

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

One (1) == Preface: SVI All Rescues, NFPA 1900 - 2403.010 03/01/24 ==

One (1) Apparatus Operation Training : DEALER TO PROVIDED
00-38-0100

APPARATUS TRAINING

The successful bidder shall provide a factory-trained technician to provide the following training:

A minimum ____ hour structured training course for the fire apparatus mechanics of the department, covering the repair and maintenance of all components of the apparatus called for in the specifications.

The successful bidder shall provide a minimum ____ hour structured training course to be repeated three times to cover each of the ____ shifts of personnel assigned to operate the apparatus, covering nomenclature of components, proper operation of the apparatus, daily operational maintenance checks, and other information necessary for a firefighter/driver/engineer to properly operate and maintain the apparatus.

It is intended that this training be organized in such a manner that both the mechanics and fire personnel receive full benefit of the aforementioned structured training.

Liability Insurance: \$1M General Liability

One (1)
01-02-2000

LIABILITY INSURANCE

The manufacturer shall furnish with the bid a certificate of insurance for;

Workman's Compensation and Employer's Liability Insurance covering for all employees.

General Liability (each occurrence) of \$1,000,000.00. General Aggregate coverage of \$2,000,000.00. Products Completed / Operations Aggregate coverage of \$2,000,000.00. Medical Expense coverage of \$5,000 (any one person). Personal Injury of \$1,000,000.00.

Automobile liability of \$1,000,000.00 combined single limit (each accident), including any auto, all owned autos, scheduled autos, hired autos, non-owned autos, and garage liability.

Excess Umbrella Liability coverage of \$6,000,000.00 each occurrence, Aggregate of \$6,000,000.00. Garage Keepers Liability coverage of \$6,000,000.00 combined limit.

All insurance policies must be;

- Maintained for the life of the contract,
 - Must provide ten (10) days notice before cancellation,
 - Must cover all operations of the contractor, or anyone employed by them.
- Internet In-Process Site

One (1)
01-02-3000

INTERNET IN-PROCESS SITE

The manufacturer shall post and maintain a website where the San Diego County Fire Protection District will be able to view digital images of their apparatus as its being built. The digital images shall be posted

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once a week starting when the body begins production or when the cab/chassis arrives and shall continue until the final completion of unit.

One (1)
01-04-0110

Engineering Drawings, 17" x 11" Sheet

ENGINEERING DRAWINGS

The evaluation of bids shall also be based on design, engineering reliability, and completeness of drawings. No Bidder's proposal shall be considered unless complete engineering drawings to these specifications are submitted with the request for proposal package. Failure to submit factory prepared blueprints with bid shall result in automatic rejection. Submission of "bid drawings" are in addition to "production drawings" which must be submitted for San Diego County Fire Protection District approval prior to construction. Bid drawings shall allow the San Diego County Fire Protection District the ability to fully evaluate required product.

The engineering drawings shall be produced on computer aided design (CAD) equipment to assure critical tolerance and detail only available with CAD equipment. The drawings shall be on "B" size paper, 17" x 11" in size, and views must be 1/4" = 1' - 0" scale. This shall allow the San Diego County Fire Protection District the ability to compare drawings of all manufacturers on an "equal" basis. The drawings shall be completed only by the body manufacturer, and must be exactly to San Diego County Fire Protection District specifications. Submission of "similar to" drawings or "statements referring to later submission of drawings after award of contract" shall be automatically rejected.

Since the request for proposal package will require extensive evaluation by San Diego County Fire Protection District, all Bidders must submit exactly the same engineering drawings at the same scale, on the same size paper. For easy comparison of drawings, they must be on a 17" x 11" sheet as follows:

- All bid drawings will be stamped BID DRAWING.
- All items shown on the drawing will be pre-designed with regards to layout and functionality prior to the completion of the BID DRAWING.
- Two (2) 17" x 11" color drawings will be supplied with the bid proposal. Black and white or blue line drawings will not be accepted.
- There shall be five (5) views of the truck with the doors closed (Top, Left, Right, Front, Rear), four (4) views of the truck with the doors open (Top, Left, Right, Rear) and four (4) views of any walk-in area (Top, Left, Right, Rear).
- All compartment door openings and usable space shall be clearly shown in inches.
- The trucks overall length, height, width, wheelbase and cab-to-axle dimensions shall be clearly shown.
- The angles of approach and departure shall be shown in the maximum loaded condition to the nearest degree.
- All lighting packages will be clearly shown on the drawing and verified accurate per the most current NFPA standards (when applicable).
- The exterior view shall show all scene lights, marker lights, speakers, horns, exhaust, tow points, exterior outlets, windows, winch receivers, tow hitches, exterior ladders and any other item important to the function of the vehicle.
- The open view shall show all trays, shelves, air system components, hydraulic components, tool boards, storage modules and any other items important to the function of the vehicle.
- The interior view for all walk-in areas shall show all seating positions, desks, cabinets, windows, tech equipment, radio locations and any other item important to the function of the vehicle.
- Any changes to the BID drawing will require a revision which will be clearly annotated in the upper right hand side of the drawing showing the revision number, reason for the revision, date and who made the changes.

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Text Block Items;

- Purchaser's name.
 - Body size and material type.
 - Chassis manufacturer and model number.
 - Unit description.
 - Wheelbase (WB) , Cab-to-axle (CA) distance.
 - Overall length (OAL), Overall width, (OAW), Overall height (OAH).
 - Scale, date, drawn by, drawing number and sheet number.
- Responsibility of Purchaser, 1900 Fire Apparatus

One (1)
01-13-1000

RESPONSIBILITY OF PURCHASER

It shall be the responsibility of the purchaser to specify the details of the apparatus in addition to the requirements in NFPA 1900 needed by the manufacturer to build the apparatus, including:

- 1) Requirements not uniquely specified in NFPA 1900, such as the type of apparatus desired.
- 2) Any features of the apparatus desired in addition to, or in excess of, the requirements in NFPA 1900.

After acceptance of the fire apparatus, the purchaser shall be responsible for ongoing training of personnel to develop and maintain proficiency regarding the proper and safe use of the apparatus and the associated equipment.

Responsibility of Contractor

One (1)
01-13-1050

RESPONSIBILITY OF CONTRACTOR

The Contractor shall provide a detailed description of the apparatus, a list of equipment to be furnished, and other construction and performance details to which the apparatus shall conform. The detailed description of the apparatus shall include, but shall not be limited to,

3. Estimated In-Service Weight,
4. Wheelbase, Turning Clearance Radius,
5. Principal dimensions, Angle of Approach, Angle of Departure,
6. Transmission, Axle Ratios.

The Contractor's detailed description shall include a statement specifically describing each aspect of the delivered apparatus that will not be fully compliant with the requirements of this standard.

The purpose of these Contractor specifications shall be to define what the contractor intends to furnish and deliver to the purchaser.

Responsibility for the apparatus and equipment shall remain with the contractor until they are accepted by the purchaser.

Vehicle Stability (ESC), Cab/Chassis Supplied

One (1)
01-13-1310

VEHICLE STABILITY SUPPLIED WITH CAB/CHASSIS

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One (1)
01-13-1360

The cab/chassis shall be equipped with a stability control system. The system shall have, at a minimum, a steering wheel position sensor, a vehicle yaw sensor, a lateral accelerometer and individual wheel brake controls.

Performance, Roadability 68/60 MPH, Serviceability, 1900 Fire Apparatus

FIRE APPARATUS PERFORMANCE

The fire apparatus shall meet the requirements of this standard at elevations of 2000 ft (600 m) above sea level.

The fire apparatus shall meet all the requirements of this standard while stationary on a grade of 6 percent in any direction.

The fire apparatus shall meet the requirements of this standard in ambient temperature conditions between 32°F (0°C) and 110°F (43°C).

HIGHWAY PERFORMANCE

The apparatus, when loaded to its estimated in-service weight, shall be capable of the following performance while on dry, paved roads that are in good condition:

- 7) Accelerating from 0 to 35 mph (55 km/hr) within 25 seconds on a 0 percent grade
- 8) Attaining a speed of 50 mph (80 km/hr) on a 0 percent grade
- 9) Maintaining a speed of at least 20 mph (32 km/hr) on any grade up to and including 6 percent

The maximum top speed of fire apparatus with a GVWR over 26,000 lb (11,800 kg) shall not exceed either 68 mph (109 km/hr) or the manufacturer's maximum fire service speed rating for the tires installed on the apparatus, whichever is lower.

If the combined water tank and foam agent tank capacities on the fire apparatus exceed 1250 gal (4732 L), or the GVWR of the vehicle is over 50,000 lb (22,680 kg), the maximum top speed of the apparatus shall not exceed either 60 mph (95 km/hr) or the manufacturer's maximum fire service speed rating for the tires installed on the apparatus, whichever is lower.

SERVICEABILITY

The fire apparatus shall be designed to allow the manufacturer's recommended routine maintenance checks of lubricant and fluid levels to be performed by the operator without lifting the cab of a tilt-cab apparatus or without the need for hand tools.

Where special tools are required for routine service on any component of the apparatus, such tools shall be provided with the apparatus.

