet: (red)	HL7050LR - RQ3 STORM PRO HELMET RED SIZE L/XL	1
129	Rescue Helmet: (white)	HL7050LW - RQ3 STORM PRO HELMET WHITE SIZE L/XL	3
130	Water Throw Bags	BG3137 - THROWBAG-RS STANDARD LG-75' POLY/KRN 3/8	2
131	6" GREEN 12-HOUR SNAPLIGHT	909011 CYALUME	12
132	6" RED 12-HOUR SNAPLIGHT	908012 CYALUME	12
133	Mesh Gear Bag	BG3195 - HEAVY DUTY EQUIP BAG XL COLOR RED	2

134	8 MM RED RESCUE PRUSK / LRH CORD FT (75' LENGTHS)	292038 CMC	4
135	PROSERIES XL RED ALU AUTO- LOCKING D CARABINE	300253 CMC	4
136	Thermal Imaging Camera: (TIC)	Scott 8003075 Elite XRHR Camera with the following accessories: (1) 8002932 Elite XRHR truck charger, (1) 8002934 Elite XRHR desktop charger, (1) 8002933 Elite XRHR lanyard, (1) 8003011 clamshell battery, (2) 8002938 Elite XRHR extended supercell batteries	1
137	5" x 100 feet: DB-600 5" X 100' DJ YELLOW ULTRA-SHIELD COATED Cpld R/A Locking 5" Storz RED HEAD	North American Fire Hose, DB5X100YRS	11
138	<b>5" x 50 feet:</b> DB-600 5" X 50' DJ YELLOW ULTRA-SHIELD COATED Cpld R/A Locking 5" Storz RED HEAD	North American Fire Hose, DB5X50YRS	1
139	<b>5" x 30 feet:</b> DB-600 5" X 30' DJ YELLOW ULTRA-SHIELD COATED Cpld R/A Locking 5" Storz RED HEAD	North American Fire Hose, DB5X30YRS	1
140	<b>3" x 50 feet:</b> DB-800 3" X 50' DJ RED ULTRA-SHIELD COATED Cpld Alum EX 2-1/2" NST RED HEAD	North American Fire Hose, DB3X50REN	13
141	<b>3" x 30 feet:</b> DB-800 3" X 30' DJ RED ULTRA-SHIELD COATED Cpld Alum EX 2-1/2" NST RED HEAD	North American Fire Hose, DB3X30REN	2
142	<b>3" x 10 feet</b> : DB-800 3" X 10' DJ RED ULTRA-SHIELD COATED Cpld Alum EX 2-1/2" NST RED HEAD	North American Fire Hose, DB3X10REN	1
143	2 1/2" x 50 feet: DB-800 2-1/2" X 50' DJ YELLOW ULTRA-SHIELD COATED Cpld Alum EX-NST RED HEAD	North American Fire Hose, DB25X50YEN	20
144	<b>1 3/4" x 100 feet:</b> Sac Pack - Key Eco 10, orange, 1.5" NST couplings	Кеу	4
145	<b>1 3/4" x 50 feet:</b> Tankline Hose (ok 1.875") - Key Big 10 FDNY spec., yellow, 1.5" NST couplings	Кеу	20
146	1.5" forestry hose x 100 feet: OUTBACK-600 HD 1-1/2" X 100' SJ YELLOW ULTRA-SHIELD COATED Cpld Alum Forestry EX-NST	North American Fire Hose, OBH15X100YFN	6
147	<b>1" forestry hose x 100 feet:</b> OUTBACK-600 HD 1" X 100' SJ YELLOW ULTRA-SHIELD COATED Cpld Alum Forestry EX-IPT	North American Fire Hose, OBH1X100YFI	2
148	<b>1 3/4" x 16 feet:</b> CROSSLAY SHORTIES Big-10 FDNY Spec. Double Jacket Attack Hose. 1.75" x 16', Coupled Aluminum 1.5" NST. Color: Yellow	Key DP18-800-FDNY	3
149	1" x 50 feet Booster Hose: 800 psi, NPSH couplings	L.N. Curtis # BH800	3

150	Foam: FIREADE 2000 PLUS FOAMFIRES-FA2005CONCENTRATE, Class A & B Foam.Five Gallon Pail		5
151	Air Cylinder, SCBA, 4.5 30 Min	Scott wrapped 4500psi, 30 min capacity	8
152	SCBA, 4.5 30 min.	Scott	4
153	SCBA Voice Amplifier	Scott	5
154	EKG Monitor / Defibrillator & Case	M Series ZOLL	
155	Portable Suction Unit	S-SCORT III	1
156	Ems Bag: Blue Vinyl	Boundtree Medical #686504B	1
157	Ems Bag: Red Vinyl	Boundtree Medical #687000R	1
158	Backboard: w/ 4 sets of straps	Boundtree Medical #267151	1
159	Oxygen Regulator	Boundtree Medical #D2400	1
160	Oxygen Sleeve: (blue)	Boundtree Medical #381300	1
161	BLACK TOOL BOX W /TRAY 11" X 19" X 7"	BLACKHAWK P/N 578-94100B	1
162	8 Pc. Combination Ratcheting Wrench Sets, Inch	GEARWRENCH P/N 329- 9308D	1
163	8 Pc Reversible Combination Ratcheting Wrench Sets, 12 Point, Metric	GEARWRENCH P/N 329-9543	1
164	T SHAPE HEX KEY WITH 1/4" TIP SIZE	J46416 PROTO	1
165	Ball-Hex-L Key Sets, 22 per set, Hex Ball Tip, Inch/Metric, Black Oxide	EKLIND TOOL P/N 269-13222	1
166	Torx Bit Sets, 1/4; 3/8 in Drive	STANLEY P/N 576-89-420	1
167	Standard Fluted Screwdriver Sets, 10 Piece, Phillips; Slotted	STANLEY P/N 680-60-100	1
168	Adjustable Wrenches, 8 in Long, 1 1/8 in Opening, Chrome Plated	ANCHOR BRAND P/N 103-01- 008	1
169	Adjustable Wrenches, 12 in Long, 1 1/2 in Opening, Satin	PROTO P/N 577-712	1
170	10 Piece Combination Wrench Sets, SAE	DEWALT P/N 115- DWMT72167	1
171	10 Piece Combination Wrench Sets, Metric	DEWALT P/N 115- DWMT72166	1
172	Powerlock <sup>®</sup> Tape Rules 1" Wide Blade, 1 in x 30 ft	STANLEY P/N 680-33-430	1
173	14' STRAIGHT PIPE WRENCH WITH STEEL ALLOY JAW	632-31020 RIGID	3
174	Fast Release Curved Jaw Locking Pliers with Wire Cutter, 10 in Long	IRWIN VISE-GRIP P/N 586-05T	1
175	8" LINESMAN PLIER	STANLEY P/N 680-84-113	1
176	Tinner Snips	IRWIN P/N 586-23012	1
177	Curved Claw Hammer, Forged Steel Head, Fiberglass Handle, 13 in, 1 1/2 lb	PLUMB P/N 184-11405	1
178	Wonder Bar Pry Bars, 12 3/8 in, Offset; Right Angle Claw	STANLEY P/N 680-55-515	1

179	Instant Change Utility Knives, 8 STANLEY P/N 680-10- 1/2", Retractable Steel Blade, Cast Metal, Gray		1
180	2-1/4" CARBON STEEL 2-POINT UNBREAKABLE SAFETY BLADE, 5 PK	2ZRK7 WESTWARD	4
181	Crescent 25 Pc. 3/8 in Drive 6 and 12 Point Std and Deep SAE Mechanics Tool Sets, 6 Pts	CRESCENT P/N 192-CSWS8N	1
182	Receptacle Tester, 110 to 125VAC	Grainger #33M405	1
183	HACKSAW FRAME	LENOX P/N 433-12132HT50	1
184	HACKSAW, V218HE, 12X1/2X023X18, 10PER	20144V218HE LENOX	1
185	FILE,10", MILL BASTARD, CDD, 254mm	21839N NICHOLSON	4
186	TIRE INFLATOR WITH GAUGE	16388 CRAFTSMAN	1
187	25 ft. Nylon 12 Coiled Air Hose, Yellow	Grainger #1VEJ2	1
188	Steel Universal Quick Coupler Plug (for air hose)	Grainger #5ZLR3	1
189	Brass Reducing Adapter, FNPT x MNPT, 3/8" x 1/4" Pipe Size (for air hose)	Grainger #1DFY7	1
190	Steel Universal Quick Coupler Body (for air hose)	Grainger #5ZLP1	1
191	Radio 800 MHZ	Motorola APX6500	1
192	Radio VHF	Kenwood TK5710BGK	1
193	Battery Charger: portable radio battery charger	AT4-2066IFD 4 bank conditioning charger for APX6000 NiCad/NiMH batteries w/ heavy duty wiring harness for installation on vehicle	1
194	Radio Interface Module, David Clark model U3816	David Clark model U3816	2
195	Remote Push To Talk Kit		1
196	Intercom Master Unit, David Clark model U3800	David Clark model U3800	1
197	Power Cable, David Clark model C3820	David Clark model C3820	1
198	Remote Headset Station, David Clark model U3801	David Clark model U3801	1
199	Hook, Headset, NFPA Compliant		5
200	Headset, David Clark model H3442 Under Helmet, Flex Mic	David Clark model H3442	5
201	MDC: M8 SYSTEM; Core i7 Processor, 16GB RAM, WiFi, 12.1 Standard Touchscreen (1600 NIT) Display, Std Keyboard, 36 Month Warranty AND M8 Audio Legacy Upgrade Kit	Data911 Products M85211210 & MA11684	1
202	Interface Cable for VHF Radio	David Clark C3821 Radio Interface Cord	2
203	Interface Cable for 800 Mhz Radio	David Clark C38-21RD1 Radio Interface Cord / Motorola 2	

204	Direct Connect Headset	David Clark H6240-51 Radio Direct Headset - APX, TRBO	1
205	GPS Antenna	LP-IN1958-W - WIRELESS - NMO CELL AND GPS - WHITE COLOR	1
206	GPS Device, Veh Diag, USA	HSV2J01	1
207	Inspection Systems	HSEVI01	1
208	5 Pin Data I/O Cable	80059	1
209	J3 Diagnostic Cable	80144	1
210	GPS Antenna Kit	HSANT01	1
211	Bag: BLA #2 ROPE BAG	430205 CMC	1
212	Binoculars	PHELRENA 20x50 Binoculars ASIN #B07DWXL8GD	1

### **LOOSE EQUIPMENT INSTALLATION**

A loose equipment mounting allowance of \$9,000.00 is included in the bid price to cover the cost of mounting the applicable equipment per the direction of the City of Sacramento. If the City of Sacramento exceeds the loose equipment mounting allowance, additional work can be performed at an additional cost of \$130.00 per hour.

### **END OF PROPOSAL**

	Pierce Fire	e and Rescue Apparatus		
Ten (10) Year Structural Integrity				
	Custo	om Cab		
	Limited	Warranty		
1. LIMITED WARRAN Subject to the limitati the following warrant	NTY ons and exclusions set forth below, Pierce Manufacturing provides	Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to: (a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions,		
Coverage:	The Pierce Custom Cab shall be free from structural failures caused by defects in material and workmanship	<ul> <li>drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;</li> <li>(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;</li> <li>(c) any vehicle, chassis or component, part, attachment or accessory that has been</li> </ul>		
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).	repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or		
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.		
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty applies only to the cab tubular support and mounting structures and other structural components of the cab of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.	The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.  2. DISCLAIMERS OF WARRANTIES THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUDES ALL OTHER WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUDES ALL OTHER WARRANTY SET FORTH IN PARAGRAPH 1 STHE SOLE AND EXCLUDES ALL OTHER WARRANTY SET FORTH IN PARAGRAPH 1 STHE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE. 3. BUYER'S EXCLUSIVE REMEDY. If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a f		
	shall apply only if the product is properly maintained in accordance nance instructions and manuals and is used in service which is	THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated		

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

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equipment, cost of substitute vehicles or products, down-time, delay damages, any other

types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for

such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

		e and Rescue Apparatus
		al and Workmanship
		pparatus
	Limited '	Warranty
1. LIMITED WARRAM Subject to the limitation the following warranty	tions and exclusions set forth below, Pierce Manufacturing provides	Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to: (a) any integral parts, components, attachments or trade accessories of or to the product
The following warrang		that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;
Coverage:	Portions of the apparatus manufactured by Pierce shall be free from defects in material and workmanship	<ul> <li>(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;</li> </ul>
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.	(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or
Warranty Period Ends After:	Twelve (12) months.	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.
Ends After: Conditions and Exclusions: See Also Paragraphs 2 thru 4	No specific exclusions apply	The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty. 2. DISCLAIMERS OF WARRANTIES THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE. 3. BUYER'S EXCLUSIVE REMEDY. If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.
with Pierce's mainten normal to the particula	y shall apply only if the product is properly maintained in accordance nance instructions and manuals and is used in service which is ular model. Normal service means service which does not subject the or impacts greater than normally result from careful use. If the Buyer	Buyer, IN NO ÉVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

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OR TO ANY OTHER PERSON OR ENTITY.

discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE

TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER

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### PARTICIPATING OEM SALES DISTRIBUTOR SALES

### LIMITED WARRANTY ON NEW ALLISON AUTOMATIC TRANSMISSIONS USED IN EMERGENCY VEHICLE APPLICATIONS

Allison Transmission will provide for repairs or replacement, at its option, during the warranty period of each new Allison transmission listed below that is installed in an Emergency Vehicle in accordance with the following terms, conditions, and limitations.

### WHAT IS COVERED

- WARRANTY APPLIES This warranty is for new Allison transmission models listed below installed in an Emergency Vehicle and is provided to the original and any subsequent owner(s) of the vehicle during the warranty period.
- **REPAIRS COVERED** The warranty covers repairs or replacement, at Allison Transmission's option, to correct any transmission malfunction resulting from defects in material or workmanship occurring during the warranty period. Needed repairs or replacements will be performed using the method Allison Transmission determines most appropriate under the circumstances.
- **TOWING** Towing is covered to the nearest Allison Transmission Distributor or authorized Dealer only when necessary to prevent further damage to your transmission.
- **PAYMENT TERMS** Warranty repairs, including parts and labor, will be covered per the schedule shown in the chart contained in section "APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE."
- OBTAINING REPAIRS To obtain warranty repairs, take the vehicle to any Allison Transmission Distributor or authorized Dealer within a reasonable amount of time and request the needed repairs. A reasonable amount of time must be allowed for the Distributor or Dealer to perform necessary repairs.
- **TRANSMISSION REMOVAL AND REINSTALLATION** Labor costs for the removal and re-installation of the transmission, when necessary to make a warranty repair, are covered by this warranty.
- WARRANTY PERIOD The warranty period for all coverages shall begin on the date the transmission is delivered to the first retail purchaser, with the following exception:

**Demonstration Service** - A transmission in a new truck or bus may be demonstrated to a total of 5000 miles (8000 kilometers). If the vehicle is within this limit when sold to a retail purchaser, the warranty start date is the date of purchase. Normal warranty services are applicable to the demonstrating Dealer. Should the truck or bus be sold to a retail purchaser after these limits are reached, the warranty period will begin on the date the vehicle was first placed in demonstration service and the purchaser will be entitled to the remaining warranty.

APPLICABLE	WARRANTY LIMITATIONS (Whichever occurs first)		ADJUSTMENT CHARGE TO BE PAID BY THE CUSTOMER	
MODELS	Months	Transmission Miles Or Kilometers	Parts	Labor
MT, MD 3000, 3200, 3500, 3700	0–24	No Limit	No Charge	No Charge
HT with Hydraulic Controls	0–24	No Limit	No Charge	No Charge
AT, 1000 Series <sup>™</sup> , 2000 Series <sup>™</sup> , 2400 Series <sup>™</sup>	0–36	No Limit	No Charge	No Charge
HT with Electronic Controls	0–60	No Limit	No Charge	No Charge
HD 1000 EVS, 2100 EVS, 2200 EVS 2350 EVS, 2500 EVS, 2550 EVS, 3000 EVS, 3500 EVS, 4000, 4000 EVS, 4500, 4500 EVS, 4700, 4700 EVS, 4800, 4800 EVS	0–60	No Limit	No Charge	No Charge

### APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE

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### WHAT IS NOT COVERED

- DAMAGE DUE TO ACCIDENT, MISUSE, or ALTERATION Defects and damage caused as the result of any of the following are not covered:
  - Flood, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle;

- Misuse of the vehicle;
- Installation into unapproved applications and installations;
- Alterations or modification of the transmission or the vehicle, and
- Damage resulting from improper storage (refer to long-term storage procedure outlined in the applicable Allison Service Manual) Anything other than defects in Allison Transmission material or workmanship
- **NOTE:** This warranty is void on transmissions used in vehicles currently or previously titled as salvaged, scrapped, junked, or totaled.
- CHASSIS, BODY, and COMPONENTS The chassis and body company (assemblers) and other component and equipment manufacturers are solely responsible for warranties on the chassis, body, component(s), and equipment they provide. Any transmission repair caused by an alteration(s) made to the Allison transmission or the vehicle which allows the transmission to be installed or operated outside of the limits defined in the appropriate Allison Installation Guideline is solely the responsibility of the entity making the alteration(s).
- DAMAGE CAUSED by LACK of MAINTENANCE or by the USE of TRANSMISSION FLUIDS NOT RECOMMENDED in the OPERATOR'S MANUAL — Defects and damage caused by any of the following are not covered:
  - Failure to follow the recommendations of the maintenance schedule intervals applicable to the transmission;
  - Failure to use transmission fluids or maintain transmission fluid levels recommended in the Operator's Manual.
- MAINTENANCE Normal maintenance (such as replacement of filters, screens, and transmission fluid) is not covered and is the owner's responsibility.
- **REPAIRS by UNAUTHORIZED DEALERS** Defects and damage caused by a service outlet that is not an authorized Allison Transmission Distributor or Dealer are not covered.
- USE of OTHER THAN GENUINE ALLISON TRANSMISSION PARTS Defects and damage caused by the use of parts that are not genuine Allison Transmission parts are not covered.
- EXTRA EXPENSES Economic loss and extra expenses are not covered. Examples include but are not limited to: loss of vehicle use; inconvenience; storage; payment for loss of time or pay; vehicle rental expense; lodging; meals; or other travel costs.
- "DENIED PARTY" OWNERSHIP Warranty repair parts and labor costs are not reimbursed to any participating or non-participating OEMs, dealers or distributors who perform warranty work for, or on behalf of, end users identified by the United States as being a "denied party" or who are citizens of sanctioned or embargoed countries as defined by the U.S. Department of Treasury Office of Foreign Assets Control. Furthermore, warranty reimbursements are not guaranteed if the reimbursement would be contrary to any United States export control laws or regulations as defined by the U.S. Department of Commerce, the U.S. Department of State, or the U.S. Department of Treasury.

### OTHER TERMS APPLICABLE TO CONSUMERS AS DEFINED by the MAGNUSON-MOSS WARRANTY ACT

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Allison Transmission does not authorize any person to create for it any other obligation or liability in connection with these transmissions. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THESE TRANSMISSIONS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, LOST WAGES OR VEHICLE RENTAL EXPENSES) **RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.\*\*** 

\*\* Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

### **OTHER TERMS APPLICABLE TO OTHER END-USERS**

THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE ALLISON TRANSMISSION MODELS LISTED ABOVE AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLISON TRANSMISSION DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH TRANSMISSIONS. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTY.

### **OUESTIONS**

If you have any questions regarding this warranty or the performance of warranty obligations, you may contact any Allison Transmission Distributor or Dealer or write to:

Allison Transmission, Inc. P.O. Box 894 Indianapolis, IN 46206-0894 Attention: Warranty Administration PF-9

Form SE0616EN (201009)

### Waterous Five-Year Limited Warranty

WATEROUS warrants, to the original Buyer only, that products manufactured by WATEROUS will be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date the product is first placed in service, or five and one-half (5-1/2) years from the date of shipment by WATEROUS, whichever period shall be the first to expire; provided the Buyer notifies WATEROUS, in writing, of the defect in said product within the warranty period, and said product is found by WATEROUS to be nonconforming with the aforesaid warranty. When required in writing by WATEROUS, defective products must be promptly returned by Buyer to WATEROUS at WATEROUS' plant at South St. Paul, Minnesota, or at such other place as may be specified by WATEROUS, with transportation and other charges prepaid. A Returned Material Authorization (RMA) is required for all products and parts and may be requested by phone, fax, email, or mail. The aforesaid warranty excludes any responsibility or liability of WATEROUS for:

- (a) damages or defects due to accident, abuse, misuse, abnormal operating conditions, negligence, accidental causes, use in non-firefighting applications, or improper maintenance, or attributable to written specifications or instructions furnished by Buyer;
- (b) defects in products manufactured by others and furnished by WATEROUS hereunder, it being understood and agreed by the parties that the only warranty provided for such products shall be the warranty provided by the manufacturer thereof which, if assignable, WATEROUS will assign to Buyer, if requested by Buyer;
- (c) any product or part, altered, modified, serviced or repaired other than by WATEROUS, without its prior written consent;
- (d) the cost of dismantling, removing, transporting, storing, or insuring the defective product or part and the cost of reinstallation; and
- (e) normal wear items (packing, strainers, filters, light bulbs, anodes, intake screens, mechanical seals, etc.).

ALL OTHER WARRANTIES ARE EXCLUDED, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR ANY OTHER CAUSE OF ACTION, SHALL WATEROUS BE LIABLE FOR ANY PUNITIVE, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR PERSONAL INJURY OR PROPERTY DAMAGES.

The exclusive remedy of Buyer and the sole liability of WATEROUS, whether based on contract, warranty, tort or any other basis of recovery whatsoever, is expressly limited at the election of WATEROUS to:

- (a) the replacement at the agreed point of delivery of any product or part, which upon inspection by WATEROUS or its duly authorized representative, is found not to conform to the limited warranty set forth above, or
- (b) the repair of such product or part, or
- (c) the refund or crediting to Buyer of the net sales price of the defective product or part.

BUYER'S REMEDIES CONTAINED HEREIN ARE EXCLUSIVE OF ANY OTHER REMEDY OTHERWISE AVAILABLE TO BUYER.

Waterous Company 125 Hardman Avenue South South St. Paul, MN 55075 USA www.waterousco.com



F-2113 (07/17/12)

• Pierce • Fire and Rescue Apparatus			
	Five (5) Year Material and Workmanship		
	Command Zor	ne Electronics	
	Limited	Warranty	
	1. LIMITED WARRANTY         Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides    Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:		
Coverage:	Command Zone control modules shall be free from failures caused by defects in material and workmanship	<ul> <li>that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;</li> <li>(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;</li> </ul>	
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).	(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or	
Warranty Period Ends After:	Five (5) Years	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.	
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty applies to all of the control modules for the Command Zone system, including the full color graphic displays. Related wire harnesses, cables and connectors are not covered under this limited warranty and are instead covered under the Pierce One Year Basic Apparatus Limited Warranty.	The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty. <b>JISCLAIMERS OF WARRANTIES</b> THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILTY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE. <b>3. BUYER'S EXCLUSIVE REMEDY</b> If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replace (at Pierce's option and expense) any nonconforming or the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE,	

with Pierce's maintend warranty shart appry only in the product is properly maintained in accordance is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

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equipment, cost of substitute vehicles or products, down-time, delay damages, any other

types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for

such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

	Diotro	and Docauo Apparatus
<b>Charace</b> Fire and Rescue Apparatus Three (3) Year Material and Workmanship		
		Leaf Lamination
		Warranty
1. LIMITED WARRANTY       Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:         Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:       Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:         (a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions,		
Coverage:	Each Goldstar® gold leaf lamination shall be free from defects in material and workmanship.	<ul> <li>drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;</li> <li>(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;</li> </ul>
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).	(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or
Warranty Period Ends After:	Three (3) Years	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not cover damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).	The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty. 2. DISCLAIMERS OF WARRANTIES THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE. 3. BUYER'S EXCLUSIVE REMEDY. If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.
with Pierce's mainter normal to the particu product to stresses of discovers a defect or after the date of disc	shall apply only if the product is properly maintained in accordance hance instructions and manuals and is used in service which is lar model. Normal service means service which does not subject the or impacts greater than normally result from careful use. If the Buyer nonconformity, it must notify Pierce in writing within thirty (30) days overy, but in any event prior to the expiration of the warranty period. RANTY MAY NOT BE ASSIGNED OR OTHERWISE	A. EXCLUSIVE AND SOLE REMEDITION ANT BREACH OF WARRANTT.     A. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.     Notwithstanding anything to the contrary herein or in any agreement between Pierce and     Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL,     INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER,     WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT     (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW     OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY     PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS     THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO,     REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY     OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce     specifically disclaims any liability for property or personal injury damages, penalties,     damages for lost profits or revenues, loss of vehicles or products or any associated     equipment, cost of substitute vehicles or products, down-time, delay damages, any other     types of economic loss, or for any claims by any third party for any such damages.     Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited

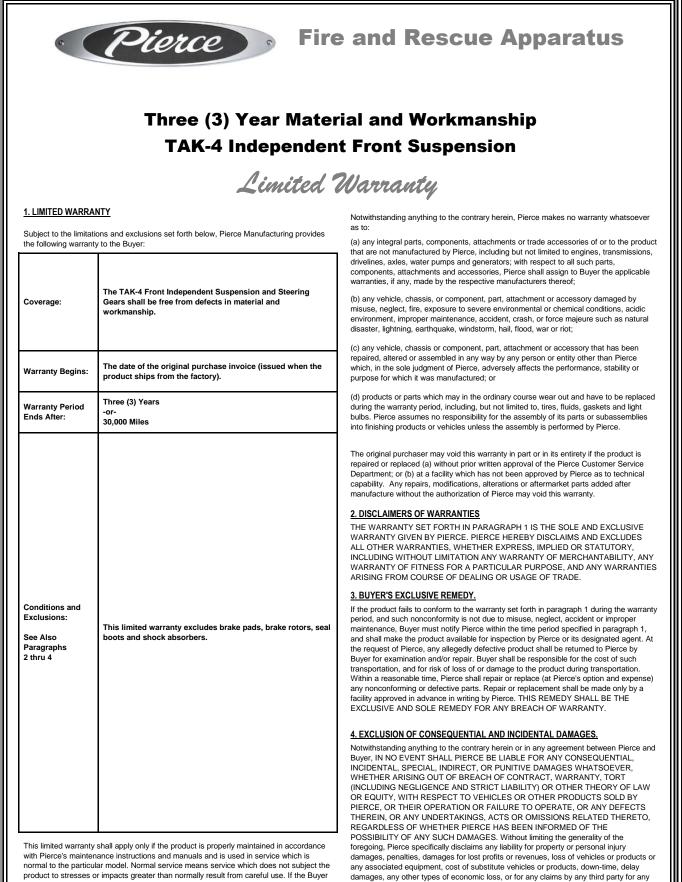
Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

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OR TO ANY OTHER PERSON OR ENTITY.

TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER

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such damages

normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

12/16/2013 WA0050

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## **Fire and Rescue Apparatus**

### Ten (10) Year Pro-Rated Paint and Corrosion

Cab

Limited Warranty

### 1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the cab painted by Pierce shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any: Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25% Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25% Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10% Corrosion Perforation 0-120 months 100% This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty. Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY. Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

#### 2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

#### 3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

#### 4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehices or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

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### **Fire and Rescue Apparatus**

## Ten (10) Year Pro-Rated Paint and Corrosion Custom Body

## **Limited Warranty**

#### **<u>1. LIMITED WARRANTY</u>**

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Exterior surfaces of the body shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any: Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25% Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25% Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10% Corrosion Perforation 0-120 months 10% This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty. Items not covered by this warranty include: (a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual). (b) UV paint fade. (c) Any cab not manufactured by Pierce.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY. Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

#### 2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

#### 3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

#### 4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehices or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

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<b>Pierce</b> Fire and Rescue Apparatus			
	Lifetime Fifty (50) Year Structural Integrity		
	Custom Cha	assis Frame	
	Limited	Warranty	
Subject to the limita	1. LIMITED WARRANTY       Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:         Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:       Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:         (a) any integral parts, components, attachments or trade accessories of or to the product		
		that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;	
Coverage:	Custom chassis frame rail manufactured by Pierce shall be free from defects in material and workmanship	(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;	
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).	(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or	
Warranty Period Ends After:	Fifty (50) Years (Expected Life of Apparatus)	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.	
Conditions and Exclusions: See Also Paragraphs 2 thru 4		The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.	
		2. DISCLAIMERS OF WARRANTIES THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.	
	This warranty does not apply to damage caused by corrosion.	3. BUYER'S EXCLUSIVE REMEDY. If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.	
		4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES. Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce	
This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the			

with Pierce's maintend warranty shart appry only in the product is properly maintained in accordance is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

types of economic loss, or for any claims by any third party for any such damages.

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• Pierce Fire and Rescue Apparatus			
Ten (10) Year Structural Integrity			
	Apparat	tus Body	
	Limited	Warranty	
Subject to the limitati	1. LIMITED WARRANTY       Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:         Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides       Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:		
the following warrant		(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;	
Coverage:	The apparatus body shall be free from structural failures caused by defects in material and workmanship	(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;	
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).	(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or	
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.	
Conditions and Exclusions: See Also Paragraphs 2 thru 4		The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty. 2. DISCLAIMERS OF WARRANTIES THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE	
		WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.	
	This warranty applies only to the body tubular support and mounting structures and other structural components of the body of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus. This warranty does not apply to damage caused by corrosion.	3. BUYER'S EXCLUSIVE REMEDY. If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.	
		4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES. Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce	

Initial of the activity of the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

y period. Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited Warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

damages for lost profits or revenues, loss of vehicles or products or any associated

types of economic loss, or for any claims by any third party for any such damages.

equipment, cost of substitute vehicles or products, down-time, delay damages, any other

2/8/2010 WA0009

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## **Pierce** Fire and Rescue Apparatus

## Ten (10) Year Material and Workmanship **Stainless Steel Piping Limited Warranty**

#### 1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Stainless steel piping shall be free from structural failures caused by defects in material and workmanship, or perforation caused by corrosion.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions: See Also Paragraphs 2 thru 4	Pierce's obligation under this warranty is limited to repairing or replacing without charge, as Pierce may elect, the stainless steel piping or components which Pierce determines to have failed due to defective material and workmanship, or perforation caused by corrosion. This warranty does not cover the use of fluoroprotein (FP) type foam. The sodium chloride within FP foam can cause long-term damage to system components if not thoroughly flushed immediately after use.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

#### 2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE, PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

#### 3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

#### 4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

3/22/2012 WA0035



## **Pierce** Fire and Rescue Apparatus

## **Three (3) Year Material and Workmanship** Meritor Wabco ABS Brake System

## **Limited Warranty**

#### 1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The Meritor Wabco ABS brake system shall be covered by Meritor Wabco as indicated in the attached Meritor Wabco warranty coverage description
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Three (3) Year
Conditions and Exclusions: See Also Paragraphs 2 thru 4	The exclusions listed in the attached Meritor Wabco warranty description shall apply.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

#### 2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE, PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

#### 3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

#### 4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

2/25/2013 WA0232



# MERITOR WABCO

Safety Strong. Efficiency Smart.

Warranty Model Year 2018 Vehicles

## **SIMPLER IS BETTER**

Warranty coverage is essential to protecting your investment. But understanding the full details of your coverage can be challenging. This straightforward approach allows you, our valued customer, to better understand how your specific vehicle applications will be covered in your region. Our component warranty coverage is provided according to vocation/usage categories listed below.

- Linehaul covers high mileage operation (over 60,000 miles/year) on well maintained major highways of concrete or asphalt construction.
- General Service covers moderate mileage operations (less than 60,000 miles/year) on well maintained public roads (less than 10 percent off-road) typically with less than three (3) stops per mile.
- Heavy Service (Vocational) covers vehicles with more than 10 percent off-road OR moderate to frequent starts/stops typically with more than three (3) stops per mile.
- Off-Highway Service covers lower mileage operations. Vehicles are not typically licensed for highway use.

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## How to Read Warranty Coverage (Example)

Number of Years	Mileage (in thousands) Unl=Unlimited	P=Parts Only P&L=Parts & Labor
3	300	Р

### **HEAVY SERVICE (VOCATIONAL) WARRANTY INFORMATION**

### **Heavy Service Vehicles**

- Airport Rescue Fire (ARF)
- Airport Shuttle
- Asphalt Truck
- Block Truck
- Bottom Dump Trailer Combination
- Cementing Vehicle
- City Bus
- Commercial Pick-Up
- Concrete Pumper
- Construction Material Hauler
- Crash Fire Rescue (CFR)
- Mixer
- Demolition
- Drill Rig
- Dump
- Emergency Service

- Equipment Hauling
- Flatbed Trailer Hauler Flatbed Truck
- Fracturing Truck Front Loader
- Geophysical Exploration Hopper Trailer Combinations
- Landscaping Truck
- Liquid Waste Hauler
- Log Hauling
- Lowboy
- Michigan Special Gravel
- Trains
- Michigan Special Log Hauler
- Michigan Special Steel Hauler

- Municipal Dump
- Newspaper Delivery
- Package Delivery
- Pick-up and Delivery Rapid Intervention Vehicle
- (RIV)
- Rear Loader
- Recycling Truck
- Residential Pick-Up/Waste
- Rigging Truck
- Roll-Off
- Scrap Truck
- Semi-End Dump
- Sewer/Septic Vacuum
- Shuttle Bus
- Side Loader
- Snowplow/Snowblower

- Steel Hauling
- Tanker
- Tank Truck
- Tractors with Pole Trailers
- Tractor/Trailer with Jeeps
- Transfer Dump
- Transfer Vehicle
- Transit Bus Trolley
- Utility Truck
- Winch Truck

### Heavy Service Typically Is

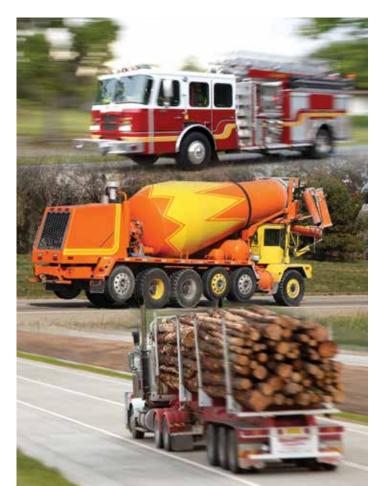
- On/Off road vocations (10% or more off-road) OR
- Moderate to frequent starts/stops typically more than three (3) stops per mile

### Meritor WABCO Components<sup>1</sup>

ABS (Anti-Lock Braking System) Air	3/300/P&L
ABS (Anti-Lock Braking System) Hydraulic	2/200/P&L
Electronic Braking System (EBS)	3/300/P&L
Electronic Stability Control (ESC)	3/300/P&L
Roll Stability Control (RSC)	3/300/P&L
Air Dryers (ALL)	1/100/P&L
Leveling Valves	1/100/P&L
Air Brake Valves	1/100/P&L
Emission Valves (SCR)	2/200/P&L
Clutch Controls	2/200/P&L
Air Compressors (ALL) <sup>2</sup>	1/100/P&L
OnGuard™	3/300/P&L
OnGuardACTIVE™	3/300/P&L
OnLane™ Lane Departure Warning	3/300/P&L
Blind Spot Detection	3/300/P&L
OptiRide™	2/200/P&L
Trailer Roll Stability Support (RSS)	3/300/P&L
Trailer Control Line Filter <sup>3</sup>	1/100/P&L
Trailer ABS Valve <sup>3</sup>	3/300/P&L

<sup>1</sup> WABCO and Meritor WABCO branded components.

