



KME FIRE APPARATUS

Quote # QUO0000004195 (Rev 1)

December 12, 2019

GSO# 11245

Prepared For:

,

Phone:

Fax:

Presented By:

KME

One Industrial Complex

Nesquehoning, PA 18240

Phone: 1-800-235-3928

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GSO# 11245 Retail Unit 2 Door Challenger TM
Specification: Final Production Release
Contract Administrator: Zack Zschunke

PO00024988 - VEHICLE TRANSPORTATION - DEALER PROVIDED

QTY: 1

Transportation for the completed vehicle from KME Fire Apparatus in Nesquehoning, PA to the end user shall be provided by the sales representative.

PO00011181 - COMPLETION INFORMATION

QTY: 1

The contractor shall supply, at the time of delivery, at least one (1) copy of the following documents.

The manufacturer's record of apparatus construction details, including the following information:

- Owners name and address
- Apparatus manufacturer, model and serial number
- Chassis make, model and serial number
- Front tire size and total rated capacity in pounds
- Rear tire size and total rated capacity in pounds
- Chassis weight distribution in pounds with water and manufacturer mounted equipment, front and rear
- Engine make, model, serial number, rated horsepower, rated speed and governed speed
- Type of fuels and fuel tank capacity
- Electrical system voltage and alternator output in amps.
- Battery make, model and total capacity in cold crank amps (CCA)
- Transmission make, model, and serial number. If so equipped chassis transmission PTO(s) make, model and gear ratio
- Pump make, model, rated capacity in gallons per minute (liters per minute where applicable) and serial number
- Pump transmission make, model, serial number and gear ratio
- Auxiliary pump make, model, rated capacity in gallons per minute (liters per minute where applicable) and serial number
- Water tank certified capacity in gallons or liters
- Paint manufacturer and paint number(s)
- Company name and signature of responsible company representative
- Certification of slip resistance of all stepping, standing and walking surfaces.

If the apparatus has a fire pump or an industrial supply pump, the pump manufacturer's certification of suction capability.

If the apparatus has a fire pump or an industrial supply pump, a copy of the apparatus manufacturer's approval for stationary pumping applications.

If the apparatus has a fire pump or an industrial supply pump, the engine manufacturers certified brake horsepower curve for the engine furnished, showing the maximum governed speed.

If the apparatus has a fire pump or an industrial supply pump, the pump manufacturers certification of hydrostatic test.

If the apparatus has a fire pump or an industrial supply pump, the Underwriters Laboratory certification of inspection and test for the fire pump (if applicable).

If the apparatus has an aerial device the Underwriters Laboratory certification of inspection and test for the aerial device.

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If the apparatus has an aerial device, all the technical information required for inspections to comply with NFPA 1911, Standards for Testing Fire Department Aerial Devices.

If the apparatus has a fixed line voltage power source, the certification of the test for the fixed power source (if applicable).

If the apparatus is equipped with an air system, test results of the air quality, the SCBA fill station, and the air system installation.

Weight documents from certified scale - showing actual loading on the front axle, rear axle(s) and overall vehicle (with the water tank full but without personnel, equipment and hose) shall be supplied with the complete vehicle to determine compliance with NFPA-1901.

Written load analysis and results of electrical performance tests.

If the apparatus is equipped with a water tank, the certification of water tank capacity by the tank manufacturer.

PO00011182 - FMVSS REQUIREMENT

QTY: 1

The chassis shall be certified by the apparatus manufacturer as conforming to all applicable Federal Motor Vehicle Safety Standards in effect at the date of contract.

This shall be attested to by the attachment of a FMVSS certification label on the vehicle by the contractor who shall be recognized as the responsible final manufacturer.

PO00011183 - RECORDS

QTY: 1

The successful bidder shall be responsible for preparing and maintaining a record file of parts and assemblies used to manufacture the apparatus.

These records shall be maintained in the factory of the bidder for a minimum of twenty (20) years.

File shall contain copies of any and all reported deficiencies, all replacement parts required to maintain the apparatus, and original purchase documents including specifications, contract, invoices, incomplete chassis certificates, quality control reports and final delivery acceptance documents.

The {Company} shall have access to any and all documents contained in this file upon official written request.

PO00011186 - GENERAL CONSTRUCTION

QTY: 1

The complete apparatus, assemblies, subassemblies, component parts, etc., shall be designed and constructed with the due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the apparatus is to be subject.

All parts of the apparatus shall be designed with a factor of safety, which is equal to or greater than that which is considered standard and acceptable for this class of equipment in fire fighting service.

All parts of the apparatus shall be strong enough to withstand general service under full load.

The apparatus shall be so designed that the various parts and readily accessible for lubrication, inspection, adjustment and repair.

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Bidder's specifications must meet minimum requirements of N.F.P.A. Pamphlet #1901; Underwriters Laboratories, Inc.; and all State and Federal Department of Transportation vehicle regulations at time of sale of unit.

The apparatus shall be designed and constructed, and the equipment so mounted, with due consideration to distribution of the load between front and rear axles that all specified equipment, including a full complement of specified ground ladders, full water tank, loose equipment, and firefighters shall be carried without overloading or injuring the apparatus.

PO00011188 - PRODUCT LIABILITY

QTY: 1

Each bidder shall supply proof of product liability and facility insurance equal to or exceeding \$30,000,000.00.

This shall be provided as part of the proposal. There will be no exceptions.

PO00011192 - PAINT CERTIFICATION

QTY: 1

The finish paint shall be certified by the apparatus manufacturer as conforming to all applicable Commercial Vehicle Paint Standards in effect at the date of contract.

This shall be attested to by the attachment of a Sikkens certification.

PO00023879 - PRICES & PAYMENTS

QTY: 1

The bid price will be F.O.B. Destination, on a delivered and accepted basis at the Fire Department. Total price on KME's proposal sheet will include all items listed in these specifications. KME has computed pricing less federal and state taxes. It is understood that any applicable taxes will be added to the proposed prices, unless the purchaser furnishes appropriate tax-exempt forms.

PO00023889 - PENALTY CLAUSE

QTY: 1

KME is agreeing to a penalty clause per the terms of the specifications. It is understood that this penalty clause excludes delays due to issues beyond KME's reasonable control, such as war, fire, labor disputes, acts of God, governmental regulations, or supplier issues.

Further, any changes requested after order submittal, including those made during the pre-construction conference, may void any penalty clauses or require that delivery and penalty be re-negotiated in good faith by both parties.

PO00010973 - FAIR ETHICAL & LEGAL COMPETITION

QTY: 1

In order to ensure fair, ethical, and legal competition, neither original equipment manufacturer (OEM) nor parent company of the OEM shall have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

There will be no exceptions.

PO00010976 - MATERIAL & WORKMANSHIP

QTY: 1

All equipment furnished shall be guaranteed to be new and of current manufacture, to meet all requirements of these specifications.

All workmanship shall be of high quality and accomplished in a professional manner so as to insure a functional apparatus with a pleasing, aesthetic appearance.

PO00010978 - CONTRACT ADMINISTRATOR

QTY: 1

The successful bidder shall designate a contract administrator to provide a single point interface between the purchaser and the contractor on all matters concerning the contract.

PO00010979 - APPROVAL DRAWING

QTY: 1

A detailed drawing of the apparatus shall be provided to the purchaser for approval before construction begins. A copy of this drawing shall also be provided to the manufacturer's representative. Upon purchaser's approval, the finalized drawing shall become a part of the total contract.

The drawing shall show, but is not limited to, such items as the chassis make and model, major components, location of lights, sirens, all compartment locations and dimensions, special suction, discharges, etc. The drawing shall be a visual interpretation of the apparatus as it is to be supplied.

PO00010981 - DELIVERY

QTY: 1

Delivery of the apparatus to the {Company} shall remain the bidder's responsibility.

On initial delivery of the fire apparatus, a qualified and responsible representative of the contractor shall demonstrate the apparatus and provide initial instruction to representatives of the customer regarding the operation, care, and maintenance of the apparatus and equipment supplied.

PO00011164 - INSTRUCTION MANUALS - TWO (2) SETS - USB/CD

QTY: 1

In accordance with standard commercial practices, applicable to each vehicle (including body and special equipment) furnished under the contract, the following listed manuals and schematics, in the quantity specified, shall be provided at time of delivery of each vehicle.

The contractor shall supply at time of delivery, two (2) USB/CD copies of a complete operation and service manual covering the complete apparatus as delivered and accepted.

The manual shall contain the following:

- Descriptions, specifications, and ratings of chassis, pump (if applicable), and aerial device.
- Wiring diagrams.
- Lubrication charts.
- Operating instructions for the chassis, any major components such as a pump and any auxiliary systems.
- Instructions regarding the frequency and procedures recommended for maintenance.
- Parts replacement information.

PO00010982 - VEHICLE FLUID PLATE

QTY: 1

As required by NFPA-1901, the contractor shall affix a permanent plate in the driver's compartment specifying the quantity and type of the following fluids used in the vehicle:

A permanent plate in the driving compartment shall specify the quantity and type of the following fluids used in the vehicle:

- Engine oil
- Engine coolant

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- Chassis transmission fluid
- Pump transmission lubrication fluid
- Pump primer fluid
- Drive axle(s) lubrication fluid
- Air-conditioning refrigerant
- Air-conditioning lubrication oil
- Power steering fluid
- Cab tilt mechanism
- Transfer case fluid
- Equipment rack fluid
- Air compressor system lubricant
- Generator system lubricant
- Aerial systems

PO00010984 - PA STATE INSPECTION

QTY: 1

The completed vehicle should include an annual safety inspection sticker on the windshield as required by the Pennsylvania Department of Transportation.

PO00010987 - UNIT BUILT AT HEADQUARTERS

QTY: 1

In order to insure top quality construction, maximum assembly line and engineering communication and the highest level of manufacturing supervision the entire apparatus shall be built at the bidders' primary (headquarters) manufacturing facility.

Apparatus constructed at satellite plants will not be considered.

PO00010988 - EXACT BLUEPRINT WITH BID

QTY: 1

A scale drawing of the specific apparatus being proposed shall be submitted WITH THE BID.

Drawings of similar units or demo units shall not be permitted.

Bidders should be clear that this provision is requiring a SCALE drawing of the truck which is actually being bid.

The drawing shall be done at the manufacturer's facility by the manufacturer's engineering department in order to guarantee the accuracy of the drawing.

Failure to comply with this requirement shall be grounds for rejection of the bid!

PO00010990 - FAMA MEMBERSHIP

QTY: 1

The apparatus manufacturer must be a current member of the Fire Apparatus Manufacturer's Association (FAMA).

PO00010992 - MANUFACTURED IN UNITED STATES

QTY: 1

The entire apparatus shall be assembled within the borders of the Continental United States to insure more readily available parts (without added costs and delays caused by tariffs and customs) and service.

PO00010993 - ISO REQUIREMENT

QTY: 1

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The manufacturer shall operate a Quality Management System that is certified to ISO 9001 by an organization that is accredited by the ANSI-ASQ National Accreditation Board (ANAB).

This type of business management system shall allow the manufacturer to monitor processes to ensure they are effective; keep adequate records; check output for defects, with appropriate and corrective action where necessary; regularly review individual processes and the quality system itself for effectiveness; and facilitate continual improvement.

A copy of the registration certificate must be included in the proposal, NO EXCEPTIONS.

PO00010994 - TABLE OF CONTENTS

QTY: 1

As all manufacturers present their specifications in a different order, each manufacturer shall provide a table of contents for ease of bid comparison and to clearly locate all proposed items.

PO00010997 - AMP DRAW REPORT

QTY: 1

The bidder shall provide with their bid proposal and at the time of delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

A written load analysis, which shall include the following:

- The rating of the alternator.
- The minimum continuous load of each component that is specified per: Applicable NFPA-1901.
- Additional loads that, when added to the minimum continuous load, determine the total connected load.
- Each individual intermittent load.

All of the above listed items shall be provided by the bidder per the applicable NFPA-1901.

PO00011001 - COOPERATIVE PURCHASING

QTY: 1

The Manufacturer shall be pleased to allow other public agencies to use the purchase agreement resulting from this invitation to bid unless the bidder expressly notes on the proposal form that prices are not available for tag-on.

The condition of such use by other agencies shall be that any such agency must make and pursue contact, purchase order/contract, and all contractual remedies with the successful bidder.

Such tag-ons shall be done so that the original purchasing agency has no responsibility for performance by either the manufacturer or the agency using the contract.

PO00023665 - KME WARRANTY, STARTING ON DELIVERY DATE

QTY: 1

Warranty coverage by KME will begin on the date of delivery to the customer.

PO00010995 - NFPA CERTIFICATION

QTY: 1

The proposed apparatus will be constructed to withstand the severe and continuous use encountered during emergency fire fighting services.

The apparatus will be of the latest type, carefully designed and constructed with due consideration to the nature and distribution of the load to be sustained.

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This proposal details the general design criteria of cab and chassis components, aerial device (if applicable), fire pump and related components (if applicable), water tank (if applicable), fire body, electrical components, painting, and equipment.

All items of these proposal specifications will conform to the fullest extent possible with the National Fire Protection Association Pamphlet No. 1901, latest edition, except as noted in the Statement-of-Exceptions.

KME will furnish satisfactory evidence of our ability to construct, supply service parts and technical assistance for the apparatus specified.

PO00011070 - GENERAL INFORMATION - NFPA 1901

QTY: 1

The proposed apparatus will be constructed to withstand the severe and continuous use encountered during emergency fire fighting services. The apparatus will be of the latest type, carefully designed and constructed with due consideration to the nature and distribution of the load to be sustained.

This proposal details the general design criteria of cab and chassis components, aerial device (if applicable), fire pump and related components (if applicable), water tank (if applicable), fire body, electrical components, painting, and equipment.

All items of these proposal specifications will conform to the fullest extent possible with the National Fire Protection Association Pamphlet No. 1901, latest edition, except as noted in the Statement-of-Exceptions.

KME will furnish satisfactory evidence of our ability to construct, supply service parts and technical assistance for the apparatus specified.

PO00010996 - NFPA TREADPLATE CERTIFICATION

QTY: 1

All stepping, standing, and walking surfaces on the body shall meet NFPA #1901 anti-slip standards.

Aluminum tread plate utilized for stepping, standing, and walking surfaces shall be Alcoa No-Slip type.

This material shall be a minimum 3/16 (0.1875") in thickness.

Upon request by the purchaser, the manufacturer shall supply proof of compliance with this requirement.

All vertical surfaces on the entire vehicle will also have NFPA treadplate in order to provide a consistent pattern.

PO00009789 - "PUMPER FIRE APPARATUS" NFPA 2016 CHAPTERS OF COMPLIANCE

QTY: 1

The unit shall be designed to conform fully to the "Pumper Fire Apparatus" requirements as stated in the NFPA 1901 Standard (2016 Revision), which shall include the following required chapters as stated in this revision:

- Chapter 1 Administration
- Chapter 2 Referenced Publications
- Chapter 3 Definitions
- Chapter 4 General Requirements
- Chapter 5 Pumper Fire Apparatus
- Chapter 12 Chassis and Vehicle Components
- Chapter 13 Low Voltage Electrical Systems and Warning Devices
- Chapter 14 Driving and Crew Areas

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- Chapter 15 Body, Compartments and Equipment Mounting
- Chapter 16 Fire Pumps and Associated Equipment
- Chapter 18 Water Tanks

PO00010889 - SAFETY SIGNS (NFPA REQUIRED)

QTY: 1

Safety sign(s) shall be located on the vehicle at the rear step, and at any cross walkway(s), to warn personnel that riding in or on these areas while the vehicle is in motion is prohibited.

PO00011011 - UL TESTING

QTY: 1

If required by the specific chapters of NFPA-1901, the proposed unit shall be tested and certified by Underwriters Laboratories Inc.

(UL) Underwriters Laboratories Inc. (UL) is recognized worldwide as a leading third party product safety certification organization for over 100 years.

UL has served on National Fire Protection Association (NFPA) technical committees for over thirty years.

UL is a nationally recognized testing laboratory recognized by OSHA.

UL complies with the American Society for Testing and Materials (ASTM) Standard ASTM E543 "Determining the Qualifications for Nondestructive Testing Agencies."

UL has more than 40 years of automotive fire apparatus safety testing experience and 16 years of factory aerial device testing and Certification experience.

UL has more than 100 years of experience developing and implementing product safety standards.

UL does not represent, is not associated with, nor is in the manufacture or repair of automotive fire apparatus.

All test work for fire pumps outlined in NFPA 1901, Edition shall be conducted.

UL has included a list of all factory aerial device manufacturers for whom testing is currently being conducted on a regular basis.

UL carries ten million dollars in excess liability insurance for bodily injury and property damage combined.

UL provides the manufacturer a complete written examination and test report for each inspection performed at the manufacturer's facility.

This report specifies the points of inspection and results of such examinations and tests.

The UL inspectors performing the test work on the units are certified to Level II in the required NDT methods, under the requirements outlined in ASNT document CP-189.

The actual person(s) performing the inspection shall present for review proof of Level II Certification in the required NDT methods.

The apparatus manufacturer shall designate, in writing, who is qualified to witness and certify these test results.

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Prior to submittal to the automotive fire apparatus manufacturer, the final Report shall be reviewed by the Supervisor of Fire Equipment Services and a Registered Professional Engineer, both of whom are directly involved with the aerial device certification program at UL.

When the unit successfully meets all the requirements outlined in NFPA 1901, 2016 Edition, UL shall issue a Certificate of Automotive Fire Apparatus Examination and Test stating the unit's compliance with NFPA- 1901.

PO00022604 - VEHICLE TOP SPEED - INTERNATIONAL - 2016 NFPA STATEMENT

QTY: 1

The rear axle/s shall be geared for a vehicle top speed in accordance with NFPA sections 4.15.2 and 4.15.3.

Units with GVWR over 26,000 pounds shall be limited to 68 mph. If the combined tank capacity is over 1250 gallons of foam and water or the GVWR is over 50,000 pounds, the vehicle top speed shall be limited to 60 mph or the fire service rating of the tires, whichever is lower.

PO00022605 - INTERNATIONAL SAE J2433 ROLLOVER TESTING

QTY: 1

The International chassis shall comply with SAE J2422 Cab Roof Strength Evaluation. The Cab to Chassis Mounting System shall remain attached to the vehicle chassis and in an orientation similar to its original position when subjected to 20g deceleration load in the forward direction. Components in the mounting system may become distorted or broken but never dislodge from the original mounting location.