Apparatus components that interfere with repair or removal of other major components shall be attached with fasteners, such as cap screws and nuts, so that the components can be removed and installed with ordinary hand tools. These components shall not be welded or otherwise permanently secured into place.
Construction Documentation: NFPA 1900, Fire Apparatus

One (1)
01-13-1400

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FIRE APPARATUS DOCUMENTATION

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

- 10) The manufacturers record of apparatus construction details, including the following documents:
 - a) Owner's name and address
 - b) Apparatus manufacturer, model, and serial number
 - c) Chassis make, model, and serial number
 - d) GAWR of front and rear axles and GVWR
 - e) Front tire size and total rated capacity in pounds (kilograms)
 - f) Rear tire size and total rated capacity in pounds (kilograms)
 - g) Chassis weight distribution in pounds (kilograms) with water and manufacturer-mounted equipment (front and rear)
 - h) Engine make, model, serial number, rated horsepower and related speed, and governed speed; and if so equipped, engine transmission PTO(s) make, model, and gear ratio
 - i) Type of fuel and fuel tank capacity
 - j) Electrical system voltage and alternator output in amps
 - k) Battery make, model, and capacity in cold cranking amps (CCA)
 - l) Chassis transmission make, model, and serial number; and if so equipped, chassis transmission PTO(s) make, model, and gear ratio
 - m) Ratios of all driving axles
 - n) Maximum governed road speed
 - o) Pump make, model, rated capacity in gallons per minute (liters per minute where applicable), maximum discharge pressure capability rating, and serial number
 - p) Pump transmission make, model, serial number, and gear ratio
 - q) Auxiliary pump make, model, rated capacity in gallons per minute (liters per minute where applicable), and serial number
 - r) Water tank certified capacity in gallons or liters
 - s) Foam tank (if provided) certified capacity in gallons (liters)
 - t) Aerial device type, rated vertical height in feet (meters), rated horizontal reach in feet (meters), and rated capacity in pounds (kilograms)
 - u) Paint manufacturer and paint number(s)
 - v) Company name and signature of responsible company representative
 - w) Weight documents from a certified scale showing actual loading on the front axle, rear axle(s), and overall fire apparatus (with the water tank full but without personnel, equipment, and hose)
- 2) Certification of compliance of the optical warning system (*see 10.7.17*)
- 3) Siren manufacturer's certification of the siren (*see 10.8.1.1*)
- 4) Written load analysis and results of the electrical system performance tests (*see 10.13.1 and Section 10.14*)
- 5) Certification of slip resistance of all stepping, standing, and walking surfaces (*see 12.6.4.5*)
- 6) If the apparatus has a fire pump, or a wildland fire pump, the pump manufacturer's certification of suction capability (*see 13.2.4.1 or 15.2.4.1*)
- 7) If the apparatus is equipped with a fire pump or a wildland fire pump and special conditions are specified by the purchaser, the pump manufacturer's certification of suction capacity under the special conditions (*see 13.2.4.2 or 15.2.4.2*)
- 8) If the apparatus has a fire pump, or a wildland fire pump a copy of the apparatus manufacturer's approval for stationary pumping applications (*see 13.3.1 or 15.3.1*)

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- 9) If the apparatus has a fire pump, the engine manufacturer's certified brake horsepower curve for the engine furnished, showing the maximum governed speed (*see 13.3.2.2*)
 - 10) If the apparatus has a fire pump or a wildland fire pump, the pump manufacturer's certification of the hydrostatic test (*see 13.5.2.2 or 15.5.2.2*)
 - 11) If the apparatus has a fire pump with a maximum discharge pressure capability rating that exceeds the hydrostatic test pressure of 13.5.2.1, the pump manufacturer's certification of the hydrodynamic test
 - 12) If the apparatus has a fire pump or a wildland fire pump, the certification of inspection and test for the fire pump (*see 13.13.1.1.5 or 13.13.1.2.4 or 15.13.1.2.4 as applicable*)
 - 13) If the apparatus is equipped with an auxiliary pump, the apparatus manufacturer's certification of the hydrostatic test (*see Section 14.13*)
 - 14) When the apparatus is equipped with a water tank, the certification of water tank capacity (*see Section 17.6*)
 - 15) If the apparatus has an aerial device, the certification of inspection and test for the aerial device (*see Section 20.31*)
 - 16) If the apparatus has an aerial device, all the technical information required for inspections to comply with NFPA 1910
 - 17) If the apparatus has a foam proportioning system, the foam proportioning system manufacturer's certification of accuracy (*see 18.10.4.2*) and the final installer's certification the foam proportioning system meets this standard (*see 18.11.2*)
 - 18) If the system has a CAFS, the documentation of the manufacturer's pre delivery tests (*see Section 19.9*)
 - 19) If the apparatus has a line voltage power source, the certification of the test for the power source (*see 21.15.7.2*)
 - 20) If the apparatus is equipped with an air system, air tank certificates (*see 23.5.1.2*), the SCBA fill station certification (*see 23.9.6*), and the results of the testing of the air system installation (*see 23.14.5 and 23.15.4*)
 - 21) For wildland fire apparatus, or structural apparatus without stability control, certification of vehicle side slope stability, including the weight distribution assumed for the calculations or as loaded on the vehicle for the tilt table test (*see 7.14.3*)
 - 22) Any other required manufacturer test data or reports
- One (1)
01-13-1450 Operations and Service Documentation: One (1) Copy

OPERATIONS AND SERVICE DOCUMENTATION

The contractor shall deliver with the fire apparatus complete operation and service documentation covering the completed apparatus as delivered and accepted.

The documentation shall address at least the inspection, service, and operations of the fire apparatus and all major components thereof.

The contractor shall also deliver with the fire apparatus the following documentation for the entire apparatus and each major operating system or major component of the apparatus:

- 23) Manufacturer's name and address
- 24) Country of manufacture
- 25) Source for service and technical information
- 26) Parts replacement information
- 27) Descriptions, specifications, and ratings of the chassis, pump (if applicable), and aerial device (if applicable)
- 28) Wiring diagrams for low voltage and line voltage systems to include the following information:

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- a) Pictorial representations of circuit logic for all electrical components and wiring
- b) Circuit identification
- c) Connector pin identification
- d) Zone location of electrical components
- e) Safety interlocks
- f) Alternator–battery power distribution circuits
- g) Input/output assignment sheets or equivalent circuit logic implemented in multiplexing systems
- 29) Lubrication charts
- 30) Operating instructions for the chassis, any major components such as a pump or aerial device, and any auxiliary systems
- 31) Precautions related to multiple configurations of aerial devices, if applicable
- 32) Instructions regarding the frequency and procedure for recommended maintenance
- 33) Overall apparatus operating instructions
- 34) Safety considerations
- 35) Limitations of use
- 36) Inspection procedures
- 37) Recommended service procedures
- 38) Troubleshooting guide
- 39) Apparatus body, chassis and other component manufacturer's warranties
- 40) Special data required by this standard
- 41) A material safety data sheet (MSDS) for any fluid that is specified for use on the apparatus

The contractor shall deliver with the apparatus all manufacturer's operations and service documents supplied with components and equipment that are installed or supplied by the contractor.

One (1)
01-13-1515
Manuals: Online @ SVI Trucks . com w/ QR Code

NFPA REQUIRED DOCUMENTATION FORMAT - Online @ SVI Trucks . com

The vehicle construction details and the operations and service documentation as required per NFPA 1900 latest edition shall be provided online. These manuals shall be divided into sections for ease of reference and will include two (2) QR codes installed on the apparatus for accessibility, with an additional 2 QR codes shipped loose.

One (1)
01-13-1710
Fire Apparatus Safety Guide: Fire Apparatus Manufacturer's Association.

FIRE APPARATUS SAFETY GUIDE

A Fire Apparatus Safety Guide published by Fire Apparatus manufacturer's Association shall be provided with delivered vehicle. This manual includes essential safety information for fire fighters, fire chiefs, apparatus mechanics, and fire department safety officers. The guide is applicable to municipal, wildland, and airport fire fighting apparatus manufactured on either custom or commercial chassis.
Statement of Exceptions, Requirements

One (1)
01-13-1750

STATEMENT OF EXCEPTIONS

The final-stage manufacturer shall deliver with the fire apparatus either a certification that the apparatus fully complies with all requirements of this standard or alternatively, a Statement of Exceptions specifically describing each aspect of the completed apparatus that is not fully compliant with the requirements of this standard at the time of delivery.

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The Statement of Exceptions shall contain, for each noncompliant aspect of the apparatus or missing required item, the following information:

- 42) A separate specification of the section of the applicable standard for which compliance is lacking
- 43) A description of the particular aspect of the apparatus that is not in compliance therewith or required equipment that is missing
- 44) A description of the further changes or modifications to the delivered apparatus that must be completed to achieve full compliance
- 45) Identification of the entity that will be responsible for making the necessary post delivery changes or modifications or for supplying and installing any missing required equipment to the apparatus to achieve full compliance with this standard

Prior to or at the time of delivery of the apparatus, the Statement of Exceptions shall be signed by an authorized agent of the entity responsible for final assembly of the apparatus and by an authorized agent of the purchasing entity, indicating mutual understanding and agreement between the parties regarding the substance thereof.

Carrying Capacity: Special Service, NFPA 1900

One (1)
01-13-2025

CARRYING CAPACITY

The GAWR and the GCWR or GVWR of the chassis shall be adequate to carry the weight of the completed vehicle when loaded to its estimated in-service weight. The manufacturer shall establish the estimated in service weight during the design of the vehicle.

The estimated in-service weight shall include the following:

- 46. The chassis, body and tank(s)
- 47. Full fuel, lubricant, and other chassis or component fluid tanks or reservoirs
- 48. Full water and other agent tanks
- 49. *250 lb (114 kg) in each seating position
- 50. Fixed equipment such as pumps, aerial devices, generators, reels and air systems as installed
- 51. Ground ladders, suction hose, designed hose load in their hose beds and on their reels
- 52. An allowance for miscellaneous equipment that is the greatest of the following:
 - a) The values shown for items 1 - 7
 - b) A purchaser-provided list of equipment to be carried with weights
 - c) A purchaser-specified miscellaneous equipment allowance

The manufacturer shall engineer and design the fire apparatus such that the completed apparatus, when loaded to its estimated in-service weight, with all movable weights distributed as close as is practical to their intended in-service configuration, does not exceed the GVWR.

A final manufacturer's certification of the GVWR or GCWR, along with a certification of each GAWR, shall be supplied on a label affixed to the vehicle.

The fire apparatus manufacturer shall permanently affix a high-visibility label in a location visible to the driver while seated.

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The label shall show the height of the completed unequipped fire apparatus in feet and inches (meters), the length of the completed fire apparatus in feet and inches (meters), and the GVWR in tons (metric tons).

Wording on the label shall indicate that the information shown was current when the apparatus was manufactured and that, if the overall height changes while the vehicle is in service, the fire department must revise that dimension on the plate.

