Fire Apparatus and Custom Fabricators

SPECIFICATIONS

FOR

VAN
VOLUNTEER FIRE DEPARTMENT

ON A

UTILITY RESCUE

11 Sperti Drive ● P.O. Box 17128 ● Edgewood, KY 41017
Phone (859) 331 – 0360 Fax (859) 331 - 0399

APPROVAL DRAWINGS

There shall be a complete set of drawings that are designed from the specifications and/or any change orders signed by the purchaser before construction begins. These drawings shall indicate the chassis make and model, location of lights, siren, horns, compartments and all major components of the unit. The signed drawings will become part of the bid contract documents. NO EXCEPTIONS.

CUSTOMER SUPPLIED CAB/CHASSIS

The chassis shall be supplied by the Fire Department. It is the responsibility of the purchaser to deliver the chassis to the apparatus manufacturer.

Any modifications necessary to mount the apparatus body on the customer-supplied cab/chassis will be the responsibility of the customer. The cost will be added to the price of the unit if applicable.

The chassis being supplied by the Fire Department shall be as follows:

Ford F-550 4 x 4
200" Wheel Base
84" CA
200-Amp Alternator
19,500 GVWR

Note: Ford Motor Company does not recommend the use of a non Ambulance Prep package cab/chassis for emergency vehicle operations.

The Ambulance Prep package consists of a dual alternator system totaling 320-Amps charging capability. This package also includes a dual battery system and heavy duty cooling systems for engine and transmission.

Ford Motor Company reserves the right to not warrant the cab/chassis and related systems should a non Ambulance Prep cab/chassis be used for emergency apparatus applications.

WINCH

A Warn brand winch Model M12000 12V, 12,000# Electric shall be installed Transformer grill guard winch mounting assembly. The winch shall be supplied complete with 125 feet of 3/8" galvanized aircraft wire cable and replaceable clevis hook. The winch shall be so equipped to enable power reverse and free spooling. A 30-foot remote control switch shall also be supplied.

EXHAUST SYSTEM

The exhaust pipe shall be extended to exit on the right side of the unit, horizontally.

BRUSH GUARD

A Warn Transformer grill guard / winch mounting system shall be installed to the front of the chassis cab. The Grill guard shall mount to the factory chassis frame and bumper. The guard shall have a polished stainless steel finish. The grill guard shall be provided with a fixed winch carrier and stainless steel carrier cover.

In addition there shall be stainless steel brush guards installed on the grille guard to wrap around the headlight assemblies for further protection.

TRAILER HITCH

A 2" receiver tube shall be installed at the rear of the chassis to allow the unit the ability to tow. The hitch shall be braced and reinforced to chassis frame, and have a minimum of a Class III rating. There shall be additional bracing required for the securing of the safety chains.

A universal trailer towing electrical connector shall be provided at the rear of the unit near the receiver tube for easy access.

REAR TOW EYES

Under the rear tail board there shall be structural steel reinforcement attached to frame rails of chassis to support tow eye assemblies. Mounted at rear center of apparatus it must be capable to with stand the requirements of towing (not lifting) the apparatus without damage.

CAB CONSOLE

Between the two front seats, a console shall be constructed of .125" aluminum. It shall have a 3/4 inch raised edge around all 4 sides to keep pens, etc. from falling off. The console shall be sprayed with a gray spatter style coating.

The console shall house the electrical switch panel, siren head, electrical breakers, relays, and other miscellaneous equipment as required by the fire department.

A binder storage area shall be provided to the rear of the console for department books.

STAINLESS STEEL WHEEL COVERS

A set of four (4) Phoenix stainless steel wheel covers shall be installed on the wheels of the unit, front and rear. Braided stainless air filler shall be installed on rear wheels.

FLUID IDENTIFICATION PLATE

A permanently engraved plate shall be installed in the cab specifying the quantity and type of fluids used in the apparatus.