- <sup>2</sup> WABCO compressors installed on Cummins, Mercedes, and DDC engines are not warranted or serviced by Meritor WABCO. Please contact your respective dealer/distributor of those engines for warranty and servicing.
- <sup>3</sup> An extended warranty of 4/400/P will be applied when a Meritor WABCO Trailer Control Line Filter is used in combination with a Meritor WABCO Trailer ABS valve.



- Michigan Special Waste Vehicle

### **TERMS AND CONDITIONS**

### **Coverage Exclusions**

### **Product Description**

### All

The cost of any repairs, replacements or adjustments to a covered product due to the following: (1) damage to the product or its component parts caused by incorrect use, installation, maintenance or repair, including without limitation (a) improper fit of mating components or brackets, (b) damaged threads, (c) cut, broken, chafed, pinched or otherwise damaged wiring (sensors, harnesses and connectors), (d) damaged sensors from removal when seized in block, or associated with sensor adjustments/ alignments, and (e) damage resulting from the use or installation of non-genuine Meritor WABCO components or materials; (2) damage to the product, its component parts, or diminished product or component part performance due to incorrect operation, deviation from approved conditions or misapplication; (3) any unauthorized disassembly of the product or its component parts including without limitation (a) obliterated, defaced or missing WABCO or Meritor WABCO name plate, serial numbers or label identifying the device as a Meritor WABCO product or WABCO component, (b) changes to sealed adjusting screws, and (c) opening or attempted repair of non-serviceable components; (4) malfunction of the component due to internal contamination out of the vehicle system including without limitation (a) water and other contamination damage that is due to the use of a non-genuine air dryer cartridge or (b) valve failures due to contamination in air system, (5) complaints associated with noise, (6) damage resulting from corrosion (including oxidation of electrical devices and connections).

### **Air Dryers**

Mounting brackets (see vehicle OEM). Desiccant cartridge housing only.

### **Air System Components**

Normal wear items; Gladhand seals, dash valve knobs, valve actuation handles, treadles, pedals.

### ABS, Electronic Stability Control (ESC), Roll Stability Control (RSC), OptiRide<sup>™</sup>, OnGuard<sup>™</sup> and OnLane<sup>™</sup>, collectively "Electronics"

Failure of electronic components due to overvoltage condition, improper grounding, electrostatic discharge (ESD), improper shielding, electromagnetic interference (EMI), or other wiring or installation issues.

Malfunctions and failure codes caused by other electronic subsystem failures (data bus, engine, transmission, dashboard, etc.)

### **Hydraulic Components**

For certain components, brake fluid DOT3 or DOT4 is used as the operating medium. Use of any other fluid will void all warranties associated with that component. For hydraulic braking applications the brake fluid is considered a maintenance item. Maintenance intervals are listed in TB-1367.

### **Coverage Limitations**

### **Product Description**

### All

Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program.

Products purchased on an incomplete vehicle (glider) are limited to one year, 1/Unl/P.

For vehicles that operate full- or part-time outside of the United States and Canada, a 1-Year/Unlimited Miles parts only (1/Unl/P) will apply.

### **TOOLBOX™** Software

Proper diagnostics of Meritor WABCO Electronics may require the latest version of TOOLBOX<sup>™</sup>. Additional labor due to use of an outdated version of TOOLBOX<sup>™</sup>. TOOLBOX<sup>™</sup> software, and/or the time to purchase or install latest version of TOOLBOX<sup>™</sup> are not covered under product warranty.

### **TERMS AND CONDITIONS**

### (1) What is Covered by this Commercial Warranty?

Meritor WABCO Vehicle Control Systems warrants to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment will be free from defects in material and workmanship. This warranty coverage begins from the original in-service date to the limits provided and runs concurrently with any warranties provided by OEMs and/or any service contracts that cover the components listed in this publication, if any. If the components listed in this publication are covered by an OEM warranty and/or service contract, then the OEM's warranty and/ or service contract shall supersede Meritor WABCO's warranty and Owner shall comply with all OEM's warranty and/or service contract requirements for claims under such OEM's warranty and/or service contract until those agreements expire. Once those agreements expire and provided the Meritor WABCO warranty has not expired under the terms stated above, the Meritor WABCO warranty would be in effect until its expiration date.

Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed previously in this publication. Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Additional diagnostic time due to use of an outdated version of TOOLBOX™, time to purchase or install latest version of TOOLBOX™ are the responsibility of the authorized Meritor WABCO service location and are not covered under product warranty. Components installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

#### (2) Designation of Vocational Use Required.

To obtain warranty coverage, each Owner must notify Meritor WABCO through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the Meritor WABCO components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with Meritor WABCO directly. Failure to notify Meritor WABCO of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/UnI/P) from the initial in-service date.

A second Owner and each subsequent Owner must also notify Meritor WABCO as to the intended vocational use of the vehicle. This notification can be sent directly to Meritor WABCO or through the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use.

Coverage under Meritor WABCO's warranty requires that the application of products be properly approved pursuant to OEM and Meritor WABCO, approvals.

### (3) What is the Cost of this Warranty?

There is no charge to the Owner for this warranty.

### (4) What is not Covered by this Warranty?

In addition to the items listed on page 7, this warranty does not cover normal wear and tear, or service items; nor does it cover a component that fails, malfunctions or is damaged as a result of (a) improper handling, storage, installation, adjustment, repair or modification including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by Meritor WABCO, (b) accident, fire or other casualty, natural disaster, road debris, negligence, misuse, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the brake system capacity), or (c) improper or insufficient maintenance (including deviation from maintenance intervals, approved lubricants, or lube levels). This warranty does not cover any component or part that is not sold by Meritor WABCO.

### (5) Remedy.

The exclusive remedy under this warranty shall be the repair or replacement of the defective component at Meritor WABCO's option. Meritor WABCO reserves the right to require that all applicable covered components are available and/or returned to Meritor WABCO for review and evaluation.

### (6) DISCLAIMER OF WARRANTY.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. SOME STATES LIMIT OR DO NOT ALLOW THE DISCLAIMER OF IMPLIED OR OTHER WARRANTIES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO THE EXTENT SUCH STATE'S LAW IS APPLICABLE TO THESE TERMS.

#### (7) LIMITATION OF REMEDIES.

IN NO EVENT SHALL MERITOR WABCO BE LIABLE FOR SPECIAL, INCI-DENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR UNDER ANY LEGAL THEORY, INCLUDING, BUT NOT LIMITED TO, TOW-ING, DOWNTIME, LOST PRODUCTIVITY, CARGO DAMAGE, TAXES, LOST PROFITS, COSTS OF PROCUREMENT OF A SUBSTITUTE COMPONENT OR ANY OTHER LOSSES OR COSTS RESULTING FROM A COVERED COMPONENT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO THE EXTENT SUCH STATE'S LAW IS APPLICABLE TO THESE TERMS.

### (8) TIME LIMIT ON COMMENCING LEGAL ACTION.

ANY LEGAL ACTION OR CLAIM ARISING FROM OR RELATED TO THIS WARRANTY, IN CONTRACT OR OTHERWISE, MUST BE COMMENCED WITHIN ONE YEAR FROM THE ACCRUAL OF THAT CAUSE OF ACTION, OR BE BARRED FOREVER.

#### (9) To Obtain Service.

If the Owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either Meritor WABCO or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM new truck and/or trailer dealer or authorized Meritor WABCO service location. The dealer will inspect the vehicle and contact Meritor WABCO for an evaluation of the claim. When authorized by Meritor WABCO, the dealer will repair or replace during the term of this warranty any defective Meritor WABCO component covered by this warranty.

#### (10) Entire Agreement.

This is the entire agreement between Meritor WABCO and the Owner about warranty and no Meritor, Meritor WABCO employee, or dealer is authorized to make any additional warranty on behalf of Meritor WABCO unless in writing and signed by an authagized of 221 representative of Meritor WABCO.



For more information on Meritor WABCO Warranty, call our OnTrac Customer Service team at 866-OnTrac1 (866-668-7221) or visit meritorwabco.com.

Litho in USA. Revised 06/17. SP-1375 (47865/11900) Meritor WABCO Vehicle Control Systems 2135 West Maple Road, Troy, Michigan 48084, USA Phone: 866-ONTRAC1 (866-668-7221) Fax: 248-435-8002

meritorwabco.com

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### R. H. SHEPPARD CO., INC. 101 Philadelphia St. Hanover, PA 17331 Pierce Manufacturing Inc. 2600 American Drive Appleton, WI 54912

**LIMITED WARRANTY:** The R. H. Sheppard Co. Inc., ("Sheppard") warrants all M110PKG1 and M110SAU1 steering gears manufactured and sold to Pierce Manufacturing Inc. ("Pierce") for application on Pierce TAK-4 equipped vehicles to be free from defects of workmanship and material under normal use and service for a period of thirty six months from the in service date of the vehicle to its original owner.

Vehicle applications where Sheppard product is used require an application approval before production build. If Pierce uses Sheppard product for any purpose or application which has not been approved by Sheppard in advance, including aftermarket devices (defined as a device added to the steering system directly or indirectly affecting the performance or operation of the Sheppard product in its approved application) not tested and approved by Sheppard this limited warranty SHALL NOT APPLY AND SHALL BE VOID. <u>SHEPPARD MAKES NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED. SHEPPARD EXPRESSLY DISCLAIMS ANY WARRANTY OF</u> <u>MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.</u> **SHEPPARD SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES OR FOR LOSS OR DAMAGE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF A PRODUCT.** Pierce expressly acknowledges its obligation to inform all users (customers) of the above disclaimer.

**CONDITIONS:** Claims under this Limited Warranty may only be made by Pierce. In no event shall Sheppard be held liable for warranty charges by unauthorized persons. No allowance will be made for repairs or alterations, unless made with the written consent of Sheppard. Authorized Pierce dealers shall be the only authorized repair facility for Sheppard products applied to Pierce vehicles. Any warrantable repair made under this Limited Warranty must be made on or before 36 months of the in-service date for the Product to which the claim relates. Sheppard shall not be liable for claims made after such date. Sheppard product fitted to Pierce vehicles that are repaired at a repair facility other than an authorized Pierce dealer within the warranty period will be considered for payment under the guidelines of this agreement only by joint written consideration of Sheppard and Pierce warranty departments. It shall be the responsibility of the Pierce warranty department to notify Sheppard if and when this situation occurs. Sheppard will not be held responsible for damage to other steering components such as but not limited to pumps and reservoirs due to improper adjustment of steering gear relief plungers. Vehicle downtime and towing will not be considered under warranty.

**<u>REMEDIES</u>**: The sole and exclusive remedy of Pierce for Sheppard's breach of the foregoing warranty is limited to the return and repair or reimbursement as follows:

### R. H. SHEPPARD CO., INC. WARRANTY Pierce Manufacturing Inc. Page 2

**Warranty Support:** In support of the Pierce dealer network, Sheppard will provide a toll-free "Hotline" service to assist in the diagnosis and troubleshooting of steering problems. The R. H. Sheppard Co., Inc. Field Service Department can be reached at 1-800-274-7437 for assistance. Sheppard will require that Pierce dealers contact this toll-free "Hotline" for approval <u>before</u> product is removed from a vehicle in a warranty situation. When contacted regarding a warranty situation, the Sheppard representative will provide an authorization number for removal of the product. This Returned Goods Authorization (RGA) number must be included in all warranty correspondence and attached to all returned goods.

**Procedure:** In the event of a warranty situation, the servicing dealer shall contact the Sheppard Hotline and receive an RGA number before replacing any steering gear. For M110PKG1 and M110SAU1 steering gear models, the dealer will first obtain an RGA number from Sheppard, and then order the replacement gear from Pierce. Replacement M110PKG1 and M110SAU1 steering gears shall be shipped from Pierce once those models are in full production. A warranty claim for both parts and labor will then be generated by the dealer and sent to Pierce. After reviewing the claim, Pierce will submit it to Sheppard for reimbursement.

**Parts Reimbursement:** Sheppard agrees to reimburse Pierce at Pierce's purchase price plus 30% mark-up for parts found to be defective within the warranty period. Parts being returned for warranty consideration shall be sent to the R. H. Sheppard Company, 447 E. Middle St., Hanover, PA 17331 ATTN: Warranty Dept. Sheppard's determination as to whether the part is covered by the foregoing warranty is final and conclusive. Sheppard requires the return of complete steering gears only. Individual seals replaced under warranty **should not** be returned unless specifically requested by Sheppard. All parts being returned for warranty consideration must be clearly tagged with all pertinent warranty information including, but not limited to (1) Returned Goods Authorization number (RGA); (2) claim number; (3) date in service; (4) date of failure; (5) mileage; (6) part number; (7) labor hours; (8) dealer labor rate and; (9) dollar amount claimed. Claims submitted without prior authorization are subject to rejection under this agreement.

**Labor:** Labor to repair Sheppard product found to be defective within the warranty period will be reimbursed at not more than 10 hours per vehicle. Labor shall be reimbursed at the rate of \$85.00 USD per hour for M110PGK1 and M110SAU1 steering gears.

**Freight:** Pierce will collect M110PGK1 and M110SAU1 warranty material at a designated collection point. Inbound freight to the Pierce collection point will be the responsibility of Pierce. All warranty material should be returned from the Pierce collection point to R. H. Sheppard Co. Freight Collect by a Sheppard-specified common carrier based on location of the Pierce collection point. Sheppard does not require the return of failed seals. Any freight charges incurred for the return of seals will be the responsibility of Pierce. Parts returned for warranty consideration without prior authorization are subject to rejection under this agreement and may be subject to a charge back of inbound freight charges. Parts rejected under this warranty will be returned to Pierce Freight Collect or scrapped by Sheppard at Pierce's discretion.

### R. H. SHEPPARD CO., INC. WARRANTY Pierce Manufacturing Inc. Page 3

**Outside Purchases:** Pierce authorized dealers shall be the only outlet for repair, warranty service and parts for Sheppard products applied to Pierce vehicles. Sheppard will not be responsible for consumables such as hoses, belts, fluids, fittings or miscellaneous shop material that may be required for the repair of the product.

Warranty Documentation: Warranty credit memos will be issued monthly to the Pierce Warranty Department. Monthly credit memos will include (1) claim number; (2) part number; (3) parts reimbursement; (4) labor reimbursement; (5) any applicable Pierce reference number and; (6) reason for rejection or acceptance of the claim. Credit memos will be issued in U.S. funds. Debits for warranty claims will not be accepted under this agreement. Claim disposition will constitute the final and conclusive resolution of warranty claims.

**Parts Retention:** Sheppard will retain parts submitted for warranty consideration for a period of sixty (60) days for any material found to be rejected for warranty. Sheppard will notify Pierce within sixty (60) days of receipt of Sheppard's determination as to whether any such part is covered by this warranty. Warranty reimbursement will be issued within thirty days of receipt of material at Sheppard.

**<u>Good-Will Requests:</u>** Good-Will requests will be considered jointly between Sheppard and Pierce for equitable compensation.

**RECALLS:** Sheppard retains the right to review information regarding federal motor vehicle recall and /or product repair programs if Sheppard products fitted to Pierce vehicles are alleged to be noncompliant with federal motor vehicle safety standards. Sheppard retains the right to review any claims of product defect or non-compliance before participating in reimbursement of expenses incurred as a result of alleged non-compliance or defect of its products. Sheppard agrees to negotiate in good faith for the reimbursement of expenses incurred by Pierce for all administrative, material and labor cost and expense associated with any recall where Sheppard product is found to be defective or non-compliant with federal motor vehicle standards.

**MISCELLANEOUS:** This writing constitutes the full complete and final statement of Sheppard's limited warranty for M110PKG1 and M110SAU1 products sold to Pierce. All prior oral or written correspondence, test data, negotiations, representations, understandings and the like regarding products are merged in this writing and extinguished by it. This limited warranty may not be altered, amended extended or modified except by a writing signed by the President or Vice President of Sheppard. No employee, vendor, dealer, distributor or other representative of Sheppard has authority to make statements to extend, expand, alter or amend the terms of this Limited Warranty. Sheppard expressly disclaims any statements contrary to the Limited Warranty. Sheppard's failure at any time to enforce any of the terms and conditions stated herein shall not constitute a waiver of any provisions herein. This Limited Warranty shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania.

### R. H. SHEPPARD CO., INC. WARRANTY Pierce Manufacturing Inc. Page 4

Any legal actions which may arise as a result of disputes, controversies or claims arising out of or related to this limited warranty shall be in such forum as Sheppard and Pierce shall agree, or, in the absence of agreement, in a court of appropriate jurisdiction other than in the county in which either party is located. This Limited Warranty shall not be assigned by Pierce.

**COOPERATIVE EFFORT:** Sheppard and Pierce agree to work cooperatively toward expanding this warranty coverage to a period of sixty months from the in service date. These cooperative efforts shall focus on examining the effects of increased heat generated by 2007 model engines and its impact on the entire power steering system.

**AGREEMENT**: This agreement is effective April 3, 2006 and may be modified by mutual agreement between Sheppard and Pierce of a signed amendment to be attached to the original Limited Warranty. There are no third party beneficiaries to this Limited Warranty. This warranty agreement applies to Pierce authorized dealers only. It does not encompass any special arrangements that Pierce may now have or that Pierce may enter into, with any other segments of the trucking industry. This warranty agreement does not apply to non-conforming product removed at Pierce assembly plants.

This Limited Warranty agreement between the R. H. Sheppard Co., Inc and Pierce Manufacturing Inc. may be terminated by either party with thirty days written notice prior to termination.

Signed at Pierce Manufacturing Inc., Appleton, WI this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

### R. H. SHEPPARD CO., INC.

PIERCE MANUFACTURING INC.

Authorized Signature

Authorized Signature

Title

Title



## **Pierce** Fire and Rescue Apparatus

### Five (5) Year Material and Workmanship - Transmission Oil Cooler Three (3) Year Collateral Damage Coverage

## Limited Warranty

#### 1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The transmission cooler shall be free from component or structural failures caused by defects in material and/or workmanship. Collateral damage up to \$10,000 per occurrence is available for the first three (3) years.
Warranty Begins:	The date of delivery to the first retail purchaser.
Warranty Period Ends After:	Five (5) Years on Oil Cooler and three (3) years on collateral damage coverage
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This warranty does not cover repair due to accidents, misuse, and excessive vibration, flying debris, storage damage (freezing), negligence or modification. This warranty is void if any modification or repairs are performed without authorization. This also voids any future warranty. This warranty does not cover cost of maintenance or repairs due to lack of required maintenance services as recommended. Performance of the required maintenance and use of proper fluids are the responsibility of the owner. Towing is covered to the nearest distributor or authorized dealer only when necessary to prevent further damage to your transmission. Labor costs for the removal and reinstallation of goods may be covered when necessary to make repairs. Please contact your OEM for authorization. Replacement of cooler during the warranty period is limited to 100% of reasonable labor costs up to a maximum of \$700 to remove, replace, or repair the oil cooler.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

#### 2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE, PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

#### 3. BUYER'S EXCLUSIVE REMEDY.

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

#### 4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

2/22/2012 WA0216

# ERTM EFEND ٥ **CATING** cð LIP-T-TANK<sup>TM</sup> 2 , ∎ ∎ Ó S LLIP E ш R™ ™ **RATO INTEG** e, POLYSID POLY-TANK®, FOR:

# LIFETIME SERVICE WARRANTY

United Plastic Fabricating, Inc. (hereinafter called "UPF") warrants each POLY-TANK®, Booster/Foam Tank POLYSIDE® Wetside Tank, Integrator Tank/Body, ELLIPSE™ Elliptical Tank, Ellip-T-Tank Tank and DEFENDER™ Skid Tank to be free from defects in material and workmanship for the service life of the original vehicle (vehicle must be actively used in an emergency response for fire suppression). All UPF Tanks must be installed and operated in accordance with the UPF Installation and Operating Guidelines. Failure to do so can void the warranty.

Every UPF Tank is inspected and tested before leaving our facility. Should your UPF Tank require service, please notify UPF via email, fax, in writing or by calling UPF at 1-978-975-4520. Please provide the serial number, a description of the service request, the location along with the phone number and name of the contact person. Our goal is to have scheduled work completed within a reasonable time period.

Under a valid warranty claim, UPF will cover the cost to repair the UPF Tank including the customary and reasonable costs to make the tank accessible such as the removal and reinstallation of the tank if authorized in advance (pre-approved) by UPF. The warranty will not cover tanks that have been improperly installed, operated, misused, abused, or modified from its intended or designed use. Serial number must not have been altered, defaced or removed. Tanks that are not stored or installed properly which results in the tank suffering UV damage will not be covered by this agreement.

Should UPF determine that the service claim is valid under this warranty for a tank located outside of the United States and Canada, UPF will assume the costs for labor and material for the warranty repair as described above plus all travel costs to the U.S. port of embarkation. Costs for airline travel outside of the U.S. and Canada will not be the responsibility of UPF.

In the event the tank shall become stationed in an area of the world that is considered to be a war zone or where unsafe conditions exist for the safe passage of United States Nationals, as reported by the United States Department of State, (http://www.state.gov), and a request to perform service or warranty repairs, UPF reserves the right to refuse to honor such requests. It is the purchaser's responsibility to relocate the tank to an area where such repairs can be performed without undue risk to UPF employees or their designee. UPF will make every reasonable effort to support our products though alternative means.

For Ellipse<sup>™</sup> elliptical tanks, a separate five year warranty provided by the subcontractor is applied to the sub-frames, chute linings (rubber isolation strips) and metal components. The stainless steel wrap provided by UPF shall be warranted by the subcontractor performing the wrap installation in accordance with their warranty in place at the time of the installation. UPF will not be liable for any warranty costs associated with the wrap, sub-frames, chute linings (rubber isolation strips) and metal components but will assist with all claims on behalf of its customer.

For PolySide® wetsided tanks and Integrator™ Tank/Body units, all polypropylene components related to the tank shall carry the standarded Pue difetime service warranty. Other polypropylene components, including but not limited to compartments, wheel wells, fenders and other body related components shall be warranted by UPF for a period of ten years. The warranty for the PolySide® and Integrator™ units excludes paint or hardware, which shall be covered by the manufacturer of the paint/hardware.

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**POLY-TANK** 

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All UPF tanks 50 gallons or less utilized for non-fire applications and installed on specialty vehicles such as ATVs, trailers, boats, etc. are covered under a separate warranty policy available from UPF. Further, UPF Protector<sup>™</sup> foam and water trailers are warranted under a separate warranty policy available from UPF.

This UPF warranty is transferable within the United States only with prior written approval by UPF (except an original apparatus manufacturer may assign this warranty to the first titled owner/lessee of the apparatus).

UPF will NOT reimburse any unnecessary work and/or work that has not been pre-approved. Any and all third party charges must be preauthorized and approved in writing by UPF prior to commencing the work. Any unauthorized third party repairs, alterations, actions or modifications will not be covered and can void the warranty. UPF will be the sole determining authority as to whether a service claim will be valid and covered under this warranty.

In no event will UPF be liable for an amount in excess of the purchase price of the booster/foam tank at the time of manufacture or for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of failure of its product. Loss of contents (water, foam, etc.) shall not be the responsibility of UPF. Further, UPF is not responsible for costs associated with service repairs to chassis, sub-frames, bodies, valves, dumps, hoses, pressure vacuum vents, and other components (i.e. liquid level transducers, etc.). Further, UPF will not cover the cost for travel of the vehicle to and from a repair facility.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly cancelled. UPF neither assumes, nor authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation or incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EX-TEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITION-ALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATION OR LIABILITIES ON THE PART OF UPF.

POLY-TANK®, & POLYSIDE® are registered trademarks of UPF, Inc. INTEGRATOP™ FLUPSE™ ELLIP-T-TANK™ & DEFENDER™ are trademarks of UPF, Inc. © 08/01/09 UPF, Inc. Printed in the USA



# BULLETIN

TO: All Dealer Service Representatives

From: Kevin Hanegraaf

DATE: January 4, 2010

RE: UPF Tank Warranty Policy – Truck in Accident

Service Topic #292



To keep the UPF tank warranty valid on trucks that have been involved in a vehicular accident, it is UPF's policy that the customer must remove the tank from the truck and send it back to one of UPF's facilities for inspection. In the event that this does not take place, the warranty will be considered null and void.

The customer must remove and send the tank back to UPF for inspection in order to maintain the original warranty coverage, at which time it will be:

- Filled with water
- Visually inspected
- Ultraviolet spark tested on articulating test stand in the dark
- Recommendation for repairs if necessary provided by UPF
- Fully evaluated and repaired by UPF

If your customer chooses to leave the tank on the truck and wants a technician to inspect and/or repair the tank in the field, then <u>the warranty is no longer in effect</u>. This direction is upheld by UPF because the technician cannot inspect the entire tank when it is still installed on the truck.

**Note:** This memo is intended to relay the information Pierce has received on UPF's tank warranty for trucks that are in a vehicular accident. In the event of an actual claim, we direct you to consult with UPF's service Manager Maura Watts (800-638-8265 x253)



#### AMDOR Inc. TERMS OF BUSINESS AND GENERAL INFORMATION

#### Warranty:

All AMDOR Inc. roll-up door products are warranted for a period of 10 years from the date of delivery (with the exception of wet paint adhesion - please see below). AMDOR Inc. liability covers the replacement or repair of any component that fails due to defects in material and / or workmanship during the coverage period. We accept no liability for claims made for damages to any part (or parts) of a vehicle and / or machine (of any type) or injury claims by a person or persons assumed or alleged to have been brought about by the use or misuse of any product supplied by AMDOR Inc. Warranty coverage does not extend to door attachments including (but not limited to) decals, emblems, stripes and adhesives.

In order to initiate the claims process please contact your authorized representative of AMDOR Inc. Warranty claims must be accompanied by a written description providing full and reasonable details as to the nature of the defect. Upon receipt of your claim arrangements will be made to inspect the defective product (if necessary). Justified warranty claims will be repaired, exchanged, or credited to the customer's account at AMDOR Inc.'s discretion. All warranty claims must be approved in writing by the Customer Service Manager for AMDOR Inc. There are no exceptions to this clause.

Limited warranty coverage includes the labor associated with the disassembly and assembly of products deemed to be defective by AMDOR Inc. Labor allowances are based on a set time schedule as determined by AMDOR Inc. The maximum allowable hourly labor rate is \$ 50. All warranty labor claims must be approved in writing by an authorized representative of AMDOR Inc. prior to commencement of work. Allowances for removal and installation:

Curtain replacement:	3/4 hour
Balancer replacement:	1 hour
Door ajar switch	3/4 hour
Bottom Panel Assembly:	1/2 hour
Slat replacement:	3/4 hour
Door removal and replacement	1 1/2 hours

Items authorized for return must be accompanied by a Return Goods Authorization (RGA) number. We will accept collect shipments of items deemed to be defective provided that they are returned via the most economical carrier. Should items be

returned by means other than the most economical carrier the difference will be charged back to the sender.

AMDOR Inc. reserves the right to reject any claim when a product has been opened, interfered with or modified. Claims may also be rejected when damage to the product (or any sub-assembly) has been brought about by accident, misuse, abuse, vandalism, incorrect installation, temperature extremes, chemical exposure or any factor other than regular operating conditions.

#### Limited Wet Paint Match Adhesion Warranty

AMDOR Inc. warrants wet paint finishes applied by AMDOR utilizing our approved factory paint specification. All wet paint match colors must be approved in writing by an authorized OEM representative. AMDOR Inc. will provide a color spray out for this purpose. The time required for shipping and consideration of initial color spray outs will be considered over and above stated lead times. Warranty coverage will extend for a period of not less than 5 years from the date of delivery as determined by AMDOR Inc.'s Packing Slip. AMDOR reserves the right to determine whether individual units will be replaced and / or repaired by an AMDOR approved vendor. An allowance will be made for labor associated with the disassembly and assembly of individual units at the prescribed hourly rate of \$ 50 per hour. Compensation for labor will not exceed the maximum time allowance permitted for door removal and replacement. Written approval including specified allowance for time must be obtained from AMDOR prior to initiating work. Warranty coverage will extend to the following visible paint system defects:

1./ Loss of mechanical adhesion as evidenced by peeling, cracking or blistering which exposes the substrate material.

2./ Corrosion of the substrate due to paint system failure.

3./ Fading which results in a substantial departure from the primary AMDOR approved body color.

Wet paint adhesion limited warranty coverage will be excluded when damages to the system are determined by AMDOR Inc. to be a result of the following:

1./ Damage caused through the use of attachments including (but not limited to) decals, labels, adhesives, non factory approved coatings.

2./ Loss of gloss, discoloration or damage due to improper maintenance (including but not limited to) mechanical wash systems, pressure washers, steam cleaners, non approved wash or polishing agents.

3./ Abuse, acts of nature, excessive heat / cold, chemical exposure, vandalism and / or accidents.

4./ Scratches, chips, abrasions, or dents from any source.

	Pierce Fire	e and Rescue Apparatus
	54 Months Materia	I and Workmanship
	Camera	System
	Limited V	Warranty
1. LIMITED WARRA Subject to the limitat the following warran	NTY ions and exclusions set forth below, Pierce Manufacturing provides	Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to: (a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions,
Coverage:	This limited warranty covers repairs to correct any defect related to materials or workmanship of the Sharpvision camera system installed on the apparatus occuring during the warranty period.	<ul> <li>drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;</li> <li>(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;</li> </ul>
Warranty Begins:	The date of delivery.	(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or
Warranty Period Ends After:	Fifty - Four (54) months	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.
Conditions and Exclusions: See Also Paragraphs 2 thru 4	This limited warranty does not apply to related wire harnesses, cables, and connectors, which are covered by the Pierce one (1) year basic apparatus limited warranty.	The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty. <b>JUSCLAIMERS OF WARRANTIES</b> THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE. <b>3. BUYER'S EXCLUSIVE REMEDY</b> If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replace ment shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY. TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY OPEECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS O

with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.

damages for lost profits or revenues, loss of vehicles or products or any associated

types of economic loss, or for any claims by any third party for any such damages.

equipment, cost of substitute vehicles or products, down-time, delay damages, any other

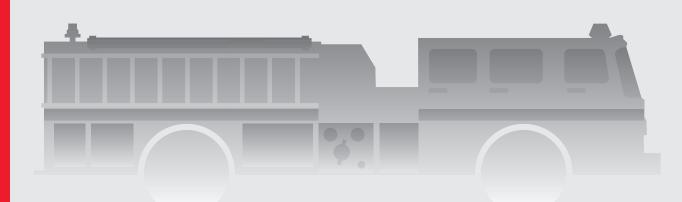
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# Cummins Warranty

Worldwide Fire Apparatus/Crash Trucks



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# Coverage

#### Products Warranted

This Warranty applies to new diesel Engines sold by Cummins and delivered to the first user on or after April 1, 2007, that are used in fire apparatus truck and crash truck\* applications Worldwide.

#### **Base Engine Warranty**

The Base Engine Warranty covers any failures of the Engine which result, under normal use and service, from a defect in material or factory workmanship (Warrantable Failure). This Coverage begins with the sale of the Engine by Cummins and ends five years or 100,000 miles (160,935 kilometers), whichever occurs first, after the date of delivery of the Engine to the first user.

Engine aftertreatment components included in the Cummins Critical Parts List (CPL) and marked with a Cummins part number are covered under Base Engine Warranty.

Additional Coverage is outlined in the Emission Warranty section.

These Warranties are made to all Owners in the chain of distribution and Coverage continues to all subsequent Owners until the end of the periods of Coverage.

# Cummins Responsibilities

Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Warrantable Failure.

Cummins will pay for the lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay for reasonable labor costs for Engine removal and reinstallation when necessary to repair a Warrantable Failure.

Cummins will pay reasonable costs for towing a vehicle disabled by a Warrantable Failure to the nearest authorized repair location. In lieu of the towing expense, Cummins will pay reasonable costs for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging when the repair is performed at the site of the failure.

## Owner Responsibilities

Owner is responsible for the operation and maintenance of the Engine as specified in Cummins Operation and Maintenance Manuals. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of the applicable Warranty, Owner must notify a Cummins distributor, authorized dealer or other repair location approved by Cummins of any Warrantable Failure and make the Engine available for repair by such facility. Except for Engines disabled by a Warrantable Failure, Owner must also deliver the Engine to the repair facility.