Equipment Allowance: Special Service Fire Apparatus 1900

One (1)
01-13-2050

Apparatus Type	Equip. Storage Area	Apparatus Size	Equipment Allowance	
			lb.	kg.
Special Service Fire Apparatus	Minimum of 120 cu ft (3.4 cu mt) of enclosed compartmentation.	10,000 lb to 15,000 lb (4,500 kg to 7,000 kg) GVWR	2,000	910
		15,001 lb to 20,000 lb (7,001 kg to 9,000 kg) GVWR	2,500	1,135
		20,001 lb to 30,000 lb (9,001 kg to 14,000 kg) GVWR	3,000	1,350
		30,001 lb to 40,000 lb (14,001 kg to 18,000 kg) GVWR	4,000	1,800
		40,001 lb to 50,000 lb (18,001 kg to 23,000 kg) GVWR	6,000	2,700
		50,001 lb to 60,000 lb (23,001 kg to 27,000 kg) GVWR	8,000	3,600
		60,001 lb and up (27,001 kg) GVWR	10,000	4,500

One (1) Testing: USA, UL - NFPA 1900, Fire Apparatus
01-14-0100

TESTING

One (1) Testing: Road, NFPA
01-14-0160

ROAD TEST

Each apparatus shall be tested by the manufacturer before delivery to verify that it meets the following criteria;

Tests shall be conducted at a location and in a manner that does not violate local, state or provincial, or federal traffic laws. Tests shall be conducted on a dry, level, paved surface that is free of loose material, oil, or grease. Tests shall be conducted with the water and foam tanks full (water or product).

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The apparatus shall accelerate from 0 to 35 mph (55 km/hr) within 25 seconds. The apparatus shall attain a speed of 50 mph (80 km/hr).

The auxiliary braking system, if so equipped, shall function as intended by the auxiliary braking system manufacturer.

The air service brakes shall bring the apparatus to a complete stop from a speed of 20 mph (32.2 km/hr) in a distance not exceeding 35 ft (10.7 m).

The hydraulic service brakes shall bring the apparatus to a complete stop from a speed of 30 mph (48.2 km/hr) in a distance not exceeding 88 ft (26.8 m).

Testing: 12 VDC, OEM Tested

One (1)
01-14-1000

LOW VOLTAGE - ELECTRICAL SYSTEM PERFORMANCE TEST

The vehicles low voltage electrical system shall be tested and certified by the manufacturer. The certified test results shall be delivered with the completed vehicle. Tests shall be performed when the air temperature is between 0°F and 110°F (−18°C and 43°C).

TEST SEQUENCE

The following three (3) tests shall be performed in the order in which they appear below. Before each test, the batteries shall be fully charged until the voltage stabilizes at the voltage regulator set point and the lowest charge current is maintained for ten (10) minutes. Failure of any of these tests shall require a repeat of the sequence.

1. RESERVE CAPACITY TEST

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 ten (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 of the battery system.

2. ALTERNATOR PERFORMANCE TEST

TEST AT IDLE

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.

TEST AT FULL LOAD

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The total continuous electrical load shall be activated with the engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system shall be permitted during this test.

An alarm sounded by excessive battery discharge, as detected by the warning system required in 13.3.4, or a system voltage of less than 11.8 V dc for a 12 V nominal system, 23.6 V dc for a 24 V nominal system, or 35.4 V dc for a 42 V nominal system for more than 120 seconds shall be considered a test failure.

3. LOW VOLTAGE ALARM TEST

The following test shall be started with the engine off and the battery voltage at or above 12 V for a 12 V nominal system, 24 V for a 24 V nominal system or 36 V for a 42 V nominal system.

With the engine shut off, the total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm activates. The battery voltage shall be measured at the battery terminals.

The test shall be considered a failure if the alarm does not sound in less than 140 seconds after the voltage drops to 11.70 V for a 12 V nominal system, 23.4 V dc for a 24 V nominal system, or 35.1 V for a 42 V nominal system.

The battery system shall then be able to restart the engine. Failure to restart the engine shall be considered a test failure.

LOW VOLTAGE - ELECTRICAL SYSTEM PERFORMANCE TEST

DOCUMENTATION

The manufacturer shall deliver the following with the fire apparatus:

- 53) Documentation of the electrical system performance tests
 - 54) A written electrical load analysis, including the following:
 - a) The nameplate rating of the alternator
 - b) The alternator rating
 - c) Each of the component loads specified that make up the minimum continuous electrical load
 - d) Additional electrical loads that, when added to the minimum continuous electrical load, determine the total continuous electrical load
 - e) Each individual intermittent electrical load
- Testing: 120/240 VAC, NFPA 1900, UL Tested

One (1)
01-14-2100

UL 120/240 VAC CERTIFICATION

The 120/240 volt electrical system shall be third-party, independent, audit-certified through Underwriters Laboratory (UL) to the current edition of NFPA 1900 to perform as listed below;

The prime mover shall be started from a cold start condition, and the unloaded voltage and frequency shall be recorded.

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The line voltage electrical system shall be loaded to at least 100% of the continuous rated wattage stated on the power source specification label. Testing with a resistive load bank shall be permitted.

The power source shall be operated in the manner specified by the apparatus manufacturer as documented on instruction plates or in operation manuals. The power source shall be operated at a minimum of 100% of the continuous rated wattage as stated on the power source specification label for a minimum of two (2) hours.

The load shall be adjusted to maintain the output wattage at or above the continuous rated wattage during the entire 2-hour test.

The following conditions shall be recorded at least every 1/2 hour during the test:

- 55) The power source output voltage, frequency and amperes
- 56) The prime mover's oil pressure, water temperature and transmission temperature, if applicable
- 57) The power source hydraulic fluid temperature, if applicable
- 58) The ambient temperature and power source air inlet temperature

The following conditions shall be recorded once during the test for power sources driven by dedicated auxiliary internal combustion engines:

- 1) Altitude
- 2) Barometric pressure
- 3) Relative humidity

If the generator is driven by the chassis engine and the generator allows for operation at variable speeds, the chassis engine speed shall be reduced to the lowest rpm allowed for generator operation and the voltage and frequency shall be recorded.

The load shall be removed and the unloaded voltage and frequency shall be recorded.

Voltage shall be maintained within $\pm 10\%$ of the voltage stated on the power source specification label during the entire test. Frequency shall be maintained within ± 3 Hz of the frequency stated on the power source specification label during the entire test.

The total continuous electrical loads, excluding those loads associated with the equipment defined in NFPA 21.15.7.3.11.2, shall be applied during the testing unless an auxiliary engine drives the power source.

If the apparatus is equipped with a fire pump, the 2-hour certification test of the power source shall be completed with the fire pump pumping at 100% capacity at 150 psi (1000 kPa) net pump pressure. The test shall be permitted to be run concurrently with the pump certification test.

DOCUMENTATION

The results of each test shall be recorded on an appropriate form and provided with the delivery of the fire apparatus.

Testing: Line Voltage, Dielectric Withstand

One (1)
01-14-2300

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DIELECTRIC VOLTAGE WITHSTAND TEST

The line voltage wiring and permanently connected devices and equipment shall be subjected to a dielectric voltage withstand test of 900 volts for one (1) minute. The testing shall be performed after all body work has been completed.

The test shall be conducted as follows:

- 4) Isolate the power source from the panel board and disconnect any solid state low voltage components
- 5) Connect one lead of the dielectric tester to all the hot and neutral buses tied together
- 6) Connect the other lead to the fire apparatus frame or body
- 7) Close any switches and circuit breakers in the circuit(s)
- 8) Apply the dielectric voltage for one (1) minute in accordance with the testing equipment manufacturer's instructions

The electrical polarity of all permanently wired equipment, cord reels and receptacles shall be tested to verify that wiring connections have been properly made.

Electrical continuity shall be verified from the chassis or body to all line voltage electrical enclosures, light housings, motor housings, light poles, switch boxes and receptacle ground connections that are accessible to fire fighters in normal operations.

If the apparatus is equipped with a transfer switch, it shall be tested to verify operation and that all non grounded conductors are switched.

Electrical light towers, floodlights, motors, fixed appliances and portable generators shall be operated at their full rating or capacity for 30 minutes to ensure proper operation.

Warranty: Boiler Plate

WARRANTY

A full statement shall be provided of the warranties for the vehicle(s) being bid. Warranties should clearly describe the terms under which the vehicle manufacturer accepts responsibility for the cost to repair defects caused by faulty design, quality of work or material and for the applicable period of time after delivery.

Cost of repairs refers to all costs related thereto including, but not limited to, the cost of materials and the cost of labor.

The Body Manufacturer shall warrant all materials and accessories used on the vehicle(s), whether fabricated by manufacturer or purchased from an outside source and will deal directly with the San Diego County Fire Protection District on all warranty work.

Warranty: General, 2 Years, Standard

GENERAL LIMITED WARRANTY - TWO (2) YEARS

The vehicle shall be free of defects in material and workmanship for a period of two (2) years or 36,000 miles (or 57,936 kilometers), whichever occurs first starting thirty (30) days after the original invoice date.

One (1)
01-40-0100

One (1)
01-40-1100

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

One (1)
01-40-2000 The Contractor must be the "single source" coordinator of all warranties on the vehicle.
Warranty: Low Voltage Electrical, 5 Year, Standard

LOW VOLTAGE ELECTRICAL WARRANTY - FIVE (5) YEARS

One (1)
01-40-2100 The vehicle low voltage electrical system shall be free of defects in material and workmanship for a period of five (5) years or 60,000 miles (or 96,561 kilometers), whichever occurs first, starting thirty (30) days after the original invoice date.

Warranty: Structural, 10 Years, Standard

STRUCTURAL WARRANTY - TEN (10) YEARS

One (1)
01-40-2350 The body shall be free of structural or design failure or workmanship for a period of ten (10) years, or 100,000 miles (or 160,934 kilometers), whichever occurs first, starting thirty (30) days after the original invoice date.

Warranty: Body Undercoat, 20 Years

UNDERCOAT WARRANTY

One (1)
01-40-3300 The body undercoating shall have a warranty provided by the manufacturer for the lifetime of the vehicle or twenty (20) years, whichever occurs first. The warranty shall be transferable between vehicle owners. Should the undercoating material applied to the underside of the body and wheel wells of the vehicle ever flake off, peel, chip or crack due to drying out, the damaged area shall be re-sprayed without charge to the vehicle owner.