PO00022584 - INTERNATIONAL - TWENTY (20) INCH FRONT BUMPER EXTENSION

QTY: 1

A 12" high, 96" wide, two (2) ribbed, bright finish stainless steel front bumper shall be provided. A twenty (20) inch front bumper extension, with aluminum tread plate gravel shield shall be provided.

PO00011973 - WHEEL TRIM KITS, CHROME BABY MOONS/LUG NUT COVERS - SINGLE AXLE

QTY: 1

Wheel trim kits consisting of chrome baby moon hubcaps and chrome lug nut covers shall be installed on the front and rear axles of the single rear axle chassis.

PO00011993 - COVER BATTERY BOX WITH TREAD PLATE OVERLAY

QTY: 1

The battery box shall be overlaid with polished aluminum tread plate.

The cover of this box shall be easily removable for inspection of the batteries.

PO00012001 - REAR WALL OF COMMERCIAL CAB OVERLAID W/TREAD PLATE

QTY: 1

The rear exterior wall of the cab shall be overlaid with polished aluminum tread plate from the walkway up to the bottom of the rear cab window, for scuff protection.

SP00016745 - INTERNATIONAL HV607 SBA 2DR 4X2 14/26

QTY: 1

Base Chassis, Model HV607 SBA with 228.00 Wheelbase, 160.90 CA, and 75.00 Axle to Frame.

AXLE CONFIGURATION

AXLE CONFIGURATION {Navistar} 4x2

Notes

Pricing may change if axle configuration is changed.

ENGINE

ENGINE, DIESEL {Cummins L9 450} EPA 2017, 450HP @ 2100 RPM, 1250 lb-ft Torque @ 1400 RPM, 2200 RPM Governed Speed, 450

Peak HP (Max), (RATED FOR EMERGENCY VEHICLES ONLY)

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RADIATOR Aluminum; Cross Flow, Front to Back Series System, 1469 SqIn, with 1172 SqIn Charge Air Cooler

Includes

: DEAERATION SYSTEM with Surge Tank

: HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps

: RADIATOR HOSES Premium, Rubber

FAN DRIVE {Horton Drivemaster} Direct Drive Type, Two Speed with Residual Torque Device for Disengaged Fan Speed

: FAN Nylon

AIR CLEANER Dual Element

ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection

BLOCK HEATER, ENGINE 120V/1000W, for Cummins ISB/B6.7/ISL/L9 Engines

Includes

: BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door

EMISSION COMPLIANCE Engine Shutdown System Exempt Vehicles, Complies with California Clean Air Regulations

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; with Ignition Switch Control for Cummins ISB/B6.7 or ISL/L9 Engines

ENGINE WATER COOLER {Sen-Dure} Auxiliary, For Use with Fire Trucks

FAN OVERRIDE Manual; with Electric Switch on Instrument Panel, (Fan On with Switch On)

FEDERAL EMISSIONS {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2019

THROTTLE, HAND CONTROL Engine Speed Control for PTO; Electronic, Stationary Pre-Set, Two Speed Settings; Mounted on Steering Wheel

TRANSMISSION

TRANSMISSION, AUTOMATIC {Allison 3000 EVS} 5th Generation Controls, Close Ratio, 5-Speed with Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, Max, GVW N/A

ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS), 127/198 Includes J1939 Based Auto Neutral; Fire/Pumper, Tank, Aerial/Ladder

OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil Type

PTO LOCATION Dual, Customer Intends to Install PTO at Left and/or Right Side of Transmission

SHIFT CONTROL PARAMETERS Allison 3000 or 4000 Series Transmissions, 5th Generation Controls, Performance Programming

TRANSMISSION OIL Synthetic; 29 thru 42 Pints

Description

TRANSMISSION SHIFT CONTROL for Column Mounted Stalk Shifter

CLUTCH

CLUTCH Omit Item (Clutch & Control)

REAR AXLES, SUSPENSIONS

AXLE, REAR, SINGLE {Meritor RS-26-185} Single Reduction, 26,000-lb Capacity, R Wheel Ends . Gear Ratio: 5.38

Notes

: Axle Lead Time is 60 Days

SUSPENSION, REAR, SINGLE 31,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs

FRONT AXLES

AXLE, FRONT NON-DRIVING {Meritor MFS-14-143A} Wide Track, I-Beam Type, 14,000-lb Capacity

FRONT SUSPENSIONS

SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 14,000-lb Capacity, with Shock Absorbers

SPRINGS, FRONT AUXILIARY Rubber

CABS, COWLS, BODIES

CAB Conventional, Day Cab

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ACCESS, CAB Steel, Driver & Passenger Sides, Two Steps per Door, for use with Day Cab and Extended Cab

AIR CONDITIONER with Integral Heater and Defroster

CAB INTERIOR TRIM Diamond, for Day Cab

Includes

: CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger

: DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Reading Lights; Integral to Overhead Console, Center Mounted

: SUN VISOR (3) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Vanity Mirror and Toll Ticket Strap, plus 1 Auxiliary Visor (Front Only), Driver Side

CAB MOUNTING HEIGHT EFFECTS High Cab in Lieu of Mid High Cab Mounting (Approx. 4.5")

CAB REAR SUSPENSION Air Bag Type

GAUGE CLUSTER Premium Level; English with English Speedometer and Tachometer, for Air Brake Chassis, Includes Engine Coolant

Temperature, Primary and Secondary Air Pressure, Fuel and DEF Gauges, Oil Pressure Gauge, Includes 5 Inch LCD Color Display

GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} with Black Bezel, Mounted in Instrument Panel VIRTUAL GA, OIL TEMP, AUTO XMSN for Allison Transmission, Requires Premium Cluster

GRAB HANDLE, EXTERIOR (2) Chrome, Towel Bar Type, with Anti-Slip Rubber Inserts, for Cab Entry Mounted Left and Right Side at B-Pillar

GRAB HANDLE, CAB INTERIOR (2) Safety Yellow

INSTRUMENT PANEL Flat Panel

IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

MIRRORS (2) Aero Pedestal, Power Adjust, Heated, Turn Signals, Bright Heads, Black Arms, 6.5" x 14" Flat Glass, Includes 6.5" x 6"

Convex Mirrors, for 102" Load Width

Notes

: Mirror Dimensions are Rounded to the Nearest 0.5"

SEAT BELT All Red; 1 to 3

SEAT, DRIVER {Seats, Inc. Universal Series} 911, NFPA Compliant, Air Suspension, High Back Vinyl with Covered Back and International Logo on Head Rest

SEAT, PASSENGER {Seats, Inc. Universal Series 911} NFPA Compliant, Non-Suspension, High Back for SCBA, Vinyl Covered Back, Adjusters, 0 Degree Back angle, International Logo on Headrest

SEATBELT WARNING PREWIRE Includes Seat Belt Switches and Seat Sensors for all Belted Positions in the Cab and a Harness Routed to the Center of the Dash for the Aftermarket Installation of the Data Recorder and Seatbelt Indicator Systems, for 1 to 3 Seat Belts

WINDOW POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature

FRAMES

FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.125" x 3.580" x 0.312" (257.2mm x 90.9mm x 8.0mm); 480.0" (12192) Maximum OAL

FRAME REINFORCEMENT Full Outer C-Channel, Heat Treated Alloy Steel (120,000 PSI Yield), 10.813" x 3.892" x 0.312" (274.6mm x 98.8mm x 7.9mm), 480.0" (12192mm) OAL

BUMPER, FRONT Omit Item

FRAME EXTENSION, FRONT Integral; 20" In Front of Grille

TOW HOOK, FRONT (2) Frame Mounted

WHEELBASE RANGE 189" (480cm) Through and Including 256" (650cm)

BRAKES

BRAKE SYSTEM, AIR Dual System for Straight Truck Applications

Includes

: BRAKE LINES Color and Size Coded Nylon

: DRAIN VALVE Twist-Type

: GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster

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: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel
: QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4
: SLACK ADJUSTERS, FRONT Automatic (with Air Cam Brakes)
: SLACK ADJUSTERS, REAR Automatic (with Air Cam Brakes)
: SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6
AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)
BRAKES, FRONT, AIR CAM S-Cam; 16.5" x 5.0"; Includes 20 Sq. In. Long Stroke Brake Chambers
BRAKE CHAMBERS, FRONT AXLE {Bendix} 20 SqIn
BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and
Spring Actuated Parking Brake
BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 30/30 Spring Brake
BRAKE CHAMBERS, SPRING Relocated To Rear Of Rear Axle For Maximum Ground Clearance
BRAKE SHOES, REAR Cast
AIR COMPRESSOR {Cummins} 18.7 CFM
AIR DRYER {Bendix AD-IP} with Heater
AIR DRYER LOCATION Mounted Inside Left Rail, Back of Cab
AIR TANK LOCATION (2) : One Mounted Under Each Frame Rail, Front of Rear Suspension, Parallel to
Rail
DRAIN VALVE {Berg} with Pull Chain, for Air Tank

STEERING

STEERING GEAR {Sheppard M100} Power
STEERING COLUMN Tilting and Telescoping
STEERING WHEEL 4-Spoke; 18" Dia., Black

DRIVELINES

DRIVELINE SYSTEM {Dana Spicer} SPL170, for 4x2/6x2

EXHAUST SYSTEMS

EXHAUST SYSTEM Single, Horizontal Aftertreatment Device, Frame Mounted Right Side Under Cab, for
Single Short Horizontal Tail
Pipe, Frame Mounted Right Side Back of Cab
AFTERTREATMENT COVER Steel, Black
ENGINE COMPRESSION BRAKE {Jacobs} for Cummins ISL/L9 Engines; with Selector Switch and
On/Off Switch
SWITCH, FOR EXHAUST 3 Position, Momentary, Lighted Momentary, ON/CANCEL, Center Stable,
INHIBIT REGEN, Mounted in IP
Inhibits Diesel Particulate Filter Regeneration When Switch is Moved to ON While Engine is Running,
Resets When Ignition is Turned OFF

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM 12-Volt, Standard Equipment

Includes

: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab
: HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel
: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever
: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light
: STARTER SWITCH Electric, Key Operated
: STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector
: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change
Feature
: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays),
Integral with Turn Signal Lever
: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted
: WIRING, CHASSIS Color Coded and Continuously Numbered

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ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt 325 Amp. Capacity, Pad Mount, with Remote Sense

BACK-UP ALARM Electric, 102 dBA

BATTERY BOX Steel, with Aluminum Cover, 14" Wide, 2-3 Battery Capacity, Mounted Left Side Under Cab

BATTERY DISCONNECT SWITCH for Cab Power Disconnect Switch; Cab Mounted, Disconnects Power to Power Distribution Center (PDC) and Body Builder Through Solenoid, Does Not Disconnect Charging Circuits; Locks with Padlock

BATTERY SYSTEM {Fleetrite} Maintenance-Free, (3) 12-Volt 1980CCA Total, Top Threaded Stud

BODY BUILDER WIRING Back of Day Cab at Left Frame or Under Sleeper, Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn

CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses

CIGAR LIGHTER Includes Ash Cup

CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade

DATA RECORDER Includes Display Mounted in Overhead Console

HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on

HORN, AIR Black, Single Trumpet, with Lanyard Pull Cord

HORN, ELECTRIC Disc Style

IGNITION SWITCH Keyless

INDICATOR, BATTERY WARNING Green BATTERY ON Indicator, Mounted on Left Side of Instrument Panel, To be Used with Factory Installed or Customer Mounted Battery Disconnect Switch

INDICATOR, LOW COOLANT LEVEL with Audible Alarm

POWER SOURCE Cigar Type Receptacle without Plug and Cord

POWER SOURCE, ADDITIONAL Auxiliary Power Outlet (APO) & USB Port, Located in the Instrument Panel

POWER SOURCE, TERMINAL TYPE 2-Post

RADIO AM/FM/WB/Clock/Bluetooth/USB Input/3.5MM Auxiliary Input, MP3, Apple Device Play & Control, Bluetooth for Phone & Music

SOLENOID, AIR for Customer Use; Provides (2) Normally Closed Pilot Air Source, Approx. 4 CFM, Includes Latched Switch in Cab; Air Available Only with Key in "Ignition" or "Accessory" Position; Air Will Exhaust with Key in "Off" Position

SPEAKERS (2) 6.5" Dual Cone Mounted in Both Doors, (2) 5.25" Dual Cone Mounted in Both B-Pillars

STARTING MOTOR {Delco Remy 39MT} 12 Volt, Gear Reduced, with Thermal Over-Crank Protection

STOP-LIGHT WIRING MODIFIED Stop-Lights Turned on When Engine Compression Brake, Exhaust Brake or Retarder is Activated

SWITCH, AIR HORN, PASSENGER Fire Truck Application; Momentary Switch Located in Instrument Panel Close to Passenger, Driver Also To Activate Switch with Lanyard

SWITCH, BODY CIRCUITS, MID with (2) Remote Power Modules Mounted in Cab Behind Driver Seat, Up to 6 Outputs & 6 Inputs Each, Max 20 amp per Channel, Max 80 amp Total, Includes 2 Switch Packs with Momentary Switches

SWITCH, BODY CIRCUITS, REAR with Remote Power Module Mounted at Rear on Frame, Up to 6 Outputs & 6 Inputs, Max 20 amp per Channel, Max 80 amp Total, Includes 1 Switch Pack with Momentary Switches

TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender

WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time

FRONT END

FRONT END Tilting, Fiberglass, with Three Piece Construction, for WorkStar/HV

BUG SCREEN Mounted Behind Grille

GRILLE Stationary, Chrome

GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System

INSULATION, SPLASH PANELS for Sound Abatement

INSULATION, UNDER HOOD for Sound Abatement

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LOGOS EXTERIOR Model Badges

LOGOS EXTERIOR, ENGINE Badges

SPEEDOMETER, TOOLS, MISC

KEYS - ALL ALIKE Fleet - Includes Ignition and Cab Door Keys

KEYS - ALL ALIKE, ID I-1003 Compatible with Z-001

PAINT SCHEMATIC, PT-1 Single Color, Design 100

Includes

: PAINT SCHEMATIC ID LETTERS "WL"

PAINT TYPE Base Coat/Clear Coat, 1-2 Tone

SURCHARGE, REAR AXLE for Meritor Rear Axles

PAINT CLASS Single Custom Color

FUEL TANKS

FUEL TANK Top Draw, Non-Polished Aluminum, 24" Dia, 50 US Gal (189L), Mounted Left Side, Under Cab

DEF TANK 5 US Gal (19L) Capacity, Frame Mounted Outside Left Rail, Under Cab

FUEL COOLER Less Thermostat; Mounted in Front of Cooling Module

FUEL/WATER SEPARATOR {Racor 400 Series,} 12 VDC Electric Heater, Includes Pre-Heater, with Primer Pump, Includes Water-in-Fuel Sensor

LOCATION FUEL/WATER SEPARATOR Mounted Inside Left Rail, 59" Back of Cab

WHEELS, TIRES - FRONT

WHEELS, FRONT {Accuride 42644} DISC; 22.5x8.25 Rims, Standard Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

(2) TIRE, FRONT 12R22.5 Load Range H G751 MSA (GOODYEAR), 483 rev/mile, 68 MPH, All-Position

WHEELS, TIRES - REAR

WHEELS, REAR {Accuride 42644} DUAL DISC; 22.5x8.25 Rims, Standard Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

(4) TIRE, REAR 12R22.5 Load Range H G282 MSD (GOODYEAR), 481 rev/mile, 75 MPH, Drive

BODY INTEGRATION

BDY INTG, I/O EXP HARNESS {for Diamond Logic Builder} In-Cab wire harness (DLB) program only, Includes a harness with five blunt cut wires routed on lower left of instrument panel. Two ground active inputs and two (.5Amp) relay drivers outputs are provided

WARRANTY

WARRANTY Standard for HV507, HV50B, HV607 Models, Effective with Vehicles Built July 1, 2017 or Later, CTS-2025A

PO00001102 - INTERNATIONAL - TWENTY (20) INCH FRONT BUMPER EXTENSION

QTY: 1

A 12" high, 96" wide, two (2) ribbed, bright finish stainless steel front bumper shall be provided.

A twenty (20) inch front bumper extension with aluminum tread plate gravel shield shall be provided.

PO00000886 - INTERNATIONAL - CENTER CONSOLE FOR NAVISTAR 2 DOOR - BRUSHED

QTY: 1

A center console fabricated from 1/8" aluminum shall be furnished and will be located between the driver and officer's seats. The forward area of the console shall have a mounting surface for emergency lighting switch panels and electronic siren control boxes. This should be within reach of the driver or officer. In addition, the console shall be equipped with two (2) map/notebook storage pockets at the rear of the console. The console shall be finished with a brushed aluminum. The console dimensions are based on current International cab models. Other specified commercial cabs may result in varied dimensions. Changes to the international cab may also result in varied dimensions.

PO00001511 - INTERNATIONAL - AUXILIARY AIR MANIFOLD - COMMERCIAL CHASSIS

QTY: 1

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All auxiliary air devices on the commercial chassis shall be fed from a common manifold. The common manifold shall be installed at an accessible location near the chassis air tanks. The manifold shall be fed by a 3/8" synflex airline plumbed from the primary air tank using a pressure protection valve. Unused ports shall be closed off using an appropriately sized plug.

PO00022589 - COMMERCIAL CHASSIS ELECTRICAL SYSTEM DESCRIPTION

QTY: 1

The commercial chassis electrical system shall be provided as furnished by the original manufacturer. A customized interface shall be provided and designed, so as not to disturb any of the required chassis functions. The necessary interfaces shall only be provided in areas where load management is allowed or with accessory components provided on the chassis.

PO00022606 - ** AKRON/WELDON VEHICLE DATA RECORDER/SEAT BELT SYS. INCLUDED IN INTERNATIONAL CHASSIS SPEC**

QTY: 1

PO00002034 - AKRON/WELDON VEHICLE DATA RECORDER DOWNLOAD HARNESS

QTY: 1

A Weldon model #0L40-2597-00, VDR download harness shall be supplied with the system to allow the data to be downloaded to a computer.

PO00023875 - CENTER WELL

QTY: 1

One (1) storage well constructed of 1/8" aluminum shall be installed in the gravel shield. This storage well shall be center mounted between the chassis frame rails. The bottom of the storage well shall have a minimum of four (4) drain holes.