Service locations are listed on the Cummins Worldwide Service Locator at cummins.com.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items provided during Warranty repairs unless such items are not reusable due to the Warrantable Failure.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred as a result of a Warrantable Failure.

Owner is responsible for non-Engine repairs and for "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

Owner is responsible for a \$100 (U.S. Dollars) deductible per each service visit under this plan in the 3rd, 4th and 5th years of Base Engine Warranty. The deductible will not be charged during the first 2 years of the Base Engine Warranty.

# Limitations

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel

#### exhaust fluid.

This Warranty does not apply to accessories supplied by Cummins which bear the name of another company. Such non-warranted accessories include, but are not limited to: alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, vacuum pumps, power steering pumps, fan drives and air compressors. Cummins branded alternators and starters are covered for the first two years from the date of delivery of the Engine to the first user, or the expiration of the Base Engine Warranty, whichever occurs first.

Failures resulting in excessive oil consumption are not covered beyond the duration of the Coverage or 100,000 miles (160,935 kilometers) or 7,000 hours from the date of delivery of the Engine to the first user, whichever of the three occurs first. Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

Failures of belts and hoses supplied by Cummins are not covered beyond the first year from the date of delivery of the Engine to the first user or the duration of the Warranty, whichever occurs first.

Parts used to repair a Warrantable Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Warrantable Failure assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

Cummins Inc. reserves the right to interrogate Electronic Control Module (ECM) data for purposes of failure analysis.

## CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY AND THE EMISSION WARRANTY SET FORTH HEREINAFTER ARE THE SOLE WARRANTIES MADE BY CUMMINS IN REGARD TO THESE ENGINES. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

# Emission Warranty

#### **Products Warranted**

This Emission Warranty applies to new Engines marketed by Cummins that are used in the United States<sup>\*\*</sup> in vehicles designed for transporting persons or property on a street or highway. This Warranty applies to Engines delivered to the first user on or after September 1, 1992.

#### Coverage

Cummins warrants to the first user and each subsequent purchaser that the Engine is designed, built and equipped so as to conform at the time of sale by Cummins with all U.S. federal emission regulations applicable at the time of manufacture and that it is free from defects in material or factory workmanship which would cause it not to meet these regulations within the longer of the following periods: (A) Five years or 100,000 miles (160,935 kilometers) of operation, whichever occurs first, as measured from the date of delivery of the Engine to the first user or (B) The Base Engine Warranty.

If the vehicle in which the Engine is installed is registered in the state of California, a separate California Emission Warranty also applies.

#### Limitations

Failures, other than those resulting from defects in material or factory workmanship, are not covered by this Warranty.

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Cummins is not responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs or other losses resulting from a Warrantable Failure.

## CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

\* Airport operated crash trucks and fire department operated trucks employed to respond to fires, hazardous material releases, rescue and other emergency-type situations.

\*\* United States includes American Samoa, the Commonwealth of Northern Mariana Islands, Guam, Puerto Rico and the U.S. Virgin Islands.



Cummins Inc. Box 3005 Columbus, IN 47202-3005 U.S.A.

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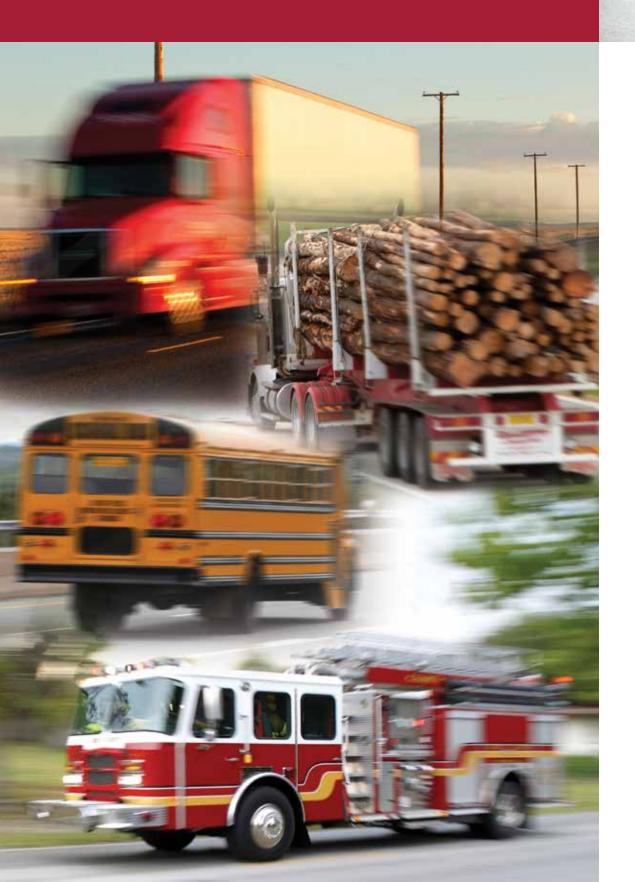
Fire and Rescue Apparatus				
	Two (2) Year Materi	al and Workmanship		
	Merito	r Axles		
	Limited	Warranty		
	ons and exclusions set forth below, Pierce Manufacturing provides the	Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to: (a) any integral parts, components, attachments or trade accessories of or to the product		
following warranty to t	he Buyer:	(a) any integral parts, components, attachments of trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;		
Coverage:	The Meritor axle shall be covered by Meritor as indicated in the attached Meritor warranty coverage description	(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;		
		(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or		
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).			
Warranty Period Ends After:	Two (2) Year	(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.		
		The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.		
		THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.		
Conditions and Exclusions: See Also Paragraphs 2 thru 4	The exclusions listed in the attached Meritor warranty description shall apply.	3. BUYER'S EXCLUSIVE REMEDY. If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.		
		4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES. Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims		
This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the		any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.		
date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY. Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle. Page 118 ct				

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## MERITOR<sup>®</sup> COMMERCIAL VEHICLE SYSTEMS WARRANTY/MODEL YEAR 2018 VEHICLES







## WARRANTY INFORMATION CONTENTS

Effective Model Year 2018 Vehicles

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Heavy Service	7-8
Off-Highway Service	9
Terms and Conditions	10

### How to Read Warranty Coverage

Number of Years	Mileage (in thousands)	P=Parts Only
	Unl=Unlimited	P&L=Parts & Labor

#### Notice:

Models or components that are approved for use by Meritor's vocational guidelines contained in Meritor Publication TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, which are not specifically listed, are warranted for one year, unlimited miles, parts only (1/Unl/P).

Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

#### Advantage Program

Purchasing additional coverage on select components will continue to safeguard your investment against major repair costs after the initial base coverage expires. You can find out more about the Advantage Program by visiting www.meritor.com or by contacting Meritor at 866-OnTrac1 (866-668-7221).



## LINEHAUL WARRANTY INFORMATION

Flatbed

General Freight

Grain Hauler

#### **Linehaul Vehicles**

- Auto Hauler
- Bulk Hauler
- Chip Hauler (Truck)\*
- Doubles

\* Chip Hauler vehicles require specific axle models listed below and Linehaul condition to be eligible for Linehaul warranty consideration.

#### Linehaul Typically Is

- High mileage operation (over 60,000 miles/year)
- Well maintained major highways of concrete or asphalt construction

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Refrigerated Freight

Tanker

Triples

Livestock Hauler

Moving Van

Pipe Hauler

Greater than 30 miles between starting and stopping

#### Front Non-Drive Steer Axles – 5/750/P&L

FD-965	FF-966	MFS-10-144A-N	MFS-12-132C-N	MFS-13-122C-N	MFS-14-143A-N
FF-941	FF-967	MFS-12-122A-N	MFS-12-143A-N	MFS-13-132B-N	
FF-942	FG-941	MFS-12-122B-N	MFS-12E-143A-N	MFS-13-132C-N	
FF-943	FG-943	MFS-12-122C-N	MFS-12-144A-N	MFS-13-143A-N	
FF-944	MFS-10-122A	MFS-12E-122A-N	MFS-13-122A-N	MFS-13-144A-N	
FF-961	MFS-10-143A-N	MFS-12-132B-N	MFS-13-122B-N	MFS-14-122A-N	

#### Rear Drive Single Axles – 5/750/P&L

 RS-19-144/145/A
 RS-21-160

 MS-19-14X
 RS-23-160

 MS-21-144
 RS-23-161

 RS-21-145
 RS-23-186

#### **Drivelines**

RPL	5/500/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/Unl/P
92N	1/Unl/P

#### Rear Drive Tandem/Tridem Axles – 5/750/P&L

RT-34-144/P/A	MA-40-165	MT-40-943
RT-40-145/A	MA-40-175	MT-40-943-SP
RT-40-160/P <sup>1,2</sup>	MT-34-14X/P	RZ-166 <sup>2</sup>
RT-46-160/P <sup>1,2</sup>	MT-40-14X/P	RZ-188
RT-46-164EH/P <sup>1,2</sup>	MT-40-14X/P	
RT-50-160/P <sup>1,2</sup>	MT-40-144/P	

<sup>1</sup> These models required for Chip Hauler and Linehaul warranty consideration.
<sup>2</sup> Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

# LINEHAUL WARRANTY INFORMATION

#### **Brake Components**

Cam Q Series Trailer Brakes LX500 Feature <sup>1</sup>	5/500/P, 1/100/L 5/750/P&L
Q+ Drum Brake™	5/500/P, 1/Unl/P&L
ASA	5/500/P, 1/UnI/P&L
Hubs/Cast Drums and Other Wheel-end Con	nponents 1/UnI/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
STEELite X30 Drum Brake™ <sup>2</sup>	12-Years or Wearable Life/P
EX+ Air Disc Brake™	5/500/P, 1/Unl/L
<sup>1</sup> Includes: bushing, seal, cam, ASA lubricat 3/500/P&L.	tion and wear coverage of
2 December of the second stress of the second stress stress second	

<sup>2</sup> Based on stamped wear diameter max.

#### **Trailer Axles**

Beam and Brackets	5/500/P, 1/100/L
Wheel End Systems <sup>1</sup>	
Standard System <sup>2</sup>	1/100/P&L
PreSet by Meritor <sup>3</sup>	5/500/P&L
AxlePak5 <sup>4</sup>	5P/L
AxlePak7 <sup>5</sup>	7P/I

<sup>1</sup> Includes hub, wheel seals and wheel bearings—all systems require annual

inspections and proper documentation to ensure full coverage.

<sup>2</sup> When installed by Meritor.

<sup>3</sup> Requires approved hubcap stating PreSet by Meritor on hubcap face.

<sup>4</sup> When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/500P, 3/500L.

<sup>5</sup> When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/750P, 3/500L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

#### TAG/Pusher Axles<sup>1</sup>

TQ, TQD, TR, TRD Beam and Brackets 5/750/P&L <sup>1</sup> For brake components and ABS Coverage, refer to appropriate product warranties.

#### Meritor Tire Inflation System by PSI

**MTIS Components** 

3/500/P&L

#### **Trailer Air Suspension Systems**

MPA38/40 (Tandem Axle Parallelogram) <sup>1</sup>	
Major Structural Components	5/500/P, 1/100/L
Curbing Damage Warranty <sup>2</sup>	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/100/P&L
PinLoc Actuator	3/300/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs & Rebound Straps	2/200/P, 1/100/L
Bushings	5/500/P, 3/300/L

<sup>1</sup> Fastener torque coverage is limited to 2/Unl P&L when torqued by Meritor (For axle and ABS coverage, refer to appropriate product warranties.)

<sup>2</sup> "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.



## GENERAL SERVICE WARRANTY INFORMATION

#### **General Service Vehicles**

- Aerial Ladder Truck
- Aerial Platform
- Ambulance
- 📕 Auto Hauler
- Beverage Truck
- 📕 Chip Hauler
- Cross Country Coach
- Flatbed

#### **General Service Typically Is**

- Lower mileage operations (less than 60,000 miles/year)
- Generally, on-road service (less than 10% off-road)
- An average of three (3) miles between starting and stopping

## Front Engine Commercial Chassis Front Engine Integral Coach

- General Freight
- Intercity Coach
- Intermodal Chassis
- Livestock Hauler
- Meat Packer
- Moving Van



# Refrigerated Freight School Bus Stake Truck Tanker Tanker Truck Tour Bus

Wrecker

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

#### Front Drive/Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FH-941	MFS-7-153C-N	MFS-12E-122A-N	MFS-13-122C-N	MFS-18-135A-N
FF-941	FH-946 <sup>1</sup>	MFS-7-163C-N	MFS-12-122B-N	MFS-13-132B-N	MFS-18-193A-N
FF-942	FL-941	MFS-8-113B-N	MFS-12-122C-N	MFS-13-132C-N	MFS-20-133A-N
FF-943	FL-943	MFS-8-143A-N	MFS-12-132B-N	MFS-13-143A-N	MFS-20-135A-N
FF-944	MFS-6-151A-N	MFS-8-153B-N	MFS-12-132C-N	MFS-13-144A-N	MFS-20H-193A-N
FF-946	MFS-6-153B-N	MFS-8-163B-N	MFS-12-143A-N	MFS-14-122A-N	MFS-22H-135A-N
FF-961	MFS-6-162B-N	MFS-10-122A	MFS-12-144A-N	MFS-14-143A-N	MFS-22H-193A-N
FF-966	MFS-6-153C-N	MFS-10-143A-N	MFS-12E-143A-N	MFS-16-122A-N	
FF-967	MFS-6-162C-N	MFS-10-144A-N	MFS-13-122A-N	MFS-16-143A-N	
FG-941	MFS-7-113C-N	MFS-12-122A-N	MFS-13-122B-N	MFS-18-133A-N	

<sup>1</sup> Can also be used with reduced steer angles in tag position in Coach Applications.

#### Rear Drive Single Axles – 2/Unl/P&L

MS-17-13X	MS-21-144	RC-23-1621	MS-26-616	79163
MS-17-14X	MS-23-17X	RC-23-1651	MS-26-616-SP	
MS-19-13X	RS-21-145/A	RS-23-160	RS-30-185	
MS-19-14X	RS-21-160	RS-23-161	MS-30-616	
RS-17-144/145/A	RC-22-145	RS-23-186	MS-30-616-SP	
RS-19-144/145/A	RC-22-145/A	RS-24-160	RS-35-380	
MS-21-13X	RC-23-160	RC-25-160	71162	
MS-21-14X	RC-23-161	RS-26-185	71163	

<sup>1</sup> 3/Unl/P&L if PreSet by Meritor.

#### Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	MT-44-14X/P	MT-58-616
RT-34-144/P/A	RT-44-145/P	$RT-58-185^{1}$
MT-40-14X/P	RT-46-169	MT-70-380
MT-40-144/P	MT-52-616	RZ-166
RT-40-145/A	RT-52-185 <sup>1</sup>	RZ-188

<sup>1</sup> Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

#### RT-40-160/P RT-46-164EH/P RT-46-160/P RT-50-160/P

#### Drivelines

RPL	4/400/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/UnI/P
92N	1/Unl/P

Rear Drive Tandem – 3/Unl/P&L



## **GENERAL SERVICE WARRANTY INFORMATION**

#### **Brake Components**

Cam Q Series Trailer Brakes	3/UnI/P, 1/UnI/L
LX500 Feature <sup>1</sup>	3/Unl/P&L
Cam P <sup>3</sup>	2/200/P
Cam	3/UnI/P
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake ™ <sup>3</sup>	2/200/P&L
ASA	3/UnI/P
ASA <sup>3</sup>	2/200/P
Hubs/Cast Drums and Other Wheel-end Con	nponents 1/UnI/P
Hydraulic Disc Brakes	1/UnI/P
All Other Brakes	1/UnI/P
STEELite X30 Drum Brake™ <sup>2</sup>	12-Years or Wearable Life/P
EX+ Air Disc Brake™	2/Unl/P&L
<sup>1</sup> Includes: bushing, seal, cam, ASA lubrication a	nd wear coverage of 1/Unl/P.
<sup>2</sup> Based on stamped wear diameter max.	-
<sup>3</sup> Applies to Tour Rus and Cross Country Coach or	nlv

<sup>3</sup> Applies to Tour Bus and Cross Country Coach only.

#### **Trailer Axles**

Beam and Brackets <sup>1</sup>	5/UnI/P, 1/UnI/L
Wheel End Systems <sup>2</sup>	
Standard System <sup>3</sup>	1/Unl/P&L
AxlePak5⁴	5P/L
AxlePak7⁵	7P/L
<sup>1</sup> 9000 Series is 3/Unl/P, 1/Unl/L	

<sup>2</sup> 9000 Series is 3/UNI/P, 1/UNI/L

 $^2$  Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

<sup>3</sup> When installed by Meritor.

<sup>4</sup> When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/500P, 3/500L.

<sup>5</sup> When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/750P, 3/500L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

#### Chassis Axles (2000 Series/ChassiPak)

Beam & Brackets	6/UnI/P, 1/UnI/L
Wheel End Systems <sup>1</sup>	
Standard System	1/Unl/P&L
AxlePak7	7P/L
Beam and Brackets	7P/1L
<sup>1</sup> Includes hub, wheel seals and wheel bearings—all systems require annual	

<sup>1</sup> Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

#### **Trailer Air Suspension Systems**

MPA38/40 (Tandem Axle Parallelogram) <sup>1</sup>	
· · · · · · · · · · · · · · · · · · ·	5/UnI/P, 1/UnI/L
Major Structural Components	,
Curbing Damage Warranty <sup>2</sup>	5/500/P, 1/100/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/Unl/P&L
PinLoc Air Actuator	3/Unl/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/UnI/P, 1/UnI/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs and Rebound Straps	2/UnI/P, 1/UnI/L
Bushings <sup>3</sup>	5/Unl/P, 3/Unl/L
-	

(For axle and ABS coverage, refer to appropriate product warranties.)

<sup>1</sup> Fastener torque coverage is limited to 2/Unl P&L when torqued by Meritor <sup>2</sup> "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.

<sup>3</sup> Raw wood applications 3/Unl/P, 1/Unl/L

#### **TAG/Pusher Axles**

 TQ, TQD, TR, TRD Beam and Brackets<sup>1</sup>
 3/Unl/P, 1/Unl/L

 MC12002, MC14002, MC16003, FH946
 2/Unl/P&L

 (For brake components and ABS coverage, refer to appropriate product warranties.)
 13/UNL/P&L if sold with PreSet by Meritor.

#### Meritor<sup>®</sup> Tire Inflation System by PSI

MTIS Components

3/500/P&L



## HEAVY SERVICE WARRANTY INFORMATION

#### **Heavy Service Vehicles**

- Airport Rescue Fire (ARF)
- Airport Shuttle
- Asphalt Truck
- Block Truck
- Bottom Dump Trailer Combination
- Cementing Vehicle
- 📕 City Bus
- Commercial Pick-Up
- Concrete Pumper
- Construction Material Hauler
- Crash Fire Rescue (CFR)
- Mixer
- Demolition

- Drill Rig
   Dump
- Emergency Service
- Equipment Hauling
- Flatbed Trailer Hauler
- Flatbed Truck
- Fracturing Truck
- Front Loader
- Geophysical Exploration
- Hopper Trailer Combinations
- Landscaping Truck
- Liquid Waste Hauler
- Log Hauling
- Lowboy

- Michigan Special Gravel Trains
   Michigan Special Log Hauler
   Michigan Special Steel Hauler
   Michigan Special Waste Vehicle
- Municipal Dump
- Rapid Intervention Vehicle (RIV)
- Rear Loader (Refuse)
- Recycling Truck
- Residential Pick-Up (Refuse)
- Rigging Truck
- Roll-Off
- Scrap Truck
- Semi-End Dump
- Sewer/Septic Vacuum
- Shuttle Bus
  Side Loader
  Snowplow/Snowblower
  Steel Hauling
  Tanker
  Tank Truck
  Tractors with Pole Trailers
  Tractor/Trailer with Jeeps
  Transfer Dump
  Transfer Vehicle
  Transit Bus
  Trolley
  Utility Truck
  Winch Truck

#### Heavy Service Typically Is

- Moderate mileage operation (less than 60,000 miles per year)
- On/Off road vocations (10% or more off-road)
- Moderate to frequent stops/starts (up to 10 stops per mile)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/ or contact Meritor regarding specific application approval questions on any product line.

#### Front Drive/Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FH-941	MFS-8-113B-N	MFS-12-132C-N	MFS-13-155	MFS-22H-135A-N	MX-17-140
FF-941	FH-946	MFS-8-153B-N	MFS-12-143A-N	MFS-14-122	MFS-22H-193A-N	MX-19-140
FF-942 FF-943	FL-941 FL-943	MFS-8-163B-N MFS-10-122A	MFS-12-144A-N MFS-12-155	MFS-14-143A-N MFS-16-122A-N	RF-16-145 RF-21-160	MX-21-140 MX-21-160
FF-943 FF-944	MFS-6-151A-N	MFS-10-122A MFS-10-143A-N	MFS-12-155 MFS-13-122	MFS-16-122A-N MFS-16-143A-N	MX-10-120	MX-21-160 MX-23-160
FF-946	MFS-6-153B	MFS-10-144A-N	MFS-13-122B-N	MFS-18-133A-N	MX-10-120 EV0	MX-810
FF-961	MFS-6-162B	MFS-12-122	MFS-13-122C-N	MFS-18-135A-N	MX-12-120	
FF-966	MFS-6-162C	MFS-12-122B-N	MFS-13-132B-N	MFS-18-193A-N	MX-12-120 EV0	
FF-967	MFS-7-113C-N	MFS-12-122C-N	MFS-13-132C-N	MFS-20-133A-N	MX-14-120	
FG-941	MFS-7-153C-N	MFS-12E-122	MFS-13-143A-N	MFS-20-135A-N	MX-16-120	
FG-943	MFS-7-163C-N	MFS-12-132B-N	MFS-13-144A-N	MFS-20H-193A-N	MX-18-120	

#### **Drivelines**

RPL	3/Unl/P, 1/Unl/P&L
92N	1/Unl/P&L
MXL	1/Unl/P&L

#### Rear Drive Single Axles – 2/Unl/P&L

MS-17-14X	RS-23-160	MS-30-616-SP
RS-17-144/145/A	RC-23-161	RS-30-185/380
MS-19-14X	RS-23-161	MS-35-380
RS-19-144	RS-23-186/380	RS-38-380
MS-21-114	RC-23-162	RC-25-160
MS-21-14X	RC-23-165	RC-26-633
RS-21-145	RS-24-160	MT-58-616
RS-21-145/A	RS-25-160	MT-58-616-SP
RS-21-160	MS-26-616	71162
RC-22-145	MS-26-616-SP	71163
RC-23-160	RS-26-185/380	79163
RH-23-160	MS-30-616	



## HEAVY SERVICE WARRANTY INFORMATION

#### Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	RT-44-145/P	MT-58-616	RZ-166
RT-34-144/P/A	RT-46-169	MT-58-616-SP	RZ-188
MT-40-14X/P	MT-52-616	RT-58-185/380 <sup>1,2</sup>	
RT-40-145/A	MT-52-616-SP	RT-70-380	
MT-44-14X/P	RT-52-185/380 <sup>1,2</sup>	MT-70-380	

<sup>1</sup> Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.

<sup>2</sup> Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

#### **Brake Components**

Cam P	3/UnI/P
Cam P <sup>3</sup>	2/100/P
Cam Cast Plus™	2/100/P&L
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake™ <sup>2</sup>	2/100/P&L
ASA	3/Unl/P
ASA <sup>2</sup>	2/100/P
Hubs/Cast Drums and	
Other Wheel-end	
Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
EX+ Air Disc Brake	2/100/P&L
	12 I

<sup>1</sup> Based on stamped wear diameter max.
 <sup>2</sup> Applies to City Bus, Trolley, Shuttle Bus and Airport

Shuttle only.

<sup>3</sup> Warranty for all non-Meritor ASAs supplied by Meritor for all Heavy Service vocations is 1/100/P.

#### Transfer Cases - 1/Unl/P

MTC-4208	MTC-4213	T-2119
MTC-4210	T-2111	

#### Rear Drive Tandem – 3/Unl/P&L

RT-40-160/P/A <sup>3</sup> RT-46-160/P/A <sup>1,3</sup> RT-46-164EH/P/A <sup>2,3</sup> RT-50-160/P/A <sup>3</sup> <sup>1</sup> U.S. only. Canadian warranty = $1/Unl/P$ for combination vehicles only.
<ul> <li><sup>2</sup> Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.</li> <li><sup>3</sup> Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.</li> </ul>

#### Meritor Tire Inflation System by PSI

MTIS Components

3/500/P&L

#### **Trailer Air Suspension Systems**

MTA (Trailing Arm)

Major Structural Components <sup>1</sup>	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings <sup>1</sup>	5/Unl/P, 3/Unl/L

<sup>1</sup> Raw wood applications 3/UnI/P, 1/UnI/L (For axle and ABS coverage, refer to appropriate product warranties.)

## Center Non-drive Axles – 2/Unl/P&L

MC26000 71063 79063

#### **Trailer Axles**

Beam and Brackets<sup>1</sup> 5/UnI/P, 1/UnI/L Wheel End Systems<sup>2</sup> Standard System<sup>3</sup> 1/UnI/P&L <sup>1</sup> 9000 Series is 3/UnI/P, 1/UnI/L. <sup>2</sup> Includes hub, wheel seals and wheel bearings—all

systems require annual inspections and proper documentation to ensure full coverage.

<sup>3</sup> When installed by Meritor.

(For brake components and ABS coverage,

refer to appropriate product warranties.)



## OFF-HIGHWAY SERVICE WARRANTY INFORMATION

#### Industrial And Off-Highway Service Vehicles

- Load-On/Load-Off
- Port Tractor
- Rail Yard Spotter
- Roll-On/Roll-Off
- Stevedoring Tractor
- Trailer Spotter

MOR

- Yard Jockey
   All-Terrain Crane
- Rough Terrain Crane
- Forestry
- Material Handling
- Specialized Heavy Haul

#### Industrial And Off-Highway Service Typically Is

- Low mileage operation
- Low speed vehicle speed restriction
- Vehicles are **not** typically licensed for highway use
- Six (6) starts/stops per mile (typical)

#### dling

Specialized Mining
 Excavator
 Compactor
 Fertilizer Spreader
 Snow Blower
 Mining

Rail Car Mover
 Loader
 Tow Tractor
 Pushback Tractor

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

#### Drive Steer Axles - 1/Unl/P

MOC
11100

#### Front Non-Drive Steer Axles - 1/Unl/P

МОХ

FF - 941	MFS-12-143A-N	MFS-18-135A-N
FF - 943	MFS-12-144A-N	MFS-18-193A-N
FF - 961	MFS-13-143A-N	MFS-20-133A-N
FF - 966	MFS-13-144A-N	MFS-20-135A-N
FG - 941	MFS-14-143A-N	MFS-20H-193A-N
FG - 943	MFS-16-122A-N	MFS-22H-135A-N
FL - 941	MFS-16-143A-N	MFS-22H-193A-N
FL - 943	MFS-18-133A-N	MON-Z0 FAMILY

#### Planetary Axles - 1/Unl/P

MOR	МОХ	MOC	MOT
Rear Drive	e Single Axl	les – 1/Unl/P	1
DO 00 100	50.0		<b>DO 00 105</b>

RS-23-186	RS-24-160-SP	RS-30-185
RS-23-380	MS-30-616	RS-30-380
RS-24-160	MS-30-616-SP	MS-35-380

#### Drivelines - 1/Unl/P

RPL		

#### Rear Drive Tandem Axles – 2/Unl/P

MXL

MT-44-14X/P	MT-58-616	RT-44-145/P	RT-50-160/P
MT-52-616	MT-58-616-SP	RT-46-160/P	RZ-166
MT-52-616-SP	MT-70-380	RT-46-164EH/P	

#### **Brake Components**

Cam P	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
ASA	3/Unl/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P



## **TERMS AND CONDITIONS**

#### **Coverage Exclusions**

#### **Product Description**

#### All

The cost of any repairs, replacements or adjustments to a covered component (1) associated with noise; (2) resulting from the use or installation of non-genuine Meritor components or materials; (3) due to vibration associated with improper operation or misapplication of drivetrain components; and (4) damage resulting from corrosion.

For axle assemblies supplied by Meritor with suspension and interface brackets designed and/or attached by non-Meritor parties, Meritor warranty coverage does not apply to the brackets, bracket attachment methods, and field issues caused by brackets or bracket attachments to any covered component unless specified in a separate OEM agreement.

**Front Axles** 

King Pin Bushings.

#### **Rear Axles**

Self-contained traction equalizers and oil filters. The use of NoSPIN differentials will result in the exclusion of axle shafts from warranty considerations. NoSPIN is a product of Eaton.

#### ASA

Boot and bushing. Bent, broken, over-torqued, missing or otherwise damaged pawl assemblies.

#### Cam Brake

Brake lining wear and brake shoe "rust-jacking."

#### **Disc Brake**

Pad wear, rotor wear.

#### Coverage Limitations

#### **Product Description**

#### All

Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program. Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

#### Front Axles

Tie rod and tie rod ends limited to 3-year/300,000-mile or published vocational coverage, whichever is less. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

#### **Rear Axles**

Pinion and through shaft seals limited to 3-year/300,000-mile or published vocational coverage, whichever is less, if yoke is installed by Meritor. If yoke is not installed by Meritor, then Meritor does not warrant pinion seals. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

#### **Rear Axles**

The Meritor<sup>®</sup> breather part number A-2297-C-8765 with A-3196-J-1336 hose must be used for eligibility of any potential warranty consideration relating to contamination and/or loss of lube in axles.

#### Cam Brake

Limited to bracket, brake spider and camshaft structural integrity.

#### STEELite X30

Wearable life is up to the discard diameter of the drum.

#### **Disc Brake**

Warranty coverage for boots, seals, bushings and pins is 2/200/P. Warranty coverage for pads is 1/100/P.

Warranty coverage on vehicles with 1,850 lb-ft engine torque and over may be reduced on individual drivetrain components. Contact your Meritor representative for specific details.

## **TERMS AND CONDITIONS**

#### (1) What is Covered by this Commercial Warranty?

Meritor Inc. warrants to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment in vehicles licensed for on-highway use, will be free from defects in material and workmanship. This warranty coverage begins only after the expiration of the OEM's vehicle warranty for the applicable covered components. Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed elsewhere in this warranty statement.

Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Components (whether new, used or remanufactured) installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

For certain components, coverage requires the use of specific extended drain interval or synthetic lubricants. For further information about lubrication and maintenance, see Meritor publication Maintenance Manual Number I and the applicable Meritor maintenance manual for the product in question. Other conditions and limitations applicable to this warranty are detailed below.

#### (2) Designation of Vocational Use Required.

To obtain warranty coverage, each Owner must notify Meritor through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the Meritor components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with Meritor directly. Failure to notify Meritor of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/UnI/P) from the initial in-service date.

A second Owner and each subsequent Owner must also notify Meritor as to the intended vocational use of the vehicle. This notification can be sent directly to Meritor or through the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use.

Coverage under Meritor's warranty requires that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

#### (3) What is the Cost of this Warranty?

There is no charge to the Owner for this warranty.

#### (4) What is not Covered by this Warranty?

This warranty does not cover normal wear and tear; nor does it cover a component that fails, malfunctions or is damaged as a result of (I) improper installation, adjustment, repair or modification (including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by Meritor), (II) accident, natural disaster, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the axle and/or driveline capacity), or (III) improper or insufficient maintenance (including deviation from approved lubricants, change intervals, or lube levels). This warranty does not cover any component or part that is not sold by Meritor. For vehicles that operate full or part time outside of the United States and Canada, a one year, unlimited mileage, parts only warranty (1/UnI/P) will apply.

#### (5) Remedy.

The exclusive remedy under this warranty shall be the repair or replacement of the defective component at Meritor's option. Meritor reserves the right to require that all applicable failed materials are available and/or returned to Meritor for review and evaluation.

#### (6) Disclaimer of Warranty.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESSED, IMPLIED OR STATUTORY INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

#### (7) Limitation of Remedies.

In no event shall Meritor be liable for special, incidental, indirect, or consequential damages of any kind or under any legal theory, including, but not limited to, towing, downtime, lost productivity, cargo damage, taxes, or any other losses or costs resulting from a defective covered component.

#### (8) To Obtain Service.

If the Owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either Meritor or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM new truck and/or trailer dealer or authorized Meritor service location. The dealer will inspect the vehicle and contact Meritor for an evaluation of the claim. When authorized by Meritor, the dealer will repair or replace during the term of this warranty any defective Meritor component covered by this warranty.

#### (9) Entire Agreement.

This is the entire agreement between Meritor and the Owner about warranty and no Meritor employee or dealer is authorized to make any additional warranty on behalf of Meritor. This agreement allocates the responsibilities for component failure between Meritor and the Owner.

Vehicle models, brands and names depicted herein are the property of their respective owners, and are not in any way associated with Meritor, Inc., or its affiliates.



Meritor Heavy Vehicle Systems, LLC 2135 West Maple Road Troy, Michigan 48084 USA For more information: call Ontrac at 866-668-7221 or visit meritor.com ©2017 Meritor, Inc. Litho in USA, **Page 129 of 221** Revised 01-17 (47865/11900)



August 7, 2019

May this letter serve as official notice that both Pierce Manufacturing Inc. and Public Procurement Authority (PPA) have agreed to extend the terms of contract number VH11574 (Fire Apparatus) into its final annual extension period. That period will end 08/13/2020.

#### Pierce Manufacturing Inc.

Signature:
Printed Name: histing Spang
Title: Director, Sales Operations
Date: 8-11-19

**Public Procurement Authority** 

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: 08/12/2019

Public Procurement Authority 25030 SW Parkway Avenue, Suite 330 Wilsonville, OR 97070 855-524-4572



## Fire Apparatus

## **Product Specifics**

**Pierce Manufacturing** Inc. is North America's leading single source manufacturer that designs, engineers, and builds the complete fire appartus from bumper to bumper. The full spectrum of vehicles is available including:

- Aerial
- Pumper
- Rescue

- Tanker
- Custom Options

## **Pricing Details**

Members receive discounted pricing on these products. For pricing and product details, log in to **nppgov.com**.