Warranty: Paint, 10 Years, Standard

PAINT LIMITED WARRANTY - TEN (10) YEARS

One (1)
01-40-3410 The body shall be free of bubbling or peeling as a result of a defect in the method of manufacture for a period of ten (10) years or 100,000 miles (or 160,934 kilometers), whichever occurs first, starting thirty (30) days after the original invoice date. **Pro-rated warranties will not be acceptable.**

Warranty: Graphics, 2 Year Install/7 - 10 Year Materials

GRAPHICS LIMITED WARRANTY

Six Hundred Fifty (650)
01-43-0050 The 3M graphics installation shall be warranted for a period of two (2) years. The 3M materials installed on completed vehicle shall be warranted for seven (7) years. The 3M Diamond grade film (if specified) shall be warranted for ten (10) years.

Construction Period

CONSTRUCTION PERIOD

The completed vehicle shall be delivered within six hundred fifty (650) days after pre-construction meeting and receipt and approval of any signed change orders from San Diego County Fire Protection District.

Contractor shall not be held liable for delays of chassis delivery due to accidents, strikes, floods or other events not subject to their control. Contractor shall provide written notice to San Diego County Fire Protection District as to delays and to what extent these delays have in completing vehicle within the stated construction time period.

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

Fourteen (14)
01-43-0060

Dealer Preparation Period

DEALER MAKE READY PERIOD

The completed vehicle shall be delivered after fourteen (14) days for dealer preparation after completed apparatus delivered to dealer location.

One (1)
01-43-0100

NO Overall Height Requirement

OVERALL HEIGHT REQUIREMENT

One (1)
01-43-0200

There is no overall height (OAH) restriction for this vehicle.

NO Overall Length Requirement

OVERALL LENGTH REQUIREMENT

One (1)
01-43-0400

There is no overall length (OAL) restriction for this vehicle.

Angle Approach and Departure: Fire Apparatus NFPA 1900

ANGLE OF APPROACH

The angle of approach for this vehicle shall not be less than eight (8) degrees when it is loaded to the estimated in-service weight as specified by the current edition of NFPA 1900.

ANGLE OF DEPARTURE

One (1)

The angle of departure for this vehicle shall not be less than eight (8) degrees when it is loaded to the estimated in-service weight as specified by the current edition of NFPA 1900.

== SVI Dealer Options - 2403.010 03/01/24 ==

One (1)
02-10-0110

Inspection Trips

One (1)

== Commercial Chassis, Medium Duty - 2403.010 03/01/24 ==

One (1)
03-SV-0032

SVI Supplied Cab/Chassis: 2025 Intl HV607 2 Dr 4x2 L9 380HP 14K/23K

CAB CHASSIS SPECIFICATION

Base Chassis, Model HV607 SBA with 192.00 Wheelbase, 118 CA, and 81.00 Axle to Frame.

TOW HOOK, FRONT (2) Frame Mounted

AXLE CONFIGURATION {Navistar} 4x2

Notes

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

: Pricing may change if axle configuration is changed.

FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.250" x 3.610" x 0.375" (260.4mm x 91.7mm x 9.5mm); 456.0" (11582mm) Maximum OAL

BUMPER, FRONT Contoured, Stainless Steel, Polished, Includes Mounting Holes for 1 CPI Bumper Mounted Siren

FRAME DIMPLE Dimple on Left and Right Top Flange of Frame Rail to Reference Rear Axle Centerline

WHEELBASE RANGE 138" (350cm) Through and Including 187" (475cm)

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

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

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

: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel

: PARKING BRAKE VALVE For Truck

: QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4

: SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6

DRAIN VALVE {Berg} with Pull Chain, for Air Tank

AIR BRAKE ABS {Bendix AntiLock Brake System} 4-Channel (4 Sensor/4 Modulator) Full Vehicle Wheel Control System

AIR DRYER {Bendix AD-9} with Heater

BRAKE, PARKING Manual Push-Pull Pneumatic Parking Brake

AIR COMPRESSOR {Cummins} 18.7 CFM

AIR DRYER LOCATION Mounted Inside Left Rail, Back of Cab

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

DUST SHIELDS, FRONT BRAKE Pad and Rotor, with Air Disc Brakes

DUST SHIELDS, REAR BRAKE Pad and Rotor, with Air Disc Brakes

AIR TANK LOCATION (2) : One Mounted Under Each Rail, Front of Rear Suspension, Parallel to Rail

BRAKES, FRONT {Bendix Spicer ADB22X} Air Disc Type, Extended Service, Size 22.5", 23,000-lb Capacity

BRAKES, REAR {Bendix Spicer ADB22X} Air Disc Type, Extended Service, Size 22.5", 26,000-lb Capacity
per Axle

BRAKE CHAMBERS, FRONT AXLE 20 SqIn, for Air Disc Brakes

BRAKE CHAMBERS, REAR AXLE 18/24 SqIn Spring Brake, Double Diaphragm, for Air Disc Brakes

STEERING COLUMN Tilting and Telescoping

STEERING WHEEL 4-Spoke; 18" Dia., Black

STEERING GEAR {Sheppard M100} Power

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

AFTERTREATMENT COVER Steel, Black

EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Right Side Under Cab, for Single
Vertical Tail Pipe, Frame Mounted Right Side Back of Cab

ENGINE COMPRESSION BRAKE {Jacobs} for Cummins ISL/L9 Engines; with Selector Switch and On/Off
Switch

TAIL PIPE (1) Turnback Type

EXHAUST HEIGHT 10'

MUFFLER/TAIL PIPE GUARD (1) Aluminum

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 SYSTEM 12-Volt, Standard Equipment

Includes

San Diego County Fire Protection District

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SVI Trucks

- : 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
- CIGAR LIGHTER Includes Ash Cup
- HORN, ELECTRIC (2) Disc Style
- FOG LIGHTS Prewire; Includes Auxiliary Switch and Wiring to Front Bumper, for Driving Lights or Fog Lights Mounted by Customer
- IGNITION SWITCH Keyless
- POWER SOURCE Cigar Type Receptacle without Plug and Cord
- ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt, 325 Amp Capacity, Pad Mount, with Remote Sense
- 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
- BATTERY SYSTEM {Fleetrite} Maintenance-Free, (3) 12-Volt 2850CCA Total, Top Threaded Stud

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

SPEAKERS (2) 6.5" Dual Cone Mounted in Doors

ANTENNA for Increased Roof Clearance Applications

RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input

BACK-UP ALARM Electric, 102 dBA

STOP, TURN, TAIL & B/U LIGHTS {Weldon} Multi-Function LED Lamp, Mounted Outside Rails, Includes LED

License Plate Light

TURN SIGNALS, FRONT Dual Face, LED, Amber/Red, Mounted on Top of Fender, Used with Standard Flush

Mounted Front Turn Signal, Side Marker Lamps, Parking Lights and Reflectors

JUMP START STUD Remote Mounted

HORN, AIR Accommodation Package, Less Horn

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

TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights

HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn On if Windshield Wipers are Turned On

INDICATOR, LOW COOLANT LEVEL with Audible Alarm

ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, with Ignition "OFF" and any Door Opened

STARTING MOTOR {Mitsubishi Electric Automotive America 105P} 12-Volt, with Soft-Start

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

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

SWITCH, AUXILIARY Switch 40 amp Circuit for Customer Use; Includes Wiring Connection at Power Distribution Center (PDC) and Control in Cab

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

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

BATTERY DISCONNECT SWITCH 300 Amp, Disconnects Charging Circuits, Locks with Padlock, Cab Mounted

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

FUSES, ELECTRICAL (7) Spare Fuses with a Variety of Ratings, Stored in a Module Located Near the Fuse Block, in the Main Fuse Panel Area

ALARM, PARK BRAKE, TIMER Programmable Parameter to Change Alarm Trigger Time

HEADLIGHTS Halogen, with Daytime Running Lights

POWER SOURCE, ADDITIONAL Auxiliary Power Outlet (APO) with USB-A Port and USB-C Port, Located in the Instrument Panel

FENDER EXTENSIONS Rubber

LOGOS EXTERIOR Model Badges

LOGOS EXTERIOR, ENGINE Badges

INSULATION, UNDER HOOD for Sound Abatement

GRILLE Stationary, Chrome

INSULATION, SPLASH PANELS for Sound Abatement

BUG SCREEN Mounted Behind Grille

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

PAINT SCHEMATIC, PT-1 Two Tone, Design 209.

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

PAINT CLASS Single Custom Color

COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data

Plan and International 360

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

SAFETY TRIANGLES

CLUTCH Omit Item (Clutch & Control)

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

ENGINE, DIESEL {Cummins L9 380} EPA 2024, 380HP @ 2100 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200

RPM Governed Speed, 380 Peak HP (Max), (RATED FOR EMERGENCY VEHICLES ONLY)

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

Fan Speed

0/0 0

Includes

: FAN Nylon

RADIATOR Aluminum, Cross Flow, Front to Back System, 1228 SqIn, with 1167 SqIn Charge Air Cooler,

Includes In-Tank Oil Cooler

Includes

: DEAERATION SYSTEM with Surge Tank

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

: RADIATOR HOSES Premium, Rubber

AIR CLEANER Single Element

EMISSION, CALENDAR YEAR {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2024

THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel

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

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

HOSE CLAMPS, RADIATOR HOSES {R.G. Ray Mini Flex Seal} Coil Spring/"T"-Bolt Constant Torque Type, for Radiator Hoses over 1" I.D.