PO00002211 - TWO (2) VELCRO STRAPS ON CENTER WELL

QTY: 1

The center, front bumper hose well shall be furnished with Velcro straps to secure the hose stored in the well.

The straps shall be attached to each side of the hose well with footman loops.

PO00002222 - DRI-DEK MATERIAL IN CENTER WELL

QTY: 1

The center storage well shall be equipped with Dri-Dek material to provide drainage and ventilation of equipment in storage well.

PO00002224 - CENTER WELL - HOSE CAPACITY

QTY: 1

The center storage well shall have the desired capacity of:

PO00002227 - CENTER WELL - 150 FEET OF 1-3/4" HOSE

QTY: 1

150' of 1 3/4" hose

PO00002306 - TWO (2) PAINTED TOW HOOKS BELOW FRONT BUMPER

QTY: 1

Two (2) front painted, tow hooks shall be fastened directly to the bumper support structure below the front bumper.

The tow hooks shall be fastened with grade 8 bolts and nuts.

PO00012024 - TIRE PRESSURE MONITORING SYSTEM - PRESSURE PRO - SIX TIRES

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QTY: 1

A Pressure Pro # HDGPM tire pressure monitoring system shall be provided. The system shall monitor the pressure on all six (6) vehicle tires.

A Pressure-Pro ABPCA-KIT extended antenna with cable shall be provided to enhance monitoring accuracy of all tires.

PO00010794 - TRANSMISSION LOCK-UP

QTY: 1

The automatic transmission furnished in the chassis shall have a lock-up assembly which brings the transmission to direct drive and prevents the transmission from shifting gears while in the pumping mode.

A positive braking system shall be provided to prevent vehicle movement during pumping operations.

The air brakes furnished must satisfy this requirement.

PO00011992 - COVER FUEL TANK WITH TREAD PLATE OVERLAY

QTY: 1

The step type fuel tank shall be overlaid with polished aluminum tread plate.

This shall include the top, front and both ends. Step areas shall be provided for access to the cab.

Step areas shall be fabricated from Alcoa "No-Slip" tread plate.

PO00022590 - 12 VOLT ELECTRICAL SYSTEM TESTING - ALL UNITS

QTY: 1

The apparatus low voltage electrical system shall be tested and certified by the manufacturer. The certification shall be provided with the apparatus. All tests shall be performed with the air temperature between 0°F and 100°F.

The following three (3) tests shall be performed in order. Before each test, the batteries shall be fully charged.

The engine shall be started and kept running until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for 10 minutes. All electrical loads shall be turned off prior to attempting to restart the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a test failure.

The minimum continuous electrical load shall be activated with the engine running at idle speed. The engine temperature shall be stabilized at normal operating temperature. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.

The total continuous electrical load shall be activated with the engine running up to the engine manufacturers governed speed. The test duration shall be a minimum of 2 hours. Activation of the load management system shall be permitted during this test. However, an alarm sounded due to excessive battery discharge, as detected by the system, or a system voltage of fewer than 11.7 volts DC for a 12-volt system, for more than 120 seconds, shall be considered a test failure.

Following completion of the preceding tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm is activated.

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The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of fewer than 11.7 volts shall be considered a test failure. The battery system shall then be able to restart the engine.

At the time of delivery, documentation shall be provided with the following information:

- Documentation of the electrical system performance test
- A written load analysis of the following;
- Nameplate rating of the alternator
- Alternator rating at idle while meeting the minimum continuous electrical load
- Each component load comprising the minimum continuous electrical load.
- Additional loads that, when added to the minimum continuous load, determine the total connected load.
- Each individual intermittent load.

PO00012461 - BATTERY DISCONNECT SWITCH, ALL UNITS

QTY: 1

The chassis batteries shall be wired in parallel to a single 12 volt electrical system, controlled through a heavy duty master disconnect switch.

The master disconnect switch shall be located within easy access of the driver upon entering or exiting the cab.

PO00002836 - 120 VOLT 20 AMP SUPER AUTO EJECT FOR BATT CHARGER - CUSTOM

QTY: 1

One (1) Kussmaul "Super" Auto Eject model 091-55-20-120, automatic, 120 volt, 20 amp shoreline disconnect shall be provided for the on board, 110 volt battery charging systems.

The disconnect shall be equipped with a NEMA 5-20 P male receptacle, which shall automatically eject the shoreline when the vehicle starter is energized.

The mating connector shall be included with the auto eject and shall be provided as loose equipment.

A label shall be provided indicating voltage and amperage ratings.

PO00022630 - SHORELINE RECEPTACLE LABEL - NFPA

QTY: 1

A shoreline power receptacle information plate shall be permanently affixed at or near the power inlet. The plate shall indicate the following:

- Type of Line Voltage
- Current Rating in Amps Power Inlet Type (DC or AC).

PO00024045 - RED COVER FOR KUSSMAUL AUTO-EJECT RECEPTACLE

QTY: 1

The Kussmaul auto-eject connection shall be equipped with a Red weatherproof cover.

PO00002841 - SHORELINE LOCATION - DRIVER'S STEP WELL

QTY: 1

The shoreline receptacle shall be located in the driver's cab step well in a pre-determined location by KME.

PO00002869 - PROMARINER PRONAUTIC, 40 AMP, BATTERY CHARGER

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QTY: 1

A ProMariner, ProNautic 1240P, fully automatic battery charger shall be provided for maintaining the vehicle battery system.

The charger shall feature a four (4) stage automatic charging system that shall extend the battery life and usage with multi-stage charging featuring a fast charge and a float/maintenance mode.

A LED status center, built into the charger, shall provide at-a-glance status of fast charge, conditioning, ready (float/maintenance) and battery type selection.

Output current shall be 40 amperes @ 12 volt DC.

SP00016611 - PROMARINER PRONAUTIC REMOTE DISPLAY

QTY: 1

A ProMariner, ProNautic Remote Display, shall be installed on the center console, to display the actual voltage, charging amps and battery temperature.

With the remote, the charger can also be controlled to operate at lower than full capacity to allow AC power to be maximized for other onboard applications.

SP00016612 - STANDARD #MATM RADIO ANTENNA INSTALLED

QTY: 1

An antenna mounting base(s) model #MATM with 17' of coaxial cable shall be provided and installed on the lower cab roof, behind the light bar.

The attached antenna wire(s) shall be run to the center console.

The Fire Department is responsible to have the correct antenna whip installed once the apparatus is delivered.

PO00010735 - HOSE BED WORK LIGHT - SWITCH

QTY: 1

The hose bed work light shall have a protected 12-volt switch at the rear body panel.

The switch will be labeled "HOSE BED WORK LIGHTS."

PO00003234 - CONTROL SWITCH IN CAB FOR REAR OF BODY LIGHTS

QTY: 1

A switch shall be provided in the cab warning, light switch console to turn the rear of body lights on and off.

PO00003240 - CONTROL SWITCH IN CAB FOR DRIVER SIDE OF BODY LIGHTS

QTY: 1

A switch shall be provided in the cab warning, light switch console to turn the driver side of body lights on and off.

PO00003242 - CONTROL SWITCH IN CAB FOR OFFICER SIDE OF BODY LIGHTS

QTY: 1

A switch shall be provided in the cab warning, light switch console to turn the officer side of body lights on and off.

PO00011819 - ENGINE COMPARTMENT WORK LIGHTS - TECNIQ LED

QTY: 1

Two (2) Tecniq model #E18 LED lights shall be provided inside the engine enclosure that will provide 800 lumens each.

Each light shall have their own independent switch incorporated into the light head.

SP00016615 - 12 VOLT POWER AND GROUND CIRCUIT, CENTER CONSOLE

QTY: 1

One (1) dedicated circuit; 12 volt, 40 Amp, power and ground on 3/8 stud and fused at battery shall be located in the center console, The circuit shall be for future installation of radios or accessories and activate when the master battery switch is on.

SP00014705 - BLUE SEA FUSE BLOCK

QTY: 1

A Blue Sea 5025B, 6 circuit fuse block, shall be installed inside of the center console. This block has a maximum amperage of 60 Amps per block and 30 Amps per circuit.

PO00022990 - FRC INVIEW TRUESIGHT REARVIEW CAMERA 7" COLOR LCD - SINGLE CAMERA

QTY: 1

An FRC InView TrueSight rear vision camera system model BCA111-A00 shall be provided to allow the driver to visually see the rear of the apparatus while in the cab. The system shall include an FRC 7" color monitor mounted adjacent to the driver and an FRC color camera that shall be mounted at the rear of the vehicle.

The rear vision camera shall be wired to automatically activate when the chassis transmission is placed in reverse.

PO00010824 - REAR VISION MONITOR MOUNTED ON CAB CEILING

QTY: 1

The monitor for the rear vision system shall be mounted ceiling of the cab in easy view of the driver.

Note: This will be a separate screen, this will not be part of the ES-Key screen.

PO00022591 - COMMERCIAL CHASSIS MARKER LIGHTS AND REFLECTORS

QTY: 1

Cab marker lights and signaling devices shall be as provided on the commercial chassis cab from the original chassis manufacturer. FMVSS reflectors shall be also be provided as required.

PO00003068 - CAB STEP LIGHTS, TECNIQ EON 3 LED, ALL DEVICES

QTY: 2

Polished, stainless steel, TecNiq Eon, 3-LED, horizontal surface mounted chassis step lights shall be provided and controlled with marker light actuation.

Step lights shall be located to properly illuminate all chassis access steps and walkway areas and shall include a mounting gasket to provide a watertight seal.

PO00010755 - NFPA COMPLIANT WARNING LIGHT PACKAGE

QTY: 1

The following warning light package shall include all of the minimum warning light and actuation requirements for the current revision of the NFPA 1901 Fire Apparatus Standard.

The lighting as specified shall meet the requirements for both "Clearing Right of Way" and "Blocking Right of Way" which includes disabling all white warning lights when the apparatus is in "Blocking Right of Way" mode.

PO00010757 - WARNING LIGHT FLASH PATTERN - NFPA FLASH PATTERN

QTY: 1

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All of the perimeter warning lights shall be set to a default NFPA compliant flash pattern as provided by the light manufacturer.

PO00010756 - LIGHT PACKAGE ACTUATION/CONTROLS

QTY: 1

The entire warning light package shall be actuated with a single warning light switch located on the cab switch panel. The wiring for the warning light package shall engage all of the lights required for "Clearing Right of Way" mode when the vehicle parking brake is not engaged. An automatic control system shall be provided to switch the warning lights to the "Blocking Right of Way" mode when the vehicle parking brake is engaged.

PO00010759 - LIGHT PACKAGE NFPA CERTIFICATION

QTY: 1

The warning light system(s) specified above shall not exceed a combined total amperage draw of 45 AMPS with all lights activated in either the "Clearing Right of Way" or the "Blocking Right of Way"

The warning light system(s) shall be certified by the light system manufacturer(s), to meet all of the requirements in the current revision of the NFPA 1901 Fire Apparatus Standard as noted in the General Requirements section of these specifications.

The NFPA required "Certificate of Compliance" shall be provided with the completed apparatus.

Any large truck as defined by NFPA shall have the lower zone warning lights mounted no higher than 62" to the optical center of the warning light from ground level. {No Exceptions}

PO00003624 - A-UPPER, WHELEN LED JE2NFPA, JUSTICE 56" LIGHT BAR FRONT POPULATED

QTY: 1

Whelen # JE2NFPA "Justice", 56" LED cab roof warning light bar shall be furnished and rigidly mounted on top of the cab roof.

The light bar shall be equipped with the following:

- Clear Lenses
- Four Corner Red Linear 6 LEDs
- Six Red Forward Facing CON 3 LEDs
- Two White Forward Facing CON 3 LEDs.

If equipped, the forward facing white lights shall be automatically disabled for the "Blocking Right of Way" mode.

PO00003639 - C-UPPER, WHELEN C9 SUPER LEDs

QTY: 1

Two (2) Whelen, C9, super LED light heads shall be furnished and mounted one (1) on each side on the upper rear face of the body, facing rear.

PO00024574 - UPPER ZONE C WARNING LIGHT LENS - CLEAR

QTY: 1

The upper zone C warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00024593 - UPPER ZONE C WARNING LIGHT BEZEL - CHROME

QTY: 1

The upper zone C warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

PO00003665 - B/D-UPPER FRONT, WHELEN C9 SUPER LEDES

QTY: 1

Two (2) Whelen, C9, super LED light heads shall be furnished and mounted one (1) on each side on the upper side face, towards the front of the body, facing to each side of the unit.

PO00024576 - UPPER ZONE B/D FRONT WARNING LIGHT LENS - CLEAR

QTY: 1

The upper zone B/D front warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00024595 - UPPER ZONE B/D FRT WARNING LIGHT BEZEL - CHROME

QTY: 1

The upper zone B/D front warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

PO00003652 - B/D-UPPER REAR, WHELEN C9 SUPER LEDES

QTY: 1

Two (2) Whelen, C9 super LED light heads shall be furnished and mounted one (1) on each side on the upper side face, towards the rear of the body, facing to each side of the unit.

The lights shall be installed with a chrome plated mounting flange.

PO00024578 - UPPER ZONE B/D REAR WARNING LIGHT LENS - CLEAR

QTY: 1

The upper zone B/D rear warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00024597 - UPPER ZONE B/D REAR WARNING LIGHT BEZEL - CHROME

QTY: 1

The upper zone B/D rear warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

PO00012073 - A-LOWER FRONT MOUNTING, COMMERCIAL CHASSIS

QTY: 1

The lower zone A warning lights shall be mounted in the commercial chassis grille no higher than 62" from ground level.

PO00003868 - A-LOWER FRONT, WHELEN C6 SUPER LEDES

QTY: 1

Two (2) Whelen C6 super LED light heads shall be provided and installed one (1) each side.

PO00024580 - LOWER ZONE A WARNING LIGHT LENS - CLEAR

QTY: 1

The lower zone A warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00024599 - LOWER ZONE A WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone A warning lights shall include red leds and a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

PO00003878 - C-LOWER REAR, WHELEN C6 SUPER LEDES

QTY: 1

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Two (2) Whelen, C6, super LED light heads shall be provided and installed one (1) each side directly below the DOT stop, tail, turn and backup lights.

PO00024582 - LOWER ZONE C WARNING LIGHT LENS - CLEAR

QTY: 1

The lower zone C warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00012075 - B/D-LOWER FRONT MOUNTING, COMMERCIAL CHASSIS

QTY: 1

The lower zone B & D warning lights shall be mounted on the sides of the commercial chassis hood at or forward of the centerline of the front axle. The light shall be mounted no higher than 62" from ground level.

PO00003892 - B/D-LOWER FRONT, WHELEN C6 SUPER LEDES

QTY: 1

Two (2) Whelen, C6 super LED light heads shall be provided and installed with one (1) on each side.

PO00024584 - LOWER ZONE B/D FRONT WARNING LIGHT LENS - CLEAR

QTY: 1

The lower zone B/D front warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00024603 - LOWER ZONE B/D FRONT WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone B/D front warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

PO00003903 - B/D-LOWER MID, WHELEN C6 SUPER LEDES

QTY: 1

Two (2) Whelen, C6 super LED light heads shall be provided and installed with one (1) on each side.

PO00024586 - LOWER ZONE B/D MID WARNING LIGHT LENS - CLEAR

QTY: 1

The lower zone B/D mid warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00024605 - LOWER ZONE B/D MID WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone B/D mid warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

PO00003925 - B/D-LOWER REAR, WHELEN C6 SUPER LEDES

QTY: 1

Two (2) Whelen C6 super LED light heads shall be provided and installed with one (1) on each side.

PO00024588 - LOWER ZONE B/D REAR WARNING LIGHT LENS - CLEAR

QTY: 1

The lower zone B/D rear warning lights shall include red LEDs and a clear lens if available from the manufacturer. If a clear lens is unavailable, a red lens shall be included.

PO00024607 - LOWER ZONE B/D REAR WARNING LIGHT BEZEL - CHROME

QTY: 1

The lower zone B/D rear warning lights shall include a chrome bezel if available from the manufacturer. If a chrome bezel is unavailable, a black bezel shall be included.

PO00003270 - NFPA (2) AMDOR H2O LED GROUND LIGHTS, BELOW CAB DOORS

QTY: 1

One (1) Amdor Luma Bar, H2O, LED 20" ground light shall be provided under each side cab door entrance step, two (2) total.

The ground lights shall turn on automatically with each respective door jamb switch and also by a master ground light switch in the warning light switch console.

Each light shall illuminate an area at a minimum 30" outward from the edge of the vehicle.

PO00003274 - GROUND LIGHTS, 2 LED BELOW PUMP PANEL RUNNING BOARD - H2O

QTY: 1

One (1) Amdor Luma Bar, H2O, LED 20" ground light shall be provided under each side pump panel running board, two (2).

The ground lights shall be activated by a master ground light switch in the cab and shall be wired through the load management system.

PO00003277 - GROUND LIGHTS, 2 LED AT REAR BODY CORNERS - H2O

QTY: 1

One (1) Amdor Luma Bar, H2O, LED 20" ground light shall be provided under each rear body corner, two (2) total.

The ground lights shall be activated by a master ground light switch in the cab and shall be wired through the load management system.

PO00009695 - CAB AND BODY GROUND LIGHTS ACTIVATE WITH PARKING BRAKE

QTY: 1

The cab and body ground lights shall activate by engaging the parking brake.

PO00022607 - DIAMOND LOGIC MULTI-PLEX SYSTEM, INTERNATIONAL CHA

QTY: 1

The electrical system for the entire apparatus shall feature the International® Diamond Logic® Electrical System. This industry leading solution is built on a multiplexed architecture containing technologies in components such as solid state power switches, self-calibrating gauges and low current switch devices used for driver controls, like rocker switches and HVAC controls. The low current system and solid state switching results in maximum reliability and durability.

At the heart of International® Diamond Logic™ electrical system is the Electronic System Controller (ESC) which functions as the gatekeeper or central processor. The ESC continually monitors the vehicles electrical system and controls, including the engine, transmission, cab and customer installed truck equipment, so that they all communicate and work together.

In addition the Diamond Logic® Electrical system consists of International factory installed, Remote Power Modules (RPMs) and factory installed switches and warning lights. This combination of factory installed equipment eliminates the need to cut into the chassis wiring and central wiring to one point outside the cab.