## **Contract Details**

- Log into nppgov.com
- Forms, legal documentation, price lists and other information can be found on the Pierce vendor page
- Sign the Intergovernmental Agreement (IGA) and keep for your records
- Provide your NPPGov member number on the purchase order



Lead Public Agency: Public Procurement Authority RFP #1420

CONTRACT TERM

Effective Date: 08/13/15 Initial expiration: 08/13/17 Possible extensions through: 08/13/20

## NPPGov

NPPGov is a national cooperative procurement organization based in Seattle, WA offering publicly solicited contracts to government entities nationwide. Our contracts are created through a public solicitation by a Lead Public Agency. Access to our cooperative contracts is free and there are no purchasing obligations.

Benefits of cooperative contracts:

- Competitively bid, no
   additional RFP necessary
- Saves time and money in your procurement process
- Live contract support





nppgov.com

customerservice@nppgov.com Page 131 of 221 877.329.8847

#### **Intergovernmental Cooperative Purchasing Agreement**

This Intergovernmental Agreement (Agreement) is by and between the "Lead Contracting Agency" and participating government entities ("Participating Agencies"), that are members of National Purchasing Partners ("NPP"), including members of FireRescue GPO and Public Safety GPO, that agree to the terms and conditions of this Agreement. The Lead Contracting Agency and all Participating Agencies shall be considered as "parties" to this agreement.

WHEREAS, upon completion of a formal competitive solicitation and selection process, the Lead Contracting Agency has entered into Master Price Agreements with one or more Vendors to provide goods and services, often based on national sales volume projections;

WHEREAS, NPP provides group purchasing, marketing and administrative support for governmental entities. NPP's marketing and administrative services are free to its membership, which includes participating public entities and nonprofit institutions throughout North America.

WHEREAS, NPP has instituted a cooperative purchasing program under which member Participating Agencies may reciprocally utilize competitively solicited Master Price Agreements awarded by the Lead Contracting Agency;

WHEREAS, the Master Price Agreements provide that all qualified government members of NPP may purchase goods and services on the same terms, conditions and pricing as the Lead Contracting Agency, subject to applicable local and state laws of the Participating Agencies;

WHEREAS, the parties agree to comply with the requirements of the Intergovernmental Cooperation Act as may be applicable to the local and state laws of the Participating Agencies;

WHEREAS, the parties desire to conserve and leverage resources, and to improve the efficiency and economy of the procurement process while reducing solicitation and procurement costs;

WHEREAS, the parties are authorized and eligible to contract with governmental bodies and Vendors to perform governmental functions and services, including the purchase of goods and services; and

WHEREAS, the parties desire to contract with Vendors under the terms of the Master Price Agreements;

NOW, THEREFORE, the parties agree as follows:

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#### ARTICLE 1: LEGAL AUTHORITY

Each party represents and warrants that it is eligible to participate in this Agreement because it is a local government created and operated to provide one or more governmental functions and possesses adequate legal authority to enter into this Agreement.

#### ARTICLE 2: APPLICABLE LAWS

The procurement of goods and services subject to this Agreement shall be conducted in accordance with and subject to the relevant statutes, ordinances, rules, and regulations that govern each party's procurement policies. Competitive Solicitations are intended to meet the public contracting requirements of the Lead Contracting Agency and may not be appropriate under, or satisfy Participating Agencies' procurement laws. It is the responsibility of each party to ensure it has met all applicable solicitation and procurement requirements. Participating Agencies are urged to seek independent review by their legal counsel to ensure compliance with all local and state solicitation requirements.

#### ARTICLE 3: USE OF BID, PROPOSAL OR PRICE AGREEMENT

- a. A "procuring party" is defined as the Lead Contracting Agency or any Participating Agency that desires to purchase from the Master Price Agreements awarded by the Lead Contracting Agency.
- b. Each procuring party shall be solely responsible for their own purchase of goods and services under this Agreement. A non-procuring party shall not be liable in any fashion for any violation of law or contract by a procuring party, and the procuring party shall hold non-procuring parties and all unrelated procuring parties harmless from any liability that may arise from action or inaction of the procuring party.
- c. The procuring party shall not use this agreement as a method for obtaining additional concessions or reduced prices for similar goods and services outside the scope of the Master Price Agreement.
- d. The exercise of any rights or remedies by the procuring party shall be the exclusive obligation of such procuring party.
- e. The cooperative use of bids, proposals or price agreements obtained by a party to this Agreement shall be in accordance with the terms and conditions of the bid, proposal or price agreement, except as modified where otherwise allowed or required by applicable law, and does not relieve the party of its other solicitation requirements under state law or local policies.

#### **ARTICLE 4: PAYMENT OBLIGATIONS**

The procuring party will make timely payments to Vendors for goods and services received in accordance with the terms and conditions of the procurement. Payment for goods and services, inspections and acceptance of goods and services ordered by the procuring party shall be the exclusive obligation of such procuring party. Disputes between procuring party and Vendor shall be resolved in accordance with the law and venue rules of the state of the procuring party.

#### ARTICLE 5: COMMENCEMENT DATE

This Agreement shall take effect after execution of the "Lead Contracting Agency Endorsement and Authorization" or "Participating Agency Endorsement and Authorization," as applicable.

#### ARTICLE 6: TERMINATION OF AGREEMENT

This Agreement shall remain in effect until terminated by a party giving 30 days written notice to "Lead Contracting Agency"

#### ARTICLE 7: ENTIRE AGREEMENT

This Agreement and any attachments, as provided herein, constitute the complete Agreement between the parties hereto, and supersede any and all oral and written agreements between the parties relating to matters herein.

#### ARTICLE 8: CHANGES AND AMENDMENTS

This Agreement may be amended only by a written amendment executed by all parties, except that any alterations, additions, or deletions of this Agreement which are required by changes in Federal and State law or regulations are automatically incorporated into this Agreement without written amendment hereto and shall become effective on the date designated by such law or regulation.

#### ARTICLE 9: SEVERABILITY

All parties agree that should any provision of this Agreement be determined to be invalid or unenforceable, such determination shall not affect any other term of this Agreement, which shall continue in full force and effect.

THIS INSTRUMENT HAS BEEN EXECUTED IN TWO OR MORE ORIGINALS BY EXECUTION AND ATTACHMENT OF "THE LEAD CONTRACTING AGENCY ENDORSEMENT AND AUTHORIZATION," OR "PARTICIPATING AGENCY ENDORSEMENT AND AUTHORIZATION," AS APPLICABLE. ONCE EXECUTED, IT IS THE RESPONSIBILITY OF EACH PARTY TO FILE THIS AGREEMENT WITH THE PROPER AGENCY IF REQUIRED BY LOCAL OR STATE LAW.

#### PUBLIC PROCUREMENT AUTHORITY ENDORSEMENT AND AUTHORIZATION

The undersigned acknowledges, on behalf of the Public Procurement Authority ("Lead Contracting Agency") that he/she has read and agrees to the general terms and conditions set forth in the enclosed Intergovernmental Cooperative Purchasing Agreement regulating use of the Master Price Agreements and purchase of goods and services that from time to time are made available by the Public Procurement Authority to Participating Agencies locally, regionally, and nationally through NPP. Copies of Master Price Agreements and any amendments thereto made available by the Public Procurement Authority will be provided to Participating Agencies and NPP to facilitate use by Participating Agencies.

The undersigned understands that the purchase of goods and services under the provisions of the Intergovernmental Cooperative Purchasing Agreement is at the absolute discretion of the Participating Agencies.

The undersigned affirms that he/she is an agent of the Public Procurement Authority and is duly authorized to sign this Public Procurement Authority Endorsement and Authorization.

Date: 2-13-2014

BY: Jeffrey D. Johnson ITS: Administrator/Board Member

Public Procurement Authority Contact Information:

Contact Person:	Heidi Chames
Address:	25030 SW Parkway Ave., Suite 330
	Wilsonville, OR 97070
Telephone No.:	855-524-4572
Email:	questions@procurementauthority.org

#### PARTICIPATING AGENCY ENDORSEMENT AND AUTHORIZATION

The undersigned acknowledges, on behalf of \_\_\_\_\_\_ ("Participating Agency") that he/she has read and agrees to the general terms and conditions set forth in the enclosed Intergovernmental Cooperative Purchasing Agreement regulating use of the Master Price Agreements and purchase of goods and services that from time to time are made available by the Lead Contracting Agency to Participating Agencies locally, regionally, and nationally through NPP.

The undersigned further acknowledges that the purchase of goods and services under the provisions of the Intergovernmental Cooperative Purchasing Agreement is at the absolute discretion of the Participating Agency and that neither the Lead Contracting Agency nor NPP shall be held liable for any costs or damages incurred by or as a result of the actions of the Vendor or any other Participating Agency. Upon award of contract, the Vendor shall deal directly with the Participating Agency concerning the placement of orders, disputes, invoicing and payment.

The undersigned affirms that he/she is an agent of \_\_\_\_\_\_ and is duly authorized to sign this Participating Agency Endorsement and Authorization.

Date:\_\_\_\_\_

BY: \_\_\_\_\_ ITS: \_\_\_\_\_

Participating Agency Contact Information:

 Contact Person:
 \_\_\_\_\_\_

 Address:
 \_\_\_\_\_\_

Telephone No.:\_\_\_\_\_\_Email:\_\_\_\_\_

#### **Sixth Amendment to Fire Apparatus Master Price Agreement**

#### **Pricing and Product Adjustment**

This Amendment to the Master Price Agreement is effective this 1st day of February, 2018 by the PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and Pierce Manufacturing Inc. ("Vendor") based upon the sales and/or service of Fire Apparatus.

#### RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Third Amendment to the Master Price Agreement on or about October 31, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Fourth Amendment to the Master Price Agreement on or about January 31, 2017 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Fifth Amendment to the Master Price Agreement on or about May 29, 2017 and by this reference incorporated herein; and

WHEREAS, Article 4.1 of the Master Price Agreement provides for price adjustments in six (6) month increments based on manufacturer cost increase; and

WHEREAS, Vendor has provided notice of pricing adjustment due to manufacturer cost increase on or about November 29, 2017; and

WHEREAS, Vendor has updated its product offering to reflect current chassis of products included in the Master Price Agreement and to remove models that have been discontinued; and

WHEREAS, Vendor has provided notice of product updates and discontinued models on or about November 29, 2017; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the pricing and product adjustment;

NOW, THEREFORE, Purchaser and Vendor enter into the following:

#### SIXTH AMENDMENT TO FIRE APPARATUS MASTER PRICE AGREEMENT

1. <u>Adjustment to Pricing and Products on Fire Apparatus</u>. Attachment A to the Master Price Agreement shall be amended in its entirety to read as follows:

#### "ATTACHMENT A

#### to Master Price Agreement by and between <u>VENDOR</u> and <u>PURCHASER</u>.

#### PRODUCTS, SERVICES, SPECIFICATIONS AND PRICES

#### ATTACHMENT A PRODUCTS, SERVICES, SPECIFICATIONS, AND PRICING

#### BASE MODEL SPECIFICATIONS

#### **1.0 AERIAL PRODUCT**

ID #	DESCRIPTION	PIE	RCE PRICE 2018
1.2	Arrow XT XT, Alum, Single, 1500 Pump, 75' HD, Aluminum Ladder, Quint	\$	773,590.00
1.3	Arrow XT XT, Alum, Tandem, 1500 Pump, 105' HD Steel Ladder, Quint	\$	886,645.00
1.4	Arrow XT XT, Alum, Tandem, No Pump, 105' HD Steel Ladder	\$	819,146.00
1.6	Arrow XT XT, Alum, Tandem, 1500 Pump, 75' HD Steel Ladder, Quint	\$	785,163.00
1.7	Arrow XT XT, Alum, Single, 1500 Pump, 75' HD Steel Ladder, Quint	\$	763,205.00
1.8	Arrow XT XT, Alum, Tandem, 1500 Pump, 100' HD Aluminum Ladder, Quint	\$	943,004.00
1.9	Arrow XT, Alum, Tandem, No Pump, 100' HD Aluminum Ladder	\$	876,720.00
1.10	Arrow XT, Alum, Tandem, 1500 Pump, 85' Steel Platform, Quint	\$	973,029.00
1.11	Arrow XT, Alum, Tandem, No Pump, 85' Steel Platform	\$	904,189.00
1.12	Arrow XT, Alum, Tandem, 1500 Pump, 100' Steel Platform, Quint	\$	1,061,324.00
1.14	Arrow XT, Alum, Tandem, 1500 Pump, 100' Aluminum Platform, Quint	\$	1,129,660.00
1.15	Arrow XT, Alum, Tandem, No Pump, 100' Aluminum Platform	\$	1,054,309.00

1.16	Arrow XT, Alum, Tandem, 2000 Pump, 95' Mid-Mount Steel Platform	\$ 1,122,756.00
1.17	Arrow XT, Alum, Tandem, No Pump, 95' Mid-Mount Steel Platform	\$ 1,053,582.00
1.18	Arrow XT, Alum, Tandem, 2000 Pump, 100' Mid-Mount Steel Ladder, Quint	\$ 991,000.00
1.19	Arrow XT, Alum, Tandem, No Pump, 100' Mid-Mount Steel Ladder	\$ 923,187.00
1.21	Arrow XT, Alum, Single, 1250 Pump, 61'/55/ Sky-Boom	\$ 653,471.00
1.24	Arrow XT, Alum, Single, 75' HAL PUC Quint	\$ 801,165.00
1.25	Arrow XT, Alum, Tandem, 105' HD Steel Ladder PUC	\$ 922,222.00
1.26	Arrow XT, Alum, Tandem, 100' Steel Platform PUC	\$ 1,094,025.00
1.27	Arrow XT, Single, 1500 Pump, 107' Aerial	\$ 1,005,208.00
1.28	Arrow XT, Single, 2000 Pump, 110' Platform	\$ 1,023,371.00
1.29	Arrow XT, Ascendant Tiller NPNT	\$ 1,282,294.00
1.30	Arrow XT, Ascendant Tiller Quint	\$ 1,373,697.00

#### 2.0 PUMPER PRODUCT

ID #	DESCRIPTION	PIE	RCE PRICE 2018
2.1	Saber FR, Alum, Single, 1250 Pumper, 750 Water	\$	356,905.00
2.2	Impel, Alum, Single, 1250 Pump, 750 Water	\$	398,717.00
2.3	Impel, Alum, Single, 1500 Pump, PUC, 750 Water	\$	465,128.00
2.5	Freightliner M2-106, 2-Door, Alum, Single, 1250 Pump, 750 Water	\$	220,828.00
2.6	International 4400, 2-door, Alum, Single, 1250 Pump, 750 Water	\$	229,923.00
2.7	Kenworth T370, 2-Door, Alum, Single, 1250 Pump, 750 Water	\$	228,852.00
2.8	Peterbilt 337, 2-Door, Alum, Single, 1250 Pump, 750 Water	\$	237,726.00
2.9	Freightliner M2-106, 4-Door, Galv, Single, 1000 Pump, 4x4 Wildland	\$	357,263.00

#### 3.0 RESCUE

ID #	DESCRIPTION	PIERCE PRICE 2018	
3.1	Arrow, Alum, Single, Non-Walk-In, HDR	\$	411,311.00
3.2	Saber FR, Alum, Single, Non-Walk-In HDR	\$	339,926.00

3.3	Freightliner M2-106, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 238,310.00
3.4	International 7400, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 212,770.00
3.5	Kenworth T370, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 214,239.00
3.6	Peterbilt 337, 2-Door, Alum, Single, Non-Walk-In, HDR	\$ 222,801.00
3.7	Saber FR, Alum, Single, Walk-In, HDR	\$ 367,354.00
3.8	Arrow XT, Alum, Single, Walk-In, HDR	\$ 448,322.00
3.9	Freightliner M2-106, 2-Door, Alum, Single, Walk-In HDR	\$ 238,303.00
3.10	International 7400, 2-Door, Alum, Single, Walk-In, HDR	\$ 246,065.00
3.11	Kenworth T370, 2-Door, Alum, Single, Walk-In, HDR	\$ 238,047.00
3.12	Peterbilt 337, 2-Door, Alum, Single, Walk-In, HDR	\$ 255,606.00
3.13	Ford F550, 4-Door, Alum, Single, 12' Non-Walk-In	\$ 147,746.00

#### 4.0 TANKER

ID #	DESCRIPTION	PIEI	RCE PRICE 2018
4.1	International, 2-Dr, Alum, Tandem, 500 Pump, 3000 Water, DX	\$	232,609.00
4.2	Impel, Alum, Tandem, 1250 Pump, 2000 Water, Tanker/Pumper	\$	483,032.00
4.3	International, 2-Dr, Single, 1000 Pump, 2100 Water DX	\$	222,281.00
4.4	International 4400, 2-Dr, Single, 1000 Pump, 2100 Water, DX	\$	228,805.00
4.5	Kenworth T370, 2-Dr, Single, 1000 Pump, 2100 Water, DX	\$	225,181.00
4.6	Saber FR, 4-Dr, Single, 1500 Pump, 1800 Water, Pumper/Tanker	\$	374,144.00
4.7	Impel, Aluminum, Tandem, 1250 Pump, 2500 Water, Elliptical	\$	476,658.00
4.8	Saber FR, Aluminum, Single, 1250 Pump, 1800 Water, Elliptical	\$	413,553.00
4.10	Kenworth T370, 2Dr, Alum, Tandem, 500 Pump, 3000 Water, DX	\$	240,33700
4.11	International 7500, 2-Dr, Alum, Tandem Rear, 500 pump, 3000 Water, DX	\$	253,114.00

#### ATTACHMENT A PRODUCTS, SERVICES, SPECIFICATIONS, AND PRICING

#### OPTION CATALOG PRICING: SAMPLING

*Note:* We have provided a price range for several option categories. The reason for this is the extensive volume of options Pierce offers along with the variety of options within and across product categories. For example, Pierce manufactures 7 different custom cabs. In each cab family, there are up to 10 different configurations which are tied to options specific to a certain product offering (e.g. Pumper, Aerial, Rescue, Tanker, etc.). The price range encompasses the low and high end for that particular category. This is a sampling of what we offer as our order configurator includes over 30,000 options. This number of options is too extensive to list individually.

#### **1.0 CUSTOM CHASSIS**

PUBLISHE	D OPTIONS:	PRICE R	ANGE
562564	Various Arrow XT Cabs	55,317.00	75,710.00
689045	Various Dash CF Cabs	54,872.00	60,671.00
625652	Various Enforcer Cabs	48,636.00	62,230.00
647271	Various Impel FR Cabs	48,869.00	74,608.00
559725	Vaious Quantum Cabs	56,856.00	66,162.00
625654	Various Saber FR Cabs	46,500.00	61,198.00
647244	Various Velocity FR Cabs	52,365.00	77,344.00

#### 2.0 AXLE, FRONT

PUBLISHE	D OPTIONS:	PRICE RANGE	
566636	Axle, Front, Dana, 16,000 - 23,000 lb	8,658.00	9,312.00
637708	Axle, Front, Meritor 18,000 - 21,500 lb,	10,568.00	39,025.00
624947	Axle, Front, Marmon Herrington 21,500 (FWD)	34,782.00	39,023.00
30262	Axle, Front, Oshkosh TAK-4, Non Drive, 19,500 - 24,000 lb	28,893.00	31,731.00

#### 3.0 AXLE, REAR

PUBLISHE	D OPTIONS:	PRICE RANGE	
690933	Axle, Front, Dana, 16,000 - 40,000 lb	9,283.00	27,808.00
10404	Axle, Rear, Eaton, 24,000 - 31,000 (FWD)	23,954.00	31,651.00
37001	Axle, Tiller, Meritor 34,000 - 48,000 lb	26,275.00	32,312.00
52481	Axle, Tiller Trailer, Oshkosh TAK-4, 26,000 - 52,000	48,278.00	81,328.00
530472	Axle, Rear, Meritor, 17,000 - 60,000 lb	8,793.00	42,818.00
644866	Axle, Rear, Oshkosh TAK-4 T3, 26,000 - 52,000 lb, Rear Steer	14,689.00	18,429.00

#### 4.0 BRAKES

PUBLISHE	BLISHED OPTIONS: PRICE RANGE		ANGE
20674	ABS Brake Systems, Tandem Rear Axle	6,599.00	12,832.00
10670	ABS Brake Systems , Single rear axle	5,900.00	10,928.00
705	Brakes, Cam, Front,	686.00	945.00
740	Brakes, Cam, Rear (single - Tandem)	703.00	1,509.00
508676	Brakes, EX225, 17", Disc Plus, Front (and or TAK-4)	686.00	1,325.00
509206	Brakes, Meritor, EX225, Disc Plus, Rear (single - tandem)	860.00	1,711.00

10,928.00 11,627.00

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#### 5.0 COMPARTMENTS ACCESSORIES

PUBLISHE	D OPTIONS:	PRICE RANGE
4002	Matting, .13" Rubber in Compt per	61.00
3934	Dust Filter, All Compt Louvers per	102.00
4005	Alum Treadplate on Compt Floor per	151.00
3990	Grating, Wood in Compt per	233.00
539811	Box, Poly Tool per	297.00
13919	Partition, Adjustable, Vertical Compt	431.00
562776	Toolboard, .188" Alum, Rr Wall Compt,w/Track, No Holes, Painted	765.00
27093	Rack, Air Bags inside Compt, 6-Slot	1,192.00
558501	Drawer Assembly, CTECH, Four Drawers, Up To 24" Wide	2,171.00

#### 6.0 COMPARTMENT, PUMPERS

PUBLISHE	ED OPTIONS:	PRICE RANGE	
83648	Med Body, Roll/Lap, Various Heights & Depths	2,927.00	17,337.00
83661	Long Body, Roll/Lap, Various Heights & Depths	5,839.00	23,752.00
585287	PUC Body, Roll/Lap, Various Lengths, Heights & Depths	7,865.00	37,965.00
6708	HDRP Body, Roll/LAP, Various Length, Heights & Depths	15,382.00	16,112.00

#### 7.0 COMPARTMENT, TANKERS

PUBLISH	PUBLISHED OPTIONS:		PRICE RANGE	
231	Long Tanker Body, Rollup/Lap, Various Heights & Depths	1,283.00	16,471.00	
63851	Extended Tanker Body, Rollup/Lap, Various Heights & Depths	4,203.00	28,493.00	

#### **8.0 ENGINE**

PUBLISHE	PUBLISHED OPTIONS:		PRICE RANGE	
623882	Engine, Cummins ISL9, 350 - 450 hp, 1150 - 1250 ft-lb W/OBD	83,612.00	101,360.00	
623942	Engine, Cummins ISX12, 400 - 600 hp, 1550 ft-lb, W/OBD	115,233.00	131,440.00	
610863	Engine, DDC DD13, 450 - 525 hp	103,141.00	121,599.00	

#### 9.0 FOAM SYSTEMS

PUBLISHE	D OPTIONS:	PRICE F	RANGE
5414	Foam Sys, Eductor	7,719.00	8,075.00
65417	Foam Sys, 1600 - 2002	9,346.00	22,281.00
592633	Foam Sys, Husky 3, Single Agent	10,875.00	
95358	Foam Sys, Husky 12, (Single Agent)	19,458.00	
95353	Foam Sys, Husky 12, (Dual Agent)	22,121.00	
676901	Foam Sys, Husky Single Agent, Industrial	37,722.00	113,634.00

#### **10.0 Foam Cells**

PUBLISH	ED OPTIONS:	PRICE R	ANGE
5446	Foam Cell, 20 - 60 Gallon	1,667.00	2,562.00
88466	Foam Tank, 1000 - 2500 Gallon	11,261.00	24,955.00

#### **11.0 GENERATORS**

PUBLISHED OPTIONS:		PRICE R	ANGE
684098	Generator, Gas,	2,148.00	8,028.00
20947	Generator, Diesel	16,179.00	31,874.00
649150	Generator, Hydraulic	20,126.00	46,557.00

#### **12.0 GRAPHICS**

PUBLISHE	D OPTIONS:	PRICE RANGE	
684084	Lettering, Vinyl, 1.00 - 4.00 (1 - 160)	204.00	1,740.00
686417	Lettering, Gold Leaf, 1.00 - 11.00 (1 - 160)	510.00	6,517.00

#### **13.0 LADDER STORAGE**

PUBLISHED OPTIONS:		PRICE RANGE	
4296	Rack, Ladders in Hosebed/Between Tank & Side Sheet	1,084.00	5,831.00
14308	Rack, Quic-Lift	7,206.00	9,030.00
2773	Rack, Laddr, Hydraulic	11,006.00	13,546.00

#### **14.0 LIGHTING**

PUBLISHE	O OPTIONS:	PRICE R.	PRICE RANGE	
0006372	Lightbar, Various Brand, Length & Function	789.00	7,415.00	
0689545	Lights, Compt, LED	119.00	6,529.00	
647803	Lights, Clearance/Marker/ID	131.00	235.00	
648293	Light, Directional, Front	381.00	1,120.00	
0058128	Lights, Front, Warning	97.00	6,728.00	
0041878	Lights, Front Zone Lower	497.00	2,142.00	
644038	Lights, Perimeter Scene, Cab	202.00	1,514.00	
65704	Lights, Rear Scene	60.00	658.00	
41634	Light, Side Zone Upper	408.00	2,985.00	

#### **15.0 LIGHT TOWERS**

PUBLISHE	D OPTIONS:	PRICE RANGE
0636216	Light Tower, NS2.3-1500 MAG, 2-750W Magnafire Lts, 120 VAC Cld 7.5'	9,545.00
0636206	Light Tower, NS2.3-6000 OPT, 4-1500W Optimum Lts, 240 VAC Cld 7.5'	10,858.00
0642218	Light Tower KL450, 6-500W Lights, 120 Volt AC, Cld	13,779.00
0636195	Light Tower, NS4.5-6000 OPT, 4-1500W Optimum Lts, 240 VAC Cld 15'	16,647.00
0523461	Light Vertical Tower, IWM 7-25-9000 OPT 6-1500W 240V Optimum 25'	21,821.00

#### **16.0 SAFETY SYSTEMS**

PUBLISHED OPTIONS:		PRICE RANGE
583042	Side Roll and Frontal Impact Protection	12,640.00
583040	Frontal Impact Protection	3,087.00
583041	Side Roll Protection	9,903.00

#### **17.0 SHEVELING/TRAYS**

PUBLISHE	D OPTIONS:	PRICE RANGE
0687079	Shelves, Adjustable, 500 lb Capacity, Full Width (each) Tray, Floor Mounted, Slide-Out, w/ Side Slides, 200lb, 2.00" Sides	213.00
647042	(each)	703.00
3984	Tray, 250 lb Slide-out, 2" Sides - Adj. Height (each)	579.00
3983	Tray, 500 lb Slide-out, 2" Sides - Adj. Height (each)	1,002.00
83986	Tray, 215 lb, Tilt/Slide-Out, 30 Deg, Adj (each)	748.00

#### **18.0 TRANSMISSION**

PUBLISHE	D OPTIONS:	PRICE RANGE
642569	Trans, Allison 5th Gen, 3000 EVS P, With Prognostics	25,551.00
642574	Trans, Allison 5th Gen, 3000 EVS PR, With Prognostics	39,383.00
642579	Trans, Allison 5th Gen, 4000 EVS P, With Prognostics	37,636.00
642594	Trans, Allison 5th Gen, 4000 EVS PR, With Prognostics	49,640.00
642532	Trans, Allison 5th Gen, 4500 EVS P	40,388.00
642601	Trans, Allison 5th Gen, 4500 EVS PR, With Prognostics	52,466.00

#### **19.0 UNDERCOATING**

PUBLISHED OPTIONS: RANGE +		RANGE + 6%	
695507	Rust Proof, Torque Box	315.00	
599008	Rust Proof/Undercoat, Custom Chassis	616.00	
7379	Undercoating, Pumper/Rescue/Tanker	682.00	
631674	E-Coat, TAK-4 Components, Front Axle, Black	692.00	
646119	E-Coat, TAK-4 Components, Tiller Axle, Black	692.00	
652945	E-Coat, Under Body/Chassis Component Package	1,939.00	
25070	Corrosion Prevention Treatment, Dissimilar Metal	2,356.00	

#### 20.0 Water Tanks

PUBLISHED OPTIONS:		RANGE + 6%	
9308	Tank, Water, 200 - 500 Gallon, Poly, Aerial	7,565.00	10,164.00
28244	Tank, Water, 500 - 30000 Gallon, Poly	7,601.00	27,575.00

The pricing above is current as of February 1, 2018.

2. <u>Full Force and Effect</u>. In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY:

Date 02/01/2018

BY: Tella Leighton ITS: Contract Manager

PIERCE MANUFACTURING INC. Į. 02/01/2018 Date BY: νŶ ITS: Finmer

# Fifth Amendment to Fire Apparatus Master Price Agreement

# **Product Addition and Price Correction**

This Amendment to the Master Price Agreement is entered into this \_\_\_\_\_ day of May 2017 by PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and PIERCE MANUFACTURING, INC. ("Vendor") based upon the sales and/or service of Fire Apparatus.

# RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Third Amendment to the Master Price Agreement on or about October 31, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Fourth Amendment to the Master Price Agreement on or about January 31, 2017 and by this reference incorporated herein; and

WHEREAS, Vendor included the Arrow XT Aerial Product Line in its Proposal; and

WHEREAS, new Arrow XT Aerial Products have become available; and

WHEREAS, Vendor has provided notice, on or about May 2, 2017, to include the new Arrow XT Aerial Products at comparable pricing offered for existing Arrow XT Aerial Products in the Master Price Agreement; and

WHEREAS, Vendor adjusted Price List on or about January 31, 2017; and

WHEREAS, Vendor has provided notice on or about April 25, 2017 to correct a scrivener error on the price of an Aerial Product from the January 31, 2017 Price List Update; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the product addition and price list correction.

NOW, THEREFORE, Purchaser and Vendor enter into the following:

# AMENDMENT TO MASTER PRICE AGREEMENT

Product Addition and Price List Correction. Attachment A to the Master Price 1. Agreement shall be amended in part to reflect the following product addition and price list correction:

1.0 Aerial Product

ID#	Description	Price
1.27	Arrow XT, Single, 1500 Pump, 107' Aerial	\$975,930.00
1.28	Arrow XT, Single, 2000 Pump, 110' Platform	\$993,564.00
1.29	Arrow XT, Ascendant Tiller NPNT	\$1,244,946.00
1.30	Arrow XT, Ascendant Tiller Quint	\$1,333,686.00

2. Full Force and Effect. In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY

Neidi arnold

Date

BY: Heidi Arnold ITS: Contract Manager

PIERCE MANUFACTURING, INC.

5/29/17

BY: Krishina Spang ITS: Sr. Sales Operations Manager

# Fourth Amendment to Fire Apparatus Master Price Agreement

# **Pricing Adjustment**

This Amendment to the Master Price Agreement is effective this the PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and Pierce Manufacturing Inc. ("Vendor") based upon the sales and/or service of Fire Apparatus.

# RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Third Amendment to the Master Price Agreement on or about October 31, 2016 and by this reference incorporated herein; and

WHEREAS, Article 4.1 of the Master Price Agreement provides for price adjustments in six (6) month increments; and

WHEREAS, Vendor has provided notice of pricing adjustment on or about September 9, 2016; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the price adjustment;

NOW, THEREFORE, Purchaser and Vendor enter into the following:

# FOURTH AMENDMENT TO FIRE APPARATUS MASTER PRICE AGREEMENT

1. <u>Adjustment to Pricing on Fire Apparatus</u>. Attachment A to the Master Price Agreement shall be amended in its entirety to read as follows:

Fourth Amendment Price List has been removed, but is available upon request. Current Price List is included in Attachment A in the Amendment set forth at the beginning of this document.

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20.0 Water Tanks

PUBLISHEL	DOPTIONS;	PRICE RI	ange
9308	Tank, Water, 200 - 500 Gallon, Poly, Aerial	7,345.00	9,868.00
28244	Tank, Water, 500 ~ 30000 Gallon, Poly	7,380.00	26,772.00

The pricing above is current as of February 1, 2017.

2. <u>Full Force and Effect</u>. In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

**IN WITNESS WHEREOF**, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY:

ط ا Date BY? ITS:

PIERCE MANUFAGTURING INC .: Date \_ 6 BY: ITS: UP ずる TANCO

# Third Amendment to Fire Apparatus Master Price Agreement

# **Dealer List Adjustment**

This Amendment to the Master Price Agreement is entered into this <u>21</u> day of October, 2016 by PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and PIERCE MANUFACTURING, INC. ("Vendor") based upon the sales and/or service of Fire Apparatus.

# RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into a Second Amendment to the Master Price Agreement on or about March 28, 2016 and by this reference incorporated herein; and

WHEREAS, Vendor has provided a list of dealers authorized to sell Fire Apparatus under the terms of the Master Price Agreement; and

WHEREAS, Vendor has provided notice, on or about September 19, 2016, that the list of authorized dealers has been updated and can be found electronically online; and

WHEREAS Vendor desires to provide a link where the current list of dealers authorized to sell Fire Apparatus under the terms of the Master Price Agreement can be found online; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the addition of the dealer link;

NOW, THEREFORE, Purchaser and Vendor enter into the following:

# AMENDMENT TO MASTER PRICE AGREEMENT

1. <u>Dealer list for Fire Apparatus</u>. Attachment A to the Master Price Agreement shall be amended in part to include the following link where the current list of dealers authorized to sell Fire Apparatus under the terms of the Master Price Agreement can be found online:

### http://www.piercemfg.com/find-a-dealer

2. <u>Full Force and Effect</u>. In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY:

31 101 Date BY: Arnol ITS: Marage ract

PIERCE MANUFACTURING, INC.:

Date BY: ITS:

# Second Amendment to Fire Apparatus Master Price Agreement

# Product Line Addition and Dealer List Update

This Amendment to the Master Price Agreement is entered into this <u>67</u> day of March, 2016 by PUBLIC PROCUREMENT AUTHORITY ("Purchaser") and PIERCE MANUFACTURING, INC. ("Vendor") based upon the sales and/or service of Fire Apparatus.