EPA IDLE COMPLIANCE Low NOx Idle Engine, Complies with EPA Clean Air Regulations; Includes "Certified

Clean Idle" Decal on Door

CARB IDLE COMPLIANCE Does Not Comply with California Clean Air Idle Regulations

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO

Controls and Starter Lockout, with Ignition Switch Control, for Cummins B6.7 and L9 Engines

CARB EMISSION WARR COMPLIANCE Does Not Comply with CARB Emission Warranty

TRANSMISSION, AUTOMATIC {Allison 3000 EVS} 6th Generation Controls, Close Ratio, 6-Speed with Double

Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor

TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 & 2000 Series Transmission

TRANSMISSION OIL Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS), Fire/Pumper, Tank, Aerial/Ladder, Package Number 198

SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, Performance Programming

PTO CONTROL, DASH MOUNTED For Customer Provided PTO; Includes Switch, Electric/Air Solenoid, Piping and Wiring

PTO LOCATION Customer Intends to Install PTO at Left Side of Transmission

AXLE, REAR, SINGLE {Meritor RS-23-186} Single Reduction, 23,000-lb Capacity, 200 Wheel Ends . Gear Ratio: 4.30

Notes

: Axle Lead Time is 60 Days

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

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

Springs

SHOCK ABSORBERS, REAR (2)

AXLE, REAR, LUBE {EmGard FE-75W-90} Synthetic Oil; 40 thru 49.99 Pints

AXLE SHAFT MODIFICATION Axle Shaft Flanges Modified for 0.625" Diameter Drive Studs with Solid Type

Cone-Locks

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

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

CAB Conventional, Day Cab

AIR CONDITIONER with Integral Heater and Defroster

GAUGE CLUSTER Base Level; English with English Electronic Speedometer

Includes

: GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color

Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip

Hours, MPG, Distance to Empty/Refill for

: GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure

Gauge, Primary and Secondary Air Pressure

: WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

(Visual and Audible), Low Air Pressure (Primary and Secondary)

GAUGE, TEMPERATURE, AMBIENT Sensor Wiring with Display Unit Mounted in Cluster

GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission

GAUGE, AIR APPLICATION

GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} Mounted in Instrument Panel

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

SEAT, DRIVER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered

Back and International Logo on Headrest, for Fire Truck

SEAT, PASSENGER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered Back, International Logo on Headrest, for Fire Truck

GRAB HANDLE, EXTERIOR (2) Chrome, for Cab Entry, (1) Towel Bar Type, with Anti-Slip Rubber Inserts Mounted Left Side at B-Pillar, (1) Towel Bar Type Mounted Right Side on Vertical Exhaust

MIRRORS (2) Aero Pedestal, Power Adjust, Heated, Turn Signals, Black Heads and 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;

CAB INTERIOR TRIM Classic, 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, Integral to Overhead Console, Center Mounted

: SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

MONITOR, TIRE PRESSURE Omit

ARM REST, RIGHT, DRIVER SEAT

ARM REST, LEFT, PASSENGER SEAT

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

FRESH AIR FILTER Attached to Air Intake Cover on Cowl Tray in Front of Windshield Under Hood

CAB REAR SUSPENSION Air Bag Type

TELEMATICS BRACKET with Universal Mount, 1" Ball Mount Size, for Customer Supplied Telematics

Device, Mounted in Auxiliary Gauge Location in Flat Panel, Includes (1) APO, (1) USB-A Port, (1) USB-C

Port

INSTRUMENT PANEL Flat Panel

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

WHEELS, FRONT {Accuride 43644} DISC; 22.5x8.25 Rims, Standard Polish Aluminum, 10-Stud, 285.75mm

BC, Hub-Piloted, Flanged Nut, with Steel Hubs

WHEELS, REAR {Accuride 43644} DUAL 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 XZE (MICHELIN), 486 rev/mile, 75 MPH, All-Position

(4) TIRE, REAR 12R22.5 Load Range H XDN2 (MICHELIN), 483 rev/mile, 75 MPH, Drive

Services Section:

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

CTS-2025A

The weight calculations included in this proposal are an estimate of future vehicle weight. The actual weight as manufactured may be different from the estimated weight. Navistar, Inc. shall not be liable for any consequences resulting from any differences between the estimated weight of a vehicle and the actual weight.

One (1) Cab to Axle: 118", 16' (WA)(WT)(WI)(WS) Body

San Diego County Fire Protection District

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SVI Trucks

03-SV-9016

CAB TO AXLE DIMENSION

One (1)
03-SV-9910

Cab to axle will be 118".
Cab/Chassis: Interest Carrying Charge

One (1)
03-SV-9985

Cab/Chassis: Medium Duty/ Commercial Surcharge

One (1)

== SVI Walk Around Rescues (WA) - 2403.010 03/01/24 ==

One (1)
10-00-0012

Chassis Options: Commercial Medium, 2-Door English Labels

CHASSIS MODIFICATIONS

LUBRICATION AND TIRE DATA PLATE

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

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Pump transmission lubrication fluid . . (if applicable)
- Pump priming system fluid, if applicable . . (if applicable)
- Drive axle(s) lubrication fluid
- Air conditioning refrigerant . . (if applicable)
- Air conditioning lubrication oil . . (if applicable)
- Power steering fluid
- Cab tilt mechanism fluid . . (if applicable)
- Transfer case fluid . . (if applicable)
- Equipment rack fluid (if applicable)
- CAFS air compressor system lubricant . . (if applicable)
- Generator system lubricant . . (if applicable)
- Front tire cold pressure
- Rear tire cold pressure
- Maximum tire speed ratings

VEHICLE DATA PLATE

A permanent label in the driving compartment which indicates the following:

- Filter part numbers for the;
 - Engine
 - Transmission
 - Air
 - Fuel

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

- Serial numbers for the;
 - Engine
 - Transmission
- Delivered Weights of the Front and Rear Axles
- Paint Brand and Code(s)
- Sales Order Number

OVERALL HEIGHT, LENGTH DATA PLATE (US)

The fire apparatus manufacturer shall permanently affix a high-visibility label in a location visible to the driver while seated.

The label shall show the height of the completed unequipped vehicle in feet and inches (meters), the length of the completed vehicle in feet and inches (meters to nearest 1/10th), and the GVWR in tons (metric tons).

Wording on the label shall indicate that; "The information shown was current when the apparatus was manufactured. If the overall height changes while the vehicle is in service, the fire department must revise that dimension on the plate".

PERSONNEL CAPACITY

A label that states the number of personnel the vehicle is designed to carry shall be located in an area visible to the driver.

San Diego County Fire Protection District

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SVI Trucks

SEAT BELT WARNING - FAMA06/07

A safety sign FAMA06 shall be visible from each seat that is not equipped with occupant restraint and therefore not intended to be occupied while the vehicle is in motion.

A safety sign FAMA07, which warns of the importance of seat belt use, shall be visible from each seat that is intended to be occupied while the vehicle is in motion.

EQUIPMENT MOUNTING FAMA10

A safety sign FAMA10, which warns of the need to secure items in the cab, shall be visible inside the cab.

FIRE SERVICE TIRES - FAMA12

A safety sign FAMA12, which warns of the special requirements for fire service-rated tires, shall be visible to the driver entering the cab of any apparatus so equipped.

HELMET WARNING - FAMA15

A safety sign FAMA15, which warns not to wear helmets while the vehicle is in motion, shall be visible from each seat that is intended to be occupied while the vehicle is in motion.

CLIMBING METHOD - FAMA23

A safety sign FAMA23, which warns of the proper climbing method, shall be visible to personnel entering the cab and at each designated climbing location on the body.

REAR STEP CROSSWALK WARNING - FAMA24

A safety sign FAMA24, which warns personnel not to ride on the vehicle, shall be located at the rear step areas and at any cross walkways.

FINAL STAGE MANUFACTURER VEHICLE CERTIFICATION

A final stage manufacturer vehicle certification label shall be provided and installed in the driver cab door jamb area.

SAE Labels

SAE Labels

All labels shall use SAE units, including inches (in) and feet (ft) for dimensions, pounds (lbs) for weight, gallons (gal) for volume, and pounds per square inch (psi) for pressure.

One (1)
10-00-0050

San Diego County Fire Protection District

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SVI Trucks

All labels shall use dual units, with dimensions including both inches (in) and meters (m), weight in both pounds (lbs) and kilograms (kg), volume in both gallons (gal) and liters (L), and pressure in both pounds per square inch (psi) and kilopascals (kPa).

Chassis Options: International HV Series, 2-Door

One (1)
10-00-0310

One (1)
10-10-1110

Bumper: Cab/Chassis Supplied, Commercial

FRONT BUMPER

The front bumper shall be as provided by the cab/chassis manufacturer.

Bumper: Gravel Shield, Cab/Chassis Supplied

One (1)
10-10-1310

BUMPER GRAVELSHIELD

The bumper extension gravel shield if specified shall be provided by the cab/chassis manufacturer.

Air Horn: Cab/Chassis Supplied

One (1)
10-11-1110

AIR HORN(S)

Air horn(s) if specified shall be supplied and installed by the cab/chassis manufacturer.

Front Tow Provisions: Cab/Chassis Supplied

One (1)
10-18-1100

FRONT TOW PROVISIONS

The front tow provisions if specified shall be supplied and installed by the cab/chassis manufacturer.

BUMPER GROUND LIGHTS

One (1)
A0-6D-1000

One (1)
N2-A3-1122

Speaker: Whelen, (2) SA314A, Alum. Finish

SIREN SPEAKER

Two (2) Whelen model SA314A 100 watt aluminum, 6.4" x 6.1" x 3.1" deep siren speakers shall be provided and located behind grille or front bumper with natural aluminum finish.

The solid state siren speaker shall be vibration resistant. The SA314A shall comply with California Title XIII, Class A, and SAE J1849 requirements and with OSHA 1910.95 Guidelines regarding "Permissible Noise Exposure". All mounting hardware shall be stainless steel and covered by a two year factory warranty.

Siren Location: Front Bumper, Streetside/Curbside, Outboard

One (1)
N2-A0-0108

The siren speakers shall be located on the streetside and curbside outboard of frame rails of front bumper.

Air Inlet: Commercial, Water/Ember Separator, By Manufacturer

One (1)
10-23-1012

AIR INTAKE SYSTEM

10096-0002

San Diego County Fire Protection District

Medium Rescue / USAR

SVI Trucks

An air filter shall be provided in the engine's air intake system by the commercial cab/chassis manufacturer. Air inlet restrictions shall not exceed the engine manufacturer's recommendations.

The air inlet shall be equipped with a means of separating water and burning embers from the air intake system.

This requirement shall be permitted to be achieved by either of the following methods:

9. Provision of a device such that burning particulate matter larger than 0.039 in. (1.0 mm) in diameter cannot reach the air filter element.
10. Provision of a multi screen ember separator capable of meeting the test requirements defined in the Parker Hannafin, Racor Division, publication LF 1093-90, *Ember Separation Test Procedure*, or an equivalent test.