The Diamond Logic® Electrical System allows fully customizable logic to carry out functions which up until now required hard-wired circuits and component. The use of the system shall enable the manufacturer to reduce; if not eliminate; conventional circuit interlock and power supply components for all body builder installed functions as specified by the customer. The programmable system allows for automation of tasks, custom features and safety interlocks to meet complex application requirements resulting in increasing functionality and reducing wiring the wiring used in equipment by up to 70%.

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Each vehicle shall be programmed by engineering and not only stored in engineering database, but also uploaded to International which shall enable any International Dealer location to maintain, troubleshoot or repair the entire system installed on the apparatus and NOT only the chassis.

This multiplex system controls both chassis and body functions including but not limited to emergency lighting, scene lighting, compartment lighting, and door ajar circuitry. Systems that utilize a multiplexed chassis with a hard wired body, or two different multiplex systems, shall not be considered. {No Exceptions}

PO00011802 - CHASSIS DIAGNOSTICS SYSTEM

QTY: 1

Diagnostic ports shall be accessible while standing on the ground and located inside the driver's side door left of the steering column. The diagnostic panel shall allow diagnostic tools such as computers to connect to various vehicle systems for improved troubleshooting providing a lower cost of ownership. Diagnostic switches shall allow engine and ABS systems to provide blink codes should a problem exist.

The diagnostic system shall include the following:

- A single port to monitor the engine, transmission and ABS system and diagnostics of the roll sensor (if applicable)
- Engine diagnostic switch (blink codes)
- ABS diagnostic switch (blink codes)
- Allison Transmission Codes (through touch pad shifter)

PO00011821 - BODY ELECTRICAL SYSTEM

QTY: 1

All electrical lines in the body shall be protected by automatic circuit breakers, conveniently located to permit ease of service.

Flashers, heavy solenoids and other major electrical controls shall be located in a central area near the circuit breakers.

All lines shall be color and function coded every 3", easy to identify, oversized for the intended loads and installed in accordance with a detailed diagram.

A complete wiring diagram shall be supplied with the apparatus.

Wiring shall be carefully protected from weather elements and snagging. Heavy duty loom shall be used for the entire length.

Grommets shall be utilized where wiring passes through panels.

In order to minimize the risk of heat damage, wires run in the engine compartment area shall be carefully installed and suitably protected by the installation of heat resistant shielded loom.

All electrical equipment shall be installed to conform to the latest federal standards as outlined in NFPA 1901.

PO00012441 - DOOR OPEN INDICATOR W/ INTEGRAL AUDIBLE ALARM

QTY: 1

A 1" round, red flashing warning light with an audible alarm, shall be functionally located in the cab to signal when an unsafe condition is present such as an open cab door or body compartment door, an

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extended ladder rack, a deployed stabilizer, an extended light tower or any other device which is opened, extended or deployed which may cause damage to the apparatus if it is moved.

This light shall be activated through the parking brake switch to signal when the parking brake is released.

This light shall be labeled "DO NOT MOVE TRUCK".

PO00009693 - DUNNAGE AREA LIGHTING, TECNIQ EON 3 LED

QTY: 1

Two (2) stainless steel, TecNiq Eon 3-LED horizontal surface mounted lights shall be provided in the dunnage area to provide adequate illumination of this area.

These lights shall be switched in the same manner as the step lights.

PO00011816 - COMPARTMENT LIGHT ACTIVATION

QTY: 1

Compartment lighting shall be switched either from an integral switch as provided by the roll up door manufacturer or a magnetic proximity switch if it is a KME manufactured door.

PO00003422 - COMPARTMENT LIGHTS, AMDOR LUMA BAR LED LIGHTING - DUAL

QTY: 7

Each individual, equipment storage compartment shall be equipped with the AMDOR, Luma Bar, LED light fixture, mounted on each side of the forward (and rear) vertical door frame.

PO00002999 - OPTRONICS MARKER/TURN LIGHTS @ EA SIDE OF BODY

QTY: 1

Optronics model MCL82RB, red, LED marker lights with integral reflectors shall be provided at the lower side rear, having one (1) on each side.

Optronics Model #STL71AMB, yellow, LED side marker and turn lights shall be provided on the apparatus lower side, forward of rear axle that puts one (1) on each side, if the apparatus is 30' long or longer.

PO00003003 - OPTRONICS MARKER LIGHTS @ REAR OF BODY

QTY: 1

Optronics MCL65, red, LED clearance lights shall be provided on the apparatus rear upper having one (1) on each side at the outermost practical location.

Optronics MCL12, LED, 3-lamp identification bar will be provided on the apparatus rear center.

The lights shall be red in color.

PO00003007 - TRUCK-LITE DOT AMBER REFLECTORS @ SIDE OF BODY

QTY: 1

Truck-Lite # 98034Y, yellow reflectors shall be provided on the apparatus body lower side, as far forward and low as practical with one (1) on each side if the apparatus is 30' long or longer.

PO00003008 - TRUCK-LITE DOT RED REFLECTORS @ REAR OF BODY

QTY: 1

Truck-Lite # 98034R, red reflectors shall be provided on the apparatus rear with one (1) on each side at the outermost practical location.

PO00010767 - TECNIQ #L10 LED LICENSE PLATE LIGHT @ DS REAR OF BODY

QTY: 1

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One (1) Tecniq model #L10 LED license plate light shall be provided above the mounting position of the license plate.

The light shall be clear in color and shall have a chrome finish.

PO00003037 - WHELEN C6 LED BRAKE, REVERSE, TURN W/ QUAD HOUSING

QTY: 1

Two (2) Whelen C6 series, 4-1/8" x 6-1/2", LED red combination tail and stop lights, shall be mounted one each side at the rear of the body.

Two (2) Whelen C6 series, 4-1/8" x 6-1/2", LED amber arrow turn signal lights, shall be mounted one each side, on a vertical plane with the tail/stop lights.

Two (2) Whelen C6 series, 4-1/8" x 6-1/2", LED white back-up lights, shall be mounted one each side on a vertical plane with the turn/tail/stop signals.

These lights shall activate when the transmission is placed in reverse gear.

Two (2) Whelen PLASC4V mounting flanges, installed one (1) on each side, shall be provided to mount the lights described above in one common mounting flange.

The fourth opening shall be for the lower rear warning lights.

The lights shall be mounted in order, from top to bottom, as described above.

PO00003075 - BODY STEP LIGHTS, TECNIQ EON 3 LED, ALL DEVICES

QTY: 2

Polished, stainless steel, TecNiq Eon 3-LED, horizontal surface, mounted body step lights shall be provided and controlled with marker light actuation.

Step lights shall be located to properly illuminate all body access steps and walkway areas and shall include a mounting gasket to provide a watertight seal.

PO00003402 - PUMP ENCLOSURE WORK LIGHTS - TECNIQ LED

QTY: 1

Two (2) Tecniq, model #E18 lights shall be provided inside the pump enclosure, providing 800 lumens each.

Each light shall have their own independent switch incorporated into the light head.

PO00003106 - AMDOR LED STRIP HOSE BED LIGHT-FRONT HOSEBED WALL

QTY: 1

One (1) Amdor, LED, strip surface mounted lights shall be mounted in the hose bed on the front wall to illuminate the hose bed area.

PO00003173 - WHELEN C9 SERIES LED SCENE LIGHTS ON REAR OF BODY

QTY: 1

Two (2) Whelen, # C9SL, super LED scene lights shall be provided, (1) one on each side of the rear body panel in a chrome plated flange.

The scene lights shall be wired through the load management system.

PO00003176 - WHELEN C9 SERIES LED SCENE LIGHTS ON DRIVER SIDE OF BODY

QTY: 1

Two (2) Whelen, # C9SL, super LED scene lights shall be provided.

The scene lights shall be installed one rearward and one forward on the driver side of the body in a chrome plated flange.

The scene lights shall be wired through the load management system.

PO00003177 - WHELEN C9 SERIES LED SCENE LIGHTS ON OFFICER SIDE OF BODY

QTY: 1

Two (2) Whelen, # C9SL, super LED scene lights shall be provided.

The scene lights shall be installed one rearward and one forward on the officer side of the body in a chrome plated flange.

The scene lights shall be wired through the load management system.

PO00003245 - REAR SCENE LIGHTS TO BE ACTIVATED BY REVERSE LIGHTS

QTY: 1

In addition to the cab mounted switch for the rear scene lights, the rear scene lights shall illuminate when the transmission is placed in reverse gear and the apparatus is operating as an emergency vehicle (Primary Warning switch on).

PO00004197 - ECCO #575, BACK-UP ALARM - 107 DBA

QTY: 1

An Ecco, model #575, 107dBA back-up alarm, shall be provided and installed at the rear of the apparatus under the tailboard.

The back-up alarm shall activate automatically when the transmission is placed in reverse gear and the ignition is "on".

PO00002932 - DUAL CHROME AIR HORNS - HADLEY

QTY: 1

Two (2) chrome plated, Hadley air horns shall be at the front of the vehicle.

The air horns shall be mounted in full compliance with NFPA-1901.

The supply lines shall be dual 1/4" lines with equal distance from each horn.

PO00002946 - DUAL AIR HORNS RECESSED IN FRONT BUMPER, 1-DS & 1-OS

QTY: 1

Each air horn shall be recessed in the front bumper; one (1) on the driver's side and one (1) on the officer's side.

PO00002955 - AIR HORN CONTROL - FOOT SWITCH FOR OFFICER & DRIVER

QTY: 1

The air horn(s) shall be controlled by a floor mounted, foot switch on the officer and the driver's side.

PO00004210 - SIREN, WHELEN # 295HFS2, 100W - FLUSH MOUNT

QTY: 1

One (1) Whelen # 295HFS2, 100 watt electronic siren shall be provided featuring: flush mount remote control head recessed in center dash panel as space allows, "Si-Test" self diagnostic feature, six (6) function siren, radio repeat, and public address.

The electronic siren and speaker shall meet the NFPA required SAE certification to ensure compatibility between the siren and speaker.

PO00004235 - ONE (1) WHELEN SP123BMC SPEAKER

QTY: 1

One (1) Whelen, model # SP123BMC with chrome plated ABS outer flange, siren speakers shall be provided, recessed in the front bumper and wired to the electronic siren.

PO00004714 - HALE DSD-150,1500 GPM SINGLE STAGE PUMP

QTY: 1

- HALE DSD-150
- 1500 G.P.M.
- SINGLE STAGE

The pump must deliver the percentage of rated capacity at the pressure listed below:

- 100% of rated capacity at 150 P.S.I. net pump pressure
- 100% of rated capacity at 165 P.S.I. net pump pressure
- 70% of rated capacity at 200 P.S.I. net pump pressure
- 50% of rated capacity at 250 P.S.I. net pump pressure.

The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis and have the capacity of 1500 gallons per minute (U.S. GPM), NFPA-1901 rated performance.

The entire pump shall be manufactured and tested at the pump manufacturer's factory. The pump shall be driven by a drive line from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance. The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 600 PSI (41.3 BAR). The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Standard 1901. Pump shall be free from objectionable pulsation and vibration. This DSD 150 model shall include the Custom Rams Horn suction manifold. The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI (2069 BAR). All moving parts in contact with water shall be of high quality bronze or stainless steel. Pumps utilizing castings made of lower tensile strength cast iron are not acceptable. Pump body shall be vertically split, on a single plane, for easy removal of impeller assembly, including clearance rings.

Pump shaft to be rigidly supported by two bearings for minimum deflection. The bearings shall be heavy-duty, deep groove ball bearings in the gearbox and they shall be splash lubricated. The pump shaft shall be heat-treated, electric furnace, corrosion resistant, stainless steel. Pump shaft must be sealed with double lip oil seal to keep road dirt and water out of gearbox.

Pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machined, hand-ground and individually balanced. The vanes of the impeller intake eye shall be hand-ground and polished to a sharp edge, and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower. Impeller clearance rings shall be bronze, easily renewable without replacing impellers or pump volute body.

PO00010792 - PUMP RATIO

QTY: 1

The pump ratio shall be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected.

The manufacturer shall supply at time of delivery copies of the pump manufacturer's certification of hydrostatic testing, the engine manufacturer's current certified brake horsepower curve.

PO00009802 - PUMP MOUNTS - MID-SHIP PUMPS

QTY: 1

Extra heavy duty pump mounting brackets shall be furnished.

These shall be bolted to the frame rails in such a position to perfectly align the pump so that the angular velocity of the drive line joints shall be the same on each end of the drive shaft.

This shall assure full capacity performance with a minimum of vibration. Mounting hardware shall utilize Grade 8 bolts.

PO00009138 - HALE MECHANICAL PUMP SEAL

QTY: 1

The mid ship pump shall be equipped with a high quality, spring loaded, self-adjusting mechanical seal capable of providing a positive seal to atmosphere under all pumping conditions.

This positive seal to atmosphere must be achievable under vacuum conditions up to 26 Hg (draft) or positive suction pressures up to 250 PSI.

The mechanical seal assembly shall be 2 inches in diameter and consists of a carbon sealing ring, stainless steel coil spring,

Viton rubber boot, and a tungsten carbide seat with a Teflon backup seal provided.

Only one (1) mechanical seal shall be required, located on the first stage suction (inboard) side of the pump and be designed to be compatible with a one piece pump shaft.

A continuous cooling flow of water from the pump shall be directed through the seal chamber when the pump is in operation.

PO00009122 - HALE DSD PUMP DRIVE UNIT - SPLIT SHAFT

QTY: 1

The drive unit shall be completely assembled and tested at the pump manufacturer's factory.

The drive unit shall be of sufficient size to withstand up to 16,000 lbs. ft. of torque of the engine in both road and pump operating conditions.

The drive unit shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.

The gearbox drive shafts shall be of heat treated chrome nickel steel and at least 2-3/4 inches in diameter on both the input and output drive shafts.

They shall withstand the full torque of the engine in both road and pump operating conditions.

All gears, drive and pump shall be of the highest quality electric furnace chrome nickel steel.

Bores shall be ground to size and teeth integrated, crown-shaved and hardened, to give an extremely accurate gear for long life, smooth, quiet running and higher load carrying capability.

An accurately cut spur design shall be provided to eliminate all possible end thrust.

PO00023021 - HALE - INTERNATIONAL PUMP SHIFT

QTY: 1

The drive unit shall be equipped with a power shift. The shifting mechanism shall be a heat treated, hard anodized aluminum power cylinder with stainless steel shaft.

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The pump shift control, pump engaged light and ok to pump indicator light shall be provided utilizing the International multi-plex system. They shall be located in the lower left switch panel. Switch to be YELLOW in color with a three-sided guard around it to denote being for a strategic type switch function. A standard International air solenoid pack shall be utilized to lock the transfer case in road or pump.

This control shall be electronically interlocked through the International multi-plex system to prevent inadvertent activation or de-activation. This allows the control to be interlocked with engine rpm, transmission gear status and park brake state. The switch positions and indicator lights shall be clearly marked. The pump shift switch shall also serve as the manual lockup switch; in case of air pressure loss.

PO00023022 - INTERNATIONAL PUMP SHIFT MANUAL OVERRIDE

QTY: 1

An emergency manual pump shift control shall be furnished on the left side pump panel which may be utilized if the air shift control does not operate.

PO00023880 - PUMP INSTALLATION - COMMERCIAL

QTY: 1

PO00022395 - MANIFOLD - DISCHARGE & SUCTION

QTY: 1

A custom made suction and discharge manifold shall be constructed from stainless steel and/or flexible tubing. The manifold shall be designed to provide maximum efficiency for the suction inlets and the discharges. {No Exceptions}.

PO00010750 - AUXILIARY ENGINE COOLER

QTY: 1

An auxiliary cooler or heat exchanger shall be installed in the engine compartment between the engine and the chassis radiator.

The cooler shall permit the use of water from the pump for cooling the engine.

The cooling shall be done without mixing engine and pump water.

PO00004811 - FIRE RESEARCH "IN CONTROL" TGA-300 PRESSURE GOVERNOR

QTY: 1

The apparatus shall be equipped with a Fire Research InControl series TGA300 pressure governor and monitoring display kit shall be installed. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 5 1/2" high by 10 1/2" wide by 2" deep. Inputs for monitored information shall be from a J1939 databus or independent sensors. Outputs for engine control shall be on the J1939 databus or engine specific wiring.

The following continuous displays shall be provided:

- Pump discharge; shown with four daylight bright LED digits more than 1/2" high
- Pump Intake; shown with four daylight bright LED digits more than 1/2" high
- Pressure / RPM setting; shown on a dot matrix message display
- Pressure and RPM operating mode LEDs
- Throttle ready LED
- Engine RPM; shown with four daylight bright LED digits more than 1/2" high
- Check engine and stop engine warning LEDs

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- Oil pressure; shown on a dual color (green/red) LED bar graph display
- Engine coolant temperature; shown on a dual color (green/red) LED bar graph display
- Transmission Temperature: shown on a dual color (green/red) LED bar graph display
- Battery voltage; shown on a dual color (green/red) LED bar graph display.
- The dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and night time operation.

The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

- High Battery Voltage
- Low Battery Voltage (Engine Off)
- Low Battery Voltage (Engine Running)
- High Transmission Temperature
- Low Engine Oil Pressure
- High Engine Coolant Temperature
- Out of Water (visual alarm only)
- No Engine Response. (visual alarm only)

The program features shall be accessed via push buttons located on the front of the control panel. There shall be an USB port located at the rear of the control module to upload future firmware enhancements.

Inputs to the control panel from the pump discharge and intake pressure sensors shall be electrical. The discharge pressure display shall show pressures from 0 to 600 psi. The intake pressure display shall show pressures from -30 in. Hg to 600 psi.

The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 psi. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor, monitoring, and master pressure display shall be programmed to interface with a specific engine.

PO00011415 - TASK FORCE TIPS #A18 SERIES INTAKE RELIEF VALVE

QTY: 1

A Task Force Tips relief valve shall be provided.

The valve shall be adjustable from 50 to 300 psi (3 to 14 bar) with easy to see 25 psi (2 bar) increments.

The aluminum casting shall be hardcoat anodized, and powder coat finished inside and out for maximum corrosion protection.

PO00009890 - TRIDENT "MANUAL" AIR PRIMING SYSTEM

QTY: 1

The priming pump will be a Trident air primer system.

A push in primer handle will open the priming valve and prime the pump.

PO00004825 - ROTARY MASTER DRAIN VALVE

QTY: 1

A rotary type, 12 port, master drain valve shall be provided and controlled at the lower portion of the side pump panel.