# RECITALS

WHEREAS, Purchaser and Vendor entered into a Master Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Purchaser and Vendor entered into an Amendment to the Master Price Agreement on or about February 13, 2016 and by this reference incorporated herein; and

WHEREAS, Vendor included the Arrow XT Aerial Product Line in its Proposal; and

WHEREAS, a new Arrow XT Aerial Product has become available; and

WHEREAS, Vendor has provided notice, on or about February 29, 2016, to include the new Arrow XT Aerial Product at comparable pricing offered for existing Arrow XT Aerial Products in the Master Price Agreement; and

WHEREAS, A list of authorized dealers for Vendor is identified in the Master Price Agreement; and

WHEREAS, Vendor has provided notice that the list of authorized dealers has been updated on or about March 6, 2016; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the product line addition and authorized dealer list update.

NOW, THEREFORE, Purchaser and Vendor enter into the following:

# AMENDMENT TO MASTER PRICE AGREEMENT

1. <u>Product Addition</u>. Attachment A to the Master Price Agreement shall be amended in part to reflect the following product addition:

1.0 Aerial Product

ID#	Description	Price
1.27	Arrow XT, Single, 1500 Pump, 107' Aerial	\$759,891.00

2. <u>Dealer List for Fire Apparatus</u>. Attachment A to the Master Price Agreement shall be amended in part to replace the list of authorized dealers with the one below:

Nerce Deal Digitingthorized Dealer	Principal	Teleptione	Fax	Mailing Address	E-msil Address
ATLANTIC PARTICIPACY SOLUTIONS INC	<i>IDE PACK</i>	(785) 3939911	(703) 3930244	12351 RANDOLPH RIDGE LANE, MANASSAS VA 20109	pack@samionresponcy.com
CHARCHVILLE FIRE EQUIPMENT CORP	STEVE BULVIN	(585)2931688	(585)2931803	348 SANFORD RD S, CHURCHVILLE NY 14428-9548	strveguvin@churchvil@funcom
CONTRAD FIRE EQUIPMENT BIC	PAUL SCHALTZ	(813)7805521	(913)7805251	887 IL JAHAMAR COURT, OLATHE KG 66061	penis@oppratfire.com)
EMERGENCY EQUIPMENT PROFESSIONALS	JEFF KUNTZ	(662)2804729	(662)3427251	PO Box 1739, SOUTHHAVEN MS 30071	iniz@eepminc.com
ENERGENCY VEHICLE SPECIALIST	ROBERT WHARTON, JR	(501) 3273200	(501)3273208	PO BOX 267, WEMPHIS TN SEIDS	Minister Geveniti-seath.com
FRILEY FIRE EQUIPMENT CO INC	JOHN W FRILEY	(740)9674328*	(740)9625422	20 SOUTH 5TH STREET, MCCONNELSVILLE OH 49758	jafeticytictheytre.com
FRE & SAFETY SERVICES LTD	DAVE RUSSELL	(800)4008017	(905)4 \$20513	300 RVAN STREET, SCUTH PLANDBED NJ (1730 -	duselQisa mp
FRE APPARATUS & EQUIPMENT INC	LESUE NILES	(920)5743418*	(920)5743412	P.O. BOX 297, APPLETON WI 54912-0297	niloslesije @gmail.com
FREMATIC	PETER CHANRATTY	(631)9243181*	(631)9246202	PO BOX 197, YAPEANE NY 11980-0187	pharmanity (gi in annu Sc. com)
FRONT RANGE FIRE APPARATUS LTD	DUANE DOUCETTE	(303)4499911*	(303)4491203	7600 MILLER COURT, LONGNIGHT CO 60504	duaned@froptrangelire.com
GLICK FIRE EQUIPMENT CO NIC	DOUG CLICK	(7 17)2994120*	(71)7)2994324	PO BOX F9, SMORETOWN PA (1576-0069	doug <b>egyicline.co</b> m
GLOBAL EMERGENCY PRODUCTS	MRCE MRCOOLA, JRL	(630)8984995	(830)9781155	1401 N FARNSWORTH AVE, AURORA IL 60505-1611	mnikoola@lanco1.com
GOLDEN STATE FIRE APPARATUS INC.	RYAN WIRES IT	(209)5220422	(205)5220464	1237 DOKER DRIVE, MODESTO CA 95351	(yang Golden State: Re. Com.
HALTFIREINC	TODD ERICOLN	(248)669080D*	(248)6698120	50168 WEBT PORTIAC TRAIL, UNIT 5, WOICH MI 48393	lincoln@ju#ins.nel
HUGHES FIRE EQUIPMENT INC	REXHIUGHES	(541)7470072	(541)747(073	910 SHELLEY ST, GPRING FIELD OR 97477	(faithes@hoghestine.com
MIKUTEMAN FIRE AND RESCUE APPARATUS	JEFF FOURNEER	(508)6683112*	(5 <b>08)</b> 216 <b>8</b> 388	2181 PROVIDENCE HIGHWAY, WALPOLE NA 62081	jaunier@ninstemantucks.com
NORTH STAR FRE APPARATUS	BRAD WHETE	(920)4604094	(920)8323617	2600 AMERICAN DRIVE, APPLETON, WI 54814	beline <b>gainceai</b> g com
RELIANT FREE APPARATUS INC	SCOTT ISRUEGER	(262) 2976020	(262) 2975022	880 ENTERPRISE ORME, PO BOX 470, SLENGER WI 53088	stolik@refanifire.com
ROSS EDARMENT COMPANY MU	MERRIL ROSS	(601)5662437	(601)5550671	7285 BOUTH 700 W, KIDWALE UT BIOH7	neetiin@russequip.com
Schukwacher Fire Bouirneat LLC	JOHN SCHUMMACHER	(636)2393867*	(636)2397830	2000 E 5TH STIREET, WASHINGTON MO 63090	sis312@sbcglobat.net
SEDON'S MARTIN' EVERGENCY GROUP BIC	PAT SIDICINS	(281)4426806*	(281)4420850	14233 BITERDRINE WEST, HOUSTON TX 77032	pal skidons (Ssidicos marin cos
SOUTH COAST FIRE EQUIP INC	KEVIN NEW ELL	(909)6739900'	(909)6739700	2020 8 BAKER AVE, ONTARIO CA 91761	ke/mgsouthcoastfre.net
SPARTAN FIRE & EMERGENCY APPARATUS	ROBERT E FOILE M	(864)5822376*	(054)5822377	319 BOUTHPORT ROAD, ROEBUCK SC 29376	rite en soarlandte soan
IEN-8 FIRE EQUIPMENT WC	DANN BOUWER	(941)7667779*	(941)7562598	2904 59TH AVE DR E, BRAGENRON FL 34203-6312	dauntoower@ien8fre.com

3. <u>Full Force and Effect</u>. In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY

Date 3/28/16 BY: Heidi Arnold ITS: Contract Manager

PIERCE MANUFACTURING, INC. 16 3 1 Date \_ Yn BY: Mj chael E. Pack ITS: VP Finance Finance

# Amendment to Fire Apparatus Master Price Agreement

# **Pricing Adjustment**

This Amendment to the Master Price Agreement is effective as of the 13th day of February, 2016 by the Public Procurement Authority ("Purchaser") and Plerce Manufacturing Inc. ("Vendor") based upon the sales and/or service of Fire Apparatus.

## RECITALS

WHEREAS, Purchaser and Vendor entered into a Mester Price Agreement on or about August 13, 2015 and by this reference incorporated herein; and

WHEREAS, Article 4.1 of the Master Price Agreement provides for price adjustments in six (6) month increments; and

WHEREAS, Vendor has provided notice of pricing adjustment on or about December 10, 2016; and

WHEREAS, Purchaser and Vendor desire that the Master Price Agreement shall be amended in part to reflect the price adjustment;

\* NOW, THEREFORE, Purchaser and Vendor enter into the following:

# AMENDMENT TO FIRE APPARATUS MASTER PRICE AGREEMENT

1. <u>Adjustment to Pricing on Fire Apparatua</u>. Attachment A to the Master Price Agreement shall be amended in its entirely to read as follows:

# "ATTACHMENT A

to Master Price Agreement by and between VENDOR and PURCHASER.

# PRODUCTS, SERVICES, SPECIFICATIONS AND PRICES

First Amendment Price List has been removed, but is available upon request. Current price list is included in the Attachment A in the Amendment set forth at the beginning of this document.

The pricing above is current as of February 13, 2016.

2. <u>Full Force and Effect</u>. In each and every other respect, the terms of the Master Price Agreement, as amended, entered into between the parties on or about August 13, 2015 shall remain in full force and effect during the term of the agreement and the parties hereto hereby ratify said Master Price Agreement in its entirety, as if fully set out herein, along with the modifications identified herein.

IN WITNESS WHEREOF, the parties have hereto signed this Amendment on the day and year first above written.

PUBLIC PROCUREMENT AUTHORITY

1/27 Date BY: Heidi Arnold

ITS: Contract Manager

PIERCE MANUFACTURING INC.

BY: ITS:

Date 1/27

### <u>PUBLIC PROCUREMENT AUTHORITY</u> <u>MASTER PRICE AGREEMENT</u>

This Master Price Agreement is effective as of the date of the last signature below (the "Effective Date") by and between the PUBLIC PROCUREMENT AUTHORITY ("PPA" or "Purchaser") and PIERCE MANUFACTURING INC. ("Vendor").

### RECITALS

WHEREAS, the Vendor is in the business of selling certain FIRE APPARATUS and related products and services, as further described herein; and

WHEREAS, the Vendor desires to sell and the Purchaser desires to purchase certain products and related services all upon and subject to the terms and conditions set forth herein; and

WHEREAS, Purchaser and Vendor desires to extend the terms of this Master Price Agreement to benefit other qualified government members of National Purchasing Partners, LLC dba FireRescue GPO, dba Public Safety GPO, dba Law Enforcement GPO and dba NPPGov;

NOW, THEREFORE, Vendor and Purchaser, intending to be legally bound, hereby agree as follows:

#### **ARTICLE 1 – CERTAIN DEFINITIONS**

- 1.1 "Parties" shall mean the Purchaser and Vendor.
- 1.2 "Agreement" shall mean this Master Price Agreement, including the main body of this Agreement and Attachments A-F attached hereto and by this reference incorporated herein, including Purchaser's Request for Proposal RFP No.1420 (herein "RFP") and Vendor's Proposal submitted in response to the RFP (herein "Vendor's Proposal") as referenced and incorporated herein as though fully set forth (sometimes referred to collectively as the "Contract Documents").
- 1.3 "Applicable Law(s)" shall mean all applicable federal, state, and local laws, statutes, ordinances, codes, rules, regulations, standards, orders, and other governmental requirements of any kind.
- 1.4 "Employee Taxes" shall mean all taxes, assessments, charges and other amounts whatsoever payable in respect of, and measured by the wages of, the Vendor's employees (or subcontractors), as required by the Federal Social Security Act and all amendments thereto and/or any other applicable federal, state or local law.
- 1.5 "Purchaser's Destination" shall mean such delivery location(s) or destination(s) as Purchaser may prescribe from time to time.
- 1.6 "Products and Services" shall mean the products and/or services to be sold by Vendor hereunder as identified and described on Attachment A hereto and incorporated herein, as may be updated from time to time by Vendor to reflect products and/or services offered by Vendor generally to its customers.
- 1.7 "Purchase Order" shall mean any authorized written, electronic, or fax order sent or made by Purchaser pursuant hereto, including, but not limited to, written purchase orders, requisitions sent by fax machine,

and orders in such other form and/or mode of transmission as Purchaser and Vendor may from time to time agree. In addition, the parties agree that this Agreement and accepted Purchase Orders constitute a contract for the sale of goods and/or services and satisfy all statutory and legal formalities of a contract.

- 1.8 "Unemployment Insurance" shall mean the contribution required of Vendor, as an employer, in respect of, and measured by, the wages of its employees (or subcontractors) as required by any applicable federal, state or local unemployment insurance law or regulation.
- 1.9 "National Purchasing Partners (NPP)" is a subsidiary of two nonprofit health care systems. The Government Division of NPP, herein after referred to as "NPPGov," provides group purchasing marketing and administrative support for governmental entities within the membership. NPPGov's membership includes participating public entities across North America.
- 1.10 "Lead Contracting Agency" shall mean the Public Procurement Authority, which is the governmental entity that issued the Request for Proposal and awarded this resulting Master Price Agreement.
- 1.11 "Participating Agencies" shall mean members of National Purchasing Partners for which Vendor has agreed to extend the terms of this Master Price Agreement pursuant to Article 2.5 and Attachment C herein. For purposes of cooperative procurement, "Participating Agency" shall be considered "Purchaser" under the terms of this agreement.

### ARTICLE 2 - AGREEMENT TO SELL

- 2.1 Vendor hereby agrees to sell to Purchaser such Products and Services as Purchaser may order from time to time by Purchase Order and accepted in writing by vendor, all in accordance with and subject to the terms, covenants, and conditions of this Agreement. Products and services may be sold through any authorized Vendor dealer as indicated in Vendor's Proposal and listed in Attachment A. Vendor's current authorized dealer list as amended will be available on Vendor website. Purchaser agrees to purchase those Products and Services ordered by Purchaser by Purchase Order in accordance with and subject to the terms, covenants, and conditions of this Agreement. In lieu of a Purchase Order, the customer or vendor contract may be acceptable.
- 2.2 All Purchase Orders issued by Purchaser to Vendor for Products during the Term (as hereinafter defined) of this Agreement are subject to the provisions of this Agreement as though fully set forth in such Purchase Order. The vendor holds authority to negotiate above and beyond the terms of this Agreement to meet the customer or vendor contract requirements. In the event that the provisions of this Agreement shall govern. No other terms and conditions, including, but not limited to, those contained in Vendor's standard printed terms and conditions, on Vendor's order acknowledgment, invoices or otherwise, shall have any application to or effect upon or be deemed to constitute an amendment to or to be incorporated into this Agreement, any Purchase Order, or any transactions occurring pursuant hereto or thereto, unless this Agreement shall be specifically amended to adopt such other terms and conditions in writing by the parties.
- 2.3 Notwithstanding any other provision of this Agreement to the contrary, Purchaser shall have no obligation to order or purchase any Products and Services hereunder and the placement of any Purchase Order shall be in the sole discretion of Purchaser. This Agreement is <u>not exclusive</u>. Vendor expressly acknowledges and agrees that Purchaser may purchase at its sole discretion, Products and Services which are identical or similar to the Products and Services described in this Agreement from any third party.

- 2.4 Except as otherwise expressly set forth herein, in case of any conflict or inconsistency between any of the Contract Documents, the documents shall prevail and apply in the following order of priority:
  - (i) This Agreement;
  - (ii) Vendor's Proposal; and
  - (iii) The RFP.

Vendor has provided a list of Exceptions to the RFP Solicitation identified in Vendor's Proposal. Vendor's Exceptions to the RFP are hereby **approved** and by this reference incorporated herein.

Notwithstanding the foregoing, to the extent there is any conflict between any provision set forth in the main body of this Agreement and any pricing provisions, information and/or schedule(s) set forth in Vendor's Proposal incorporated as Attachment D, the pricing provisions, information and/or schedule(s) set forth in the Vendor's Proposal shall control.

- 2.5 Extension of contract terms to National Purchasing Partners, LLC
  - 2.5.1 Pursuant to Section 1.0 of the RFP, Vendor agrees to extend the same terms, covenants and conditions available to Purchaser under this Agreement to other government agencies and non-profit entities that are members of National Purchasing Partners, that have executed an Intergovernmental Cooperative Purchasing Agreement (IGA) as a Participating Agency as may be required by the government agency's local regulations, and that wish to access this Agreement in accordance with Attachment C which is attached hereto and incorporated herein by reference. Each Participating Agency will be exclusively responsible for and deal directly with Vendor on matters relating to ordering, delivery, inspection, acceptance, invoicing, and payment for Products and Services in accordance with the terms and conditions of this Agreement as if it were "Purchaser" hereunder. Any disputes between a Participating Agency and Vendor will be resolved directly between them under and in accordance with the laws of the State in which the Participating Agency exists. Pursuant to the IGA, the Lead Contracting Agency shall not incur any liability as a result of the access and utilization of this Agreement by other Participating Agencies.
  - 2.5.2 This Solicitation meets the public contracting requirements of the Purchaser and may not be appropriate under or meet Participating Agencies' procurement laws. Participating Agencies are urged to seek independent review by their legal counsel to ensure compliance with all local and state solicitation requirements.
  - 2.5.3 Vendor acknowledges execution of a Vendor Administration Fee Agreement with National Purchasing Partners, LLC, pursuant to the terms of the RFP.
- 2.6 Oregon Public Agencies are prohibited from use of products and services offered under this contract that are already provided by qualified nonprofit agencies for disabled individuals as listed on the Department of Administrative Service's Procurement List ("Procurement List") pursuant to ORS 279.835-.855. See www.OregonRehabilitation.org/qrf for more information. Vendor shall not sell products and services identified on the Procurement List (e.g., reconditioned toner cartridges) to Purchaser or Participating Agencies within the state of Oregon or to public institutions in other states with similar restrictions.

### ARTICLE 3 - TERM AND TERMINATION

- 3.1 The initial contract term shall be for two (2) calendar years from the effective date of this Agreement. Upon termination of the original two (2) year term, this Agreement shall extend for up to three (3) successive one (1) year periods; provided that the Lead Contracting Agency and/or the proposer may opt to decline extension of the MPA by providing notification in writing at least thirty (30) calendar days prior to the annual extension anniversary of the original term.
- 3.2 Either party may terminate this Agreement by written notice to the other party if the other party breaches any of its obligations hereunder and fails to remedy the breach within thirty (30) days after receiving written notice of such breach from the non-breaching party.

### ARTICLE 4 - PRICING, INVOICES, PAYMENT, AND DELIVERY

4.1 Purchaser shall pay Vendor for all Products and Services ordered and delivered in compliance with the terms and conditions of this Agreement on the terms and at the pricing specified for each such Product and Service on Attachment A. The pricing schedule for Products and Services set forth on Attachment A hereto shall remain fixed for the initial six (6) months of the Agreement and will be reviewed and updated by Vendor in six (6) month increments based on the next manufacturer price increase or other indicators that warrant price adjustments. This may include but not limited to changes in the National Fire Protection Association (NFPA) standards and/or Environmental Protection Agency (EPA) requirements.

Pricing contained in Attachment A shall be extended to all NPPGov, FireRescue GPO and Law Enforcement GPO members upon execution of the IGA.

- 4.2 Vendor shall submit original invoices to Purchaser in form and substance and format reasonably acceptable to Purchaser. All invoices must reference the Purchaser's Purchase Order number, contain an itemization of amounts for Products and Services purchased during the applicable invoice period and any other information reasonably requested by Purchaser, and must otherwise comply with the provisions of this Agreement and such reasonable requirements as may be prescribed by Purchaser from time to time. Invoices shall be addressed as directed by Purchaser.
- 4.3 Unless otherwise specified, Purchaser is responsible for any and all applicable sales taxes. Applicable sales tax may be added to the Vendor pricing, in which case the Purchaser is not required to pay sales tax direct to the purchaser's state.
- 4.4 Purchaser shall not be responsible for any additional costs or expenses incurred by Vendor in connection with the Products and Services except those set forth in Attachment A and Attachment F, including (but not limited to) the "Pre-Delivery Expenses" section of Attachment F.
- 4.5 Price reductions or discount increases may be offered at any time during the contract term and shall become effective upon notice of acceptance from Purchaser.
- 4.6 Unless otherwise expressly agreed upon in writing by the parties (in a Purchase Order or otherwise), and as set forth in Attachments D and F herein, Vendor shall deliver Products to the requesting Participating Agency FOB Manufacturer's facility. As set forth in Attachment F, Vendor will, upon Participating Agency's request, assist with coordinating transportation of the Product, provided that such shipping/delivery costs are not included in the pricing and will be the sole responsibility of the Participating Agency.

4.7 Vendor shall have the risk of loss of or damage to any Products until delivery to Purchaser at shipping point (FOB Manufacturer's facility). Purchaser shall have the risk of loss of or damage to the Products after delivery to Purchaser. Notwithstanding the foregoing, and unless otherwise expressly agreed to by the Parties in writing, title to Products shall not transfer to Purchaser until Purchaser has fully satisfied all of its payment obligations hereunder. Note: final payment is different than an elected pre-payment, and cannot to be used interchangeable.

### ARTICLE 5 - INSURANCE

5.1 During the term of this Agreement, Vendor shall maintain at its own cost and expense (and shall cause any subcontractor to maintain) insurance policies providing insurance of the kind and in the amounts generally carried by reasonably prudent manufacturers in the industry, with one or more reputable insurance companies licensed to do business in Oregon and any other state or jurisdiction where Products and Services are sold hereunder. Such certificates of insurance shall be made available to the PPA within thirty (30) days of request.

BY SIGNING THE AGREEMENT PAGE THE VENDOR AGREES TO THIS REQUIREMENT AND FAILURE TO MEET THIS REQUIREMENT WILL RESULT IN CANCELLATION OF THIS MASTER PRICE AGREEMENT.

- 5.2 All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Master Price Agreement is satisfactorily completed and formally accepted. Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect coverage afforded under the insurance policies to protect the Public Procurement Authority. The insurance policies may provide coverage that contains deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to the Public Procurement Authority under such policies. Vendor shall be solely responsible for the deductible and/or self-insured retention and the Public Procurement Authority, at its option, may require Vendor to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.
- 5.3 Vendor shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction over Vendor's employees engaged in the performance of the work or services, as well as Employer's Liability insurance. Vendor waives all rights against the Public Procurement Authority and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the Workers' Compensation and Employer's Liability or commercial umbrella liability insurance obtained by Vendor pursuant to this agreement.
- 5.4 Insurance required herein shall not be permitted to expire, be canceled, or materially changed without prior written notice to the Public Procurement Authority. The Public Procurement Authority will be sent an updated certificate of insurance twice annually with current effective policies.
- 5.5 Notwithstanding the foregoing, to the extent there is any conflict between any provision set forth in Article 5 of this Agreement and any insurance provisions, information and/or certificate(s) set forth in or attached to Vendor's Proposal incorporated as Attachment D, the insurance provisions, information and/or certificate(s) set forth in or attached to Vendor's Proposal shall control.

### ARTICLE 6 - INDEMNIFICATION AND HOLD HARMLESS

- Vendor agrees that it shall indemnify, defend and hold harmless Purchaser, its respective officials, 6.1 directors, employees and agents (collectively, the "Indemnities"), and National Purchasing Partners, LLC from and against any and all damages, claims, proceedings, losses, expenses, costs, obligations and liabilities (including without limitation reasonable attorney's fees), suffered directly or indirectly by any of the Indemnities to the extent, or arising out of any third-party claim alleging: (i) any breach of any covenant, representation or warranty made by Vendor in this Agreement, (ii) any failure by Vendor to perform or fulfill any of its obligations, covenants or agreements set forth in this Agreement, (iii) the negligence or intentional misconduct of Vendor, any subcontractor of Vendor, or any of their respective employees or agents, (iv) any failure of Vendor, its subcontractors, or their respective employees to comply with any Applicable Law, (v) any litigation, proceeding or claim by any third party relating in any way to the obligations of Vendor under this Agreement or Vendor's performance under this Agreement, (vi) any Employee Taxes or Unemployment Insurance, or (vii) any claim alleging that the Products and Services or any part thereof infringe any third party's U.S. patent, copyright, trademark, trade secret or other intellectual property interest. Such obligation to indemnify shall not apply where the damage, claim, loss, expense, cost, obligation or liability is due to the breach of this Agreement by, or negligence or willful misconduct of, Purchaser or its officials, directors, employees, agents or contractors. In addition, Vendor shall not be liable for infringement claims related to nonstandard or special-order product, the design of which is provided to Vendor by Purchaser. The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph. The provisions of this Article shall survive the expiration or termination of this Agreement.
- 6.2 LIMITATION OF LIABILITY: IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR INJURIES TO PERSONS OR TO PROPERTY OR LOSS OF PROFITS OR LOSS OF FUTURE BUSINESS OR REPUTATION, WHETHER BASED ON TORT OR BREACH OF CONTRACT OR OTHER BASIS, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- 6.3 The same terms, conditions and pricing of this Agreement may be extended to government members of National Purchasing Partners, LLC. In the event the terms of this Agreement is extended to other government members, each government member (procuring party) shall be solely responsible for the ordering of goods and services under this Agreement. A non-procuring party shall not be liable in any fashion for any violation by a procuring party, and the procuring party shall hold non-procuring parties or unrelated purchasing parties harmless from any liability that may arise from action or inaction of the procuring party.

### ARTICLE 7 - WARRANTIES

Purchaser shall refer to Vendor's Proposal for all Vendor and manufacturer express warranties, as well as those warranties provided under Attachment B herein. Warranties tie to the specific unit purchased at time of sale.

### ARTICLE 8 - INSPECTION AND REJECTION

- 8.1 Purchaser shall have the right to inspect and test Products at any time prior to shipment from Manufacturer's facility. Products for which a written notice of defect has not been delivered to the Vendor within fifteen (15) days prior to delivery shall be deemed accepted by Purchaser. The payment for Products shall in no way impair the right of Purchaser to reject nonconforming Products, or to avail itself of any other remedies to which it may be entitled.
- 8.2 If any of the Products are found at any time to be materially defective in material or workmanship, damaged, or otherwise not in conformity with the requirements of this Agreement or any applicable Purchase Order, and a written notice of defect has been delivered to the Vendor within fifteen (15) days of delivery, as its exclusive remedy, Purchaser may at its option and at Vendor's sole cost and expense, elect either to (i) return any damaged, non-conforming or defective Products to Vendor for correction or replacement, or (ii) require Vendor to inspect the Products and remove or replace damaged, non-conforming or defective Products. If Purchaser elects option (ii) in the preceding sentence and Vendor fails within thirty (30) days of written notice thereof to initiate the necessary inspection, removal and replacement, Purchaser, at its option, may inspect the Products and Vendor shall bear the cost thereof. Payment by Purchaser of any invoice shall not constitute acceptance of the Products covered by such invoice, and acceptance by Purchaser shall not relieve Vendor of its warranties or other obligations under this Agreement.
- 8.3 The provisions of this Article shall survive the expiration or termination of this Agreement.

### ARTICLE 9 – SUBSTITUTIONS

Except as otherwise permitted hereunder, Vendor may not make any substitutions of Products, or any portion thereof, of any kind without the prior written consent of Purchaser. However vendor substitutions that do not change the fit, form, and/or function of the product and are insignificant in nature, such as cosmetic changes, do not require prior written consent.

## ARTICLE 10 - COMPLIANCE WITH LAWS

- 10.1 Vendor agrees to comply with all Applicable Laws. At Vendor's expense, secure and maintain in full force during the term of this Agreement, all licenses, permits, approvals, authorizations, registrations and certificates, if any, required by Applicable Laws in connection with the performance of its obligations hereunder. At Purchaser's request, Vendor shall provide to Purchaser copies of any or all such licenses, permits, approvals, authorizations, registrations and certificates.
- 10.2 Purchaser has taken all required governmental action to authorize its execution of this Agreement and there is no governmental or legal impediment against Purchaser's execution of this Agreement or performance of its obligations hereunder.

## ARTICLE 11 – PUBLICITY / CONFIDENTIALITY

11.1 Except as otherwise expressly authorized herein, no news releases, public announcements, advertising materials, or confirmation of same, concerning any part of this Agreement or any Purchase Order issued hereunder shall be issued or made without the prior written approval of the parties or the commencement of the agreement to the public forum. Neither party shall in any advertising, sales materials or in any other

way use any of the names or logos of the other party without the prior written approval of the other party or the commencement of the agreement to the public forum. The vendor is to market this program as an avenue to procure fire apparatus and will require marketing material to promptly initiate awareness including but not limited to names and logos. Notwithstanding the foregoing, following the completion of a sale to any Participating Agency hereunder, Vendor shall have the right to make general news releases and/or public announcements confirming the sale of a Product to such Participating Agency without the prior written approval of the parties, so long as such general news release and/or public announcement do not reference this Agreement (and/or any of the terms, covenants, and conditions set forth herein).

11.2 Any knowledge or information which Vendor or any of its affiliates shall have disclosed or may hereafter disclose to Purchaser, and which in any way relates to the Products and Services covered by this Agreement shall not, unless otherwise designated by Vendor, be deemed to be confidential information, and shall be acquired by Purchaser, free from any confidentiality restrictions, as part of the consideration for this Agreement. Note: designation of confidential material required and to be retained by Vendor.

### ARTICLE 12 - RIGHT TO AUDIT

Subject to Vendor's reasonable security and confidentiality procedures, Purchaser, or any third party retained by Purchaser, may at any time upon prior reasonable notice to Vendor, during normal business hours, audit the books, records and accounts of Vendor to the extent that such books, records and accounts pertain to sale of any Products and Services hereunder or otherwise relate to the performance of this Agreement by Vendor and are related to a sale which has been made hereunder this agreement. Vendor shall maintain all such books, records, and accounts for a period of at least three (3) years after the date of expiration or termination of this Agreement. The Purchaser's right to audit under this Article 12 and Purchaser's rights hereunder shall survive the expiration or termination of this Agreement for a period of three (3) years after the date of such expiration or termination.

### **ARTICLE 13 - REMEDIES**

Except as otherwise provided herein, any right or remedy of Vendor or Purchaser set forth in this Agreement shall not be exclusive, and, in addition thereto, Vendor and Purchaser shall have all rights and remedies under applicable law, including without limitation, equitable relief. The provisions of this Article shall survive the expiration or termination of this Agreement.

#### **ARTICLE 14 - RELATIONSHIP OF PARTIES**

Vendor is an independent contractor and is not an agent, servant, employee, legal representative, partner or joint venturer of Purchaser. Nothing herein shall be deemed or construed as creating a joint venture or partnership between Vendor and Purchaser. Neither party has the power or authority to bind or commit the other.

### **ARTICLE 15 - NOTICES**

All notices required or permitted to be given or made in this Agreement shall be in writing. Such notice(s) shall be deemed to be duly given or made if delivered by hand, by certified or registered mail or by nationally recognized overnight courier to the address specified below:

If to Purchaser: Public Procurement Authority 25030 SW Parkway Ave. Suite 330 Wilsonville OR 97070 ATTN: Heidi Arnold

If to Vendor: Pierce Manufacturing Company 2600 American Drive Appleton, WI 54914 ATTN: Mark Smith

Either party may change its notice address by giving the other party written notice of such change in the manner specified above.

### **ARTICLE 16 - FORCE MAJEURE**

Delay in performance or non-performance of any obligation contained herein shall be excused to the extent such failure or non-performance is caused by force majeure. For purposes of this Agreement, "force majeure" shall mean any cause or agency preventing performance of an obligation which is beyond the reasonable control of either party hereto, including without limitation, fire, flood, sabotage, shipwreck, embargo, strike, explosion, labor trouble, accident, riot, acts of governmental authority (including, without limitation, acts based on laws or regulations now in existence as well as those enacted in the future), acts of God, and delays or failure in obtaining raw materials, supplies or transportation. A party affected by force majeure shall promptly provide notice to the other, explaining the nature and expected duration thereof, and shall act diligently to remedy the interruption or delay if it is reasonably capable of being remedied. In the event of a force majeure situation, deliveries or acceptance of deliveries that have been suspended shall not be required to be made upon the resumption of performance.

#### **ARTICLE 17 - WAIVER**

No delay or failure by either party to exercise any right, remedy or power herein shall impair such party's right to exercise such right, remedy or power or be construed to be a waiver of any default or an acquiescence therein; and any single or partial exercise of any such right, remedy or power shall not preclude any other or further exercise thereof or the exercise of any other right, remedy or power. No waiver hereunder shall be valid unless set forth in writing executed by the waiving party and then only to the extent expressly set forth in such writing.

#### **ARTICLE 18 - PARTIES BOUND; ASSIGNMENT**

This Agreement shall inure to the benefit of and shall be binding upon the respective successors and assigns of the parties hereto, but it may not be assigned in whole or in part by Vendor without the prior written consent of Purchaser which shall not be unreasonably withheld or delayed. Vendor shall not delegate its duties under this Agreement nor assign monies due or to become due to it hereunder without prior written consent of Purchaser. Purchaser may freely assign this Agreement to an instrumentality thereof or to a third party responsible for administering this Agreement on behalf of Purchaser.

### ARTICLE 19 - SEVERABILITY

To the extent possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Agreement is declared invalid or unenforceable, by judicial determination or otherwise, such provision shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provision or provisions and the rights and obligations of the parties shall be construed and enforced accordingly.

### **ARTICLE 20 - INCORPORATION; ENTIRE AGREEMENT**

- 20.1 All the provisions of the Attachments hereto are hereby incorporated herein and made a part of this Agreement. In the event of any apparent conflict between any provision set forth in the main body of this Agreement and any provision set forth in the Attachments, including the RFP and/or Vendor's Proposal, the provisions shall be interpreted, to the extent possible, as if they do not conflict. In the event that such an interpretation is not possible, the provisions set forth in the main body of this Agreement shall control; provided, however, that, notwithstanding the foregoing, to the extent there is any conflict between any provision set forth in the main body of this Agreement and/or schedule(s) set forth in Vendor's Proposal incorporated as Attachment D, the pricing provisions, information and/or schedule(s) set forth in the Vendor's Proposal shall control.
- 20.2 This Agreement (including Attachments and Contract Documents hereto) constitutes the entire agreement of the parties relating to the subject matter hereof and supersedes any and all prior written and oral agreements or understandings relating to such subject matter.

## ARTICLE 21 - HEADINGS

Headings used in this Agreement are for convenience of reference only and shall in no way be used to construe or limit the provisions set forth in this Agreement.

## **ARTICLE 22 - MODIFICATIONS**

This Agreement may be modified or amended only in writing executed by both parties hereto.