FUEL TYPE PLATE

A permanently engraved plate shall be installed on or near the fuel fill to designate the chassis fuel type.

SEATING LABEL

There shall be a label located in the cab or in view of the driver, stating maximum seating capacity.

VEHICLE HEIGHT LABEL

There shall be a label located in the cab or in view of the driver, stating the overall height of the vehicle.

SEAT BELT WARNING LABEL

There shall be a label located at all seating areas, warning personnel that death or serious injury could result from not wearing seat belts while the vehicle is in motion.

RIDING ON STEP WARNING LABEL

There shall be a label located at all exterior stepping surfaces, stating "Warning: Death or serious injury may result from riding on any stepping surface when the vehicle is in motion.

REAR MUD FLAPS

There shall be a set of rear anti-spray black mud flaps shall be installed on the rear wheel well.

NFPA CREW SEATS

In place of the factory rear bench seat there shall be a Flame Fighter ABTS seat kit installed in the cab. Kit shall provide two (2) NFPA seats and one center jump seat. Each seat shall be installed on a rigid pedestal in the cab at proper height to assure correct location of seatbelts.

Seats shall the appropriate color to match interior.

NFPA 1901 COMPLIANT SEATING

In place of the factory front seats, there shall be a Flame Fighter ABTS seat kit installed in lieu of the front bench or bucket seats.

The kit shall include two (2) high back Flame Fighter ABTS seats with an open center area for console. The kit shall be mounted on a rigid pedestal in the cab at proper heights

Seats shall be the appropriate interior color to best match the chassis interior.

TIRE PRESSURE MONITORING SYSTEM

A tire pressure monitoring system shall be provided on the chassis. It shall monitor the tire pressure and provide a visual notification of low air pressure.

COMPARTMENT CONFIGURATION

11' Utility Body

Door Style: Roll-up Doors

Body Length 132”

Body Width 96”

Cab/Axle 84”

Approximate Compartment Dimensions: Dimensions may change during design phase of the apparatus body.

Compartment Location	Width	Height	Depth
Driver Side Front L-1 above frame.	50”	60”	25”-Transverse
Driver Side Over Wheel L-2	57”	33”	25"
Driver Side Rear L-3	25”	60”	25”
Passenger Side Front R-1 above frame.	50”	60”	25"-Transverse
Passenger Side Over Wheel R-2	57”	33”	25"
Passenger Side Rear R-3	25”	60”	25"

DEPARTURE ANGLE

The rear of the body shall be angled up approximately 25-degrees similar to a wetland style apparatus body. The rear compartment will be slightly shorter in height to accommodate this feature.

If space permits there shall be one (1) SCBA storage area on each side of the body forward in the wheelhouse area in the sloped floor area.

DOORS

The compartment doors shall be R.O.M Robinson brand extruded aluminum shutter style doors with lift bar latch mechanisms and associated hardware shall be provided and installed as specified by the manufacture.

The drum assemblies shall be fully enclosed and protected from the elements. Plates supporting the door roll assembly shall be bolted in place, adjustable and capable of being removed with common hand tools. Plates that are welded in place will not be acceptable and do not meet service and maintenance specifications.

The roll-up doors on each side of the apparatus shall be painted same color as the body and chassis cab.

All compartments shall be sweep-out design constructed of aluminum sheet. There shall be one (1) vent per compartment. There shall be aluminum tread bright installed on the front, side and top of each compartment that will help protect the painted surface from damage.

ALUMINUM WHEEL WELL LINERS:

The rear wheel wells shall be radius cut for a pleasing appearance. A polished aluminum fenderette shall be furnished and installed at each rear wheel well opening. The fenderette shall be held in place with concealed stainless steel fasteners.

A full depth 25" radius wheel well liner shall be provided. The wheel well liner panels shall be double break formed painted smooth aluminum plate that is bolted in place with stainless steel fasteners.