The valve shall be located in pump compartment lower than the main body and connected in such a manner as to allow complete water drainage of the pump body and all required accessories.

Water shall be drained below the apparatus body and away from the pump operator.

PO00004830 - DRAINS/BLEEDER "INNOVATIVE CONTROLS" LIFT UP @ ALL 1-1/2" OR LARGER

QTY: 1

All lines shall drain through the master drain valve or shall be equipped with individual drain valves, easily accessible, and labeled.

One (1) individual "Innovative Control" lift up drain valve shall be furnished for each 1-1/2" or larger discharge port and each 2-1/2" gated auxiliary suction.

Drain/bleeder valves shall be located at the bottom of the side pump module panels.

All drains and bleeders shall discharge below the running boards.

PO00004840 - SYNIFLEX SUCTION, DISCHARGE, PRESSURE AND CONTROL LINES

QTY: 1

Small lines within the pump enclosure shall be constructed from Syniflex hose.

Uses include but are not limited to such lines as priming control, gauge lines, drain lines, air control valves, pump shift, supplemental cooling, foam flush, and air bleeder valves.

PO00010965 - SUCTION INLETS - 6" INLETS

QTY: 1

Two (2) 6" N.S.T. suction inlets shall be provided, one on the driver side and one on the officer side pump panel.

A removable strainer shall be installed on each inlet.

PO00024018 - SHORT NECK MAIN PUMP SUCTION INLETS

QTY: 1

The main pump suction inlets shall be furnished with a short suction end, terminating with only the suction threads protruding through the side panel to minimize the distance an exterior appliance protrudes beyond the pump panel.

PO00012076 - BEHIND PANEL MOUNT

QTY: 1

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All side gated inlet valves shall be recess mounted behind the side pump panels or body panels. There will be no exceptions.

PO00023976 - 6" NST INTAKE CAP - DRIVER SIDE

QTY: 1

A 6" NST chrome plated long handle pressure vented cap shall be installed on driver side intake.

PO00023980 - 6" NST INTAKE CAP - OFFICER SIDE

QTY: 1

A 6" NST chrome plated long handle pressure vented cap shall be installed on officer side intake.

PO00011333 - 2-1/2" DRIVER SIDE AUX PRIMARY SUCTION INLET FORWARD OF MAIN

QTY: 1

One (1) 2-1/2" auxiliary suction shall be provided at the driver side pump panel, to the front of the main inlet.

The 2-1/2" auxiliary suction shall terminate with a removable strainer, chrome plated 2-1/2" NST female swivel with a chrome plated plug and retaining chain.

PO00004969 - 2-1/2" AKRON #8800 S.S. BALL VALVE, DRIVER SIDE FRONT AUX SUCTION

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the driver's side front auxiliary suction.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

SP00016633 - SWING CONTROL @ TOP MOUNT PANEL, DRIVER SIDE FRONT AUX SUCTION

QTY: 1

The driver side auxiliary intake valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00011323 - TANK TO PUMP

QTY: 1

One (1) 4" tank to pump line shall be piped through the front bulkhead of the tank with a 90 degree elbow down into the tank sump.

This line shall be plumbed directly into the rear of the pump suction manifold for maximum efficiency. A check valve shall be provided to prevent accidental pressurization of the water tank through the pump connection.

Connection from the valve to the tank shall be made by using a non-collapsible flexible rubber hose.

PO00004999 - 3" AKRON #8800 SERIES - S.S. BALL, VALVE, TANK TO PUMP

QTY: 1

An Akron Brass 3" Generation II Swing-Out Valve shall be provided between the pump suction manifold and the water tank.

The valve shall have an all brass body with flow optimizing, stainless steel ball and dual polymer seats.

PO00011319 - 3" TOP MOUNT SWING CONTROL FOR TANK TO PUMP -TOP MOUNT

QTY: 1

A locking push/pull swing control handle shall be located on the operator's panel with function plate.

PO00010962 - TANK FILL LINE 2" FROM PUMP - SIDE MOUNT

QTY: 1

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One (1) 2" gated full flow pump to tank refill line controlled at the pump panel shall be provided. A deflector shield inside the tank shall be furnished. Tank fill plumbing shall utilize 2" high pressure hose for tank connection to accommodate flexing between components. There will be no exceptions.

PO00005031 - 2" AKRON #8800 SERIES - S.S. BALL TANK FILL, SIDE MOUN

QTY: 1

An Akron Brass 2" Generation II Swing-Out Valve shall be provided between the pump discharge manifold and the water tank.

The valve shall have an all brass body with flow optimizing, stainless steel ball, and dual polymer seats.

PO00011330 - TOP MOUNT SWING CONTROL FOR TANK FILL - TOP MOUNT

QTY: 1

A locking push/pull swing control handle shall be located on the operator's panel with function plate.

PO00012083 - DRIVER SIDE MAIN DISCHARGE #1

QTY: 1

A discharge shall be provided and located at the driver's side pump panel.

The driver's side discharge #1 shall terminate with NST threads, through the left panel above the main pump intake.

The main pump discharge shall be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

PO00009226 - 2-1/2" AKRON #8800 SERIES - S.S. BALL, DRIVER SIDE #1

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the driver's side #1 discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

PO00005039 - DS #1 DISCHARGE - 2-1/2" STRAIGHT NST & 30-DEGREE NST ELBOW

QTY: 1

The discharge valve shall be equipped with a straight 2 1/2" NST adapter that shall be equipped with a 2 1/2" NST, 30-degree, chrome plated elbow.

PO00005050 - 2-1/2" NST PRESSURE VENTED CAP - DRIVER SIDE DISCHARGE #1

QTY: 1

A 2 1/2 " NST, chrome plated pressure vented cap shall be installed on driver's side #1 discharge.

PO00005091 - TOP MOUNT SWING CONTROL HANDLE - DRIVER SIDE DISCHARGE #1

QTY: 1

The driver's side # 1 discharge valve shall be controlled by a locking push/pull swing handle located on the top mount operator's panel.

PO00005121 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS- DRIVER SIDE DISCHARGE #1

QTY: 1

The driver's side # 1 discharge shall be equipped with a 2.5" Innovative Controls pressure gauge.

The gauge shall have a rugged, corrosion free stainless steel case and clear scratch resistant molded crystals with captive, O-ring seals to ensure distortion free viewing and seal the gauge.

The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40F to +160F.

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The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous, bronze, bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

PO00012084 - DRIVER SIDE MAIN DISCHARGE #2

QTY: 1

A discharge shall be provided and located at the driver's side pump panel.

The driver's side discharges # 2 shall terminate with NST threads, through the left panel above the main pump intake.

The main pump discharge shall be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

PO00009304 - 2-1/2" AKRON #8800 SERIES - S.S. BALL, DRIVER SIDE #2

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the driver's side #2 discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

PO00005145 - DS #2 DISCHARGE - 2-1/2" STRAIGHT NST & 30-DEGREE NST ELBOW

QTY: 1

The discharge valve shall be equipped with a straight 2 1/2" NST adapter that shall be equipped with a 2 1/2" NST, 30-degree, chrome plated elbow.

PO00005156 - 2-1/2" NST PRESSURE VENTED CAP - DRIVER SIDE DISCHARGE #2

QTY: 1

A 2 1/2" NST, chrome plated, pressure vented cap shall be installed on driver's side # 2 discharge.

PO00005194 - TOP MOUNT SWING CONTROL HANDLE - DRIVER SIDE DISCHARGE #2

QTY: 1

The driver's side # 2 discharge valve shall be controlled by a locking push/pull swing handle located on the top mount operator's panel.

PO00005223 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS- DRIVER SIDE DISCHARGE #2

QTY: 1

The driver's side # 2 discharge shall be equipped with a 2.5", Innovative Controls pressure gauge.

The gauge shall have a rugged, corrosion free, stainless steel case and clear, scratch resistant, molded crystals with captive, O-ring seals to ensure distortion free viewing and seal the gauge.

The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation, and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous, bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

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A polished, chrome-plated, stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

PO00012086 - OFFICER SIDE MAIN DISCHARGE #1

QTY: 1

A discharge shall be provided and located at the officer's side pump panel.

The officer's side discharges #1 shall terminate with NST threads, through the officer's side panel above the main pump intake.

The main pump discharge shall be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

PO00005279 - 2-1/2" AKRON #8800 SERIES - S.S. BALL, OFFICER SIDE #1, SIDE MOUNT

QTY: 1

An Akron Brass, 2 1/2" Generation II, Swing-Out Valve shall be provided for the officer's side #1 discharge.

The valve shall have an all brass body with flow optimizing, stainless steel ball, and dual polymer seats.

PO00005289 - OS #1 DISCHARGE - 2-1/2" STRAIGHT NST & 30-DEGREE NST ELBOW

QTY: 1

The discharge valve shall be equipped with a straight, 2 1/2" NST adapter that shall be equipped with a 2 1/2" NST, 30-degree, chrome plated elbow.

PO00005300 - 2-1/2" NST PRESSURE VENTED CAP - OFFICER SIDE DISCHARGE #1

QTY: 1

A 2 1/2" NST, chrome plated, pressure vented cap shall be installed on officer's side # 1 discharge.

PO00005340 - TOP MOUNT SWING CONTROL HANDLE - OFFICER SIDE DISCHARGE #1

QTY: 1

The officer's side, # 1 discharge valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00005370 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS- OFFICER SIDE DISCHARGE #1

QTY: 1

The officer's side, # 1 discharge shall be equipped with a 2.5", Innovative Controls pressure gauge.

The gauge shall have a rugged, corrosion free, stainless steel case and clear, scratch resistant, molded crystals with captive, O-ring seals to ensure distortion free viewing and seal the gauge.

The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous, bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished, chrome-plated, stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

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The gauge shall have black graphics on a white background.

PO00012087 - OFFICER SIDE MAIN DISCHARGE #2

QTY: 1

A discharge shall be provided and located at the officer's side pump panel.

The officer's side discharges #2 shall terminate with NST threads, through the officer's side panel above the main pump intake.

The main pump discharge shall be plumbed directly from the pump discharge manifold utilizing direct connect discharge valve flanges.

PO00005394 - 3" AKRON #8800 SERIES - S.S. BALL, VALVE OFFICER SIDE #2, SIDE MOUNT

QTY: 1

An Akron Brass, 3" Generation II, Swing-Out Valve shall be provided for the officer's side #2 discharge.

The valve shall have an all brass body with flow optimizing, stainless steel ball, and dual polymer seats.

PO00005406 - OS #2 DISCHARGE - 3" STRAIGHT NST & 30-DEGREE NST ELBOW

QTY: 1

The discharge valve shall be equipped with a straight, 3" NST, adapter that shall be equipped with a 3" NST, 30-degree, chrome plated elbow.

PO00005415 - 3" NST PRESSURE VENTED CAP - OFFICER SIDE DISCHARGE #2

QTY: 1

A 3" NST, chrome plated, pressure vented cap shall be installed on officer's side #2 discharge.

PO00005452 - TOP MOUNT SWING CONTROL HANDLE - OFFICER SIDE DISCHARGE #2

QTY: 1

The officer's side, #2 discharge valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00005482 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS- OFFICER SIDE DISCHARGE #2

QTY: 1

The officer's side, #2 discharge shall be equipped with a 2.5", Innovative Controls, pressure gauge.

The gauge shall have a rugged, corrosion free, stainless steel case and clear, scratch resistant, molded crystals with captive, O-ring seals to ensure distortion free viewing and seal the gauge.

The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation, and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous, bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished, chrome-plated, stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

PO00012103 - DRIVER SIDE HOSE BED DISCHARGE 2-1/2"

QTY: 1

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A 2 1/2" rear hose bed discharge shall be plumbed to the upper front body panel, extending into the front of the hose bed.

PO00005863 - DS HOSE BED DISCHARGE TERMINATE @ FLOOR LEVEL FRONT

QTY: 1

The rear hose bed discharge shall terminate just above the hosebed floor, in the driver side front of the hose bed.

PO00005867 - 2-1/2" NST MALE THREADS ON DRIVER SIDE HOSE BED DISCHARGE

QTY: 1

The driver side hose bed discharge pipe shall be equipped with a chrome 2 1/2" NSTM thread adapter.

PO00005871 - DS HOSE BED DISCHARGE, PLUMBING, 2-1/2" STAINLESS STEEL PIPING

QTY: 1

The driver side hose bed discharge shall be plumbed utilizing 2 1/2" schedule 10 stainless steel piping, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the rear of the vehicle.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

PO00005876 - 2-1/2" AKRON #8800 SERIES - S.S. BALL, VALVE DRIVER SIDE HOSE BED DISCHARGE

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the driver's side hose bed rear discharge. The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

SP00016634 - TOP MOUNT SWING CONTROL HANDLE FOR DS HOSE BED DISCHARGE

QTY: 1

The driver side hosebed discharge valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00005925 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS- DRIVER SIDE HOSE BED DISCHARGE

QTY: 1

The driver's side hose bed discharge shall be equipped with a 2.5" Innovative Controls pressure gauge.

The gauge shall have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge.

The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

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PO00012108 - DECK GUN DISCHARGE

QTY: 1

A deck gun discharge shall be plumbed from the pump to an area on top of the vehicle.

The deck gun piping shall be firmly supported and braced.

PO00006024 - DECK GUN DISCHARGE TERMINATE @ CENTER TOP MOUNT PANEL

QTY: 1

The deck gun discharge shall be located in the center of the dunnage area above the pump module, centered on the pump operator's panel.

The piping shall be positioned so the deck gun appliance is accessible from the pump operator's position.

A pedestal type, 1/4" steel plate support assembly or "U" clamp shall be provided to stabilize deck gun plumbing below deck gun mount flange.

PO00006032 - 4-BOLT FLANGE ON DECK GUN DISCHARGE

QTY: 1

The deck gun discharge pipe shall terminate with a 4-bolt flange.

PO00006036 - DECK GUN DISCHARGE - OVA HEIGHT NOT EXCEED TALLEST POINT

QTY: 1

The deck gun piping shall be designed so the overall height of the deck gun in the mounted/stowed position does not exceed the tallest point on the cab/body.

PO00006039 - DECK GUN DISCHARGE, PLUMBING, 3" STAINLESS STEEL PIPING

QTY: 1

The deck gun discharge shall be plumbed utilizing 3" schedule 10 stainless steel piping, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to the deck gun location.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

PO00006045 - 3" AKRON #8800 SERIES - S.S. BALL, VALVE DECK GUN DISCHARGE

QTY: 1

An Akron Brass 3" Generation II Swing-Out Valve shall be provided for the deck gun discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

SP00016635 - TOP MOUNT SWING CONTROL HANDLE FOR DECK GUN DISCHARGE

QTY: 1

The deck gun discharge valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00006091 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS- DECK GUN DISCHARGE

QTY: 1

The deck gun discharge shall be equipped with a 2.5" diameter Innovative Controls pressure gauge.

The gauge shall have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge.

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The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

PO00012111 - #1 FRONT DISCHARGE #2-1/2"

QTY: 1

A 2 1/2" front #1 discharge shall be plumbed to the front bumper of the vehicle.

PO00006334 - 2-1/2" NST CHICKSAN SWIVEL @ TOP OSFRONT BUMPER #1 DISCHARGE

QTY: 1

The front #1 discharge shall terminate on the top officer's side of the front bumper extension gravel shield with a chrome 2 1/2" NST chicksan swivel adapter.

PO00006352 - #1 FRONT DISCHARGE, PLUMBING, 2-1/2" STAINLESS STEEL PIPING

QTY: 1

The front #1 discharge shall be plumbed utilizing 2 1/2" schedule 10 stainless steel piping, flexible hosing, 45 degree elbows, and a limited number of 90 degree sweep elbows in an assembly from the pump to the front of the vehicle.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

Automatic discharge drains shall be provided at all low points in the plumbing.

PO00006362 - 2-1/2" AKRON #8800 SERIES - S.S. BALL, VALVE FRONT #1 DISCHARGE

QTY: 1

An Akron Brass 2 1/2" Generation II Swing-Out Valve shall be provided for the front #1 discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seat.

SP00016636 - TOP MOUNT SWING CONTROL HANDLE FOR FRONT #1 DISCHARGE

QTY: 1

The front bumper discharge valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00006413 - 2-1/2" NSTF X 1-1/2" NSTM REDUCER W/CAP FRONT #1 DISCHARGE

QTY: 1

A 2-1/2" NSTF X 1-1/2" NSTM reducer w/cap shall be provided on the front #1 discharge.

PO00006417 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS - FRONT #1 DISCHARGE

QTY: 1

The front #1 discharge shall be equipped with a 2.5" Innovative Controls pressure gauge.

The gauge shall have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge.

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The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

PO00012120 - SPEEDLAY #1

QTY: 1

Speedlay #1 shall be a transverse hose bed, which shall be designed as an integral part of the pump module design, located forward of the pump just above the frame rails.

Hose deployment shall be accomplished from either side of the apparatus.

The speedlay hose bed flooring shall be designed to be removable, constructed from brushed finish, perforated aluminum material.

PO00012194 - STAINLESS STEEL SCUFF PLATES - SPEEDLAY #1

QTY: 1

The outer edge of the speedlay #1 hosebed shall be trimmed stainless steel scuff plates.

PO00006879 - 1-1/2" NST CHICKSAN SWIVEL - SPEEDLAY #1

QTY: 1

The speedlay #1 discharge shall terminate through the rear wall of the hosebed with a 1 1/2" NSTM chicksan swivel adapter.

The hosebed rear wall shall be slotted to allow the swivel to through the wall, allowing the pre-connected hose to be pulled off either side of the apparatus without kinking the hose at the coupling connection.

PO00006890 - SPEEDLAY #1 CAPACITY - 200 FEET OF 1-3/4" HOSE

QTY: 1

Speedlay #1 shall be designed to have a minimum total capacity of 3.5 cubic feet as required by NFPA - 1901 to accommodate a minimum of 200 feet of 1-3/4" fire hose.

The hose shall be loaded in a double stack configuration.