One (1)
10-25-1110 Exhaust: As Provided by Cab/Chassis

EXHAUST

One (1)
10-25-1A00 The exhaust system shall be as provided by cab/chassis manufacturer.
Exhaust: Tailpipe Adapter Flange Options, Straight Cut Tailpipe

One (1)
10-50-0000 – The tail pipe(s) shall terminate in a standard straight cut pipe.
WARNING LIGHT: CHASSIS CAB

One (1)
10-50-2010 Warning Lights: Chassis Cab, Medium, Whelen

CAB WARNING LIGHT PACKAGE

One (1)
N5-20-2010 Zone A - Front Commercial Cab

ZONE A - FRONT WARNING LIGHTS, UPPER

One (1)
N5-20-2510 Lightbar: Whelen Freedom F4N0QLED, LED, 60"

There shall be one (1) Whelen Freedom F4N0QLED LED 60" lightbar permanently mounted to the cab roof.

The lightbar configuration (streetside to curbside) shall be:

<u>SECTION</u>	<u>INTERNAL COMPONENTS</u>	<u>LENS COLOR</u>
1	Red Side LED	Clear
2	Red Front Corner LED	Clear
3	Blank	Clear
4	White Super Long-LED	Clear
5	Blank	Clear
6	Red Super Long-LED	Clear
7	Blank (Opticom if specified)	Clear

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8	Blank (Opticom if specified)	Clear
9	Red Super Long-LED	Clear
10	Blank	Clear
11	White Super Long-LED	Clear
12	Blank	Clear
13	Red Front Corner LED	Clear
14	Red Side LED	Clear

All clear lights shall shut down when the parking brake is set to comply with "Blocking" mode requirements as outlined in NFPA 1900.

One (1)
N4-20-0043 Lightbar Control: Multiplex Display(s)

The lightbar(s) shall be separately controlled at multiplex display(s) in the cab.
Lightbar Option: (1) Steady Red Light, CA Required

One (1)
N5-20-2600

The lightbar shall be supplied with one (1) steady burn red LED light on drivers side to comply with California DOT requirements.

One (1)
N5-50-7010 Lightbar Option GTT Opticom, 795H Infrared LED

GTT OPTICOM

A GTT Opticom model 795H Infrared LED emitter light with built-in power supply shall be provided inside the specified light bar. Adding the Opticom LED shall re-configure the standard light(s) in specified light bar. The LED technology uses less power, has a longer life, and non-visible to the human eye.

One (1)
N5-50-7A02 GTT Opticom, Activation: VMUX Opticom Switch

- Opticom shall be controlled by a virtual switch, labeled "OPTICOM", and interlocked with the parking brake (transmission park position) same as other clear warning.

One (1)
N6-20-2000 Zone A - Front

ZONE A - FRONT WARNING LIGHTS, LOWER

One (1)
N3-05-M001 Warning Lights: (2) Whelen M6 Series LED, Red, Color Lens

There shall be two (2) Whelen M6 linear super-LED Light(s) with full-fill optic provided, one (1) each side. The light head shall include an integral flasher with programmable flash patterns and Hi/Lo intensities.

Each Light shall have:

- Red LEDs

- Red Lens

Two (2)
N3-10-1151 Light Bezel: Whelen M6, Chrome

Each light shall have a chrome flange.

One (1)
N3-15-M253 Flash Pattern: Whelen M6, M7 and M9, Action Scan, Factory Default

- Flash Pattern shall be (factory default) Action Scan.

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- One (1)
N3-15-M600 Flash Pattern: Whelen M-Series, No Low Power
- The Low Power option will **NOT** be provided for the above lighting group.
- One (1)
N4-20-0033 Light Control: Multiplex Display(s)
- The lights shall be controlled at the multiplex display(s) in the cab.
- One (1)
N6-20-3015 Zones B & D - Cab Intersection, Front, Commercial Light Duty
- ZONES B AND D - CAB INTERSECTOR LIGHT (CAB FRONT CORNERS)**
- One (1)
N3-05-I001 Warning Lights: (2) Whelen ION Series, Red, Clear Lens, Chrome
- There shall be two (2) Whelen surface mount ION Series LED light(s) with wide angle optic provided, one (1) each side. The light head shall include an integral flasher with programmable flash patterns.
- Each light shall have:
- Red LEDs
 - Clear Lens
 - Chrome Flange
- One (1)
N4-20-0033 Light Control: Multiplex Display(s)
- The lights shall be controlled at the multiplex display(s) in the cab.
- One (1)
10-A8-0212 Back-up Alarm - Electric: Cab Chassis Supplied
- BACK-UP ALARM**
- An electronic back-up alarm shall be supplied and installed by the cab/chassis manufacturer. The back-up alarm shall actuate automatically when the transmission gear selector is placed in reverse.
- One (1)
10-A8-0322 Hazard Warning Light: Truck-Lite Red LED, NFPA 1900
- CAB HAZARD WARNING LIGHT**
- A Truck-Lite red LED flashing light shall be provided and located in the driving compartment and be illuminated automatically whenever the vehicles parking brake is not fully engaged and any of the following conditions exist:
- Any passenger or equipment compartment door is not closed.
 - Any ladder or equipment rack is not in the stowed position.
 - Stabilizer system is not in its stowed position.
 - Powered light tower is not stowed.
 - Any other device permanently attached to the apparatus is open, extended, or deployed in a manner that is likely to cause damage to the apparatus if the apparatus is moved.
- Compartments and equipment meeting all of the following conditions shall be permitted to be exempt from being wired to the hazard light:
- The volume is less than or equal to 4 ft³ (0.1 m³).
 - The compartment has an opening less than or equal to 144 in.² (92,900 mm²).
 - The open door does not extend sideways beyond the mirrors or up above the top of the fire apparatus.

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- All equipment in the compartment is restrained so that nothing can fall out if the door is open while the apparatus is moving.
- Manually raised pole lights with an extension of less than 5 ft (1.5 m).

The hazard light shall be labeled; "Do not move apparatus when light is on."

In addition, label shall be in both English/French for units built for Canada; "*Ne pas déplacer l'engin lorsque la lumière est allumée.*"

One (1)
N0-24-1110

Door Ajar Audible Alarm

An audible alarm shall be provided for the door ajar light.

One (1)
10-AA-1110

Antenna Mounting: Cab

RADIO ANTENNA INSTALLATION

One (1)
10-AA-2010

Antenna #1

Antenna #1 mounted and installed on the roof of the cab/chassis.

Due to multiple configurations of antenna whips, the Body Manufacturer shall provide the antenna base, and San Diego County Fire Protection District shall provide the whip.

One (1)
10-AC-0300

Antenna Cable: Routing, Center Console

The end of antenna cable shall be routed to specified center console. Cable shall be labeled for **PROVIDE INFORMATION.**

One (1)
10-AD-0102

Antenna Mounting: Cab Roof, Driver Side, Upper Forward

Cab roof mounted antenna shall be located driver side of upper forward roof section.

One (1)
10-B0-2000

SCBA Bracket: NO SCBA Bracket Provided

SCBA SEAT AIR PACK BRACKETS

No SCBA air pack bracket(s) shall be provided in specified commercial cab SCBA seats. San Diego County Fire Protection District will provide and install necessary bracket(s) after delivery.

One (1)
10-B0-B010

Seat Belt Color: Commercial, NFPA Compliant

SEAT BELT COLOR

Section 11.1.3.3 of the NFPA 1900 Standards, requires all seat belt webbing in cab to be bright red or bright orange in color, and section 11.1.3.4 the buckle portion of the seat belt shall be mounted on a rigid or semi rigid stalk such that the buckle remains positioned in an accessible location.

One (1)
10-B0-B020

Seat Belt: Web Length, Commercial, NFPA Compliant

SEAT BELT WEB LENGTH - COMMERCIAL CAB

Sections 11.1.3.1 and 11.1.3.2 of the NFPA 1900 standards, require the effective seat belt web length for a Type 1 lap belt for pelvic restraint to be a minimum of 60", and a Type 2 pelvic and upper torso restraint-style seat belt assembly to be a minimum of 110".

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The chassis seat belt web length as supplied by the commercial chassis manufacturer shall be compliant to NFPA Standards 11.1.3.1 and 11.1.3.2.

Seat Belt/VDR System: Weldon 6444, Displays in Vista Screen, V-MUX Wired

One (1)
10-B0-B201

SEAT BELT MONITORING AND VEHICLE DATA RECORDER (VDR) SYSTEMS

SEAT BELT MONITORING

A Weldon 6444 series gateway interface module shall be integrated into V-MUX multiplex system display to allow the driver to know if all persons seated in the vehicle are secured with seat belts before moving the vehicle. Built-in smart seating logic shall detect if the correct sit and buckle sequence is not followed for all seats. System shall also provide an output for an external alarm. Weldon diagnostic port will be located under dash on driver side. System shall include the following features;

VEHICLE DATA RECORDER (VDR)

The vehicle data recorder shall have the following features;

- Recorded Data Includes: Vehicle Speed, Acceleration, Deceleration, Engine Speed, Engine Throttle Position, ABS Event, Seat Occupied Status, Seat Belt Status, Master Optical Warning Switch, Park Brake, Service Brake, Time, Date and Engine Hours.
- Password Protected by the customer
- Six (6) seat position inputs for occupied and belts buckled. Additional six (6) seat expansion module available.
- Easily interfaces with V-MUX™ or other multiplexing systems
- Data is extracted by a standard, mini USB cable

OCCUPANT RESTRAINT INDICATOR

The occupant restraint indicator shall have the following features;

- Will be displayed on Vista IV panel.
 - Supports commercial and custom cab seating layouts; up to 12 seats
 - Built-in audible alarm
 - Use in conjunction with Vehicle Data Recorder (VDR)
- Ignition Key: Attached by Cable

One (1)
10-B3-1002

IGNITION KEY

If the vehicle is specified to have an ignition key it will be attached to steering column or dash with vinyl covered steel cable.