FOLDING STEPS

There shall be a total of two (2) NFPA compliant large folding step supplied and installed. One on each side of the unit on the rear of the body.

REAR CARGO AREA

The rear cargo area shall accommodate fire department miscellaneous equipment.

The floor of the compartment shall be constructed of 1/8" fire apparatus aluminum brite treadplate. The walls and the front shall be constructed from brushed D.A sanded finish aluminum sheet.

The rear cargo area shall be covered with a ROM electric operated shutter cover over the bed opening of the body.

SLIDEOUT TRAY

The slide out trays shall be capable of supporting a minimum weight of three hundred and fifty (350) pounds, even when fully extended.

All trays are to be of 3/16" smooth aluminum with press formed flanges of 2" on all four sides.

All slide trays shall be on roller mechanisms, which will allow them to extend beyond compartment by ninety percent (90%) of their overall length.

An automatic latching system shall be provided to hold the slide trays in their fully retracted and extended positions. The latching system shall consist of a thumb activated spring latch and a gas charged shock to support the tray when completely extended and aid in the retraction of the tray when pushing in. No more than 20 lbs. of force shall be needed to extend or retract the tray.

Tray dimensions shall vary to accommodate the specified compartment for which it is to be mounted.

There shall be one (1) slide out tray mounted in the passenger side front compartment per fire department request.

STOKES / BACKBOARD STORAGE

There shall be provisions made in the driver and passenger side font transverse compartment for horizontal storage of stokes basket stretcher and backboard.

Stokes Basket and backboards shall be accessible from either side of the unit. There shall be a fold down or swing out door provided with a trigger latch to keep Stokes Basket and backboard in place while in transit.

GRAB RAILS

Two (2) grab rails 18" long x 1-1/4" diameter aluminum extrusion anti-slip grip, shall be mounted on the rear face of the body one (1) each side. The grab rails shall meet or exceed the National Fire Protection Associations Pamphlet 1901.

12 VOLT WIRING

All electrical work shall be performed by persons familiar with emergency vehicle systems.

All of the emergency electrical equipment shall be served by circuits separate and distinct from the vehicle chassis circuits. Body wiring shall be color and function coded, grease, oil and moisture resistant, routed in protected locations, neatly and securely fastened, and all apertures properly grommeted for passing wiring. Solderless insulated connectors shall be provided where required.

The electrical system shall be completely controlled through a distribution center. The center shall incorporate automatic reset circuit breakers connected to relays to control each electrical circuit. Each circuit breaker and relay shall be sized to the load intended to be carried.

The 12-volt electrical system shall be controlled through a switch panel located in the cab and at a location that is easily accessible for the driver. The panel shall include switches arranged in the most convenient and practical manner that is possible.

SWITCH CONTROL PANEL

The switch control panel, integral to the siren, shall be supplied in the cab easily accessible by the driver. The panel shall contain an appropriate number of switches with backlighted tags.

All compartment wiring shall run in minimum 289 degree Fahrenheit loom and be securely fastened.

All heavy ampere-carrying cables requiring terminals shall have the terminals both crimped and soldered for good electrical connections. These circuits shall include the starting charging and siren circuits.

All wiring shall be color-coded and a schematic shall be supplied upon delivery of the truck. The diagram shall represent the exact wiring application, not a proposed system.

The distribution center, relays, strobe power packs and all other control devices shall be located in a convenient location for service.

Body shall be equipped with all lighting as required by Federal Motor Vehicle Safety Standards.

All electrical and emergency lighting equipment shall be supplied with automatic reset circuit breakers of appropriate amperage. All circuits shall be operated through a Bosch or equal continuous duty relay to remove load from all switches.

BATTERY DISCONNECT SWITCH

A Cole Hersey brand 75908 master battery disconnect switch shall be installed in a convenient location to the driver.

BATTERY LIGHT

A green "battery on" pilot light that is visible from the driver's position shall be provided.