PO00006897 - SPEEDLAY #1, PLUMBING, 2" STAINLESS STEEL PIPING

QTY: 1

The speedlay #1 discharge shall be plumbed utilizing 2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to speedlay hosebed.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

PO00006907 - 2" AKRON #8800 SERIES - S.S. BALL, VALVE SPEEDLAY #1

QTY: 1

An Akron Brass 2" Generation II Swing-Out Valve shall be provided for the speedlay #1 discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

SP00016637 - TOP MOUNT SWING CONTROL HANDLE SPEEDLAY #1

QTY: 1

The speedlay #1 discharge valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00006957 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS - SPEEDLAY #1

QTY: 1

The speedlay #1 discharge shall be equipped with a 2.5" Innovative Controls pressure gauge.

The gauge shall have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge.

The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

PO00012121 - SPEEDLAY #2

QTY: 1

Speedlay #2 shall be a transverse hose bed, which shall be designed as an integral part of the pump module design, located forward of the pump just above the lower speedlay.

Hose deployment shall be accomplished from either side of the apparatus.

The speedlay hose bed flooring shall be designed to be removable, constructed from brushed finish, perforated aluminum material.

PO00012196 - STAINLESS STEEL SCUFF PLATES - SPEEDLAY #2

QTY: 1

The outer edge of the speedlay #2 hosebed shall be trimmed stainless steel scuff plates.

PO00006980 - 1-1/2" NST CHICKSAN SWIVEL - SPEEDLAY #2

QTY: 1

The speedlay #2 discharge shall terminate through the rear wall of the hosebed with a 1 1/2" NSTM chicksan swivel adapter.

The hosebed rear wall shall be slotted to allow the swivel to through the wall, allowing the pre-connected hose to be pulled off either side of the apparatus without kinking the hose at the coupling connection.

PO00006993 - SPEEDLAY #2 CAPACITY - 200 FEET OF 1-3/4" HOSE

QTY: 1

Speedlay #2 shall be designed to have a minimum total capacity of 3.5 cubic feet as required by NFPA - 1901 to accommodate a minimum of 200 feet of 1-3/4" fire hose.

The hose shall be loaded in a double stack configuration.

PO00006998 - SPEEDLAY #2, PLUMBING, 2" STAINLESS STEEL PIPING

QTY: 1

The speedlay #2 discharge shall be plumbed utilizing 2" schedule 10 stainless steel piping and/or flexible hose, 45 degree elbows and a limited number of 90 degree sweep elbows in an assembly from the pump to speedlay hosebed.

A minimum of one (1) grooved pipe coupling shall be furnished in this assembly to allow for flex and serviceability.

PO00007008 - 2" AKRON #8800 SERIES - S.S. BALL, VALVE SPEEDLAY #2

QTY: 1

An Akron Brass 2" Generation II Swing-Out Valve shall be provided for the speedlay #2 discharge.

The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats.

SP00016638 - TOP MOUNT SWING CONTROL HANDLE SPEEDLAY #2

QTY: 1

The speedlay #2 discharge valve shall be controlled by a locking push/pull swing handle located on the top mount, operator's panel.

PO00007058 - INNOVATIVE CONTROLS LIQUID FILLED 2-1/2" PRESS GAUGE SS - SPEEDLAY #2

QTY: 1

The speedlay #2 discharge shall be equipped with a 2.5" Innovative Controls pressure gauge.

The gauge shall have a rugged corrosion free stainless steel case and clear scratch resistant molded crystals with captive O-ring seals to ensure distortion free viewing and seal the gauge.

The gauge shall be filled with glycerin to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from -40F to +160F.

The gauge shall exceed ANSI B40.1 Grade A requirements with an accuracy of +/- 1.5% full scale and include a size appropriate phosphorous bronze bourdon tube with a reinforced lap joint and large tube base to increase the tube life and gauge accuracy.

A polished chrome-plated stainless steel bezel shall be provided to prevent corrosion and protect the lens and gauge case.

The gauge shall have black graphics on a white background.

PO00000054 - WALKWAY ACCESS FOR SPEED LAY

QTY: 1

The hose shall be capable of being reloaded from either side of the vehicle and from access slots provided on the front of the pump module while standing in the pump module walkway.

PO00000057 - WALKWAY ACCESS FOR SPEED LAY

QTY: 1

The hose shall be capable of being reloaded from either side of the vehicle and from access slots provided on the front of the pump module while standing in the pump module walkway.

PO00012200 - VINYL END FLAPS FOR SPEEDLAYS

QTY: 1

Vinyl coated polyester covers shall be provided on each side of the speed lays to retain hose in the speed lays.

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The covers shall be secured with expandable loops sewn into the covers and hooks on the apparatus.

PO00012202 - SPEEDLAY FLAP BLACK IN COLOR

QTY: 1

The speed lay end flap shall be black in color.

PO00009880 - PLUMBING FOR FUTURE ADDITION OF FOAM SYSTEM

QTY: 1

The apparatus shall be plumbed in a configuration that allows for the installation of a foam system in the future.

The foam system installation shall require a minimal amount of work and shall not require re-plumbing of the entire system.

A stainless steel foam system manifold shall be installed on the apparatus.

The manifold shall include a section of pipe with two (2) Victaulic connections, this section of pipe shall be removable for installation of the foam system flow meter.

The foam manifold shall include taps for up to three (3) discharges that can be made foam capable with the future addition of a foam system.

PO00015604 - INJECTION FOAM SYSTEM INSTALLED ON SPEEDLAY #1

QTY: 1

Speedlay #1 discharge.

PO00015605 - INJECTION FOAM SYSTEM INSTALLED ON SPEEDLAY #2

QTY: 1

Speedlay #2 discharge

PO00009155 - INJECTION FOAM SYSTEM INSTALLED ON FRONT DISCHARGE

QTY: 1

Front discharge.

PO00010790 - TOP MOUNT PUMP MODULE, PUMPER

QTY: 1

The pump module shall be a self-supported structure mounted independently from the body and chassis cab.

The design must allow normal frame deflection without imposing stress on the pump module structure or side running boards.

The pump module shall be securely mounted to the chassis frame rails.

The pump module shall incorporate a formed structure on the top front to support the top mount control panel and required mechanical control handles.

The valves shall be controlled by vertically operated swing handles.

Each handle shall be equipped with a twist-lock, easy-grip knob.

The valve control handles shall be mounted in-line.

Each valve control handle shall be connected to its respective valve via a control rod and a bell crank mechanism, if needed.

Each control rod shall consist of a 1/2" pipe welded to a threaded stud to form a rigid linkage.

Each pressure gauge shall be located directly above its respective discharge control handle, and shall be clearly marked by color coded name plates.

PO0000005 - PUMP MODULE - STEEL CONSTRUCTION

QTY: 1

The pump module shall be a welded frame work utilizing structural steel components properly braced to withstand the rigors of chassis frame flex.

PO00010828 - TOP MOUNT DUNNAGE AREA

QTY: 1

A dunnage area shall be provided above the pump enclosure, behind the top mount control panel, for equipment mounting and storage. This area shall be furnished with a removable 3/16" aluminum tread plate floor and shall be enclosed on the sides.

NOTE: The size of this storage area may vary when top mounted crosslays, booster reel(s), etc., are specified and located in this area.

PO00011445 - PUMP MODULE WALKWAY

QTY: 1

There shall be a transverse walkway located at the rear of the chassis cab, ahead of the pump module.

The walkway shall be constructed of 3/16" aluminum tread plate and shall be clear and unobstructed for through traffic.

Folding step(s) shall be provided if necessary to maintain NFPA step heights.

If steps adjacent to walkway (such as commercial chassis cab access steps) provide NFPA compliant step height, folding steps shall not be provided.

A miscellaneous equipment storage compartment shall be provided at either side of the walkway, outboard of the chassis frame rails.

A vertically hinged, aluminum tread plate door with positive closure latch shall be provided on the outboard face of each compartment.

Compartments shall be ventilated.

PO00011447 - WALKWAY WIDTH = 20"

QTY: 1

The pump house walkway shall be approximately 20" wide.

PO00011571 - RUNNING BOARD STEPS (NON-AERIALS)

QTY: 1

The driver and officer running board steps shall be fabricated of 3/16" polished aluminum tread plate.

The outside edge on each step shall be fabricated with a double break, return flange.

The steps shall be rigidly reinforced with a heavy duty support structure.

The running boards shall not form any part of the compartment design, and shall be bolted into place with a minimum 1/2" clearance gap between any panel to facilitate water runoff.

PO0000085 - TOP MOUNT PUMP PANEL - PUMPER

QTY: 1

The pump operator's control panel shall be located above the pump towards the rear of the transverse walkway area with the operator facing the rear of the apparatus to operate the pump controls. The top and side panels shall be completely removable and designed for easy access and servicing.

PO00000100 - TOP MOUNT GAUGE PANEL - 1/8" BLACK CLAD ALUMINUM

QTY: 1

The top operator's panel shall be fabricated from 1/8" black vinyl clad aluminum with a grained finish.

PO00000106 - TOP MOUNT SIDE PANELS - 1/8" BLACK CLAD ALUMINUM

QTY: 1

The left and right side pump panel shall be fabricated from 1/8" black vinyl clad aluminum with a grained finish.

PO00000131 - HORIZONTALLY HINGED GAUGE PANEL - TOP MOUNT

QTY: 1

An angled, full width, horizontally hinged gauge access panel shall be provided at the top mount operator's position. Chrome plated positive locks shall be provided along with chain holders to secure the panel in the opened position.

PO00000138 - DRIVER'S SIDE VERTICALLY HINGED PUMP ACCESS DOOR - TOP MOUNT

QTY: 1

The driver side pump panel shall be split and vertically hinged to provide complete access to the pump and plumbing on the driver side of the pump enclosure.

The panels shall be equipped with stainless steel hinges and secured with push type locks to hold the panels closed.

The drains located on the driver side panel shall be fastened to the lower panel, which shall be stationary.

PO00000139 - OFFICER'S SIDE VERTICALLY HINGED PUMP ACCESS DOOR - TOP MOUNT

QTY: 1

The officer's side pump panel shall be split and vertically hinged to provide complete access to the pump and plumbing on the officer's side of the pump enclosure.

The panels shall be equipped with stainless steel hinges and secured with push type locks to hold the panels closed.

The drains located on the officer's side panel shall be fastened to the lower panel, which shall be stationary.

PO00010829 - PANEL FASTENERS

QTY: 1

Stainless steel machine screws and lock washers shall be used to hold these panels in position.

The panels shall be easily removable to provide complete access to the pump for major service.

PO00010830 - CAPS AND ADAPTERS SAFETY TETHER - BALL CHAIN

QTY: 1

All applicable discharge and suction caps, plugs and adapters shall be equipped with chrome plated ball chain and secured to the vehicle.

PO00010832 - PUMP PANEL DISCHARGE/SUCTION TRIM PLATES, HIGH POLISHED

QTY: 1

A high polished trim plate shall be provided around each discharge port and suction inlet opening to allow accessibility to the respective valve for service and repairs.

PO00010833 - DISCHARGE GAUGE TRIM BEZELS

QTY: 1

Each individual discharge gauge shall be installed into a decorative chrome-plated mounting bezel that incorporates valve-identifying verbiage and color labels.

PO00010834 - IDENTIFICATION PLATES

QTY: 1

Color coded identification tags shall be provided for all gauges, controls, connections, switches, inlets and outlets.

PO00011788 - PUMP OPERATOR'S PANEL LIGHT SHIELD - TOP-MOUNT

QTY: 1

The pump operator's panel shall be equipped with a light shield that shall be full width of the control panel, and shall be positioned to cover the lights and prevent glare.

The light shield shall be equipped with the following lights:

PO00011733 - AMDOR LUMA BAR H2O SUPER BRIGHT LED - PANEL TOP-MOUNT

QTY: 1

- Three (3) 20" Amdor Luma Bar H2O super bright led strip lights.

One (1) light under the operator's panel light shield shall be actuated when fire pump is engaged in addition to the pump engaged light.

PO00011786 - STEP LIGHTS FOR WALKWAY AREA - TOP MOUNT

QTY: 1

The top mount walkway shall be illuminated by the following lights:

PO00011785 - TECNIQ EON 3 LED LIGHTS - WALKWAY TOP-MOUNT

QTY: 1

- Four (4) TecNiq Eon, 3-LED illumination lights mounted in horizontal stainless steel bezels and mounting gaskets.

The lights shall be controlled with the marker lights.

PO00011743 - DRIVER SIDE PUMP PANEL LIGHTING, FULL WIDTH SHIELD/STEP - TOP-MOUNT

QTY: 1

The driver side pump panel shall be equipped with a light shield/step that shall be full width of the control panel, and shall be positioned to cover the lights and prevent glare.

The light shield shall be fabricated from aluminum tread plate, which shall also serve as a step.

The step shall be a minimum of 8" deep X the width of the pump panel.

The light shield shall be equipped with the following lights:

PO00011755 - AMDOR LUMA BAR H2O SUPER BRIGHT LED - DRIVER SIDE TOP-MOUNT

QTY: 1

- One (1) 20" Amdor Luma Bar H2O super bright led strip light.

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The lights shall be switched with the top mount panel lights.

PO00011767 - OFFICER SIDE PUMP PANEL LIGHTING, FULL WIDTH LIGHT/STEP - TOP-MOUNT

QTY: 1

The officer side pump panel shall be equipped with a light shield/step that shall be full width of the control panel, and shall be positioned to cover the lights and prevent glare. The light shield shall be fabricated from aluminum tread plate, which shall also serve as a step. The step shall be a minimum of 8" deep X the width of the pump panel.

The light shield shall be equipped with the following lights:

PO00011775 - AMDOR LUMA BAR H2O SUPER BRIGHT LED - OFFICER SIDE TOP-MOUNT SHIELD/STEP

QTY: 1

- One (1) 20" Amdor Luma Bar H2O super bright led strip light.

The lights shall be switched with the top mount panel lights.

PO00012573 - AIR HORN CONTROL BUTTON ON PUMP PANEL

QTY: 1

Pump panel air horn actuation button labeled "EVACUATION" in white letters with a red background.

PO00012579 - AIR INLET/OUTLET ON RIGHT SIDE PUMP PANEL

QTY: 1

Air inlet/outlet chuck (right side panel).

PO00012580 - SHUT-OFF VALVE FOR SPECIFIED AIR INLET/OUTLET

QTY: 1

A quarter turn valve shall be provided for each air chuck.

PO00011409 - PUMP PRESSURE & VACUUM TEST PORTS @ PANEL

QTY: 1

The pump panel shall be equipped with Vacuum & Pressure test plugs to allow for test equipment to monitor pump pressure and vacuum levels.

Chrome plugs and labels shall be provided for the test ports.

PO00009788 - PUMP UL CERTIFICATION - 750 GPM & UP

QTY: 1

The pump shall be third party performance tested to meet the requirements of NFPA-1901.

To ensure top quality and integrity, the test company shall be Underwriters Laboratories (UL).

There will be no exceptions.

SP00016616 - TANK 980 GAL POLY

QTY: 1

The water tank shall have a capacity of 980 gallons, constructed from Poly material.

PO00010836 - WATER TANK CONSTRUCTION POLY

QTY: 1

The Poly water tank shall be constructed of PT3 polypropylene material.

This material shall be a non-corrosive stress relieved thermoplastic and UV stabilized for maximum protection.

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Tank shell thickness may vary depending on the application and may range from 1/2 to 1" as required. Internal baffles are generally 3/8" in thickness.

The tank shall be of a specific configuration and is so designed to be completely independent of the body and compartments.

Joints and seams shall be fused using nitrogen gas as required and tested for maximum strength and integrity.

The tank construction shall include PolyProSeal technology wherein a sealant shall be installed between the plastic components prior to being fusion welded.

This sealing method will provide a liquid barrier offering leak protection in the event of a weld compromise.

The top of the booster tank is fitted with removable lifting assembly designed to facilitate tank removal.

The transverse and longitudinal swash partitions shall be manufactured of a minimum of 3/8" PT3 polypropylene.

All partitions shall be equipped with vent and air holes to permit movement of air and water between compartments.

The partitions shall be designed to provide maximum water flow.

All swash partitions interlock with one another and are completely fused to each other as well as to the walls of the tank.

All partitions and spacing shall comply with NFPA 1901.

The walls shall be welded to the floor of the tank providing maximum strength as part of the tank's unique Full Floor Design.

Tolerances in design allow for a maximum variation of 1/8" on all dimensions.

All tanks shall be tested and certified as to capacity on a calibrated and certified tilting scale.

Each tank shall be weighed empty and full to provide precise fluid capacity.

Each Poly-Tank's III is delivered with a Certificate of Capacity delineating the weight empty and full and the resultant capacity based on weight.

A tag shall be installed on the apparatus in a convenient location and contain pertinent information including a QR code readable by commercially available smart phones.

The information contained on the tag shall include the capacity of the water and foam (s), the maximum fill and pressure rates, the serial number of the tank, the date of manufacture, the tank manufacturer, and contact information.

The QR code will allow the user to connect with the tank manufacturer for additional information and assistance.

The tank must be designed and fabricated by a tank manufacturer that is ISO 9001:2000 certified in each of its locations.

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The ISO certification must be to the current standard in effect at the time of the design and fabrication of the tank.

PO00010837 - WATER TANK LID - POLY

QTY: 1

The tank cover shall be constructed of 1/2" thick PT3 polypropylene and UV stabilized, to incorporate a multi-piece locking design, which allows for individual removal and inspection if necessary.

The tank cover(s) shall be flush or recessed 3/8" from the top of the tank and shall be fused to the tank walls and longitudinal partitions for maximum integrity.

Each one of the covers shall have hold downs consisting of 2" minimum polypropylene dowels spaced a maximum of 40" apart.

These dowels shall extend through the covers and will assist in keeping the covers rigid under fast filling conditions.

A minimum of two lifting dowers shall accommodate the necessary lifting hardware.

PO00010843 - WATER TANK FILL TOWER POLY (TANK CAPACITY 1000-1250)

QTY: 1

The tank shall have a combination vent and manual fill tower.

The fill tower shall be constructed of 1/2" PT3 polypropylene and shall be a minimum dimension of 12" x 12" outer perimeter.

The fill tower shall be blue in color indicating that it is a water-only fill tower.

The tower shall be located in the left front corner of the tank unless otherwise specified by the tank manufacturer to the purchaser.

The tower shall have a 1/4" thick removable polypropylene screen and a PT3 polypropylene hinged cover.

The capacity of the tank shall be engraved on the top of the fill tower lid. Inside the fill tower there shall be a combination vent/overflow pipe.

The vent overflow shall be a minimum of schedule 40 polypropylene pipe with a minimum I.D. of that is designed to run through the tank, and shall be piped to discharge water behind the rear wheels as required in NFPA 1901 so as to not interfere with rear tire traction.