## **ARTICLE 23 - GOVERNING LAW**

This Agreement shall be governed by and interpreted in accordance with the laws of the state of Oregon or in the case of a Participating Agency's use of this agreement, the laws of the state in which the Participating Agency exists, without regard to its choice of law provisions.

# ARTICLE 24 - COUNTERPARTS

This Agreement may be executed in counterparts all of which together shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year last written below.

<u>PURCHASER:</u> <u>Xleidi</u> arnold
Printed Name: Heidi Arnold
Title: <u>Contracts Manager</u> Public Procurement Authority
Dated: aug 13, 2015
VENDOR: mlandalas
Printed Name: Michael Pack
Title: VP Finance Pierce Manufacturing Company
Dated: 8-13-15

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# ATTACHMENT A

# to Master Price Agreement by and between <u>VENDOR</u> and <u>PURCHASER</u>.

# PRODUCTS, SERVICES, SPECIFICATIONS AND PRICES

Original Price List has been removed but is available upon request. Current Price List is included in Attachment A in the Amendment set forth at the beginning of this document.

# ATTACHMENT B

# to Master Price Agreement by and between <u>VENDOR</u> and <u>PURCHASER</u>.

# **ADDITIONAL SELLER WARRANTIES**

To the extent possible, Vendor will make available all warranties from third party manufacturers of Products not manufactured by Vendor, as well as any warranties identified in this Agreement and Vendor's Proposal.

<u>Warranty</u>

Option #	Description	Category
0652758	Warranty, ABS Brake System, 3 Year, Meritor Wabco, WA0232	Warranty, ABS, Custom
0057002	Warranty, Structure, 10 Year, Aerial Device, Sky Arm, WA0053	Warranty, Aerial Device
0006999	Warranty, Structure, 20 Year, Aerial Device, WA0052	Warranty, Aerial Device
0685727	Warranty, Hydraulic System and Components, 3 Year/5 Year, WA0200	Warranty, Aerial Device, Added
0632349	Warranty, Aerial Device, Snozzle, WR0007	Warranty, Aerial Device, Snozzle
0595780	Warranty, Service, 1 Year, Refurb, WA0032	Warranty, Body, Structural
0596025	Warranty, Structure, 10 Year, Body, WA0009	Warranty, Body, Structural
0596022	Warranty, Structure, 10 Year, Encore Rescue, WA0016	Warranty, Body, Structural
0596023	Warranty, Structure, 10 Year, PMFD Rescue, WA0015	Warranty, Body, Structural
0596024	Warranty, Structure, 15 Year, HDR, WA0010	Warranty, Body, Structural
0596027	Warranty, Structure, 2 Year, Mini Pumper, WA0001	Warranty, Body, Structural
0596026	Warranty, Structure, 5 Year, Tanker/Pumper, WA0005	Warranty, Body, Structural
0019914	Warranty, Structure, 10 Year, Custom Cab, WA0012	Warranty, Cab
0695416	Warranty, Pierce Camera System, WA0188	Warranty, Camera System
0553301	Warranty, Chassis, 3 Year, Velocity/Impel, WA0037	Warranty, Chassis
0596017	Warranty, Frame, 50 Year, Custom Chassis, WA0013	Warranty, Chassis Frame
0681622	Warranty, Basic Vehicle, 1 yr or 100,000 Miles, KW-T800	Warranty, Chassis, Commercial
0681665	Warranty, Basic Vehicle, 1 yr or 100,000 Miles, Peterbilt 367	Warranty, Chassis, Commercial
0681666	Warranty, Basic Vehicle, 1 yr, IHC 7400/7500/7600	Warranty, Chassis, Commercial
0681667	Warranty, Basic Vehicle, 1 yr, KW-T370	Warranty, Chassis, Commercial
0648597	Warranty, Basic Vehicle, Severe Service, 1 yr or 50,000 Miles Peterbilt	Warranty, Chassis, Commercial
0648403	Warranty, Basic Vehicle, Severe Service, 1 yr or 50,000 Miles, Kenworth	Warranty, Chassis, Commercial
0648375	Warranty, Basic Vehicle, Severe Service, 1 yr or 80,000 Km, Canada, Kenworth	Warranty, Chassis, Commercial
0648376	Warranty, Basic Vehicle, Severe Service, 1 yr or 80,000 Km, Canada, Peterbilt	Warranty, Chassis, Commercial
0638262	Warranty, Basic Vehicle, 5 yrs/100,000 Miles, FXP	Warranty, Chassis, Commercial
0553455	Warranty, Electronics, 5 Year, MUX, WA0014	Warranty, Command Zone Body
0647720	Warranty, Pierce LED Strip Lights, WA0203	Warranty, Compartment Lights

Option #	Description	Category
0696698	Warranty, Engine, Cummins, 5 Year, WA0181	Warranty, Engine
0696696	Warranty, Engine, Detroit DD13, 5 Year, WA0180	Warranty, Engine
0030008	Warranty, Basic, 1 Year, Apparatus, WA0008	Warranty, Fire Apparatus
0080020	Warranty, Commercial Chassis, Statement Not Required	Warranty, Fire Apparatus
0657846	Warranty, Foam System, Husky 12, WA0231	Warranty, Foam System
0657990	Warranty, Foam System, Husky 3, WA0231	Warranty, Foam System
0595424	Warranty, Frame, 10 Year, Encore Rescue, WA0017	Warranty, Frame, Encore Rescue, Commercial Chassis
0663011	Warranty, Axle, 1 Year, Marmon Harrington, General Service	Warranty, Front Axle
0530523	Warranty, Axle, 2 Year, Meritor, General Service, WA0046	Warranty, Front Axle
0595698	Warranty, Axle, 3 Year, TAK-4, WA0050	Warranty, Front Axle
0696094	Warranty, Axle, Eaton/Dana, 3 Year Parts and Labor, WA0184	Warranty, Front Axie
0595421	Warranty, Goldstar, 3 Year, Apparatus, WA0018	Warranty, Graphics
0595 <mark>412</mark>	Warranty, Graphics Lamination, 1 Year, Apparatus, WA0168	Warranty, Graphics
0524627	Warranty, Electronics, 5 Year, MUX, WA0014	Warranty, Multiplexed Electrical System
0661058	Warranty, Electronics, Weldon V-MUX	Warranty, Multiplexed Electrical System
0595860	Warranty, Paint, 4 Year, Aerial Device, Pro-Rated, WA0047	Warranty, Paint, Aerial Device
0595820	Warranty, Paint, 10 Year, Body, Pro-Rate, WA0057	Warranty, Paint, Body
0595547	Warranty, Paint, 12 Year, S/S Body, Pro-Rate, WA0058	Warranty, Paint, Body
0595282	Warranty, Cab Paint, As Provided By Chassis Manufacturer, Commercial	Warranty, Paint, Cab
0595813	Warranty, Paint, 10 Year, Cab, Pro-Rate, WA0055	Warranty, Paint, Cab
0648675	Warranty, 10 Year S/S Pumbing, WA0035	Warranty, Plumbing
0035034	Warranty, Plumbing, Standard	Warranty, Plumbing
0582298	Warranty, Pump, Darley, 3 Year Parts, 3 Year Labor, WA0179	Warranty, Pump
0582368	Warranty, Pump, Darley, 6 Year Parts, 3 Year Labor, WA0179	Warranty, Pump
0639206	Warranty, Pump, Hale, 1 Year Parts, WA0248	Warranty, Pump
0639211	Warranty, Pump, Hale, 5 Year Parts, 2 Year Labor, WA0248	Warranty, Pump
0516693	Warranty, Pump, Pierce, PUC, 6 Year, WA0039	Warranty, Pump
0004575	Warranty, Pump, Waterous, 2 Year Parts, WA0227	Warranty, Pump
0063510	Warranty, Pump, Waterous, 5 Year Parts, WA0225	Warranty, Pump

Option #	Description	Category
0530524	Warranty, Axle, 2 Year, Meritor, General Service, WA0046	Warranty, Rear Axle
0644874	Warranty, Axle, 3 Year, TAK-4, IRS, WA0249	Warranty, Rear Axle
0564751	Warranty, Axle, Eaton/Dana, 3 Year Parts and Labor, WA0184	Warranty, Rear Axle
0693126	Warranty, AMDOR, Roll-up Door, 10 Year/5 Year Painted, WA0185	Warranty, Roll-up Doors
0693127	Warranty, Gortite, Roll-up Door, 6 Year, WA0190	Warranty, Roll-up Doors
0681118	Warranty, ROM, Roll-up Door, 7 Year, WA0206	Warranty, Roll-up Doors
0684953	Warranty, Steering Gear, Sheppard M110, 3 Year WA0201	Warranty, Steering Gear
0684952	Warranty, Steering Gear, TRW Ross TAS, 1 Year WA0202	Warranty, Steering Gear
0687388	Warranty, Swivels, 5 Year, Aerial Device, WA0197	Warranty, Swivels, Aerial Device
0001508	Warranty, 1-year Transmission (std MT)	Warranty, Transmission
002151 <mark>6</mark>	Warranty, 5-Year EVS Transmission, Standard Comm, WA0187	Warranty, Transmission
0060356	Warranty, Transmission, Standard Ford	Warranty, Transmission
0685945	Warranty, Transmisson Cooler, WA0216	Warranty, Transmission Cooler
0688798	Warranty, Water Tank, Lifetime, UPF, Poly Tank, WA0195	Warranty, Water Tank

### ATTACHMENT C

#### to Master Price Agreement by and between <u>VENDOR</u> and <u>PURCHASER</u>.

### PARTICIPATING AGENCIES

Purchaser served as the Lead Contracting Agency in cooperation with National Purchasing Partners and on behalf of other government agencies that desire to access the Master price Agreement. Vendor must deal directly with any Participating Agency concerning the placement of orders, issuance of the purchase orders, contractual disputes, invoicing, and payment. The Purchaser is acting as "Lead Contracting Agency" for the Participating Agencies and shall not be held liable for any costs, damages, etc., incurred by any Participating Agency.

The subsequent contract shall be construed to be in accordance with and governed by the laws of the state in which the Participating Agency exists. Each Participating Agency is required to execute an Intergovernmental Cooperative Purchasing Agreement ("IGA"), as set forth on the National Purchasing Partners web site, www.nppgov.com and <u>www.firerescue-gpo.com</u>. The IGA allows the Participating Agency to purchase Products and Services from the Vendor in accordance with each Participating Agency's legal requirements.

## ATTACHMENT D

# to Master Price Agreement by and between <u>VENDOR</u> and <u>PURCHASER</u>.

Pierce Manufacturing, Inc's proposal in response to PPA RFP #1420 FIRE APPARATUS, published on October 22, 2014 and submitted on February 12, 2015 to the Public Procurement Authority is not attached hereto but is incorporated by reference herein.

### ATTACHMENT E

# to Master Price Agreement by and between <u>VENDOR</u> and <u>PURCHASER</u>.

Public Procurement Authority's Request for Proposal #1420 FIRE APPARATUS, published on October 22, 2014 and closing on February 12, 2015 is not attached hereto but is incorporated by reference herein.

### ATTACHMENT F

#### to Master Price Agreement by and between <u>VENDOR</u> and <u>PURCHASER</u>.

### ADDITIONAL VENDOR TERMS OF PURCHASE

This attachment includes the following:

Performance Bonds Pre-Payment Discount Pre-Delivery Expenses Transportation Expenses Manuals Service Training

#### Performance Bonds

A performance bond is a <u>surety bond</u> issued to guarantee satisfactory completion of a project by a contractor. In other words, it is a guarantee that if a Manufacturer goes out of business or bankrupt the Fire Department will not be at a loss. This is especially important if pre-payment options are elected. If a customer does not require a performance bond and makes any payment in advance, the customer could potentially be out those funds and not receive the apparatus they purchased. The rate for a performance bond is set for a given manufacturer by a surety company that has evaluated the manufacturer's ability to satisfy contractual obligations, the lower the rate the more confidence the surety company is expressing in the manufacturer. Pierce Manufacturing Inc. can currently provide a performance bond at a cost of \$2.70 per \$1,000.00 of contract amount. The actual rate will vary from time to time.

#### Payment & pricing options:

*Chassis Progress Payment Discount:* Discount of approximately 2.5% to 3% of custom chassis price is offered if chassis progress payment is made three (3) months prior to the RFP (ready for pick up from the factory) date. Example: Chassis progress payment in the amount of \$220,714.00 could earn a discount of (\$6,621.00). This discount is not available for Commercial chassis products.

Aerial Device Progress Payment Discount: Discount of approximately 1.5% to 2% of aerial device price is offered if aerial device progress payment is made two (2) months prior to the RFP (ready for pick up from the factory) date. Example: Aerial device progress payment in the amount of \$310,385.00 could earn a discount of (\$6,207.00).

#### Pre-Payment Discount

Discount amount varies dependent upon apparatus price, delivery schedule, and extent of pre-payment and applicable rate. If elected, payment for the entire contract amount is due within thirty (30) days of contract

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execution. This deduction is in addition to all other discounts listed above. If this option is elected, final payment for any changes processed during manufacturing is due prior to the unit leaving the factory for delivery.

### Multi-Unit Purchase Discount:

Discounts may be available for identical multi-unit purchases. Discount varies dependent upon number of identical units purchased and will be handled on a case by case basis.

#### Pre-Delivery Expenses

Dealer provided options can be added to the apparatus contract upon request and will be handled by the Pierce authorized dealer. Dealer provided options can vary depending upon the customer's request and can include but are not limited to the items listed below. Pricing will be provided to each customer upon request and varies by dealership and customer location.

- Factory inspection trips
- Weekly construction photo progress reports beginning at the cab weld stage and typically ending one week prior to the RFP date. Includes approximately 6 reports.
- Orientation DVD specific to your apparatus
- Loose Equipment
- Engine and or transmission diagnostic software
- Monitors
- Hose
- Intercom System
- Radio Equipment
- Rescue Tools and Equipment
- · Pre delivery service consisting of basic fluid and filter's
- · Custom fabrication for tool mounting and communication equipment
- Other items as requested by customer

#### Transportation Expenses

Prices quoted in PPA RFP #1420 are FOB Manufacturer's facility. Transportation of the apparatus from the factory to the customer's facility can be added to the contract. In most cases the apparatus is delivered to the Pierce authorized dealer facility in your area for a Pre-Delivery inspection and the installation of any dealer provided options, if applicable. If there is not a Pierce authorized dealer facility in close proximity to your location the apparatus may be delivered directly to your facility. The cost for this transportation varies dependent upon the type of apparatus and the proximity of your facility to the location of the manufacturer's facility. *Delivery is conducted in accordance with DOT regulations*.

Delivery charges can vary from as low as \$1,000.00 to as high as \$15,000.00 or more if flatbed, barge, or container ship transport is required.

If delivery is added to the contract, upon arrival of the apparatus from the factory at the authorized dealer

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facility, a pre-delivery inspection is conducted to address any issues that may have arisen during transportation from the factory. Below is an example of the in-depth inspection provided by Hughes Fire Equipment, Inc. on apparatus sold within their authorized sales territory. Pre-delivery inspections may vary slightly among Pierce authorized dealerships.

- 1. Fill Water Tank, monitor tank level gauge for accuracy, check for leaks or seepage into foam tanks
- Check all engine and drive train fluid levels, such as engine oil, transmission fluid, differential oil, power steering fluid, wheel hub oil, engine coolant; pump transmission fluid, cab lift fluid, windshield wiper fluid, ladder rack fluid etc.
- 3. Check all compartment doors for adjustment
- 4. Check all compartment lighting
- 5. Operate all equipment racks and reels for proper extension and retraction
- 6. Check calibration of CZ II time and temperature, set for local time zone
- 7. Fill foam cells with water, add dye packet or soap solution, and check for external leaks as well as seepage into the water tank. Monitor foam level gauge for accuracy.
- 8. Check tire pressure, set as needed
- 9. Torque all wheel lug nuts
- 10. Torque suspension U-bolts to manufacturer spec's
- 11. Grease chassis
- 12. Inspect hoses and wiring harnesses for proper routing and signs of abrasion
- 13. Verify operation of all water pump components including primer pulp fluid level, dry vacuum test, pressure governor/relief valve, transfer valve, cap all discharges and check for gauge accuracy
- 14. Verify operation of all foam system components (use dyed water or soap solution to simulate foam) including foam system hydraulic fluid level, while discharging water operate system, verify color/bubbly water in each discharge plumbed for foam, flush system, verify operation of fill pump if equipped
- 15. Operate generator or invertor including check hydraulic fluid level (PTO driven), check engine oil (engine driven), operate all 120v lighting and appliances, verify power at all cord reels
- Operate all external lights and warning systems including headlights, turn signals, hazards, brake lights, backup lights, emergency lighting, 12v scene lighting, perimeter (step/pump panel) lighting, siren/air horn/electric horn
- 17. Verify the operation of all interior controls in the cab including heater/ac, windshield wipers, electric mirrors, electric windows, high idle, verify warning alarm and light, "do not move truck"
- 18. Drain water tank, foam cells and water pump prior to delivery to customer
- 19. Burnish brakes, custom chassis only
- 20. Address any issues that developed during transportation of apparatus from factory
- 21. Fill fuel tank prior to delivery to customer
- 22. Wash and detail
- 23. Delivery apparatus to customer facility if required by contract

If any warranty repair items arise during the Pre-delivery inspection they are addressed and repaired prior to delivery of the apparatus to the customer when possible. If delivery of the apparatus to the customer's facility occurs prior to completion of an open warranty item a service technician is sent to the customer's facility to complete such repairs under warranty when possible.

#### Manuals

The manufacturer shall supply at time of delivery, complete operation and maintenance manuals covering the complete apparatus as delivered. A permanent plate shall be mounted in the driver's compartment which specifies the quantity and type of fluid required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

#### Service

The authorized Pierce dealer is able to render prompt service and furnish replacement parts in addition to operating a factory authorized service center and parts repository capable of satisfying the warranty service requirements and parts requirements of the vehicle(s) being purchased.

The Pierce authorized Dealer has staffing of factory-trained mechanics, well versed in all aspects of service for all major components of the apparatus.

As the manufacturer, facilities are available in Appleton, WI, Weyauwega, WI, and Bradenton, FL. These facilities are equipped with factory personnel and inventory in excess of \$5 million in inventory dedicated to service and replacement parts to ensure quick response and minimize down time.

Furthermore, Pierce Manufacturing Inc. houses inventory in a dedicated facility, with a dedicated shipping area that ensures service parts are given priority and extends a customized, Pierce aftermarket website for authorized Dealers to conduct business in real-time.

Parts identification is provided to both the dealer and the Fire Department through an on line web based application for the specific truck. Access will be granted using the specific VIN number of the vehicle and the online web application provides the ability to view complete bills of materials, digital photographs, parts drawings, assembly drawings, and access to all current operation, maintenance and service publications. The end user can access this information via the Guest Login.

Pierce Manufacturing Inc. maintain a 24 hour/ 7 day a week, toll free emergency hot line and employs a staff of 30+ dedicated individuals to troubleshooting and parts support.

Both Pierce and their authorized Dealers are capable of providing both in-house and on-site service for the apparatus along with training per request.

Replacement parts and various levels of service after delivery are available from your local Pierce authorized dealer, including but not limited to those shown below:

#### SERVICE:

- Warranty repair for Pierce product line for all items with the exception of those that must be handled directly by the component manufacture such as engine etc.
- Direct access to Pierce technical support
- Routine preventative maintenance
- Annual aerial ladder testing

- Pump testing
- Ground ladder testing
- NFPA 1911 annual inspections maintenance and testing
- Repairs from small minor issues to major overhauls and many other services
- Dealer repair services extend to most other fire and emergency rescue product lines in addition to Pierce Manufacturing
- Service provided by EVT, ASE, Pierce and industry specific certified technicians
- All Pierce authorized sales and service dealer have access to Pierce's extensive level of technical and customer service support staff

### PARTS:

- OEM supplier of large assortment of products supplied with fire and emergency rescue vehicles
- Large inventory of parts on-site Example: Hughes Fire facilities inventory over \$400,000.00 worth of over 2000 of the most commonly required parts and components required for apparatus repair. This level of inventory enables "out of service" time to be kept to a bare minimum.
- All Pierce authorized sales and service dealers have access to Pierce's extensive level of replacement parts inventory, which is in excess of \$5M as well as any Pierce required fabrication services

### Training

Every aerial product purchase has training included with a Pierce certified trainer that performs onsite operational training.

Customer Service also offers operational and maintenance training throughout the calendar year at regional locations for a nominal fee per person. List of classes offered can be viewed at any time and registered online at <u>www.pierceparts.com</u>.

## NOTICE OF SOLICITATION

# **PUBLIC PROCUREMENT AUTHORITY**

**RFP NUMBER 1420** 

## SOLICITATION FOR: FIRE APPARATUS

Notice is hereby given sealed proposals will be received by the Public Procurement Authority at the address listed below, until **5:00 PM PST** on **February 12**, **2015** for FIRE APPARATUS for the Public Procurement Authority and government members of National Purchasing Partners across the nation, including Oregon and Idaho governmental units incorporated by "ATTACHMENT H" of the RFP, WIPHE members identified in "ATTACHMENT G" of the RFP, as well as government units in all other states. Significant sales potential exists because the resulting Master Price Agreement for national proposers will include piggy backing language that will permit use of the Master Price Agreement nationwide without the need for Participating Agencies to duplicate the formal solicitation process and expend staff resources and funds.

All Proposals must be signed, sealed and addressed to:

#### **Mailing Address:**

### PPA FIRE APPARATUS RFP #1420 Public Procurement Authority c/o Heidi Chames 25030 SW Parkway Ave. Suite 330 Wilsonville, OR 97070

#### and marked "RFP NUMBER 1420 FOR FIRE APPARATUS"

# **NOTE:** THE PUBLIC PROCUREMENT AUTHORITY WILL NOT ACCEPT PROPOSAL ENVELOPES WITH INSUFFICIENT POSTAGE.

#### **INQUIRIES**:

### PPA FIRE APPARATUS RFP #1420 Public Procurement Authority c/o Heidi Chames 25030 SW Parkway Ave. Suite 330 Wilsonville, OR 97070

855-524-4572 or <u>questions@ProcurementAuthority.org</u>

**NOTE:** PUBLIC PROCUREMENT AUTHORITY PUBLISHES ITS NOTICE OF SOLICITATIONS IN THE OREGON DAILY JOURNAL OF COMMERCE, USA TODAY AND ONLINE AT <u>www.ProcurementAuthority.org</u>, www.findrfp.com and www.nppgovernment.com

REQUESTS FOR PROPOSALS (RFP's) ARE AVAILABLE FOR VIEWING AND/OR DOWNLOADING ONLINE AT www.ProcurementAuthority.org, www.findrfp.com and www.nppgovernment.com

# PUBLIC PROCUREMENT AUTHORITY FIRE APPARATUS REQUEST FOR PROPOSAL

RFP NUMBER 1420

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# **IMPORTANT**

# PLEASE READ BEFORE SUBMITTING YOUR PROPOSAL

## SOLICITATIONS FOR: FIRE APPARATUS

## 1.0 <u>INTENT</u>:

1.1 GENERAL INTENT

The Public Procurement Authority (PPA) serves as the "Lead Contracting Agency" for this solicitation on behalf of its members, and as authorized by the Public Procurement Authority Intergovernmental Agreement, which is an agreement for intergovernmental cooperation among select local Oregon governments and recognized under ORS Chapter 190, in association with National Purchasing Partners, LLC (NPP), on behalf of NPP's government members (hereinafter referred to as "Participating Agencies") across the nation, including members of FireRescue GPO (FRGPO) and Public Safety GPO (PSGPO), Idaho and Oregon local government units (ATTACHMENT H), and WIPHE members (ATTACHMENT G), as well as government units in all other states, as authorized under the terms of the Intergovernmental Cooperative Purchasing Agreement executed by all Lead Contracting and Participating

Agencies, a cooperative procurement group, is soliciting proposals from qualified companies (hereinafter referred to as "Vendor") to enter into a Master Price Agreement for FIRE APPARATUS.

The intent of this Interstate Cooperative Procurement Solicitation (Solicitation) is to invite Proposers active in the retail and wholesale of FIRE APPARATUS to submit a competitive pricing proposal offering FIRE APPARATUS to PPA, which will then be made available to NPP members locally and nationwide; to reduce expenses by eliminating multiple requests for proposals and multiple responses by Vendors; and to obtain discounted pricing through volume purchasing. Significant sales potential exists because the Master Price Agreement will be used nationwide without the need for Participating Agencies to duplicate the formal solicitation process and expend staff resources. Preferably, the successful Proposer will provide its entire catalog ("catalog discount") or products and/or services in order that NPP, FRGPO, and PSGPO members who wish to access the Master Price Agreement may order a broad range of goods and services as needed.

With the exception of successful local Proposer(s) capable of servicing PPA and NPP members within the state of Oregon, successful Proposer(s) should have a strong national presence for FIRE APPARATUS for use by government agencies nationwide.

This Solicitation meets Oregon public contracting requirements and may not be appropriate under or meet Participating Agencies' procurement laws. Participating Agencies are urged to seek independent review by their legal counsel to ensure compliance with all local and state solicitation requirements.

#### 1.2 POTENTIAL MARKET

The Public Procurement Authority is publishing this RFP with the express purpose to create publicly awarded contracts for use by it members, which may also benefit the thousands of fellow members of NPP, FireRescue GPO and Public Safety GPO. These are nationwide programs representing member government agencies in all 50 states. We encourage proposer's response be a collaborative effort including manufacturer and distributor (when they are not the same company) to ensure nationwide contract utilization.

Proposer's response should also take into consideration the considerable market potential for this solicitation. Because the successful bid will be incorporated into a nationwide purchasing program including thousands of local government participants, the PPA believes that contracts created from this solicitation will provide vendors with a significant market advantage. Members of NPP, FireRescue GPO and Public Safety GPO and current vendors who participate in the program indicate the ability to shorten the sale cycle by eliminating the need to complete individual RFP processes is a significant advantage to participation.

The PPA believes that participation in the NPP purchasing program, benefits both its participating agencies and successful proposers. NPP engages with successful proposers who complete the Vendor Administration Agreement through a marketing and sales partnership. This partnership includes (but is not limited to) contract promotion to members, contract administration support to potential customers and live customer phone support.

#### 1.3 REQUIREMENTS

Solicitation is subject to the Public Procurement Authority's General Conditions & Instructions to Proposer(s), if any, and the following requirements:

1.3.1 This RFP and resulting Master Price Agreement is anticipated for use by the Public Procurement Authority's government members as well as other NPP member government entities and eligible nonprofit entities across the nation. The Public Procurement Authority has entered into an Intergovernmental (interlocal) Cooperative Purchasing Agreement with other Participating Agencies for the purpose of obtaining Master Price Agreements with various vendors. Interlocal purchasing agreements allow Participating Agencies to make purchases at the Public Procurement Authority's accepted proposal price, terms and conditions, provided that the Participating Agency has satisfied all of its local and state cooperative procurement requirements. By submitting a proposal, the Proposer(s) agrees to make the same proposal terms and price, exclusive of any possible rebates, incentives, freight and transportation fees, available to other Participating Agencies. The Public Procurement Authority and NPP will not incur any direct liability with respect to specifications, delivery, payment, or any other aspect of purchases by such Participating Agencies or nonprofit institutions. A true and correct copy of the Intergovernmental Cooperative Purchasing Agreement is attached hereto as "ATTACHMENT A".

The successful Proposer must deal directly with the Participating Agencies concerning the placement of orders, disputes, invoicing and payment. The Public Procurement Authority and NPP shall not be held liable for any costs or damages incurred by or as a result of the actions of the Vendor or any Participating Agency. Successful Proposers must comply with the state and local laws, rules and regulations in each state and locality where the product or service is provided.

- 1.3.2 Each Participating Agency shall execute a Participating Agency Endorsement and Authorization included in the Intergovernmental Cooperative Purchasing Agreement. While the terms of the Master Price Agreement shall govern the general pricing terms, each Participating Agency may request modification of the Master Price Agreement in accordance with each Participating Agency's state and/or local purchasing laws, rules, regulations and procedures. Each Participating Agency may, at its discretion, and upon written agreement by the Participating Agency and Successful Proposer, request additional legal and procedural provisions not included herein that the successful Proposer must adhere to if it wishes to conduct business with said Participating Agency using the Master Price Agreement.
- 1.3.3 NPP, FireRescue GPO and Public Safety GPO provide vendor exposure and marketing support for the successful Proposer's products and services throughout its membership. Successful Proposers servicing the awarded contract to NPP members shall pay a Contract Administration Fee of \$2000 per contract order (or invoice) under the Master Price Agreement as established in the NPP Vendor Administration Agreement (available upon request). A portion of the \$2000 fee is paid to the Western Fire Chiefs Association pursuant to agreements with NPP, Fire Rescue GPO, and Public Safety GPO. Western Fire Chiefs Association also administers the solicitation and bidding processes for the PPA pursuant to a separate Administration Agreement at no cost to the PPA or its members.

## 1.4 MULTIPLE AWARDS

Multiple awards may be granted to meet the requirements of this Solicitation provided that such awards are differentiated by product make and model, service, and/or distribution regions and capabilities of the successful Proposers. Specifically, the Public Procurement Authority will award separate contracts to Proposers in order to cover all local and national geographical markets, electronic purchasing capabilities, and products and services identified in this Request for Proposal, as well as the diverse and large number of Participating Agencies. The award of multiple contracts is to be determined upon receipt and review of all proposals, and based upon the general criteria provided herein. The Public Procurement Authority may solicit proposals from local qualified companies with or without a national presence provided that the successful Proposer is able to provide the Public Procurement Authority with the products and services requested. Multiple awards will ensure fulfillment of current and future requirements of the diverse and large number of Participating Agencies. In the event a local Proposer with no national distribution capabilities best meets the proposal selection criteria, multiple local and nationwide responsive proposals may be awarded simultaneously in the best interests of local commerce, the Public Procurement Authority's compliance with local laws, and the Participating Agencies nationwide.

Proposers shall be able to serve the needs of the NPP membership on a national basis. However, this requirement shall not exclude local Proposers without a national presence that are capable of meeting the requirements of the Public Procurement Authority within the state of Oregon.

#### 1.5 CONTRACT USAGE

The actual utilization of any Master Price Agreement will be at the sole discretion of the Participating Agencies. It is the intent of this Request for Proposal and resulting Master Price Agreement that members of NPP, FireRescue GPO, and Public Safety GPO (Participating Agencies) may buy directly from Successful Proposers without the need for further solicitation. However, Participating Agencies are urged to seek independent review by their legal counsel to ensure compliance with all local and state solicitation requirements as well as the need of further notice prior to utilizing the Master Price Agreement

#### 1.6 BACKGROUND OF NPP

NPP, owned by two healthcare organizations, provides group purchasing opportunities and purchasing administrative support for governmental entities and nonprofit institutions within its membership. NPP's membership includes participating public and nonprofit entities across North America.

#### 1.7 EQUAL OPPORTUNITY

The Public Procurement Authority encourages Minority and Women-owned Small Business Proposers to submit proposals.

Oregon Public Agencies are prohibited from use of products and services offered under this contract that are already provided by qualified nonprofit agencies for disabled individuals as listed on the Department of Administrative Service's Procurement List pursuant to ORS 279.835-.855. Please see *www.OregonRehabilitation.org/qrf* for more information.

### 2.0 SCOPE OF WORK:

#### 2.1 REQUIREMENTS OF PROPOSERS SUBMITTING A RESPONSE:

Proposers must present clear and concise evidence indicating Proposer's ability to comply with the requirements stated herein and to provide and deliver the specified products and services to Participating Agencies.

#### 2.1.1 PROPOSER COMMITMENTS

Each Proposer is required to commit to low pricing, and accurate and timely reporting to NPP pursuant to the reporting requirements identified in the NPP Vendor Administration Agreement. In addition, successful Proposer(s) with a national presence must commit to marketing of the Master Price Agreement nationwide and that the sales force will be trained, engaged and committed to offering NPP pricing to member government agencies nationwide, including the opportunity for NPP to train the Vendor sales staff.

# 2.1.2 **PROPOSERS MUST COMPLETE "ATTACHMENT B" – PROPOSER PROFILE** WORKBOOK".

#### 2.2 PRODUCTS AND SERVICES:

2.2.1 Provide a description of the FIRE APPARATUS offered as set forth in ATTACHMENT C. The primary objective is for the Proposer(s) to provide the Proposer(s)'s entire product line that are responsive to this RFP so that participating agencies may order a broad range of products and services as appropriate for their needs.

- 2.2.2 All products offered must be new, unused and most current product lines, unless otherwise clearly identified as remanufactured goods.
- 2.2.3 Describe any special programs that Proposer offers that shall improve the ability of the Participating Agencies access to the products, such as retail store availability, expedited delivery intervals, item sourcing, or other unique plans and services.
- 2.2.4 Explain any additional pricing incentives that may be available such as large volume purchases, cash terms, or rebates to Participating Agencies.

### 2.3 PRICING:

- 2.3.1 Pricing for the products and services may be based on "ATTACHMENT D" PRICING SCHEDULE as follows:
  - A. A fixed percentage (%) off *marked price* based on the Proposer's catalog for each CATEGORY specified in ATTACHMENT D PRICING SCHEDULE. Proposer shall identify the catalog used.

**Option (A) is preferred.** If option (A) is not feasible proposer may use option (B) provided proposer includes a justification.

- B. Alternatively, contract pricing may be based upon fixed prices (contingencies for economic price adjustments must be identified in the proposal), or a combination fixed percentage off and firm fixed prices. Proposer may offer additional discounts to purchasers based on volume.
- 2.3.2 If proposer responds with pricing option "B" the following applies. Prices for items listed in the PRICING SCHEDULE ("ATTACHMENT D") shall remain firm for a period of six (6) months. Thereafter, Proposers may request price increases based on manufacturer costs, cost of labor and/or materials which must be supported by appropriate documentation. Proposers may also add or delete products and options identified on the Pricing Schedule, provided that any additions reasonably fall within the intent of the original Pricing Schedule category. If PPA agrees to the price increase or product or option modification, PPA may approve in writing, including electronic mail, without the need for a written amendment to the Master Price Agreement.
- 2.3.3 All pricing proposals shall clearly explain how freight and/or delivery costs are determined as described in ATTACHMENT D PRICING SCHEDULE herein.
- 2.4 TAX:

Proposers shall strictly adhere to all federal, state and local tax requirements applicable to their operation, or to any contract or activity resulting from this solicitation.