BRAKE / TURN / BACKUP LIGHTS

New stop, tail, and back-up lights shall be installed. The type used shall be Whelen brand 4"x 6"rectangular lights, model 600 series consisting of the following.

Two (2) Whelen model 60R00XRR Red LED Stop/ Tail lights.
Two (2) Whelen model 60A00TAR Amber LED Arrow Turn lights
Two (2) Whelen model 60C00WCR Clear Back-Up lights

Each light shall be installed separately on the rear of the apparatus with a chrome flange.

BACKUP ALARM

An Ecco brand backup alarm shall be installed and shall be activated when the unit is placed in reverse gear.

LED COMPARTMENT LIGHTS

The body compartments shall be equipped with low voltage, light emitting diode (LED) strip style lighting. Each light strip shall be consist of a single LED placed every 1.5" in cased in a durable and impact resistant lexan shield to protect the diodes from inadvertent contact or collision which may result in damage. The lights shall be mounted vertically in each compartment where they will not interfere with adjustment or accessibility of any shelving or equipment.

Each light shall be sized accordingly to illuminate the compartment adequately.

COMPARTMENT OPEN LIGHT

A large red light shall be mounted in the cab visible from the driver and officer's seat.

Each compartment door shall be equipped with a door open indicator switch. When contact is broken at these switches, it shall activate the compartment open light in the cab.

ENGINE COMPARTMENT LIGHT

There shall be one (1) light installed in the engine compartment to illuminate the engine area. There shall be a switch located on the light.

GROUND AREA LIGHTING

There shall be six (6) high intensity water resistant lights mounted under the unit to provide proper ground area illumination in areas designed for the personnel to climb onto or descend from the apparatus.

There shall be a minimum of one (1) recessed 4" high intensity weather resistant light with clear lens provided to illuminate the rear step area.

All lights shall be activated automatically when the chassis parking brake is set or from an individual switch in the chassis cab with the work lights.

BATTERY CONDITIONER

There shall be a Kussmaul Auto Charge Super kit installed on the chassis. It shall consist of an Auto Charge1000 120 volt AC battery conditioner with a Super Auto Eject, and remote bar graph.

The battery conditioner (charger) system shall be wired to the chassis batteries and will recharge them to required levels. Conditioner shall provide full 15 amps of output as well as supplying up to 3 amps for loads connected directly to the battery such as radio memory, etc. System shall be connected through a 110 volt shoreline inlet or receptacle located on the cab. A 10 element LED charge indicator shall be mounted on the driver's side of the cab near the shoreline inlet.

The shoreline inlet is a Kussmaul Super Auto-Eject input connector with a weather proof, sealed box and cover. Auto Eject is designed to connect a 120-volt AC source to the vehicle. Unit shall automatically disconnect 120 volt AC power source by ejecting plug from the receptacle when vehicle-starting system has been energized. Super eject shall be installed in location to be determined by the fire department.

WARNING LIGHTING - MODES OF OPERATION

There shall be two modes of operation, calling for the right-of-way and blocking the right-of-way. When the master optical; warning system switch is closed, and the parking brake is released or the automatic transmission is not in park, the warning devices signaling the call for right-of-way shall be energized. When the master optical warning system switch is closed, and the parking brake is on or the automatic transmission is in park, the warning devices signaling the blockage of the right-of-way shall be energized.

NFPA COMPLIANT WARNING LIGHTING

The following lighting zone packages have been approved by the selected manufacturers to meet the current NFPA requirements for visual warning devices as outlined in section 11-8.13.3 of the NFPA 1901 Standard for Automotive Fire Apparatus 1999 edition.

LIGHT BAR

A Whelen Freedom Super Linear model FN60QLED 60" LED light bar shall be installed on the cab roof of the unit. The light bar shall be clear outer lens with red LEDs. The light bar shall have square ends.