PO00007665 - WATER TANK 4" OVERFLOW & VENT PIPE

QTY: 1

The fill tower shall be fitted with an integral 4" I.D. schedule 40 P.V.C. combination overflow/vent pipe running from the fill tower through the tank to a 4" coupling flush mounted into the bottom of the tank to allow water to overflow behind the chassis rear axle.

PO00010838 - WATER TANK SUMP

QTY: 1

The tank sump shall be a minimum of 10" wide x 10" long x 3" deep.

An anti-swirl plate shall be mounted inside the sump, approximately 1" above the bottom of the sump.

PO00010839 - WATER TANK SUMP CONNECTION; ONE (1) FRONT

The front bulkhead of the water tank shall be fitted with one (1) tank sump connection. QTY: 1

PO00007667 - WATER TANK 3" SUMP DRAIN

A 3" drain plug shall be provided. QTY: 1

PO00010840 - WATER TANK FLANGES/OUTLETS

There shall be two (2) standard tank outlets; one for tank-to-pump suction line which shall be a minimum of 4" coupling and one for a tank fill line which shall be a minimum of a 2" NPT coupling. QTY: 1

All tank fill couplings shall be backed with flow deflectors to break up the stream of water entering the tank.

SP00016614 - WATER TANK MOUNTING ALL TANKS

The tank shall rest on the body cross members spaced a maximum of 22" apart, and shall be insulated from these cross members with a minimum of 3/8" nylon webbing or 1/2" rubber, 2-1/2" wide. QTY: 1

The tank shall sit cradle-mounted using four (4) corner angles of 6 x 6 x 4 x 0.250 welded directly to the body cross members.

The angles shall keep the tank from shifting left to right or front to rear.

The tank is designed on the free-floating suspension principle and shall not require the use of hold downs.

The tank shall be completely removable without disturbing or dismantling the apparatus body structure.

The body or hose bed cross braces shall act as water tank retainers.

PO00009183 - INTEGRAL FOAM TANK, 20 GAL. TANK "A"

Included in the total capacity of the water tank, a 20 gallon integral foam storage area shall be built into the water tank. QTY: 1

The foam tank shall have a latched fill tower, properly labeled as the foam fill point.

A valved drain shall be provided.

PO00007586 - IC, SL ULTRA-BRIGHT 10 LIGHT LED WATER TANK GAUGE - PUMP

An Innovative Controls model #3030358, Ultra-Bright LED water level monitor shall be provided on the pump operator's panel. QTY: 1

The level gauge shall contain ten (10) high intensity LEDs on the display in a vertical pattern allowing the full, 3/4, 1/2, 1/4 and refill levels to be easily distinguished at a glance.

The display shall use a two-dimensional, two-element lens to refract the light from the LEDs to provide full 180 visibility for the level indications.

PO00007592 - IC WATER LEVEL - 1/4" NPT PRESS TRANSDUCER @ BOTTOM OF TANK

QTY: 1

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The gauge shall use a pressure transducer #3030376-01 installed near the bottom of the water tank to determine the correct volume in the tank.

PO00015620 - FOAM TANK - 1901 REQUIREMENT

QTY: 1

The foam proportioning system shall be supplied from the foam concentrate storage tank/s. The tank/s shall be constructed of materials compatible with foam concentrates being used in the system. Tank capacity, venting, fill opening and foam outlet plumbing connections shall be in accordance with NFPA requirements. Foam tank lid shall be sealed and latched in accordance with NFPA standards. If required a provision shall be made for installation of low tank level sensors and routing of the wiring for the sensors.

PO00018427 - CHALLENGER; WB FAMILY

QTY: 1

PO00023912 - APPARATUS BODY DESCRIPTION (CHALLENGER)

QTY: 1

The body side and compartment assemblies (will/shall) be designed and assembled to provide maximum strength and durability under all operating conditions.

Special attention (will/shall) be taken to minimize corrosion on all fabricated parts and structural members of the body. All bolt-on components (will/shall) be provided with a dissimilar metals isolation barrier to prevent electric corrosion. The body design (will/shall) also incorporate removable panels to access rear body mounts and fuel tank sending units.

The body (will/shall) be completely isolated from the cab and pump module structure.

PO00017089 - SUPER STRUCTURE FOR ALUMINUM BODIES

QTY: 1

The body super structure shall be an all welded configuration utilizing a combination of 3" x 1-1/2" 6061-T6 thick walled structural tubing and 6061 structural channel.

This structure shall be designed to totally support the full length and width of the body and shall be welded to the body side compartments by use of reinforcement plates to incorporate the compartments into an integral part of the body weldment.

The super structure shall be bolted to the sides of the chassis frame at four (4) points.

STEPPING, STANDING, & WALKING SURFACES

All stepping, standing, and walking surfaces on the body shall meet NFPA #1901 anti-slip standards. Aluminum tread plate utilized for stepping, standing, and walking surfaces shall be ALCOA No Slip type. Upon request by the Purchaser, the manufacturer shall supply proof of compliance with this requirement.

PO00009804 - SWEEP-OUT COMPARTMENTS (NON-AERIALS)

QTY: 1

Compartment floors shall be welded to the compartment walls and have a sweep out design for easy cleaning.

Compartment with hinged doors shall have the door opening flanges bend down to produce the sweep-out design.

Compartment with roll-up style doors shall have the external floor flange stepped down, 1/2" high x 2" deep, to produce a sealing surface for the roll-up doors below the compartment floor.

The sweep out design shall also permit easy cleaning.

PO00010883 - COATED FASTENERS

QTY: 1

All exterior fasteners shall be coated stainless steel screws.

Screw threads shall be coated with reusable, self-locking, sealing material to provide vibration resistance.

Screw heads shall be coated with a sealing element to prevent galvanic corrosion between dissimilar metals.

Non-coated screws shall only be provided as part of vendor supplied component installations.

There will be no exceptions.

PO00010884 - COMPARTMENT LOUVERS

QTY: 1

Ventilation between compartments to atmosphere shall be provided and located to avoid water entry into compartments.

PO00010885 - ACCESS PANELS

QTY: 1

Removable access panels shall be provided (if applicable) to access fuel tank sender, electrical junction compartment and rear body mounts.

Protective panels shall be located in the rear compartments providing access to the lights and associated wiring.

The covers shall also serve as protective covers to prevent inadvertent damage to lights or wiring from tools or equipment located in the compartment.

PO00016952 - BODY 3/16" ALUMINUM; CHALLENGER-FB/WB/LH/PRO

QTY: 1

All compartment panels and body side sheets shall be entirely 3/16" aluminum (5052-H32). Each side compartment assembly shall be both plug welded and stitch welded to ensure proper weld penetration on all panels while avoiding the possible warping caused by a full seam weld. The side compartments shall be welded on a fixture to ensure true body dimensions of all door openings. The side compartments and body side panels are then set into a body squaring fixture where the super structure is installed and the entire body is aligned to be completely symmetrical. The super structure is then welded to the compartment side panels and reinforcement plates are inserted which allows the compartment panels to become an integral component of the body support structure. A full seam weld shall not be used due to the applied heat which could distort sheet metal and remove the protective coating from the perimeter of the welded area. All seams shall be caulked prior to finish paint to ensure proper compartment seal.

PO00009649 - FENDER WITH STORAGE OPTIONS (COMMERCIAL)

QTY: 1

PO00009652 - DRIVER FORWARD FENDER - TRIPLE STORAGE SLOT

QTY: 1

A storage compartment shall be inserted into the fender to provide a storage area for three (3) customer supplied SCBA cylinders (or fire extinguishers of similar size).

The storage area shall be sized as tall and wide as possible in the fender (minimum of 14" wide x 15" tall with an angled floor by fender radius), and shall be 26" deep.

The compartment shall have a non-abrasive lined cradle storage area for each of the three (3) devices.

This storage compartment shall provide a minimum of 2.3 cubic feet of storage space.

PO00009656 - DRIVER REARWARD FENDER - TRIPLE STORAGE SLOT

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QTY: 1

A storage compartment shall be inserted into the fender to provide a storage area for three (3) customer supplied SCBA cylinders (or fire extinguishers of similar size).

The storage area shall be sized as tall and wide as possible in the fender (minimum of 14" wide x 15" tall with an angled floor by fender radius), and shall be 26" deep.

The compartment shall have a non-abrasive lined cradle storage area for each of the three (3) devices.

This storage compartment shall provide a minimum of 2.3 cubic feet of storage space.

PO00009662 - OFFICER FORWARD FENDER - TRIPLE STORAGE SLOT

QTY: 1

A storage compartment shall be inserted into the fender to provide a storage area for three (3) customer supplied SCBA cylinders (or fire extinguishers of similar size).

The storage area shall be sized as tall and wide as possible in the fender (minimum of 14" wide x 15" tall with an angled floor by fender radius), and shall be 26" deep.

The compartment shall have a non-abrasive lined cradle storage area for each of the three (3) devices.

This storage compartment shall provide a minimum of 2.3 cubic feet of storage space.

PO00009667 - OFFICER REARWARD FENDER - SLIDE OUT ABSORBENT BIN

QTY: 1

A slide out absorbent bin shall be installed in this fender position.

The storage bin shall be constructed of smooth aluminum and shall be sized to store a minimum of 40 lbs of absorbent material.

The bin shall be installed on sliding locking tracks that allow the bin to extend out of the body fender for dumping/filling.

There shall be a hinged lid on top of the storage bin to add material to the bin, and a spring loaded valve at the bottom to dispense material out of the bin.

Absorbent bins that are built into the fender and do not provide a means for sliding the bin out for loading and dispensing shall not be acceptable due to the difficulty in loading/unloading.

PO00011794 - FENDER STORAGE COMPARTMENTS - PAINTED DOORS

QTY: 1

The fender storage area(s) shall be enclosed by a hinged door fabricated from the same material as the primary body construction, and painted the primary body color.

The back side of the door shall have a section of Nylatron installed to protect the door surface from the items stored in the compartment.

Each door shall be tied into the compartment door ajar/do not move apparatus warning system.

Each fender storage compartment door will be equipped with 3M model #1333 rubber "D" style door seal.

There will be no exceptions.

PO00018443 - CHALLENGER WB STYLE BODIES

QTY: 1

PO00018449 - CHALLENGER, WB-FF-FS-R (1000 MAX COMBINED TANK CAPACITY)

QTY: 1

DRIVER'S SIDE COMPARTMENTATION

One (1) full height/full depth compartment, with a roll up door, shall be provided forward of the rear wheels. Compartment dimensions 68" high x 49" wide x 29" deep, with a door opening of 64" high x 46" wide.

One (1) high side compartment, with a roll up door, shall be provided above the rear wheels. Compartment dimensions 36" high x 64" wide by 29" deep, with a door opening of 33-1/2" high by 58" wide.

One (1) full height/full depth compartment, with a roll up door, shall be provided behind the rear wheels. Compartment dimensions 68" high x 46" wide x 29" deep, with a door opening of 64" high x 46" wide.

OFFICER'S SIDE COMPARTMENTATION

One (1) full height/split depth compartment, with a roll up door, shall be provided forward of the rear wheels. Compartment dimensions 68" high x 49" wide x 29" deep in the lower 30" high area, 14" deep in the upper 38" high area, with a door opening of 64" high x 46" wide.

One (1) high side compartment, with a roll up door, shall be provided above the rear wheels. Compartment dimensions 36" high x 64" wide by 14" deep, with a door opening of 33-1/2" high by 58" wide.

One (1) full height/split depth compartment, with a roll up door, shall be provided behind the rear wheels. Compartment dimensions 68" high x 46" wide x 29" deep in the lower 30" high area, 14" deep in the upper 38" high area, with a door opening of 64" high x 46" wide.

The water tank capacity will be reduced by the size of the foam tank added.

PO00019775 - ISOLATED REAR STEP COMPARTMENT - CHALLENGER WB

QTY: 1

One (1) rear step compartment 51" high x 42" wide x 29" deep in the lower portion and 12" deep in the upper portion shall be provided with a door opening of 47 5/8" high x 42" wide.

PO00010936 - ROLL-UP DOORS

QTY: 1

Roll-up doors shall be provided on all compartments.

The roll-up doors shall be constructed from aluminum extruded slats which shall have a flexible seal between each slat for proper sealing of the door.

A synthetic rubber seal shall be provided at each side, top and bottom edge of the door to prevent entry of dirt into the compartment.

The door shall be equipped with a lift bar style latch mechanism which shall latch at the bottom of the door mounting extrusion.

The roll-up door assembly shall be furnished with a spring-loaded, counter balance assembly to assist in door actuation.

All running board and high side compartments shall be equipped with roll-up doors.

PO00000264 - AMDOR BRAND ROLL-UP DOORS, SATIN FINISH

QTY: 1

The roll-up doors shall be Amdor brand roll-up doors. They should be equipped with a satin finish and a dual durometer slat seal. The slats shall be made from a 1" double-wall aluminum and have a continuous ball and socket hinge joint. The interior of the door shall be made of a smooth interior door curtain, preventing equipment hang-ups. The bottom panel flange shall have a stainless steel lift bar latching system. The lifting bar will have a cut out for easy access if using gloves.

PO00010934 - REAR MUD FLAPS

QTY: 1

Heavy duty mud flaps shall be provided behind the rear wheels.

PO00010862 - REAR BODY PANEL

QTY: 1

The rear body panel shall extend the full width between the body side compartments.

This panel shall be full height from the rear step to the hose bed floor.

No part of the rear panel shall be attached to the booster tank.

The rear body panel material shall be aluminum tread plate as standard.

If Chevron striping is specified for the rear of the body then smooth aluminum shall be utilized.

PO00023877 - STAINLESS STEEL WHEEL WELL LINER

QTY: 1

Fully removable, one piece, bolt-in, stainless steel rear wheel well liner and fenderette will be provided. The wheel well liners will be natural metal finish and will protect the front and rear compartments and main body supports from damage. Wheel well liners and fenderettes which are welded in place or are only partially removable shall not be considered. {No Exceptions}

PO00012482 - TREAD PLATE OVERLAY, FRONT OF SIDE COMPARTMENTS (NON-WRAP AROUND)

QTY: 1

The front face of the side compartments, next to the driver and officer pump panels shall be overlaid with full height aluminum tread plate protection panels.

The overlays shall cover the front face of the compartments only, they shall not wrap around to the door opening.

PO00000292 - BODY RUB RAILS, C-CHANNEL

QTY: 1

Sacrificial, C-Channel style, rub rails shall be mounted at the base of the body, extending outward from the body. The rub rails shall extend the full length of the main body. Rub rails shall be bolted to the body from the bottom side of the compartment area so it does not damage the body side panels on initial impact and provide easy replacement.

PO00023898 - REAR STEP 12"D X 100"W - TAPERED CORNER

QTY: 1

The rear step shall be fabricated from 3/16" polished aluminum tread plate and shall be rigidly reinforced. The rear step shall extend 12" past the rear edge of the body and shall be 100" wide with tapered corners.

The rear edge of the step shall be designed to accommodate the rear clearance lights and recessed for protection in the step reinforcement channel. The step tread plate overlay shall be bolted to the step frame for ease of replacement.

SP00016617 - INTERMEDIATE REAR STEP, 8" X 42" BOLT-ON

QTY: 1

An eight (8) inch deep, bolt on intermediate rear step, fabricated from 3/16" aluminum tread plate, shall be installed.

The step shall be approximately 8" deep x 42" wide.

PO00011563 - TWO (2) VERTICAL RAILS ON REAR

QTY: 1

Two (2) vertical rails shall be mounted on the rear edge of the beavertails, one (1) each side.

PO00011564 - ONE (1) HANDRAIL, BELOW HOSE BED LEVEL

QTY: 1

One (1) horizontal, full width handrail shall be installed on the rear, below the level of the hose bed.

SP00016618 - HANDRAIL ABOVE PUMP PANEL, EACH SIDE

QTY: 1

Two (2) vertical handrails shall be mounted above each pump panel, (1) each side.

PO00011570 - HANDRAIL FORWARD OF PUMP HOSE, EACH SIDE - TOP

QTY: 1

Two (2) vertical handrails shall be mounted on each side of the forward pump house.

PO00011555 - GRAB RAILS, KNURLED ALUMINUM EXTRUSION

QTY: 1

All hand rails shall be 1-1/4" outer diameter, knurled bright anodized aluminum extrusion, designed to meet NFPA 1901 requirements.

Molded gaskets shall be installed between the handrail stanchion castings and body surfaces to prevent electrolytic reaction between dissimilar metals and to protect paint.

Grab rails shall be provided at the following specified locations.

Additional grab rails shall be provided adjacent to any additional steps specified to comply with NFPA 1901.

PO00011511 - INNOVATIVE CONTROLS LIGHTED STEP(S), BODY FRONT, DRIVER SIDE

QTY: 1

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, shall be provided on driver side body front to provide NFPA compliant access (maximum 18" height between steps) to an upper horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

PO00011517 - INNOVATIVE CONTROLS LIGHTED STEP(S), BODY FRONT, OFFICER SIDE

QTY: 1

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, shall be provided on officer side body front to provide NFPA compliant access (maximum 18" height between steps) to an upper horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

PO00011496 - INNOVATIVE CONTROLS LIGHTED FOLDING STEP(S), BODY REAR DRIVER SIDE

QTY: 1

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, shall be provided on driver side body rear to provide NFPA compliant access (maximum 18" height between steps) to an upper

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horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

PO00011504 - INNOVATIVE CONTROLS LIGHTED FOLDING STEP(S), BODY REAR OFFICER SIDE

QTY: 1

Innovative Controls large lighted folding step(s), with a textured chrome plate finish, shall be provided on officer side body rear to provide NFPA compliant access (maximum 18" height between steps) to an upper horizontal walking surface (compartment cap, dunnage area, fabricated step, or upper body compartments).

PO00000317 - PAINTED REAR TOW EYES, BELOW BODY

QTY: 1

Two (2) painted tow eyes shall be furnished on the rear of the vehicle. The tow eyes shall be made from plate steel and shall be bolted directly to the chassis frame rails with grade 8 bolts. The tow eyes will extend below the body. The tow eyes shall be smooth and free from sharp edges. They will have a minimum eyelet hole of 2-1/2". The tow eyes shall be painted.