Tire Pressure Indicators: LED Heavy Duty, (6) Tires

One (1)
10-B3-1006

SIX (6) – LED TIRE PRESSURE VISUAL INDICATORS

Each tire valve stem shall be equipped with an LED Tire Alert (or equal), heavy duty valve cap LED indicator that indicates proper tire pressure. The LED Tire Alert valve cap is self-calibrating. When the cap is mounted on the valve stem the first time, it will memorize that tire pressure, and can be set to recognize

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a drop in pressure as little as 6 psi. It can be checked for functionality and battery condition by simply unscrewing the cap. If it is in working condition, it will immediately start blinking.

Helmet Storage: Commercial Medium Duty Chassis, 2-Door

One (1)
10-B3-1082

HELMET STORAGE

Helmet Storage: Driver Position, Commercial

One (1)
10-B3-1103

HELMET STORAGE, DRIVER POSITION

Helmet Storage: Not Provided

One (1)
10-B3-1051

Helmet storage shall be the responsibility of San Diego County Fire Protection District in specified cab area.

A safety sign FAMA15, which warns not to wear helmets while the vehicle is in motion, shall be visible from each seat that is intended to be occupied while the vehicle is in motion.

Helmet Storage: Officer Position, Commercial

One (1)
10-B3-1105

HELMET STORAGE, OFFICER POSITION

Helmet Storage: Not Provided

One (1)
10-B3-1051

Helmet storage shall be the responsibility of San Diego County Fire Protection District in specified cab area.

A safety sign FAMA15, which warns not to wear helmets while the vehicle is in motion, shall be visible from each seat that is intended to be occupied while the vehicle is in motion.

Cab Integrity Certification: Navistar

One (1)
10-B4-1005

CAB CRASH TEST CERTIFICATION

A cab crash test certification from the fire apparatus manufacturer shall be provided with the equipment. A copy of this certification shall be included with the bid.

NOTE: There shall be no exception to any portion of the cab integrity certification requirements. Nonconformance shall lead to immediate rejection of bid.

The certification shall state that the cab does meet or exceed the requirements below:

- 11) European Occupant Protection Standard ECE Regulation No. 29.
 - 12) SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.
- Paint Cab: Cab/Chassis Supplied

One (1)
10-C0-0100

CAB PAINT

The finish paint and color as provided from the cab/chassis manufacturer shall be provided. Cab shall not be repainted.

(Note: Most departments do NOT find that the fleet paint finish from a commercial cab/chassis manufacturer is acceptable. The Body Builder will NOT be responsible for paint quality and finish issues.)

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One (1)
10-C0-9022 Reflective Stripe: (2) Cab Doors, Chevron, Scotchlite

REFLECTIVE STRIPE - CAB DOOR INTERIOR

Any door of the apparatus designed to allow persons to enter or exit the apparatus shall have at least 96 in.2 (62,000 mm2) of retroreflective material affixed to the inside of the door.

The inside of each cab door shall have 4" Chevron style 3M Scotchlite 680 series graphic film.

This reflective chevron stripe shall alternate red and yellow in color.
Cab/Chassis Component Paint: Interior

One (1)
10-C1-0010

CAB INTERIOR COMPONENT PAINT COLOR, OEM SUPPLIED

Powder Coat Paint: Silver/Grey Hammertone

One (1)
P1-99-1020

Powder coat shall be hammertone silver/grey. Cardinal T064-GR05
Step and Fuel Tank Cover: International 2 Door

One (1)
10-C5-2100

CAB STEP AND FUEL TANK COVER

The stock cab upper and lower entry steps shall be overlaid with 1/8" NFPA compliant aluminum treadplate.

The maximum stepping height shall not exceed 18", with the exception of the ground to first step, which shall not exceed 24" when the vehicle is loaded to its estimated in-service weight. All steps shall have a minimum area of 35 sq in and shall be of such a shape that a 5" diameter disk does not overlap any side when placed on the step, and shall be arranged to provide a t least 8" of clearance between the leading edge of the step and any obstruction. All platforms shall have a minimum depth of 8" from the leading edge of the platform to any obstruction.

The following options will be cut into the step cover:
Cab Step Ground Lights: (2) OnScene Access Pro, White LED

One (1)
N1-12-3132

CAB STEP LIGHTS

Two (2) (one each side) OnScene 10" Access Pro white LED light(s) installed on the vehicle capable of providing illumination at a minimum level of 2 fc (20 lx) on ground areas within 30 in. (800 mm) of the edge of the vehicle in areas designed for personnel to climb onto or descend from the vehicle to the ground level.

Lighting designed to provide illumination on areas under the driver and crew riding area exits shall be switchable but activated automatically when the exit doors are opened.

Hub & Nut Covers: Stainless Steel, 2 Axles

One (1)
10-C5-5B10

HUB AND NUT COVERS

Front and rear wheels shall be provided with stainless steel hub caps and wheel nut covers.
Mudflaps: SVI Logo, 1/4" Rubber

One (1)
10-C6-1000

10096-0002

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MUDFLAPS

There shall be 1/4" rubber mudflaps with logo provided and installed behind rear axle tires to prevent throwing road debris and lower road spray.

One (1)
10-C7-1025 Air System Quick Build-Up: On Board Air Compressor

AIR BRAKE SYSTEM QUICK BUILD-UP

The air brake quick build-up system shall be supplied from the specified automatic electric compressor in order to maintain full operating air pressure while the vehicle is not running.

The quick buildup system shall provide sufficient air pressure so that the apparatus has no brake drag and is able to stop under the intended operating conditions following the 60-second buildup time.

One (1)
10-C7-1090 Air System: On Board Compressor, Incl w/Battery Conditioner

Auxiliary air compressor shall be provided with specified battery conditioner system.

One (1)
10-C7-1202 Chassis Air: Tank Drains, Cable Pulls (Up To 5 Tanks)

CHASSIS AIR TANK DRAIN CABLES

The cab/chassis air brake system tank drains cables shall be extended to panel(s) located on forward streetside lower body or as per tank locations. Each air tank drain cable shall be extended/routed to the panel(s) through eyelets so as to prevent cables hanging or being exposed below the body.

Each pull ring/handle shall be properly labeled to identify each tank and include a black colored label bezel.

One (1)
10-HA-2102 Road Emergency Safety Kit

ROAD EMERGENCY SAFETY KIT

The completed unit shall be supplied with one (1) set of three (3) dual faced reflective triangles, and three (3) warning flares complete with storage case per DOT requirements.

One (1) 2.5 lb. ABC type vehicle fire extinguisher with bracket per DOT requirements shall be provided and mounted inside cab area.

One (1)
10-R0-1010 Front Cab: Interior Components, Commercial

FRONT CAB INTERIOR COMPONENTS

One (1)
10-B2-1030 Map Box w/Open Top

MAP BOX

A map box shall be provided in the cab with an open top. The map box shall be securely fastened to the cab interior per NFPA 1900 standards. It shall be fabricated of 1/8" smooth aluminum and painted with a black or gray textured powder coat paint finish for durability and finished appearance.

The map box shall be designed to hold at least four (4) 1-1/2" 3-ring binders. Two (2) cup holders shall be provided in design.

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One (1)
A0-82-B075

The design and location of map box shall be determined by the San Diego County Fire Protection District at the pre-construction meeting.

DEF Fill: Cab/Chassis Supplied

DEF FLUID FILL

One (1)
A0-10-2150

The DEF fluid fill shall be as supplied by commercial cab/chassis manufacturer.

BODY: 18' Walk Around, Rescue, 4 Side Compts.

BODY DESIGN

The importance of public safety associated with emergency vehicles requires that the construction of this vehicle meet the following specifications. These specifications are written to establish the minimum level of quality and design. All Bidders shall be required to meet these minimum requirements.

It is the intent of these specifications to fully describe the requirements for a custom built emergency type vehicle. In order to extend the expected service life of this vehicle, the body module shall be removable from the chassis frame and be capable of being installed on a new chassis.

The sheet metal material requirements, including alloy and material thickness, throughout the specifications are considered to be a minimum. Since such materials are available to all Manufacturers, the material specifications shall be strictly adhered to.

The fabrication of the body shall be formed sheet metal. Formed components shall allow the San Diego County Fire Protection District to have the body repaired locally in the case where any object has struck the body and caused damage. The use of proprietary extrusions will prevent the San Diego County Fire Protection District from such repair and shall NOT be used. All fabricated body components to be cut by a laser or water-jet for superior cut edge quality.

Following construction of the subframe, which supports the apparatus body, the sheet metal portion of the body shall be built directly on the subframe. The joining of the subframe and body shall be of a welded integral construction.

The sheet metal fabrication of the body shall be performed using inert gas continuous feed welders only. The entire body shall be welded construction. The use of pop rivets in any portion of structural construction may allow premature failure of the body structure. Therefore, pop rivets shall NOT be used in the construction of the structural portions of the body. This includes side body sheets, inner panels of compartment doors, and any other structural portions of the body.

One (1)
A0-20-4100 18

MATERIAL: 3/16" Aluminum (WA)

EXTERIOR ALUMINUM BODY

The fabrication of the body shall be constructed from aluminum 3003H-14 alloy smooth plate. This shall include compartment front panel, vertical side sheets, side upper rollover panels, rear panels and compartment door frames.

The body compartment floors and exterior panels shall be constructed with not less than 3/16" (.187) aluminum 3003H-14 smooth plate. Interior compartment dividing walls shall be constructed with not less

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than 1/8" (.125) aluminum 3003H-14 smooth plate. Lighter gauge sheet metal will not be acceptable in these areas, No Exceptions.

The front and rear corners of body shall be formed as part of the front or rear body panels. This provides a stronger body corner and finished appearance. The use of extruded corners, or caps will not be acceptable, No Exceptions.

The door side frame openings shall be formed "C" channel design. An electrical wiring conduit raceway running the full length of exterior compartments shall be provided. This raceway shall contain all 12 volt wiring running to the rear of the apparatus, permitting easy accessibility to wiring.

Individual compartment modules, with dead air space voids between compartments, will not be an acceptable method of compartment construction.

The compartments shall be an integral part of the body construction. Compartment floors from front of body to ahead of rear axle, also from rear axle to rear of body shall be single one-piece sections. Compartment floors shall be preformed, then positioned in body and welded into final position.