LOWER ZONE A WARNING LIGHTS (GRILL)

There shall be two (2) 60R02FRR 600 series Linear Super LED lights mounted on the unit. The lights shall be mounted to the grill on the front of the chassis and have chrome flanges.

The lens color shall be red.

LOWER ZONE B&D WARNING LIGHTS

There shall be a total of six (6) 60R02FRR 600 series Linear Super L.E.D. lights mounted on the unit.

There shall be three (3) red 600 series L.E.D lights with chrome flanges mounted on each side in the lower half of the unit (zones B & D lower).

One light shall be located at the front, another shall be midship, and the third shall be toward the rear of the apparatus.

The lens color shall be red.

LOWER ZONE C WARNING LIGHTS

There shall be two (2) 60R02FRR 600 series Linear Super L.E.D. lights mounted on the rear of the unit.

The lights shall be surface mounted with a chrome flange on the rear lower half of the unit (zone C lower).

The lens color shall be red.

UPPER ZONE B&D WARNING LIGHTS

There shall be a total of four (4) 70R02FRR 700 series Linear Super L.E.D. lights mounted on the unit in upper zones B&D.

Two (2) red 700 series L.E.D. lights shall be mounted on each side in the upper half of the unit. One shall be mounted toward the front and one toward the rear of the apparatus.

The lens color shall be red.

UPPER ZONE C WARNING LIGHTS

There shall be a total of two (2) 70R02FRR 700 series L.E.D. lights mounted on the unit in upper zone C.

There shall be one (1) red 700 series L.E.D. light mounted on each side of the rear of the apparatus.

The lens color shall be red.

TRAFFIC ADVISOR BAR

There shall be a Whelen model TAL85 48” LED traffic advisor installed on the lower rear of the apparatus below the bed area.

The advisor shall contain eight (8) LED lights with amber lenses and arrow lenses on either end of the bar.

The advisor has the capability to direct traffic to the right or to the left or the right and left simultaneously.

The control head shall be mounted in the cab console convenient to the driver and officer.

ELECTRONIC SIREN & LIGHT CONTROL SYSTEM

There shall be one (1) Federal SS2000-LMS siren with power management light control system installed in the apparatus. The siren system provides a separate control head from the amplifier/relay unit; a four position slide switch for quick activation of warning light systems; an electronic siren with standard siren tones (Wail, Yelp, Hi-Lo, and Manual), and thirteen easy action rubberized push button options.

Apparatus warning lights shall all be programmed and operate off the slide switch. All functions are programmable at point of installation. As well as

A noise-canceling microphone shall be installed in cab area.

SPEAKER

There shall be one (1) Federal siren speaker model MS100 Dynamax installed on the front bumper of chassis.

SCENE LIGHTS

The unit shall be equipped with six (6) Whelen 700 series surface mount halogen lights. Scene lights shall be mounted two (2) on the right side, two (2) on the left side and two (2) on the rear of the apparatus.

120 VOLT & 240 VOLTS

Since the apparatus is equipped with a 120/240-volt electrical system, the wiring and associated equipment shall be tested.

The wiring and associated receptacles shall be subjected to a 1-min, 900-V dielectric voltage withstand test with any switches in the circuit(s) closed between live parts, including neutral and the vehicle frame. This test shall be conducted after all bodywork has been completed.

Electrical polarity checks shall be made of permanently wired equipment and receptacles to determine that connections have been properly made.

An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the test shall be recorded and provided to the purchaser at the time of delivery.

GENERATOR

The generator system shall be a Smart power Hydraulic generator rated at 8 KW.

The motor/generator shall be placed in a tray frame assembly which affords protection to the components and provides a unitized mounting module containing motor/generator, reservoir, oil cooler, filtration system, and a manifold containing a cross port check valve plus system relief valve.