PO00000226 - NFPA MINIMUM HOSEBED CAPACITY

QTY: 1

The hose bed shall provide a minimum of 30 cubic feet hose storage area for 2-1/2" or larger fire hose in order to meet NFPA-1901 minimum pumper hose storage requirement. The apparatus weight analysis shall be based on 800' of 2-1/2" hose, unless otherwise specified. If the hose load carried exceeds this minimum, the purchaser should advise the manufacturer prior to contract so that adequate chassis carrying capacity can be provided.

PO00000228 - HOSEBED FLOORING - ALUMINUM SLATS

QTY: 1

Flooring is to be constructed from extruded aluminum and have proper spaces for ventilation purposes. The flooring shall be smooth and free from sharp edges to avoid any hose damage. The hose bed floor shall be removable, providing access to the inner body framework.

PO00000232 - TWO (2) - 3/16" ADJUSTABLE HOSEBED PARTITIONS

QTY: 1

Two (2) fully adjustable 3/16" aluminum hose bed partitions shall be provided.

The partition shall be easily adjustable by channels, located at the front and rear of the hose bed.

The partition shall be removable for access to the booster tank.

PO00000243 - HOSEBED COVER - VINYL WITH VELCRO

QTY: 1

A hose bed cover shall be provided and installed. The cover shall be made from 22 ounce heavy-duty vinyl coated polyester fabric (TXN 226). The cover shall be sewn with ultraviolet resistant thread and have 2" wide nylon webbing sewn around the perimeter to provide additional strength. The cover shall be secured to the top front body flange with Velcro and quarter turn fasteners. The top side body flange should also be secured with Velcro. A weighted flap shall be furnished on the rear of the cover with two (2) bungee cords.

PO00000254 - HYPALON MATERIAL COLOR - BLACK

QTY: 1

The Hypalon material shall be black in color.

PO00019805 - HOSE BED, CHALLENGER WB-FF-FS-10

QTY: 1

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The hose bed shall be located directly above the booster tank and shall be free from all sharp objects such as bolts, nuts, etc., to avoid damage to fire hose.

The hose bed will provide approximately 141 cubic feet of hose storage area for 2 ½" or larger fire hose, exceeding NFPA 1901 minimum pumper hose storage requirements. The hose bed depth shall be 16".

The apparatus weight analysis will be based on 800' of 2 ½" hose unless otherwise specified. If the hose load to be carried exceeds this minimum, the purchaser must advise the manufacturer prior to contract so adequate chassis carrying capacity can be provided.

For added strength and rigidity, the hose bed side walls shall be (3) inches thick. The top edge of the front wall shall be flanged inward two (2) inches and downward one (1) inch.

PO00023910 - SIDE OF WATER TANK LADDER STORAGE (OFFICER SIDE)

QTY: 1

The ground ladders (will/shall) be stored vertically next to the water tank, behind the side body compartments and on the officer side of the apparatus.

To secure the ground ladders, a hinged rear access door (will/shall) be provided and tied into the "Do Not Move Apparatus" warning system.

PO00009012 - ALCO-LITE PEL-24 24' 2-SECTION EXTENSION LADDER (ALUMINUM)

QTY: 1

Alco-Lite model PEL-24; 24', aluminum, two (2) section extension ladder shall be provided.

PO00000375 - ALCO-LITE PRL-14 14' ROOF LADDER W/FOLDING HOOKS (ALUMINUM)

QTY: 1

Alco-Lite model PRL-14; 14', aluminum, straight roof ladder with folding hooks shall be provided.

PO00000381 - ALCO-LITE FL-10 10' FOLDING ATTIC LADDER (ALUMINUM)

QTY: 1

Alco-Lite model FL-10; 10', folding, aluminum, attic ladder shall be provided.

PO00012508 - PIKE POLE TUBE(S) - PUMPERS

QTY: 2

A pike pole tube(s) shall be provided.

Each holder shall be accessible from the rear of the apparatus.

Each pike pole holder shall be labeled to indicate the pike pole length.

PO00012514 - LOCATION PIKE POLE TUBE(S) - IN LADDER STORAGE COMPARTMENT

QTY: 2

The pike pole tube(s) shall be mounted in the ladder storage compartment.

PO00000415 - SUCTION HOSE STORAGE BUILT INTO BODY BEHIND ROLLUP DOOR

QTY: 1

The suction hoses shall be located beneath the hose bed. There will be one (1) on the driver side and one (1) on the officer side. The hose storage area shall be accessed from the rear of the apparatus. The storage area shall be enclosed with a hinged door on the rear of the body that ties into the "Do Not Move Apparatus" warning system.

Note: On bodies with roll up style doors, the storage area shall be behind the roll of the door and will not affect usable compartment space. On bodies with hinged style doors, the storage area shall be in the top corner of the compartment.

PO00000445 - TWO (2) 10' SECTIONS OF 6" KOCHECK LIGHTWEIGHT SUCTION HOSE

QTY: 1

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Two (2) 10' sections of six (6) inch Kochek (PVC) suction hose with lightweight hard coat couplings shall be furnished. Couplings shall include a long handle with a female swivel on one end and a rocker lug male on the other. All threads shall be six (6) inch N.S.T.

PO00010847 - GENERAL PAINT DESCRIPTION

QTY: 1

The apparatus body shall be painted with Sikkens paint product. The paint process shall meet or exceed current state regulations concerning paint operations. Pollution control shall include measures to protect the atmosphere, water, and soil. Contractor shall, upon demand, provide evidence that the manufacturing facility is in compliance with State EPA rules and regulations.

The exterior shall have no mounted components prior to painting to assure full coverage of metal treatments and paint to the exterior surfaces of the body. Any vertically or horizontally hinged smooth-plate compartment doors shall be painted separately to assure proper paint coverage on body, door jambs and door edges.

Paint process shall feature Sikkens high solid LV products and be performed in the following steps:

- Corrosion Prevention - all aluminum surfaces shall be pre-treated with the Alodine 5700 conversion coating to provide superior corrosion resistance and excellent adhesion of the base coat.
- Sikkens Sealer/Primer LV - acrylic urethane sealer/primer shall be applied to guarantee excellent gloss hold-out, chip resistance and a uniform base color.
- Sikkens High Solid LVBT650 (Base coat) - a lead-free, chromate-free high solid acrylic urethane base coat shall be applied, providing excellent coverage and durability. A minimum of two (2) coats shall be applied.
- Sikkens High Solid LVBT650 (Clear coat) - high solid LV clear coat shall be applied as the final step in order to ensure full gloss and color retention and durability. A minimum of two (2) coats shall be applied.

Any location where the material is penetrated after painting, for the purpose of mounting steps, hand rails, doors, lights, or other specified components shall be treated at the point of penetration with a corrosion inhibiting pre-treatment (ECK Corrosion Control). The pre-treatment shall be applied to the aluminum sheet metal or aluminum extrusions in all locations where the aluminum has been penetrated. All hardware used in mounting steps, hand rails, doors, lights, or other specified components shall be individually treated with the corrosion inhibiting pre-treatment.

After the paint process is complete, the gloss rating of the unit shall be tested with a 20 degree gloss meter. Coating thickness shall be measured with a digital MIL gauge and the orange peel with a digital wave scan device.

PO00010848 - GENERAL PRIMER & PREP DESCRIPTION - PUMPER

QTY: 1

All exposed welds shall be ground smooth for final finishing of areas to be painted.

The compartments and doors are totally degreased and phosphatized.

After final body work is completed, grinding (36 and 80 grit), and finish sanding shall be used in preparation for priming.

PO00010849 - GENERAL FINISH PAINT DESCRIPTION

QTY: 1

The body shall be finish sanded and prepared for final paint.

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Upon completion of final preparation, the body shall be painted utilizing the highest quality, state of the art, low V.O.C., polyurethane base paint.

Finish paint shall be applied in multiple coats to ensure proper paint coverage with a high gloss finish.

SP00016749 - INTERNATIONAL 2-DR SINGLE COLOR AS APPROVED BY CHASSIS MANUFACTURER

QTY: 1

The commercial cab exterior shall be finish painted in a single color by the chassis manufacturer.

PO00023017 - COMMERCIAL CAB PAINT FINISH - OTHER

QTY: 1

The chassis shall be painted and detailed as provided from the chassis OEM and shall meet their quality guidelines.

PO00023018 - WHEEL AND HUB PAINT - AS PROVIDED

QTY: 1

The chassis wheels shall be painted as provided by the commercial chassis manufacturer.

PO00010850 - BODY BUFFING & FINISH - PUMPER

QTY: 1

The visible and exposed areas of the body shall be buffed and detailed.

PO00004546 - INSIDE/UNDERSIDE BODY PAINTED BLACK

QTY: 1

The inside and underside areas of the complete body assembly shall be painted black using a Sikkens paint system, prior to the installation of the body on the chassis or torque box.

PO00004551 - LINE-X COMPARTMENT INTERIORS - PUMPER

QTY: 1

The interior of the body compartments shall be painted with Line-X material.

PO00004552 - LIGHT GRAY LINE-X COMPARTMENT COLOR

QTY: 1

The Line-X coating shall be light gray in color.

PO00004561 - FENDER COMPARTMENT INTERIOR - LIGHT GRAY LINE-X

QTY: 1

The interior of the fender storage compartments (if fender compartments are specified) shall be finish painted with Light Gray Line-X paint to provide a protective finish.

PO00004557 - PUMPHOUSE & PLUMBING PAINTED BLACK

QTY: 1

The pump enclosure and pump/plumbing within the pump enclosure shall be painted black.

PO00004555 - SINGLE COLOR BODY PAINT SCHEME - PUMPER - RED

QTY: 1

The body paint finish shall be Sikkens paint system in a single color to match customer furnished paint codes and requirements.

PO00010938 - "TUF-KOTE" UNDER SEAL - SINGLE AXLE UP TO 210" WHEEL BASE

QTY: 1

The under side of the apparatus shall have Tectyl # 518 film applied to retard rust and the corrosion process.

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The product shall meet military Specification A-A-59295 Type 1.

The amber, semi-firm wax film shall be applied by air spray method.

The cure time is 24 hours.

The film shall be applied to the chassis major components such as: chassis frame rails and cross members, axles, springs, drive line components, lower radiator supports, fuel tank, air tanks, running boards, bumper apron and other related components.

The under side of the cab and body shall have the film applied to the following areas: cab steps, front gravel shield and underside of battery box, body substructure, underside of all body compartments, running board supports and rear step supports.

No film shall be applied to the exhaust system or cab wheel wells, or body rear wheel wells.

NOTE: The film shall remain semi-firm to promote self-sealing.

The film may leave a light amber cast to those areas treated.

PO00010855 - PINT OF TOUCH-UP PAINT

QTY: 1

One (1) pint of each exterior color paint for touch-up purposes shall be supplied when the apparatus is delivered to the end user.

PO00010854 - FINALIZATION & DETAILING - PUMPER

QTY: 1

Prior to delivery the vehicle, the interior and exterior be cleaned and detailed.

The finalization process detailing shall include installation of NFPA required labels, checking fluid levels, sealing and caulking required areas of the cab and body, rust proofing, paint touch-up, etc

PO00011790 - 4" SCOTCH-LITE STRIPE ON CAB AND BODY

QTY: 1

A four (4) inch high "Scotch-Lite" stripe shall be provided.

The stripe shall be applied on a minimum of 60 percent of each side of the unit, 60 percent on the rear of the unit and 40 percent on the front of the unit.

The Scotch-Lite stripe layout shall be determined by the Fire Department.

PO00009525 - WHITE SCOTCH-LITE

QTY: 1

The Scotch-Lite shall be white in color.

PO00009517 - DUAL 1" SCOTCH-LITE ACCENT ON MAIN STRIPE

QTY: 1

A 1" high Scotch-Lite material accent stripe shall be incorporated into the Scotch-Lite scheme to border the primary Scotch-Lite stripe on the top and bottom edges.

Final layout of this configuration shall be determined by the Fire Department.

PO00009495 - 4" SCOTCH-LITE "Z" IN STRIPE

QTY: 1

A four (4) inch simple "Z" effect shall be incorporated into the Scotch-Lite scheme on the body.

Final layout of this configuration shall be determined by the Fire Department.

PO00009536 - REAR CHEVRON STRIPING

QTY: 1

REAR CHEVRON STRIPING

PO00012449 - 50% VERTICAL SURFACE

QTY: 1

At least 50% of the rear facing vertical surface shall be covered with alternating strips of reflective striping.

PO00009541 - 6" 50% REAR ORALITE CHEVRON STRIPING

QTY: 1

The striping shall be 6" Oralite reflective striping.

PO00024628 - RED & YELLOW ORALITE V98

QTY: 1

The Oralite V98 reflective tape shall be 012 red and 018 yellow in color.

PO00011822 - ROAD SAFETY KITS

QTY: 1

A road safety kit shall be furnished with the following equipment:

- 2 1/2 lb. B-C fire extinguisher
- Triangle safety reflectors.

PO00000521 - TWO (2) ZICO #SAC-44 FOLDING WHEEL CHOCKS, (2) MTD DRIVER SIDE

QTY: 1

Two (2) ZICO #SAC-44 folding wheel chocks shall be mounted forward of the rear wheels on the driver side below the side running board compartments.

PO00022837 - COMMERCIAL CHASSIS -1 YEAR NEW PRODUCT WARRANTY

QTY: 1

KME hereby warrants to the original purchaser (first end users) that any new products manufactured by KME will be free from defects in material and workmanship under normal use, maintenance and service for a period of one (1) year from date of delivery, subject to the conditions and exceptions stated herein.

Under this warranty, KME's obligation is limited to the repair or replacement at KME's option, at its factory, by its representative, or by its authorized service facility, of any part found to be defective by KME. If KME deems it necessary, all parts for which warranty claim is made will be returned to KME, transportation charges prepaid, for examination by KME who will be the sole judge as to whether such part was defective in material or workmanship under normal use, maintenance or service. The Commercial Chassis Warranty start date shall begin upon the departure of the completed apparatus from KME (unless chassis is customer provided, at which point the chassis warranty start period will be as agreed upon between the customer and the chassis dealership from whom it was purchased).

PO00022695 - 10 YEAR BODY STRUCTURAL WARRANTY

QTY: 1

The proposed body will be warranted against structural defects for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

PO00022699 - 10 YEAR BODY CORROSION WARRANTY, USE W/COMMERCIAL CHASSIS

QTY: 1

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The proposed body will be warranted against rust-through or perforation, due to corrosion from within, for a period of ten (10) years. Perforation is defined as a condition in which an actual hole occurs in a sheet metal panel due to rust or corrosion from within. Surface rust or corrosion caused by chips or scratches in the paint is not covered by this warranty.

PO00022701 - PAINT FINISH WARRANTY, TEN (10) YEAR

QTY: 1

The proposed paint finish will be warranted for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

PO00022702 - 5 YEAR LETTERING WARRANTY

QTY: 1

The apparatus manufacturer will provide a five (5) year warranty against defects in material and workmanship for all graphics processes. Any valid claims must be made in writing within 15 days of the determination of any defects to the manufacturer's fire apparatus. The manufacturer will at its option make any necessary repairs either at a local authorized service center or at the factory if required. The manufacturer will make the final decision as to where the repairs are to be made and any transportation cost is the owner's responsibility. The manufacturer will at its option, repair or replace any verified defects in workmanship or materials at no cost to the owner provided all the requirements of this warranty have been met.

The manufacturer will not be liable to the original purchaser or anyone else for consequential, incidental, special or direct damages, including, but not limited to, any claims for loss of profits, downtime, loss of use or inconvenience. THE COMPANY MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND SPECIFICALLY, DISCLAIMS ANY IMPLIED WARRANTY INCLUDING THE WARRANTY OF MERCHANTABILITY.

The manufacturer continually strives to improve its products and therefore, reserves the right to make improvements or changes without incurring any obligations to make such changes or additions to equipment previously sold.

PO00022703 - 1 YEAR BRIGHTWORK WARRANTY

QTY: 1

KME Fire Apparatus (KME) warrants all bright finish components used in the construction of KME Fire Apparatus against defects and workmanship provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original user-purchaser for a period of one (1) year from the date of delivery/acceptance to the original user-purchaser, whichever occurs first.

The expressed warranty excludes corrosion or degradation of bright finished components caused by damage to the component.

PO00022981 - 10 YEAR STAINLESS STEEL PIPING WARRANTY

QTY: 1

The proposed stainless steel plumbing will be warranted for a period of ten (10) years from the date of acceptance of the unit. Details of warranty coverage, limitations and exclusions are included in the specific warranty document.

PO00022973 - LIFETIME POLY TANK WARRANTY - ALL TANKS

QTY: 1

The proposed water tank will be warranted by the water tank manufacturer for the "Lifetime" of the unit. A copy of the manufacturer's warranty will be supplied to define additional details of the warranty provisions.

PO00022735 - HALE FIRE PUMP WARRANTY FULL 5 YEAR LABOR

QTY: 1

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Hale Products, Incorporated ("Hale") hereby warrants to the original buyer that products manufactured by Hale shall be free of defects in material and workmanship for a period of five (5) years from the date product is first placed into service or five and one-half (5 1/2) years from date of shipment by Hale, whichever period shall be first to expire. Within this warranty, Hale will cover parts and labor for the entire warranty period.

PO00022761 - AKRON HEAVY DUTY VALVE - 10 YEAR WARRANTY

QTY: 1

Akron Brass warrants Heavy Duty Swing-Out Valves for a period of ten (10) years after purchase against defects in material or workmanship. Akron Brass shall repair or replace any Heavy Duty Swing Out Valve which fails to satisfy this warranty.

PO00022983 - CLASS 1 - ELECTRICAL PRODUCT WARRANTY - 2 YEAR

QTY: 1

Class 1 warrants that any equipment of our own manufacture (or manufactured for us pursuant to our specifications) found to have defects in material or workmanship during normal use and service, will be repaired or replaced (at our option) free of charge, provided that written notice of such defect is received by us within two years (three for liquid-filled gauges) after initial shipment.

All equipment requiring repair or replacement under this warranty will be returned prepaid to Class 1. Such returned equipment will be examined by us and, if found to be defective as a result of materials failure or workmanship, will be repaired or replaced at no charge.

PO00024906 - ADDITIONAL ITEMS SHIPPED WITH VEHICLE

QTY: 1

- 1 - Pint of touch up paint for each color
- 1 - Bag of assorted stainless steel nuts and bolts

PO00024715 - VEHICLE CLASS TIER 0

QTY: 1