#### 3.0 <u>SPECIAL TERMS & CONDITIONS</u>:

### 3.1 MASTER PRICE AGREEMENT TERM:

As a result of this Solicitation the successful Proposer(s) shall be awarded a Master Price Agreement for a two (2) year period. Subject to a written agreement signed by the Public Procurement Authority and Successful Proposer, the Master Price Agreement may be extended up to a maximum of <u>three</u> (3), one (1) year periods. At least thirty (30) calendar days prior to the expiration of the current term the Proposer(s) shall be notified in writing by the Public Procurement Authority of the intention to extend the Master Price Agreement.

### 3.2 MASTER PRICE AGREEMENT ACCESS PROVISIONS

Utilization of the Master Price Agreement will be at the discretion of the Public Procurement Authority and Participating Agencies. The Public Procurement Authority shall be under no obligation to purchase off of the Master Price Agreement. Assuming all local competitive solicitation requirements have been met, Participating Agencies may purchase directly from the successful Proposer(s) without the need for further solicitation.

## 3.3 INDEMNIFICATIONS AND INSURANCE:

#### 3.3.1 Indemnification

The successful Proposer shall indemnify the PPA and NPP as specified in the Master Agreement.

#### 3.3.2 Insurance Requirements.

Proposer(s), at Proposer(s)'s own expense, shall purchase and maintain the herein stipulated minimum insurance from a reputable company or companies duly licensed by the State of Oregon. In lieu of State of Oregon licensing, the stipulated insurance may be purchased from a company or companies, which are authorized to do business in the State of Oregon, provided that said insurance companies, meet the approval of the Public Procurement Authority. The form of any insurance policies and forms must be acceptable to the Public Procurement Authority.

Proposer(s)'s insurance shall be primary insurance with respect to the Public Procurement Authority, and any insurance or self-insurance maintained by the Public Procurement Authority shall not contribute to it.

Award of this Solicitation is contingent upon the required insurance policies and/or endorsements identified herein. The Public Procurement Authority shall not be obligated, however, to review such policies and/or endorsements or to advise Proposer(s) of any deficiencies in such policies and endorsements, and such receipt shall not relieve Proposer(s) from, or be deemed a waiver of the Public Procurement Authority's right to insist on strict fulfillment of Proposer(s)'s obligations under this RFP.

The insurance policies required by this RFP, except Workers' Compensation, shall name the Public Procurement Authority, its agents, representatives, officers, directors, officials and employees as an Additional Insured.

The policies required hereunder, except Workers' Compensation, shall contain a waiver of transfer of rights of recovery (subrogation) against the Public Procurement Authority, its agents, representatives, officers, directors, officials and employees for any claims arising out of Proposer(s)'s work or service.

- 3.3.3 Commercial, automobile and workers' compensation insurance.
  - 3.3.3.1 <u>Commercial General Liability</u>. Proposer(s) shall maintain Commercial General Liability Insurance (CGL) and, if necessary, Commercial Umbrella Insurance. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage including, but not limited to, the liability assumed under the indemnification provisions of the Master Price Agreement.
  - 3.3.3.2 <u>Automobile Liability</u>. Proposer(s) shall maintain Automobile Liability Insurance and, if necessary, <u>Commercial Umbrella Insurance</u>. If hazardous substances, materials, or wastes are to be transported, MCS 90 endorsement shall be included.
  - 3.3.3.3 Workers' Compensation. Proposer(s) shall carry Workers' Compensation insurance to

cover obligations imposed by federal and state statutes having jurisdiction over Proposer(s)'s employees engaged in the performance of the work or services, as well as Employer's Liability insurance.

In case any work is subcontracted, Proposer(s) will require the SubProposer(s) to provide Workers' Compensation and Employer's Liability insurance to at least the same extent as required of Proposer(s).

## 4.0 SCHEDULE, RESPONSE PREPARATION AND SUBMISSION

#### 4.1 SCHEDULE OF EVENTS

#### 4.1.1 <u>Publication of request for proposal</u>

Publication of this Solicitation conforms with ORS 279, to include Public Notice by publication in a newspaper of general circulation in the area where the Public Procurement Authority is located no less than 30 days prior to the proposal due date, as well as posting of the Public Notice on the web site that typically posts Public Notices concerning the Public Procurement Authority.

Solicitation Notice Publications: October 27, 2014, January 12, 2015

#### 4.1.2 Question and answer period

The PPA will post questions and answers concerning this Solicitation for a period of twenty three (23) days after initial publication of the Notice of Solicitation or November 13, 2014, whichever occurs later. All questions shall be submitted in writing via email to questions@ProcurementAuthority.org. The Public Procurement Authority reserves the right to accept and answer questions after the twenty three (23) day question and answer period has expired.

All questions must be submitted via email as directed above. If necessary, questions can be submitted in writing to Public Procurement Authority, c/o Heidi Chames, 25030 SW Parkway Avenue, Suite 330, Wilsonville, OR 97070 or questions@ProcurementAuthority.org. All questions and answers will be posted with the original solicitation on the Public Procurement Authority website at www.ProcurementAuthority.org

There will be no mandatory pre-proposal meeting. In lieu of a pre-proposal meeting, an informational webinar shall be held on Thursday, November 13, 2014 at 11:30 A.M. PST. To join the online webinar:

### - Go to

https://themeetingson.webex.com/themeetingsonrun/j.php?ED=318348452&UID=2154877612&RT=MiM0

- Follow the onscreen instructions for completing the login process
- Call in information is: (800-504-8071), passcode: (5887665)
- Meeting number is: 713895916

- You may want to check the link and your computer for compatibility in advance of the scheduled webinar.

4.1.3 <u>Submission of proposals</u>

Deadline for submission of proposals is <u>5:00 PM PST</u>, on February 12, 2015. Heidi Chames must receive all proposals before <u>5:00 PM PST</u> on the above date in the office of the Public Procurement Authority, c/o Heidi Chames, 25030 SW Parkway Avenue, Suite 330, Wilsonville, OR 97070.

Approximate opening date: 9:00 AM PST on February 13, 2015 at the office of the Public Procurement Authority, c/o Heidi Chames, 25030 SW Parkway Avenue, Suite 330, Wilsonville, OR 97070. Proposal selection and negotiation: Approximately February 13, 2015 to March 15, 2015.

#### Approximate award date: April 1, 2015.

All responses to this proposal become the property of the Public Procurement Authority and (other than pricing) will be held confidential, to the extent permissible by law. The Public Procurement Authority will not be held accountable if parties other than the Public Procurement Authority obtain material from proposal responses without the written consent of the Proposer(s).

### 4.2 REVIEW, INQUIRIES AND NOTICES:

#### 4.2.1 The solicitation documents may be reviewed in person at the following address:

Public Procurement Authority c/o Heidi Chames 25030 SW Parkway Ave. Suite 330 Wilsonville, OR 97070

All inquiries concerning information herein shall be addressed to:

Public Procurement Authority c/o Heidi Chames 25030 SW Parkway Ave. Suite 330 Wilsonville, OR 97070

Administrative telephone inquiries shall be addressed to:

Heidi Chames, 855-524-4572 Email inquiries shall be addressed to:

questions@ProcurementAuthority.org

# Inquiries may be submitted by telephone but must be followed up in writing. No oral communication is binding on the Public Procurement Authority.

4.2.2 Proposal Interpretation of the RFP Documents and Issuance of Addenda

If any Proposer(s) finds discrepancy in, or omissions from, or is in doubt to the true meaning of any part of the RFP document, he/she shall submit to:

Public Procurement Authority c/o Heidi Chames 25030 SW Parkway Ave. Suite 330 Wilsonville, OR 97070 A written request for a clarification or interpretation thereof at least ten (10) calendar days prior to the RFP closing date.

The Public Procurement Authority is not responsible for any explanation, clarification, interpretation, or approval made or given in any manner, except by addenda. Addenda, if necessary, will be issued not later than five (5) days prior to the RFP closing date by publication on the Public Procurement Authority's web site and NPP website.

### 4.3 INSTRUCTIONS FOR PREPARING AND SUBMITTING PROPOSALS:

Proposers are to provide two (2) hard copies and two (2) electronic copies of the complete proposal. Electronic copies are to be submitted on a USB flash drive with the core response in a file less than 10 MB, when possible. Electronic files may be used by the evaluation committee so they should be organized and named in an easy to understand manner. Proposers are to address proposals identified with return address, solicitation number and title in the following manner:

RFP 1420: FIRE APPARATUS Public Procurement Authority c/o Heidi Chames 25030 SW Parkway Ave. Suite 330 Wilsonville, OR 97070

All prices shall be held firm for a period of sixty (60) days after the Solicitation closing date. Any Proposer may withdraw its proposal if a Master Price Agreement has not been executed within sixty (60) days from the RFP closing date.

#### 4.4 EXCEPTIONS AND DEVIATIONS TO THE RFP

The Proposer shall identify and list all exceptions taken to all sections of this RFP and list these exceptions, referencing the section (paragraph) where the exception exists and stating the proposed revision. The Proposer shall list these exceptions under the heading, "Exception to the Solicitation, RFP Number 1420." Exceptions not listed under the heading, "Exception to the Solicitation, RFP Number 1420." shall be considered invalid. The Public Procurement Authority reserves the right to reject, render the proposal non-responsive, enter into negotiation on any of the Proposer exceptions, or accept them outright.

The Proposer shall detail any and all deviations from specifications, if any, as requested. The Public Procurement Authority may accept or reject deviations, and all Public Procurement Authority decisions shall be final.

#### 4.5 RESPONSE FORMAT AND CONTENT:

To aid in the evaluation, it is desired that all proposals follow the same general format. The proposals are to be submitted in binders and have sections tabbed as follows:

- 4.5.1 Letter of Transmittal
- 4.5.2 Table of Contents
- 4.5.3 Short introduction and executive summary. This section shall contain an outline of the general approach utilized in the proposal.
- 4.5.4 The proposal should contain a statement of all of the programs and services proposed, including conclusions and generalized recommendations. Proposals should be all-inclusive, detailing the proposer's best offer. Additional related services should be incorporated into the proposal, if applicable.

Format Proposal to specifically address each individual sub-section and sub-set of the SCOPE OF WORK (Section 2.0).

- 4.5.5 Qualifications This section shall describe the Proposer's ability and experience related to the programs and services proposed.
- 4.5.6 Exceptions to the Proposal Solicitation, RFP Solicitation Number 1420
- 4.5.7 PRICING SCHEDULE ("ATTACHMENT D")
- 4.5.8 PROPOSER PROFILE WORKBOOK ("ATTACHMENT B")
- 4.5.9 Complete, Current Catalog Pricing shall be submitted on a USB flash drive.

#### 5.0 EVALUATION AND POST SUBMISSION

#### 5.1 EVALUATION OF PROPOSAL – SELECTION FACTORS:

A Proposal Analysis Committee will be appointed by the Public Procurement Authority on behalf of its membership to evaluate each Proposal and prepare a scoring of each Proposal. Each Proposal received and reviewed shall be awarded points under each criterion solely on the judgment and determination of the Analysis Committee and the PPA. There is a maximum score of 500 points and proposer's average total score must be at least 200 points for consideration of an award. Proposals will be evaluated on the following criteria and further defined in the Proposal Evaluation Form (ATTACHMENT E) utilizing the point system indicated on the form

1) Pricing 2) Product Line 3) Conformance 4) Marketing 5) Customer Service 6) Coverage 7) Proven Experience & References

At the Public Procurement Authority's option, Proposers may be invited to make presentations to the Evaluation Committee. Public Procurement Authority reserves the right to make multiple awards to meet the national membership needs of this Solicitation.

- 5.1.1 Additional criteria/preferences that are not necessarily awarded points.
  - 5.1.1.1 Pursuant to ORS 279, Lead Contracting Agency shall give preference to the procurement of goods manufactured from recycled materials.
  - 5.1.1.2 Pursuant to ORS 279, Lead Contracting Agency shall give preference to goods and services that have been manufactured or produced within the State of Oregon if price, fitness, availability and quality are otherwise equal; and the Lead Contracting Agency shall add a percent increase to the proposal of a nonresident Proposer equal to the percent, if any, of the preference given to the Proposer in the state in which the Proposer resides. All proposers shall identify the state to which it is a resident bidder.
  - 5.1.1.3 Proposer shall comply with all federal, state and local laws applicable to the work under the Master Price Agreement awarded as a result of this Solicitation, including, without limitation, the provisions of ORS, as set forth on "ATTACHMENT F", attached hereto and incorporated herein by this reference.
  - 5.1.1.4 Pursuant to Section 1.5, the Lead Contracting Agency encourages Minority and Women-owned Small Business Proposers to submit proposals.
- 5.2 RIGHT OF PUBLIC PROCUREMENT AUTHORITY TO AWARD OR REJECT PROPOSALS

- 5.2.1 The Request for Proposal does not commit the Public Procurement Authority to award a Master Price Agreement for the products or services specified within the Request for Proposal document. The Public Procurement Authority may cancel the procurement or reject any or all proposals in accordance with ORS 279. Under no circumstance will the Public Procurement Authority pay the costs incurred in the preparation of a response to this request.
- 5.2.2 The Public Procurement Authority reserves the right to:
  - 5.2.2.1 Accept or reject any or all proposals received as a result of the Request for Proposals;
  - 5.2.2.2 Negotiate with any qualified Proposer(s);
  - 5.2.2.3 Accept a proposal and subsequent offers for a Master Price Agreement from other than the lowest cost proposer;
  - 5.2.2.4 Waive or modify any irregularities in proposals received, after prior notifications to the Proposer(s).
- 5.2.3 Oral interpretations or statements cannot modify the provisions of this Request for Proposal. If inquiries or comments by Proposers raise issues that require clarification by the Public Procurement Authority, or the Public Procurement Authority decides to revise any part of this Request for Proposal, addenda will be provided to all persons who receive the Request for Proposal. Receipt of an addendum must be acknowledged by signing and returning it with the proposal.
- 5.2.4 The award, if there is one, will be made to that Proposer(s) who is determined to be the most qualified, responsible and responsive within a competitive price range based upon the evaluation of the information furnished under this RFP.

#### 5.3 WITHDRAWAL OF PROPOSAL

At any time prior to the hour and date set for the receipt of proposals, the Proposer(s) may withdraw its proposal. Withdrawal will not preclude the submission of another proposal prior to the deadline.

#### 5.4 PROTEST PROCESS

A prospective Proposer may protest the procurement process of the Solicitation Document for an Agreement solicited under ORS 279. Before seeking judicial review, a prospective Proposer must file a written protest with the Public Procurement Authority and exhaust all administrative remedies. Written protests must be delivered to the Public Procurement Authority at 25030 SW Parkway Avenue, Suite 330, Wilsonville, OR 97070 not less than ten (10) days prior to the date upon which all proposals are due. The written protest shall contain a statement of the desired changes to the procurement process or solicitation document that the protester believes will remedy the conditions upon which the protest is based. The Public Procurement Authority shall consider the protest if it is timely filed and meets the conditions set forth in ORS 279. The Public Procurement Authority shall respond pursuant to ORS 279. If the Public Procurement Authority upholds the protest, in whole or in part, the Public Procurement Authority may in its sole discretion either issue an Addendum reflecting its disposition or cancel the procurement or solicitation. The Public Procurement Authority may extend the due date of proposals if it determines an extension is necessary to consider and respond to the protest.

A Proposer may protest the Award of the Contract, or the intent to Award the Contract, if the conditions set forth in ORS 279 are satisfied. Judicial review of the protest and the Public Procurement Authority's decision shall be governed by ORS 279.

#### 5.5 NON-ASSIGNMENT

If a Master Price Agreement is awarded, it shall not be assigned in part or in total.

### 5.6 POST AWARD MEETING:

The successful Proposer(s) may be required to attend a post-award meeting with the PPA to discuss the terms and conditions of the Master Price Agreement.

## 5.7 PROPOSAL FINAL CERTIFICATION

The Proposer must certify the following:

a) I hereby certify, that the Proposal contained herein, fully and exactly complies with the instruction for proposers and specifications as they appear in this Notice of Solicitation.

b) I hereby further certify that I am authorized by the Board of Directors or Corporate Officers of the Corporation to sign the Requests for Proposals and proposals in the name of the corporation listed below:

Proposer Name:	
Signature:	
Name Typed:	_Title:
Proposer is a resident bidder of the state	of
Date:	

## ATTACHMENT A

## INTERGOVERNMENTAL COOPERATIVE PURCHASING AGREEMENT

This Intergovernmental Agreement (Agreement) is by and between the "Lead Contracting Agency" and participating government entities ("Participating Agencies"), that are members of National Purchasing Partners ("NPP"), including members of FireRescue GPO and Public Safety GPO, that agree to the terms and conditions of this Agreement. The Lead Contracting Agency and all Participating Agencies shall be considered as "parties" to this agreement.

WHEREAS, upon completion of a formal competitive solicitation and selection process, the Lead Contracting Agency has entered into Master Price Agreements with one or more Vendors to provide goods and services, often based on national sales volume projections;

WHEREAS, NPP provides group purchasing, marketing and administrative support for governmental entities. NPP's marketing and administrative services are free to its membership, which includes participating public entities and nonprofit institutions throughout North America.

WHEREAS, NPP has instituted a cooperative purchasing program under which member Participating Agencies may reciprocally utilize competitively solicited Master Price Agreements awarded by the Lead Contracting Agency;

WHEREAS, the Master Price Agreements provide that all qualified government members of NPP may purchase goods and services on the same terms, conditions and pricing as the Lead Contracting Agency, subject to applicable local and state laws of the Participating Agencies;

WHEREAS, the parties agree to comply with the requirements of the Intergovernmental Cooperation Act as may be applicable to the local and state laws of the Participating Agencies;

WHEREAS, the parties desire to conserve and leverage resources, and to improve the efficiency and economy of the procurement process while reducing solicitation and procurement costs;

WHEREAS, the parties are authorized and eligible to contract with governmental bodies and Vendors to perform governmental functions and services, including the purchase of goods and services; and

WHEREAS, the parties desire to contract with Vendors under the terms of the Master Price Agreements;

NOW, THEREFORE, the parties agree as follows:

## **ARTICLE 1: LEGAL AUTHORITY**

Each party represents and warrants that it is eligible to participate in this Agreement because it is a local government created and operated to provide one or more governmental functions and possesses adequate legal authority to enter into this Agreement.

## **ARTICLE 2: APPLICABLE LAWS**

The procurement of goods and services subject to this Agreement shall be conducted in accordance with and subject to the relevant statutes, ordinances, rules, and regulations that govern each party's procurement policies. Competitive Solicitations are intended to meet the public contracting requirements of the Lead Contracting Agency and may not be appropriate under, or satisfy Participating Agencies' procurement laws. It is the responsibility of each party to ensure it has met all applicable solicitation and procurement requirements. Participating Agencies are urged to seek independent review by their legal counsel to ensure compliance with all local and state solicitation requirements.

## **ARTICLE 3: USE OF BID, PROPOSAL OR PRICE AGREEMENT**

- a. A "procuring party" is defined as the Lead Contracting Agency or any Participating Agency that desires to purchase from the Master Price Agreements awarded by the Lead Contracting Agency.
- b. Each procuring party shall be solely responsible for their own purchase of goods and services under this Agreement. A non-procuring party shall not be liable in any fashion for any violation of law or contract by a procuring party, and the procuring party shall hold non-procuring parties and all unrelated procuring parties harmless from any liability that may arise from action or inaction of the procuring party.
- c. The procuring party shall not use this agreement as a method for obtaining additional concessions or reduced prices for similar goods and services outside the scope of the Master Price Agreement.
- d. The exercise of any rights or remedies by the procuring party shall be the exclusive obligation of such procuring party.
- e. The cooperative use of bids, proposals or price agreements obtained by a party to this Agreement shall be in accordance with the terms and conditions of the bid, proposal or price agreement, except as modified where otherwise allowed or required by applicable law, and does not relieve the party of its other solicitation requirements under state law or local policies.

## **ARTICLE 4: PAYMENT OBLIGATIONS**

The procuring party will make timely payments to Vendors for goods and services received in accordance with the terms and conditions of the procurement. Payment for goods and services, inspections and acceptance of goods and services ordered by the procuring party shall be the exclusive obligation of such procuring party. Disputes between procuring party and Vendor shall be resolved in accordance with the law and venue rules of the state of the procuring party.

## **ARTICLE 5: COMMENCEMENT DATE**

This Agreement shall take effect after execution of the "Lead Contracting Agency Endorsement and Authorization" or "Participating Agency Endorsement and Authorization," as applicable.

## **ARTICLE 6: TERMINATION OF AGREEMENT**

This Agreement shall remain in effect until terminated by a party giving 30 days written notice to "Lead Contracting Agency"

## **ARTICLE 7: ENTIRE AGREEMENT**

This Agreement and any attachments, as provided herein, constitute the complete Agreement between the parties hereto, and supersede any and all oral and written agreements between the parties relating to matters herein.

## **ARTICLE 8: CHANGES AND AMENDMENTS**

This Agreement may be amended only by a written amendment executed by all parties, except that any alterations, additions, or deletions of this Agreement which are required by changes in Federal and State law or regulations are automatically incorporated into this Agreement without written amendment hereto and shall become effective on the date designated by such law or regulation.

## **ARTICLE 9: SEVERABILITY**

All parties agree that should any provision of this Agreement be determined to be invalid or unenforceable, such determination shall not affect any other term of this Agreement, which shall continue in full force and effect.

THIS INSTRUMENT HAS BEEN EXECUTED IN TWO OR MORE ORIGINALS BY EXECUTION AND ATTACHMENT OF "THE LEAD CONTRACTING AGENCY ENDORSEMENT AND AUTHORIZATION" OR "PARTICIPATING AGENCY ENDORSEMENT AND AUTHORIZATION," AS APPLICABLE. ONCE EXECUTED, IT IS THE RESPONSIBILITY OF EACH PARTY TO FILE THIS AGREEMENT WITH THE PROPER AGENCY IF REQUIRED BY LOCAL OR STATE LAW.

# **SAMPLE**

## PUBLIC PROCUREMENT AUTHORITY ENDORSEMENT AND AUTHORIZATION

The undersigned acknowledges, on behalf of the Public Procurement Authority ("Lead Contracting Agency") that he/she has read and agrees to the general terms and conditions set forth in the enclosed Intergovernmental Cooperative Purchasing Agreement regulating use of the Master Price Agreements and purchase of goods and services that from time to time are made available by the Public Procurement Authority to Participating Agencies locally, regionally, and nationally through NPP. Copies of Master Price Agreements and any amendments thereto made available by the Public Procurement Authority will be provided to Participating Agencies and NPP to facilitate use by Participating Agencies.

The undersigned understands that the purchase of goods and services under the provisions of the Intergovernmental Cooperative Purchasing Agreement is at the absolute discretion of the Participating Agencies.

The undersigned affirms that he/she is an agent of the Public Procurement Authority and is duly authorized to sign this Public Procurement Authority Endorsement and Authorization.

## **SAMPLE**

Date:\_\_\_\_\_

BY: ITS:

Public Procurement Authority Contact Information:

Contact Person:	
Address:	
Telephone No.:	
Email:	

# <u>SAMPLE – DO NOT SIGN</u>

## PARTICIPATING AGENCY ENDORSEMENT AND AUTHORIZATION

The undersigned acknowledges, on behalf of \_\_\_\_\_\_ ("Participating Agency") that he/she has read and agrees to the general terms and conditions set forth in the enclosed Intergovernmental Cooperative Purchasing Agreement regulating use of the Master Price Agreements and purchase of goods and services that from time to time are made available by the Lead Contracting Agency to Participating Agencies locally, regionally, and nationally through NPP.

The undersigned further acknowledges that the purchase of goods and services under the provisions of the Intergovernmental Cooperative Purchasing Agreement is at the absolute discretion of the Participating Agency and that neither the Lead Contracting Agency nor NPP shall be held liable for any costs or damages incurred by or as a result of the actions of the Vendor or any other Participating Agency. Upon award of contract, the Vendor shall deal directly with the Participating Agency concerning the placement of orders, disputes, invoicing and payment.

The undersigned affirms that he/she is an agent of \_\_\_\_\_\_ and is duly authorized to sign this Participating Agency Endorsement and Authorization.

# <u>SAMPLE – DO NOT SIGN</u>

Date:\_\_\_\_\_

BY: \_\_\_\_\_\_ ITS: \_\_\_\_\_

Participating Agency Contact Information:

Contact Person: \_\_\_\_\_\_Address: \_\_\_\_\_

Telephone No.:	
Email:	

## ATTACHMENT B

## Proposer Profile Workbook to be completed by all responders as directed herein

# **1.0** General questions (Section 1.1 only to be completed by vendors with a national presence; i.e. vendors with a sales territory in 25 states or more).

- 1.1 The "Yes" or "No" questions below are to help evaluators familiarize themselves with national vendors. Circle "Yes" or "No" as it applies to your company.
  - ✓ Do you have a national sales force adequate in size to meet the demands of multiple agencies and their unique needs for the products and services listed herein? Yes or No
  - ✓ Do you have a national distribution network? Yes or No
  - Can you provide product availability to meet the requirements for materials and services listed herein for government and nonprofit agencies nationwide in a timely manner? Yes or No
  - ✓ Does your company have the ability to provide toll-free telephone/fax access, and an online presence? Yes or No
  - Can you provide a single point of contact (National Account Manager) to interact with the lead agency and NPP staff?
     Yes or No
  - Are you a strong competitor in the industry with a minimum of three consecutive years of demonstrated success in all business practices and pursuits?
     Yes or No
- 1.2 Additional Information:
  - 1.2.1 Provide at least three references of government agencies within the United States that have purchased products/services from Proposer similar to those specified in this solicitation within the last year. Include:
    - 1.2.3.1.1 Agency name and address
    - 1.2.3.1.2 Contact name, phone and/or email
    - 1.2.3.1.3 Description of products/services sold and date.
    - 1.2.3.1.4 PPA may use other information, however learned, in evaluation of the response.
  - 1.2.2 OPTIONAL: If a Dun and Bradstreet Comprehensive Report (or similar) for your company is available, please submit it with your response.
  - 1.2.3 OPTIONAL: Attach any case studies, white papers and/or testimonials supporting your company and products/services.

## 2.0 ABOUT PROPOSER:

- 2.1 Complete Exhibit 1
- 2.2 Complete the following table

2.2.1 State of incorporation:		
2.2.2 Federal Tax Identification		
Number:		
2.2.3 If applicable to the product(s) and/or service(s), describe the Proposer's ability to conduct		

E-commerce. [Insert response in box below]

2.2.4 Describe Proposer's system for processing orders from point of customer contact through delivery and billing. [Insert response in box below]

2.2.5 Describe Proposer's ability to provide detailed electronic reporting of quarterly sales correlated with NPP member ID numbers of Participating Agency purchases as set forth in Addendum A to Vendor Administration Agreement (VAA), a copy of which is available upon request from the PPA. [Insert response in box below]

2.2.6 Describe the capacity of Proposer to meet Minority and Women Business Enterprises (MWBE) preferences, which may vary among Participating Agencies. [Insert response in box below]

## **3.0 DISTRIBUTION SYSTEM:**

3.1 Describe distribution of products and services through Proposer's distribution system (including Alaska and Hawaii if applicable). [Insert response in box below]

3.2 Provide Proposer's shipping and delivery policy, including standard delivery time and any options and costs for expedited delivery and return policies. [Insert response in box below]

3.3 If applicable, detail the sub-contracting process (ordering, shipment, invoicing) for those products not carried in Proposer's distribution center. The process shall be transparent to the Participating Agencies. [Insert response in box below]

3.4 What is Proposer's backorder policy? Is your policy to classify as "immediate or cancel" (requiring the Participating Agency to reorder if item is backordered) or "good until cancelled"? [Insert response in box below]

## 4.0 MARKETING:

4.1 Outline Proposer's plan for marketing the Products and Services to the Participating Agencies on a local and national basis. Include any marketing incentives such as committed dollars for advertising, conferences/travel and custom marketing materials. [may attach marketing plan or insert response in box below]

4.2 Explain how Proposer will educate its local and national sales force about the use of the Master Price Agreement. [Insert response in box below]

# 5.0 Proposer point of contact (POC) who will administer, coordinate, and manage this program with NPP and the Public Procurement Authority.

<b>Contact Person:</b>	Title:	
Mailing Address:		
City:	State & Zip:	
Email Address:		
Phone #:	Fax #:	
* Attach current resume of National Account Manager that will be the POC managing this contract.		

## 6.0 CUSTOMER SUPPORT SERVICES:

Explain Proposer's policy regarding each of the following if applicable to product(s) and/or service(s): 6.1 Auditing for order completeness. [Insert response in box below] 6.2 Replacement policy (i.e., damaged or defective goods). [Insert response in box below] 6.3 Minimum order requirement (e.g., Individual item vs. case lot). [Insert response in box below] 6.4 Customer service hours/days of operation [Insert response in boxes below] Wednesday: Thursday: Monday: Tuesday: Friday: Saturday: Sunday: 6.5 Special Orders. [Insert response in box below] 6.6 Post sale services issues. [Insert response in box below] 6.7 Repair services, including repair warranty programs, if any. Proposer shall identify, where applicable, authorized factory repair facilities that will honor the warranty of items on contract. [Insert response in box below] 6.8 Technical support services Proposer provides. [Insert response in box below] 6.9 Product substitution policy. [Insert response in box below] 6.10 Identify trade-in program criteria (if applicable). [Insert response in box below] 6.11. After hours service (including weekends and holidays) [Insert response in boxes below] Monday: Tuesday: Wednesday: Thursday: Friday: Saturday: Sunday: 6.12 Shipment tracking. [Insert response in box below] 6.13 Back order tracking process. [Insert response in box below]

6.14 Return Item process, including any/all associated fees (e.g., restocking, shipping, turnaround time on returns). [Insert response in box below]

6.15 Electronic billing. [Insert response in box below]

6.16 Explain how Proposer will resolve complaints, issues, or challenges. [Insert response in box below]

6.17 Other services not already covered. [Insert response in box below]

## 7.0 DELIVERY AND FREIGHT CHARGES:

7.1 Identify delivery and/or shipping costs or provide a shipping rate schedule based on weight, item, and/or destination for <u>all items ordered</u> within the continental U.S. (and Hawaii/Alaska) The Proposer shall identify all exceptions to this shipping rate schedule. [Insert response in box below]

7.2 Identify policy for transfer of product ownership (delivery) and damage/issue resolution. [Insert response in box below

## Exhibit 1 Product/Service Coverage FIRE APPARATUS RETAIL, DISTRIBUTION AND SERVICE/SUPPORT LOCATIONS

	Number of retail stores in each state? (leave blank for none)	Number of distribution centers in each state? (leave blank for none)	Number of support locations in each state? (leave blank for none)
ALABAMA		,	
ALASKA			
ARIZONA			
ARKANSAS			
CALIFORNIA			
COLORADO			
CONNECTICUT			
DELAWARE			
FLORIDA			
GEORGIA			
HAWAII			
IDAHO			
ILLINOIS			
INDIANA			
IOWA			
KANSAS			
KENTUCKY			
LOUISIANA			
MAINE			
MARYLAND			
MASSACHUSETTS			
MICHIGAN			
MINNESOTA			
MISSISSIPPI			
MISSOURI			
MONTANA			
NEBRASKA			
NEVADA			
NEW HAMPSHIRE			
NEW JERSEY			
NEW MEXICO			
NEW YORK			
NORTH CAROLINA			
NORTH DAKOTA			
ОНЮ			
OKLAHOMA			
OREGON			
PENNSYLVANIA			
RHODE ISLAND			

SOUTH CAROLINA		
SOUTH DAKOTA		
TENNESSEE		
TEXAS		
UTAH		
VERMONT		
VIRGINIA		
WASHINGTON		
WEST VIRGINIA		
WISCONSIN		
WYOMING		

## THIS FORM MUST BE SIGNED AND RETURNED WITH SOLICITATION RESPONSE

## Exhibit 2

## **Declaration of Non Collusion**

The undersigned does hereby declare that there has been no collusion between the undersigned, the Public Procurement Authority, and National Purchasing Partners, and in further support of said Declaration, states as follows:

The person, firm, association, co-partnership or corporation herein named has not, either directly or indirectly, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding or solicitation in the preparation and submission of a proposal to the Public Procurement Authority for consideration in the award of a contract or Master Price Agreement negotiated as a result of this Request for Proposal.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

(Name of Firm)

By: \_\_\_\_\_\_(Authorized Signature)

Title:

## ATTACHMENT C SPECIFICATIONS

## FIRE APPARATUS

Proposers should respond with pricing for all equipment and options they wish to be considered in the evaluation for a possible award and master price agreement.

Response should include any and all fire apparatus proposer wishes to be considered for contract including but not limited to:

Pumper Fire Apparatus Initial Attack Fire Apparatus Mobile Water Supply Fire Apparatus Aerial Fire Apparatus Quint Fire Apparatus Special Service Fire Apparatus Mobile Foam Fire Apparatus

Apparatus must meet the general guidelines and specifications required in the latest edition of the National Fire Protection Association (NFPA) Standard for Automotive Fire Apparatus (NFPA 1901) and any standards referenced therein. All proposed apparatus must also comply with all applicable federal licensing, rules and regulations including but not limited to:

- American National Standards Institute (ANSI)
- American Society of Mechanical Engineers (ASME)
- American Society for Nondestructive Testing (ASNT)
- American Society for Testing Materials (ASTM)
- American Welding Society (AWS)
- Department of Transportation (DOT)
- Environmental Protection Agency (EPA)
- Federal Motor Vehicle Safety Standards (FMVSS)
- Institute of Electrical and Electronics Engineers (IEEE)
- National Institute for Occupational Safety and Health (NIOSH)
- Occupational Safety and Health Administration (OSHA)
- Society of Automotive Engineers (SAE)
- Underwriters Laboratory (UL)

Additionally, all proposed apparatus must meet applicable state DOT, licensing, rules and regulations in states covered by the response.