The generator shall be a commercial type with a heavy-duty bearing and of brush less design to ensure low maintenance. The reservoir shall include an oil level gauge, oil temperature gauge, fill cap, fill strainer, and a boost unit to provide a positive pressure to the pump suction port.

The generator and hydraulic motor shall be close coupled and permanently aligned using a Morse taper with a through bolt to secure the motor to the generator.

The system must be capable of producing the rated full-load power when driven from the vehicle PTO from high idle to maximum engine speed.

The generator shall be recess mounted in the front top area of the body bed forward of the roll-up shutter bed cover.

BREAKER BOX

The main breaker box shall be a Square D with eight (8) circuit breaker rated to wire size and load demand. The circuit breaker panel shall be equipped with standard circuit breakers. Circuit breaker panel shall be installed on the front (left) wall of compartment over the rear wheels. An engraved label shall be furnished next to breaker box to indicate switches and circuits.

TRANSFER SWITCH:

There shall be a Kussmaul or equal transfer switch installed to convert from generator power to the Kussmaul battery shore power unit when the generator is not in operation to energize the 110-volt outlets.

110-VOLT OUTLETS

There shall be two (2) 110-volt receptacles installed in the driver side rear compartment to power customer furnished tool chargers and batteries, etc.

220-VOLT OUTLET

There shall be one (1) 220-volt receptacle installed in the driver side front compartment to supply power for the customer supplied hydraulic rescue electric power unit.

CUSTOMER SUPPLIED HYDRAULIC REEL & ELECTRIC POWER SUPPLY

There shall be a customer supplied hydraulic rescue reel with 100 ft of hydraulic hose and the customer supplied electric power unit installed in the driver side front compartment per fire department request.

120-VOLT 750-WATT FRC PUSH-UP LIGHTS

There shall be two (2) Fire Research FCA-100-S75 750- Watt, 120 volt Focus low profile extendible lights installed on the apparatus body.

Each light shall utilize the 530-side mount, bottom raise twist lock poles. Each pole uses the patented concentric locking mechanism. The twist lock cannot jam or be over tightened, and has no metal-to-metal contact.

There shall be two (2) Focus FCA-100-S75 push –up lights installed on the apparatus at the front of the body.

The lights shall be mounted in such a way to allow them to be operated and extended while on the truck and shall be located so as not to interfere with any other lights, doors, handles, or tilting of cab.

The lights shall be hard wired through a weatherproof connector at the front of the body to the junction box breakers.

ELECTRIC REEL

There shall be one (1) 120-volt Hannay Model ECR-1616-17-18 electric cord reel installed as per the fire department instructions.

The reel shall be capable of holding 200 feet of 10/3 wires. The reel shall also be equipped with a 12- volt electric motor with a sealed push button momentary switch located near that reel.

The reel shall also be supplied with 200 feet of 10/3 wires, color to be black.

JUNCTION BOX

There shall be one (1) GFE electrical outlet junction box with powder coat finish, located on the specified electric cord reel(s). The box shall be hard wired on the specified cable, and shall terminate with four (4) 125 volt, 15 Amp outlets. Plug type shall be as specified by the fire department.

PAINT

The body exterior shall have no mounted components prior to painting to assure full coverage of metal treatments. Compartment doors will be painted separately to assure proper paint coverage on body, doorjambs and door edges.

All painted surfaces shall follow the following procedure to insure a lasting finish.

Metal surfaces shall be sanded to remove all burrs and imperfections in aluminum, before etching and treatment.

A wax & grease solvent shall be used to clean and prep the aluminum surface. The surface shall then be rinsed with freshwater. This step removes wax, grease and other surface contaminants, thus leaving a bright, clean and conditioned surface.

A self-etching, aluminum primer shall be applied next. The self-etching primer shall fill all of the minor imperfections, scratches, etc. in the metal. This step produces a corrosion resisting conversion coating that fends off oxidation and other surface contaminates leaving a surface that gives excellent paint adhesion.

A sandable primer shall be sprayed on the metal that seals the surface for the polyurethane paint. A minimum coating thickness of 2-mil shall be applied. Primer is then sanded smooth leaving the best surface for topcoat.

The apparatus body shall then be painted with a minimum of three (3) coats of high luster final finish polyurethane paint.

These steps are followed as recommended by the paint manufacturer to provide a lasting and high quality gloss finish. All paint products shall be provided by the same manufacturer as the topcoat finish.

The body shall be painted to match the chassis cab paint and color code number.

LETTERING

There shall be a maximum of sixty (60) 3” tall 3M reflective letters applied to the apparatus. The lettering shall also have left drop shading applied.

There shall be two (2) Fire Department supplied Maltese emblems mounted on the cab doors.

The exact location and color of the lettering shall be determined by the fire department.

The Maltese emblems shall be supplied by the department and mounted in a location determined by the fire department.

STRIPE

There shall be a 4" wide, (Yellow) Scotchlite stripe located no higher than 48" from the ground installed on the apparatus cab and body. This stripe will consist of a 1",4",1" triple stripe with a 1" space between each stripe.

The stripe shall cover a minimum of fifty percent (50%) of perimeter of each side of the apparatus and fifty percent (50%) of the perimeter of the rear of the apparatus and twenty-five (25%) of the perimeter of the front of the apparatus.

The department shall specify the exact location of the stripe.

CAB DOOR REFLECTIVE STRIPING

The completed apparatus shall be equipped with reflective material on the interior of each cab door in accordance with the current standards of NFPA.

EQUIPMENT

ASSORTED FASTENERS

One (1) bag of assorted stainless steel, and chrome fasteners used in the assembly of the apparatus shall be provided with the delivery of the apparatus.

WIRING SCHEMATICS

A complete set of detailed electrical wiring schematics shall be provided with the completed unit. The schematic shall clearly labeled and describe all electrical circuits for an accurate reference.

SERVICE MANUAL AND PARTS LIST

A service manual shall be provided with the completed unit. Manual shall include equipment and component information as well as warranty and service information.

2009 NFPA ADDATIONAL EQUIPMENT

Five (5) Traffic Vest. – Customer Supplied

Five (5) Traffic Cones – Customer Supplied

Five (5) Warning Devices (Flares) – Customer Supplied

One (1) Automatic External Defibulator (AED) – Customer Supplied

Increased Output Step Surface Lighting

Increased Seat Belt Length

Cab Helmet Storage /Holders mounted in cab with "Do Not Wear Helmet While Seated" warning label affixed in cab.

White-Amber Rear Retro Reflective Chevron 3M style material. (NFPA is Red-Amber)

LIMITED WARRANTY

The body manufacturer shall warrant the new apparatus for a period of twelve (12) months or 12,000 miles (whichever occurs first) from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free from defects in material and workmanship that may appear under normal use and service within the warranty period. A copy of the warranty shall be supplied with the bid.

PAINT WARRANTY

The body manufacturer shall warrant the new apparatus paint finish for a period of seven (7) years or 84,000 miles (whichever occurs first) from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free from peeling, cracking, loss of gloss caused by cracking, and any paint failure caused by defective finishes as determined by the manufacturer under normal use and service within the warranty period. A copy of the warranty shall be supplied with the bid.

ELECTRICAL WARRANTY

The body manufacturer shall warrant the new apparatus electrical system for a period of five (5) years or 60,000 miles (whichever occurs first) from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free from defects in the electrical harness and connections under normal use and service within the warranty period. A copy of the warranty shall be supplied with the bid.

BODY STRUCTURAL WARRANTY

The body manufacturer shall warrant the new apparatus for structural integrity for a period of ten (10) years from the date of delivery to the original retail purchaser. The warranty will ensure that the vehicle will be free all structural defects of both material and workmanship that may appear under normal use and service within the warranty period. A copy of the warranty shall be supplied with the