Because the specifications of this RFP are general in nature in order to meet the needs of the PPA and all members of the Government Division of National Purchasing Partners, it is incumbent upon the proposer to provide specifications and details for all apparatus and options in their response.

All responses must outline all related aspects of the vehicle sale including but not limited to sales (through authorized dealers), pre-delivery costs (including up to 3 factory visits), delivery, training, manuals, warranty, and service.

## ATTACHMENT D FIRE APPARATUS PRICING SCHEDULE

The intent is for each Proposer to submit their complete product line so that Participating Agencies may order a wide array of products and services as appropriate for their needs. Proposer is encouraged but is not required to respond to all possible categories. Proposer may subcontract items Proposer does not supply. The Proposer should not necessarily limit the proposal to the performance of the services in accordance with this document but should outline any additional services and their costs if the Proposer deems them necessary to accomplish the needs of the cooperative purchasing program.

Pricing and resulting relative discount to PPA and NPP membership shall be clearly delineated on each proposal. Contract pricing shall be based upon:

- 1) Fixed discount(s) off published price list(s) or catalog(s)
- 2) Firm fixed price with economic adjustment (contingencies for economic price adjustments must be identified in the proposal)
- 3) A combination of the above.

## Vehicle Models

Proposers shall provide pricing on all apparatus vehicle models they wish to be considered including, but not limited to, the following categories where applicable:

- Chassis/cab builder
- Cab designs (2/4 door, tilt cab, etc.)
- Cab/body sheet metals (e.g., Stainless steel, aluminum, galvanized)
- Rear axle configuration (single/tandem/tandem front steering/triple rear)
- Fire pump capacities & mounting locations (e.g., 1250/1500/2500 GPM Pump, rear/mid-mounted)
- Body configurations (e.g., Walk-In/Non-Walk-In body)
- Aerial categories (e.g., Construction/turntable positions/aerial device functions)

## Options

Proposers shall provide pricing on all options, modifications, and accessories in a format that best represents their product line and pricing structure. This may include specific pricing for some options and may also include general pricing/discounts for categories of options. Proposer may also indicate availability and pricing of all other non-specified options. The intent is to provide proposers the opportunity to present as much product as possible in the format that fits within their individual formatting needs so that the resulting award allows PPA and NPP members the greatest number of procurement options. Options which replace standard equipment on a proposed vehicle model should be priced net of any credit due for the replaced item.

The following is *one example* of how pricing could be represented in proposer's response:

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FIRE APPARATUS PRICING SCHED	
NOTE: Be sure to provide ALL models for each particular type of apparatus vehicle to be considered. Add/Insert additional lines as necessary. The following categories are just <u>suggested</u> ; it is anticipated the name, number, and name of actual categories provided by proposer will vary significantly	Percentage (%) off List Price* ( <b>OR</b> fixed price if % off pricing is not available)
PUMPER	
<b>Example:</b> Ford F-550 2-Door, Pumper, Stainless Steel Body, Single Axle, 1250 GPM Pump, Mid-Mounted	<b>Example:</b> 15% off List <b>OR</b> \$550,000
Options for each vehicle model or type may be listed here or as a separate options table	
INITIAL ATTACK	
Options for each vehicle model or type may be listed here or as a separate options table	
MOBILE WATER SUPPLY	
Options for each vehicle model or type may be listed here or as a separate options table	

AERIAL	
Options for each vehicle model or type may be	
listed here or as a separate options table	
nsteu nere or as a separate options table	
QUINT	
Outions for each uchiele model on true mouths	
Options for each vehicle model or type may be	
listed here or as a separate options table	
SPECIAL SERVICE	
Options for each vehicle model or type may be	
listed here or as a separate options table	
insteu nere or as a separate options table	
MOBILE FOAM	
Options for each vehicle model or type may be	
listed here or as a separate options table	
	· · · ·

\* Identify source of list price and publication date or expiration date.

Example FIRE APPARATUS OPTIONS TABLE		
NOTE: provide all options to be considered. Add/Insert additional lines as necessary. The following categories are just <u>suggested</u> ; it is anticipated the name, number, and name of actual categories provided by proposer will vary significantly	Percentage (%) off List Price* ( <b>OR</b> fixed price if % off pricing is not available)	
OPTION DESCRIPTION	PRICING	
<b>Example:</b> Entire catalog of options	<b>Example:</b> 10% Off List	
<b>Example:</b> Chrome wheel upgrade, single axle	Example: \$8,000	
The next section could be used to represent other options not specifically listed above, including manufacturer and dealer installed options. These options may be included as a general category or as option categories.		
<b>Example:</b> "All other non-specified options available from the manufacturer"	<b>Example:</b> 5% Off List	
<b>Example:</b> "All other non-specified options available from the dealer"	Example: List Price	
<b>Example:</b> "All other non-specified emergency	Example: At least	
lighting options"	10% Off List	

\* Identify source of list price and publication date or expiration date.

# ATTACHMENT E PROPOSAL EVALUATION FORM

## Proposals will be evaluated using a two-step process.

**The first step** evaluates the responsiveness of the proposer and determines 1) if the proposer is deemed fully responsive enabling the proposal to move to the second step and 2) if the proposal will be evaluated as a local response (within the State of Oregon) or a national response (covering the entire U.S. or a large region of the U.S.).

**The second step** of the evaluation process will only occur with proposals deemed fully responsive from the first step. The second step fully evaluates the proposers response based on the criteria found in the proposal evaluation form.

## STEP 1 Proposal Responsiveness

Component	YES	NO
Submitted on time		
Proposal signed		
Completed Proposer Workbook		
Included pricing structure		
Included references		
Deemed Fully Responsive	YES	NO
Categorized as Local or National	Local	National

# Proposal Evaluation Form

## STEP 2 Full Evaluation of Proposal

Point Value Definitions

5- Excellent – Substantially exceeds requirements
4-Very Good- Meet all requirements
3- Good – Meets most requirements

- 2- Satisfactory Minimally meets requirements
  1- Unsatisfactory Requirements essentially not met
- 0- No Response provided

Component Evaluated	Weight	Possible Points (0-5)	Total Points (Weight x PP)	Evaluator's Comments
Pricing: Product price analysis and discounts proposed including favorable pricing for cooperative purchasing.	20			Comments:
Product Line: Product line offered in indicated coverage area, considering geographic distribution limitations, warranties, any sub-proposers and coordination of manufacturer and distribution in response.	25			Comments:
Conformance: Completeness of proposal and the degree to which the Proposer responds to the terms and all requirements of the RFP requirements and specifications.	10			Comments:

Markating: The			Commonto
<u>Marketing</u> : The Proposer's marketing plan to	20		Comments:
promote the	20		
resulting contractual agreement and			
ability to incorporate use of agreement in			
their sales system			
throughout indicated coverage			
region.			
Customer Service:			Comments
Support dedicated to Lead Contracting	5		
and Participating Agencies. Ability to			
conduct e-			
commerce and meet promised			
delivery timelines.			
Coverage: Ability to provide products			Comments:
and services for	10		
indicated coverage region including			
distribution, retail &			
service facilities and staff availability.			
*Note Exhibit 1 from PPW			
Proven Experience			Comments:
<u>&amp; References:</u> Proposer's success	10		
in providing			
products and services in a timely			
manner including			
Past Performance Information (PPI)			
review.			General Comments:
TOTAL			Scheral Comments.
	100		

Name of Evaluator \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

## ATTACHMENT F

## **ORS CHAPTERS 279 (AS MAY BE AMENDED) REQUIREMENTS**

Successful Proposer (Contractor) shall comply with the requirements of this ATTACHMENT F to the extent required by any applicable federal or state law.

- (1) Contractor shall pay promptly, as due, all persons supplying labor or materials for the prosecution of the work provided for in the contract, and shall be responsible for such payment of all persons supplying such labor or material to any Subcontractor.
- (2) Contractor shall promptly pay all contributions or amounts due the Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the contract.
- (3) Contractor shall not permit any lien or claim to be filed or prosecuted against the District on account of any labor or material furnished and agrees to assume responsibility for satisfaction of any such lien so filed or prosecuted.
- (4) Contractor and any Subcontractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.617.
- (5) If Contractor fails, neglects or refuses to make prompt payment of any claim for labor or materials furnished to the Contractor or a Subcontractor by any person in connection with the contract as such claim becomes due, the District may pay such claim to the persons furnishing the labor or material and charge the amount of payment against funds due or to become due Contractor by reason of the contract. The payment of a claim in the manner authorized hereby shall not relieve the Contractor or his surety from his or its obligation with respect to any unpaid claim. If the District is unable to determine the validity of any claim for labor or material furnished, the District may withhold from any current payment due Contractor an amount equal to said claim until its validity is determined and the claim, if valid, is paid.
- (6) Contractor shall promptly, as due, make payment to any person, co-partnership, association, or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to employees of such Contractor, of all sums which the Contractor agrees to pay for such services and all monies and sums which the Contractor collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.
- (7) Contractor shall pay employees for overtime work performed under the contract in accordance with ORS 653.010 to 653.261 and the Fair Labor Standards Act of 1938 (29 USC 201, *et seq.*)
- (8) The Contractor must give notice to employees who work on this contract in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and the days per week that the employees may be required to work.
- (9) All subject employers working under the contractor either employers that will comply with ORS 656.017, or employers that are exempt under ORS 656.126.
- (10) All sums due the State Unemployment Compensation Fund from the Contractor or any Subcontractor in connection with the performance of the contract shall be promptly so paid.
- (11) The contract may be canceled at the election of District for any willful failure on the part of Contractor to faithfully perform the contract according to its terms.
- (12) Contractor certifies compliance with all applicable Oregon tax laws, in accordance with ORS 305.385.
- (13) Contractor certifies that it has not discriminated against minorities, women or emerging small business enterprises in obtaining any required subcontractors.

# ATTACHMENT G WIPHE RESPONSE FORM

## THIS FORM MUST BE RETURNED WITH SOLICITATION RESPONSE

Vendor servicing Washington State AGREES to sell items included in this solicitation to WIPHE institutions at prices offered, unless otherwise noted below:

\_ DOES NOT agree to sell to WIPHE Institutions.

\_\_\_\_\_ AGREES to sell to WIPHE Institutions at same prices and discounts, with the following exceptions: (attach additional pages as necessary)

Vendor must state geographic areas or specific institution(s) listed below within the State of Washington that are EXCLUDED from the contract(s) resulting from this solicitation:

Washington Institutions of Public Higher Education (WIPHE). See list on following page.

If Vendor agrees to sell to the WIPHE Institutions, a WIPHE Contract number will be assigned and the information will be reported to the Council of Presidents. The Council of Presidents notifies all the other schools when a WIPHE contract has been awarded and a master list will be maintained and the WIPHE website updated. WIPHE shall determine, at its absolute discretion, whether it shall accept and/or utilize the contract resulting from the Request for Proposal

#### Washington Institutions of Public Higher Education (WIPHE)

#### **FOUR-YEAR UNIVERSITIES**

CENTRAL WASHINGTON UNIVERSITY EASTERN WASHINGTON UNIVERSITY THE EVERGREEN STATE COLLEGE UNIVERSITY OF WASHINGTON WASHINGTON STATE UNIVERSITY WESTERN WASHINGTON UNIVERSITY COMMUNITY AND TECHNICAL COLLEGES: **BATES Technical College BELLEVUE Community College BELLINGHAM Technical College BIG BEND Community College** CASCADE Community College **CASCADIA** College **CENTRALIA** College **CLARK** College CLOVER PARK Technical College **COLUMBIA BASIN College** EDMONDS Community College **EVERETT Community College** 

**GRAYS HARBOR College** GREEN RIVER Community College HIGHLINE Community College LAKE WASHINGTON Technical College LOWER COLUMBIA College **OLYMPIC** College PENINSULA College PIERCE College **RENTON Technical College** SEATTLE CENTRAL Community Colleges SHORELINE Community College SKAGIT Valley College SOUTH PUGET SOUND Community College **SPOKANE** Community Colleges STATE BOARD for Technical & Community Colleges WENATCHEE Valley College YAKIMA Valley Community College WHATCOM Community College

#### Miscellaneous local agencies within Washington State\*

ADAMS COUNTY **PUYALLUP SCHOOL DIST 3 KITSAP COUNTY** FIFE SCHOOL DIST 417 **RIVERVIEW SCHOOL DIST 407** GONZAGA UNIVERSITY PLANNED PARENTHOOD OF WESTERN WASHINGTON SNOHOMISH COUNTY MASON COUNTY FEDERAL WAY SCHOOL DIST SPOKANE COUNTY **ISSAQUAH SCHOOL DIST 411** ADAMS COUNTY FIRE DISTRICT ADAMS COUNTY HEALTH DISTRICT AFFILIATED HEALTH SERVICES ALDERWOOD WATER DISTRICT ANACORTES PORT OF **ANACORTES SCHOOL DISTRICT 103** ANNAPOLIS WATER DISTRICT ASOTIN COUNTY **AUBURN SCHOOL DISTRICT 408 BAINBRIDGE IS SCHOOL DISTRICT 303** BAINBRIDGE ISLAND FIRE DEPARTMENT **BAINBRIDGE ISLAND PARKS BATTLE GROUND SCHOOL DISTRICT 119 BELLEVUE SCHOOL DISTRICT 405** BELLINGHAM PORT OF **BELLINGHAM SCHOOL DISTRICT 501** BENTON COUNTY BENTON COUNTY FIRE DISTRICT

BENTON COUNTY PUD BENTON FRANKLIN COUNTY BENTON FRANKLIN PRIVTE INDUST CNCL BENTON PORT OF **BETHEL SCHOOL DISTRICT 403** BIG BROTHERS BIG SISTERS OF KING CO **BIRCH BAY WATER & SEWER DISTRICT** BLANCHET SCHOOL DISTRICT BREMERTON KITSAP CO HEALTH DISTRICT BREMERTON PORT OF **BREMERTON SCHOOL DISTRICT 100 BURLINGTON EDISON SCHOOL DIST 100** CANCER RESEARCH AND BOISTATISTICS CASCADE BLUE MT FD SHR CASCADE IRRIGATION DISTRICT **CASHMERE SCHOOL DISTRICT 222** CATHOLIC COMM SVCS OF KING CO **CENTRAL KITSAP SCHOOL DISTRICT 401** CENTRAL WAS COMP MENTAL HEALTH **CENTRALIA SCHOOL DISTRICT 40 CHEHALIS SCHOOL DISTRICT 302** CHELAN COUNTY CHELAN COUNTY COMMUNITY HOSPITAL CHELAN COUNTY FIRE DISTRICT **CHELAN COUNTY PUD 1** CHELAN DOUGLAS COUNTY HEALTH DIST CHENEY CARE CENTER CHILD CARE RESOURCE & REFERRAL CHILDRENS THERAPY CENTER CHIMACUM SCHOOL DISTRICT 49 CLALLAM COUNTY

CLALLAM COUNTY FIRE DISTRICT CLALLAM COUNTY HOSPITAL DISTRICT CLALLAM COUNTY PUD CLARK COUNTY CLARK COUNTY FIRE DISTRICT CLARK COUNTY PUD CLE ELUM-ROSLYN SCHOOL DISTRICT 404 **CLOVER PARK SCHOOL DISTRICT 400 CNTRL WHIDBEY FIRE & RESCUE** COAL CREEK UTILITY DISTRICT COALITION AGAINST DOMESTIC VIOLENCE COLUMBIA COUNTY COLUMBIA IRRIGATION DISTRICT COLUMBIA MOSQUITO CONTROL DISTRICT COMMUNITY CHRISTIAN ACADEMY COMMUNITY PSYCHIATRIC CLINIC COMMUNITY TRANSIT CONFEDERATED TRIBES OF CHEHALIS CONSOLIDATED DIKING IMPROVEMENT DIST CONSOLIDATED IRRIGATION COWLITZ COUNTY COWLITZ COUNTY FIRE DISTRICT COWLITZ COUNTY PUD CROSS VALLEY WATER DISTRICT **DAYTON SCHOOL DISTRICT 2** DOUGLAS COUNTY DOUGLAS COUNTY FIRE DISTRICT DOUGLAS COUNTY PUD DRUG ABUSE PREVENTION CENTER E COLUMBIA BASIN IRRIGATION DIST EAST WENATCHEE WATER **EATONVILLE SCHOOL DIST 404** EDMONDS SCHOOL DISTRICT 15 EDUCATIONAL SERVICE DIST 114 **EDUCATIONAL SERVICE DISTRICT 113 ELLENSBURG SCHOOL DIST 401** ENUMCLAW SCHOOL DIST EVERETT PORT OF EVERETT PUBLICE FACILITIES DIST EVERGREEN MANOR INC **EVERGREEN SCHOOL DIST 114** FEDERAL WAY FD FERRY COUNTY FERRY COUNTY PUBLIC HOSPITAL FERRY OKAHOGAN FPD FOSS WATERWAY DEVELOPMENT AUTHORITY FRANKLIN COUNTY FRANKLIN COUNTY PUD FRANKLIN PIERCE SCHOOL DIST 402 FRIDAY HARBOR PORT OF **GARDENA FARMS IRRIGATION DIST 13** GARFIELD COUNTY GRAND COULEE PROJECT **GRANDVIEW SCHOOL DIST 116/200 GRANITE FALLS SCHOOL DIST 332 GRANT COUNTY** GRANT COUNTY HEALTH DIST

GRANT COUNTY PUD GRAYS HARBOR COUNTY GRAYS HARBOR COUNTY FIRE DIST GRAYS HARBOR COUNTY PUD #1 GRAYS HARBOR PORT OF GRAYS HARBOR PUB DEV AUTH GRAYS HARBOR TRANSIT **GRIFFIN SCHOOL DIST 324** HARBORVIEW MEDICAL CENTER HAZEL DELL SEWER DIST HEALTHY MOTHERS HEALTHY BABIES COAL HIGHLINE SCHOOL DIST 401 HIGHLINE WATER DIST HOMESIGHT HOPELINK HOQUIAM SCHOOL DIST 28 HOUSING AUTHORITY OF PORTLAND ILWACO PORT OF **INCHELIUM SCHOOL DIST 70** ISLAND COUNTY ISLAND COUNTY FIRE DIST JEFFERSON COUNTY JEFFERSON COUNTY FIRE DIST JEFFERSON COUNTY LIBRARY JEFFERSON COUNTY PUD JEFFERSON GENERAL HOSPITAL KARCHER CREEK SEWER DIST **KELSO SCHOOL DIST 458** KENNEWICK GENERAL HOSPITAL **KENNEWICK SCHOOL DISTRICT 17 KENT SCHOOL DIST 415 KETTLE FALLS SCHOOL DIST 212** KING COUNTY KING COUNTY FIRE DIST KING COUNTY HOUSING AUTHORITY KING COUNTY LIBRARY KING COUNTY WATER SEWER KINGSTON PORT OF KITSAP COUNTY FIRE & RESCUE KITSAP COUNTY LIBRARY **KITSAP COUNTY PUD 1** KITTITAS COUNTY KITTITAS COUNTY PUD KITTITAS COUNTY RECLAMATION DIST KLICKITAT COUNTY KLICKITAT COUNTY PUD LAKE CHELAN RECLAMATION DIST LAKE STEVENS SCHOOL DIST 4 LAKE WASHINGTON SCHOOL DIST 414 LAKEHAVEN UTILITY DIST LAKEWOOD SCHOOL DIST 306 LEWIS CO PUD 1 LEWIS COUNTY LEWIS COUNTY FIRE DIST LEWIS PUBLIC TRANSPORTATION LIBERTY LAKE SEWER & WATER DIST LINCOLN COUNTY

LINCOLN COUNTY FIRE DIST LONGVIEW PORT OF LONGVIEW SCHOOL DIST 122 LOTT WASTEWATER ALLIANCE LUMMI INDIAN NATION MANCHESTER WATER DIST MARYSVILLE SCHOOL DIST 25 MASON COUNTY FIRE DIST MASON COUNTY PUD MEAD SCHOOL DIST 354 METRO PARK DISTRICT OF TACOMA MID COLUMBIA LIBRARY MIDWAY SEWER DISTRICT MONROE SCHOOL DIST 103 MORTON SCHOOL DIST 214 MOSES LAKE PORT OF MOUNT BAKER SCHOOL DIST MT VERNON SCHOOL DISTRICT 320 **MUKILTEO SCHOOL DIST 6** MUKILTEO WATER DIST NAVAL STATION EVERETT NE TRI COUNTY HEALTH DIST NORTH CENTRAL REGIONAL LIBRARY DIST NORTH KITSAP SCHOOL DIST 400 NORTH SHORE UTILITY DISTRICT NORTH THURSTON SCHOOL DISTRICT NORTHSHORE SCHOOL DIST 417 NORTHWEST KIDNEY CTR NORTHWEST WORK FORCE DEVELOPMENT CO NW REGIONAL COUNCIL OAK HARBOR SCHOOL DIST 201 **OAKVILLE SCHOOL DIST 400 OCOSTA SCHOOL DIST 172** OKANOGAN COUNTY OKANOGAN COUNTY FIRE DIST OKANOGAN COUNTY PUD OKANOGAN SCHOOL DISTRICT OLYMPIA PORT OF **OLYMPIA SCHOOL DISTRICT 111** OLYMPIA THURSTON CHAMBER FOUNDATION OLYMPIC AREA AGENCY ON AGING OLYMPIC MEMORIAL HOSPITAL DIST OLYMPIC REGION CLEAN AIR AGENCY **OLYMPIC VIEW WATER & SEWER DIST** OLYMPUS TERRACE SEWER DIST PACIFIC COUNTY PACIFIC COUNTY FIRE PARATRANSIT SERVICES PASCO SCHOOL DIST PEND OREILLE COUNTY CONSERV DIST PEND OREILLE COUNTY PUB HOSP DIST PEND OREILLE COUNTY PUD PENINSULA SCHOOL DISTRICT 401 PERRY TECHNICAL INSTITUTE PIERCE COUNTY PIERCE COUNTY FIRE DIST PORT ANGELES PORT OF

PORT ANGELES SCHOOL DISTRICT 121 PRESCOTT SCHOOL DIST PUGET SOUND CLEAN AIR AGENCY PUGET SOUND SCHOOL DIST QUINCY COLUMBIA BASIN IRRIG DIST **RICHLAND SCHOOL DIST 400** S KITSAP SCHOOL DISTRICT 402 S SNOHOMISH CO PUBLIC FAC DIST SAFEPLACE SAMISH WATER DIST SAMMAMISH WATER AND SEWER DIST SAN JUAN COUNTY SAN JUAN COUNTY FIRE DIST SEA MAR COMM HEALTH CTR SEATTLE JEWISH PRIMARY SCHOOL SEATTLE PORT OF SEATTLE SCHOOL DIST 1 SEATTLE UNIVERSITY SECOND AMENDMENT FOUNDATION SECOND CHANCE INC SENIOR OPPORTUNITY SERVICES SHELTON SCHOOL DISTRICT 309 SILVERDALE WATER SKAGIT COUNTY SKAGIT COUNTY CONSERVATION DIST SKAGIT COUNTY FIRE DIST SKAGIT COUNTY ISLAND HOSPITAL SKAGIT COUNTY PORT OF **SKAGIT COUNTY PUD 1** SKAGIT TRANSIT SKAMANIA COUNTY SKOOKUM INC SNOHOMISH COUNTY LIBRARY SNOHOMISH COUNTY PUD SNOHOMISH HEALTH DISTRICT SNOHOMISH SCHOOL DISTRICT 201 SOAP LAKE SCHOOL DISTRICT 156 SOOS CREEK WATER AND SEWER DIST SOUND TRANSIT SOUTH COLUMBIA BASIN IRRIG DIST SOUTH EAST EFFECTIVE DEVELOPMENT SOUTH SOUND MENTAL HEALTH SERVICES SOUTHWEST YOUTH & FAMILY SERVICES SPECIAL MOBILITY SERVICES INC SPOKANE CO AIR POLLUTION CNTRL AUTHORITY SPOKANE COUNTY FIRE DIST SPOKANE COUNTY LIBRARY **SPOKANE SCHOOL DISTRICT 81** ST JOSEPH/MARQUETTE SCHOOL STANWOOD SCHOOL DIST 410 STEVENS COUNTY STEVENS COUNTY PUD STILLAGUAMISH TRIBE OF INDIANS SUMNER SCHOOL DISTRICT 320 SUNNYSIDE PORT OF SUNNYSIDE SCHOOL DISTRICT 201

SUQUAMISH TRIBE SW CLEAN AIR AGENCY SWINOMISH TRIBE TACOMA DAY CHILD CARE AND PRESCHOOL TACOMA MUSICAL PLAYHOUSE TACOMA PORT OF **TACOMA SCHOOL DISTRICT 10** TACOMA-PIERCE CO **TAHOMA SCHOOL DISTRICT 409** TERRACE HEIGHTS SEWER DISTRICT THURSTON COMMUNITY TELEVISION THURSTON COUNTY THURSTON COUNTY CONSERVATION DIST THURSTON COUNTY FIRE DISTRICT **TOPPENISH SCHOOL DISTRICT 202 TOUCHET SD 300** TRIUMPH TREATMENT SERVICES **TUKWILA SCHOOL DIST 406 TUMWATER SCHOOL DISTRICT 33 U S DEPARTMENT OF TRANSPORTATION** UNITED WAY OF KING COUNTY UNIVERSITY PLACE SCHOOL DIST UPPER SKAGIT INDIAN TRIBE VAL VUE SEWER DISTRICT VALLEY TRANSIT VALLEY WATER DISTRICT VANCOUVER PORT OF VANCOUVER SCHOOL DISTRICT 37 VASHON ISLAND SCHOOL DISTRICT 402 VERA IRRIGATION VETERANS ADMINISTRATION VOLUNTEERS OF AMERICA WA ASSOC OF SCHOOL ADMINISTRATORS WA ASSOC SHERIFFS & POLICE CHIEFS WA GOVERNMENTAL ENTITY POOL WA LABOR COUNCIL AFL-CIO WA PUBLIC PORTS ASSOCIATION WA RESEARCH COUNCIL WA ST ASSOCIATION OF COUNTIES

WA STATE PUBLIC STADIUM AUTHORITY WAHKIAKUM COUNTY WALLA WALLA COLLEGE WALLA WALLA COUNTY WALLA WALLA COUNTY FIRE DISTRICT WALLA WALLA PORT OF WALLA WALLA SD 140 WASHINGTON ASSOCIATION WASHINGTON COUNTIES RISK POOL WASHINGTON FIRE COMMISSIONERS ASSOC WASHINGTON HEALTH CARE ASSOCIATION WASHINGTON PUBLIC AFFAIRS NETWORK WASHINGTON STATE MIGRANT COUNCIL WEST VALLEY SCHOOL DISTRICT 208 WEST VALLEY SCHOOL DISTRICT 363 WESTERN FOUNDATION THE WHATCOM CONSERVATION DIST WHATCOM COUNTY WHATCOM COUNTY FIRE DISTRICT WHATCOM COUNTY RURAL LIBRARY DIST WHIDBEY GENERAL HOSPITAL WHITMAN COUNTY WHITWORTH WATER WILLAPA COUNSELING CENTER WILLAPA VALLEY SCHOOL DISTRICT 160 WILLAPA VALLEY WATER DISTRICT WINLOCK SCHOOL DISTRICT 232 WOODINVILLE FIRE & LIFE SAFETY DIST WOODLAND PORT OF YAKIMA COUNTY YAKIMA COUNTY FIRE DISTRICT YAKIMA COUNTY REGIONAL LIBRARY YAKIMA SCHOOL DISTRICT 7 YAKIMA VALLEY FARMWORKERS CLINIC YAKIMA-TIETON IRRIGATION DISTRICT YELM COMMUNITY SCHOOL DISTRICT YMCA - TACOMA PIERCE COUNTY YMCA OF GREATER SEATTLE

\*Washington State cities and other unnamed Washington State local and municipal agencies may also utilize the resulting Master Price Agreement; provided they enter into the Intergovernmental Cooperative Purchasing Agreement.

## ATTACHMENT H LOCAL GOVERNMENT UNITS BY STATE

## **Oregon's Incorporated Cities**

Adair Village	Donald	John Day	Nyssa	Tangent
Adams	Drain	Johnson City	Oakland	The Dalles
Adrian	Dufur	Jordan Valley	Oakridge	Tigard
Albany	Dundee	Joseph	Ontario	Tillamook
Amity	Dunes City	Junction City	Oregon City	Toledo
Antelope	Durham	Keizer	Paisley	Troutdale
Arlington	Eagle Point	King City	Pendleton	Tualatin
Ashland	Echo	Klamath Falls	Philomath	Turner
Astoria	Elgin	La Grande	Phoenix	Ukiah
Athena	Elkton	La Pine	Pilot Rock	Umatilla
Aumsville	Enterprise	Lafayette	Port Orford	Union
Aurora	Estacada	Lake Oswego	Portland	Unity
Baker City	Eugene	Lakeside	Powers	Vale
Bandon	Fairview	Lakeview	Prairie City	Veneta
Banks	Falls City	Lebanon	Prescott	Vernonia
Barlow	Florence	Lexington	Prineville	Waldport
Bay City	Forest Grove	Lincoln City	Rainier	Wallowa
Beaverton	Fossil	Lonerock	Redmond	Warrenton
Bend	Garbaldi	Long Creek	Reedsport	Wasco
Boardman	Gaston	Lostine	Richland	Waterloo
Bonanza	Gates	Lowell	Riddle	West Linn
Brookings	Gearhart	Lyons	Rivergrove	Westfir
Brownsville	Gervais	Madras	Rockaway	Weston
Burns	Gladstone	Malin	Rogue Beach	Wheeler
Butte Falls	Glendale	Manzanita	Roseburg	Willamina
Canby	Gold Beach	Maupin	Rufus	Wilsonville
Cannon Beach	Gold Hill	Maywood Park	Salem	Winston
Canyon City	Granite	McMinnville	Scappouse	Wood Village
Canyonville	Grants Pass	Medford	Scio	Woodburn
Carlton	Grass Valley	Merrill	Scott Mills	Yachats
Cascade Locks	Greenhorn	Metolius	Seaside	Yamhill
Cave Junction	Gresham	Mill City	Seneca	Yoncalla
Central Point	Haines	Millersburg	Shady Cove	
Chiloquin	Halfway	Milton-Freewater	Shaniko	
Clatskanie	Halsey	Milwaukie	Sheridan	
Coburg	Harrisburg	Mitchell	Sherwood	
Columbia City	Helix	Molalla	Siletz	
Condon	Heppner	Monmouth	Silverton	
Coos Bay	Hermiston	Monroe	Sisters	
Coquille	Hillsboro	Monument	Sodaville	
Cornelius	Hines	Moro	Spray	
Corvallis	Hood River	Mosier	Springfield	
Cottage Grove	Hubbard	Mt. Angel	St. Helens	
Cove	Huntington	Mt. Vernon	St. Paul	
Creswell	Idanha	Myrtle Creek	Stanfield	
Culver	Imbler	Myrtle Point	Stayton	
Dallas	Independence	Nehalem	Sublimity	
Damascas	Ione	Newberg	Summerville	
Dayton	Irrigon	Newport	Sumpter	
Dayville	Island City	North Bend	Sutherlin	
Depoe Bay	Jacksonville	North Plains	Sweet Home	
Depoe Bay	Jefferson	North Powder	Talent	

## **Idaho's Incorporated Cities**

Acequia	Dover	Idaho City	Mountain Home	Shoshone
Albion	Downey	Idaho Falls	Murray	Soda Springs
American Falls	Driggs	Island Park	Nampa	Spirit Lake
Ammon	Eagle	Aberdeen	Donnelly	Horseshoe Bend
Arco	Elk City	Juliaetta	New Plymouth	St. Maries
Ashton	Emmett	Kamiah	Nezperce	Stanley
Bancroft	Fairfield	Kellogg	Orofino	Star
Bellevue	Franklin	Ketchum	Parma	Stites
Boise	Fruitland	Kimberly	Payette	Sugar City
Bonners Ferry	Garden City	Kooskia	Pierce	Sun Valley
Buhl	Garden Valley	Kuna	Pocatello	Tetonia
Burley	Genesee	Lava Hot Springs	Post Falls	Troy
Caldwell	Glenns Ferry	Lewiston	Potlatch	Twin Falls
Cambridge	Gooding	МасКау	Preston	Victor
Carey	Grandjean	Malad	Priest River	Wallace
Cascade	Grace	Malta	Rathdrum	Wardner
Challis	Grangeville	Marsing	Rexburg	Weippe
Chubbuck	Hailey	McCall	Richfield	Weiser
Coeur d' Alene	Harrison	McCammon	Rigby	Wendell
Cottonwood	Hauser	Melba	Riggins	Whitebird
Council	Hayden	Meridian	Rupert	Moscow
Dalton Gardens	Heyburn	Middleton	Salmon	
Dietrich	Hidden Springs	Montpelier	Sandpoint	

This is not a complete list of all Idaho cities, but all other Idaho cities shall be incorporated by this reference.

## **Idaho's Counties**

Ada	Bonneville	Custer	Kootenai	Owyhee
Adams	Boundary	Elmore	Latah	Payette
Bannock	Butte	Franklin	Lemhi	Power
Bear Lake	Camas	Fremont	Lewis	Shoshone
Benewah	Canyon	Gem	Lincoln	Teton
Bingham	Caribou	Gooding	Madison	Twin Falls
Blaine	Cassia	Idaho	Minidoka	Valley
Boise	Clark	Jefferson	Nez Perce	Washington
Bonner	Clearwater	Jerome	Oneida	

All other Idaho local government units shall be incorporated by this reference.