Compartment floors shall have a "sweep-out" design with door opening threshold positioned lower than compartment floor, permitting easy cleaning of compartments. Angles, lips, or door moldings are not acceptable in the base of compartment door opening. One-way rubber drain valves shall be provided in compartment floors so that a water hose may be used to flush-out compartment area.

All exterior seams in sheet metal below frame, and around the rear wheel well area shall be welded and caulked to resist moisture from entering the compartments. All other interior seams and corners shall be sealed with silicone based caulk prior to painting.

Only stainless steel bolts, nuts, and sheet metal screws shall be used in mounting exterior trim, hardware and equipment.

DRIP RAILS

The body shall have drip rails over the side full height compartments. The drip rails shall be formed into the upper body panels providing a ridged lower panel and a flat upper body panel surface. The use of mechanically fastened, taped or glued on drip rails will not be acceptable, No Exceptions.

BODY ROOF: 3/16" Aluminum, Treadplate

ROOF CONSTRUCTION

The roof structure shall be integral with the body sheet metal construction and shall be an all welded assembly. The body roof structure shall be overlaid with not less than 3/16" aluminum 3003H-14 alloy tread plate and welded to roof structure and body sheet metal. All seams in roof material shall be fully and continuously welded to resist entry of moisture.

There shall be a total of four (4) 2" x 2" x 1/4" 6061-T6 alloy aluminum "C" channels running the length of body, two (2) on each outboard side. These "C" channels shall be used for roof support and in addition shall be used for mounting of any specified reels. This open "C" channel design along with special reel mounting clips allows for a universal location of any specified reels within each compartment.

One (1)
A0-25-3100 18

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In between the two (2) center "C" channels running the length of body shall be 2" x 2" x 1/4" 6061-T6 alloy aluminum tubing running in between and welded in place on approximate 16" centers to support roof and/or walkway structure if specified.

A 2" formed radius shall be provided along the body sides and utilized as a wiring trough. The use of aluminum extrusions in this area shall not be acceptable, .

One (1)
A0-30-1100 18

SUBFRAME: 2" x 6" x 1/4" Aluminum Tube

BODY SUBFRAME

The chassis frame rails shall be fitted with 1/4" custom extruded UHMW polyethylene rail cap to isolate the body frame members from direct contact with chassis frame rails.

The body subframe shall be constructed from 6061T6 aluminum alloy tubing. Subframe shall consist of two (2) 2" x 6" x 1/4" aluminum tubes, the same width as the chassis frame rails, NO EXCEPTION. Welded to this tubing shall be cross members of 2" x 6" x 1/4" aluminum. These cross members shall extend the full width of the body to support the compartments. Cross members shall be located at front and rear of the body, below compartment divider walls, and in front and rear of wheel well opening. Additional aluminum cross members shall be located on 16" centers, or as necessary to support walkway or heavy equipment.

To form the frame, the tubing shall be beveled and welded at each joint using 5356 aluminum alloy welding wire.

Six (6)
A0-40-1120

MOUNTING: Spring Mounts, 6" Aluminum Subframe

BODY MOUNTING

The body subframe shall be fastened to the chassis frame with six (6) spring loaded body mounts. Each mount shall be configured using a two-piece encapsulated slide bracket. The two (2) brackets shall be fabricated of heavy duty 1/4" thick steel and shall have a powder coat finish to resist any corrosion. Each mounting assembly shall utilizing two (2) 3/4" diameter x 6" long grade 8 bolts and two (2) heavy duty springs. The assembly design shall allow the body and subframe to act as one (1) component, separate from the chassis. As the chassis frame twists under driving conditions, the spring mounting system shall eliminate any stress from being transferred into the body. The spring loaded body mounts shall also prevent frame side rail or body damage caused by unevenly distributed stress and strains due to load and chassis movement.

Body mountings that do not allow relief from chassis movement will not be acceptable.

One (1)
A0-61-1220

REAR BUMPER: 10", Aluminum

10" REAR STEP BUMPER

The full width rear bumper shall be constructed from 2" x 2" x 1/4" aluminum tubing frame and covered with 3/16" NFPA compliant aluminum tread plate. The bumper shall extend from the rear vertical body panel 10" and provide a rear step with a minimum of 1/2" space at body for water drainage.

One (1)
A0-6A-1110

Rear Tow Eyes: (2) Painted, Below Body, Body Subframe

REAR TOW EYES

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There shall be two (2) heavy duty rear mounted tow eyes securely attached to the body subframe, below body. The tow eyes shall be fabricated from 3/4" thick steel plate with a 3" diameter opening. Tow eyes shall have a black powder coat finish.

One (1)
A0-6B-1220
Trailer Hitch Receiver: Class IV, Chassis Mounted

TRAILER HITCH

A 2" Square Class IV weight carrying capacity rear hitch receiver shall be provided below the rear bumper. The receiver shall be attached to chassis frame with heavy duty steel frame work with a black hammertone powder coat paint finish.

A label shall be provided in a location in which it is visible to an operator making trailer connections. The label shall state the maximum GVWR and tongue weight of the trailer that can be safely towed with the hitch system.

Two (2) safety chain attachment points shall be provided near the hitch point for hitches designed to use safety chains, each designed with an ultimate strength of not less than the maximum GVWR specified on label.

Without the use of a "weight distribution" ball hitch the Class IV receiver shall have a capacity of 10,000 lbs. gross trailer weight and a maximum tongue weight of 1,000 lbs. With the use of a "weight distribution" ball hitch the Class IV receiver shall have a capacity of 12,000 lbs. gross trailer weight and a maximum tongue weight of 1,200 lbs.

One (1)
A0-6B-1310
Trailer Electrical Receptacle, NFPA Standard

TRAILER ELECTRICAL RECEPTACLE

For hydraulic brake equipped or electric brake equipped trailer towing capability, a primary electrical receptacle shall be provided near the hitch point and shall match the umbilical cable specified. Receptacle shall be a 7-Way Blade Type socket, the same as used on most Light Duty Trucks and RV's.

TRAILER AUXILIARY ELECTRICAL RECEPTACLE

An auxiliary electrical receptacle shall be provided near the hitch point and shall match the umbilical cable specified for optical warning lights. Receptacle shall be a 7-Way Pin Type Socket, ISO3731 compliant with a reverse ground terminal.

One (1)
A0-6B-2100
Trailer Hitch Receiver: No Hitch Receiver/Trailer Ball

RECEIVER WITH TRAILER BALL

No hitch receiver with trailer ball will be provided with completed unit.
Ground Lights: (2) OnScene Access Pro, White LED

One (1)
A0-6D-1106

GROUND LIGHTS

There shall be two (2) OnScene 10" Access Pro white LED lights installed below bumper capable of providing illumination at a minimum level of 2 fc (20 lx) on ground areas within 30 in. (800 mm) of the edge

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of the vehicle in areas designed for personnel to climb onto or descend from the vehicle to the ground level.

One (1)
A0-80-1300

Lighting shall be switchable but activated automatically when the vehicle park brake is set.
Body Fender Panels: 3/16" Smooth Aluminum

WHEEL WELL EXTERIOR PANEL

One (1)
A0-81-1020

The exterior panel of the body wheel well enclosure shall be constructed from 3/16" smooth aluminum panels.

Fender Finish: SST Fenderette

STAINLESS STEEL BODY FENDERETTES

One (1)
A0-81-2020

The body wheel well openings shall be provided with round radius, polished stainless steel fenderettes. The fenderettes shall be bolted and easily replaceable if damaged. The fenderettes shall be installed using a rubber gasket to reduce buildup of moisture and/or debris.

Wheel Well Liner: Bolted Polymer

WHEEL WELL LINERS

One (1)
A0-82-1122

The wheel wells shall be provided with an easily removable polymer, circular inner fender liner. The inner liner shall be bolted to the wheel well with stainless steel bolts and spaced away from the wheel well so the liner will not accumulate dirt or water.

Fender SCBA Compts: SST Door, (2) CS / (2) SS, (4) 8" Dia.

SCBA CYLINDER COMPARTMENTS

One (1)
P1-10-0200

There shall be four (4) SCBA cylinder storage compartments, two (2) on each side of body in the rear wheel well area. Each compartment shall have a stainless steel hinge with brushed stainless steel door assembly with a positive catch latch. Each compartment shall have a 8" diameter tube behind the wheel well panel attached to the door assembly. Each compartment shall allow the storage of an SCBA cylinder or a fire extinguisher up to 7-3/4" in diameter and 22" deep. The door shall activate the "Hazard Warning Light" in the cab when not in the closed position.

BODY PAINT - PPG

BODY PAINT SPECIFICATIONS

BODY PAINT PREPARATION

After the body and components have been fabricated they shall be disassembled so when vehicle is complete there shall be finish paint beneath the removable components. The body shall be removed from chassis during the paint process to insure proper paint coverage. The body and components shall be metal finished as follows to provide a superior substrate for painting.

The exterior (and interior, if painted) body shall undergo a thorough cleaning process starting with a biodegradable phosphoric acid solution to begin the etching process followed by a complete clear water

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rinse. The next step shall consist of a chemical conversion coating applied to seal the metal substrate and become part of the metal surface for greater film adhesion.

All bright metal fittings, if unavailable in stainless steel or polished aluminum, shall be chrome plated. Iron fittings shall be copper under plated prior to chrome plating.

PAINT PROCESS

The paint process shall follow the strict standards set forth by PPG Industries guidelines. Painters applying PPG products will be PPG Certified Commercial Technicians, and re-certified every two (2) years. The body shall go through the following paint process;

- 13) Clean bare metal with a wax and grease remover using low lint rags.
- 14) Inspect, straighten, and hammer high points, grind all seams, sharp edges, and welds. DA sand entire paintable surfaces using 24-180 grit dry paper. Plastic fill all low spots and DA sand fill areas using 36-180 grit dry paper. Apply pinhole filler and DA sand areas using 80-180 grit dry paper.
- 15) Re-clean bare metal using a wax and grease remover and low lint rags.
- 16) Within 24 hours, a PPG Delfleet® epoxy color primer with proper hardener for corrosion resistance using a pressure pot spray gun and applying 2-5 full wet coats or 1.5-8.0 dry mils max. achieving full hiding and allow to air dry 60 minutes @ 70°F or bake for 45 minutes @ 140°F degree.
- 17) Inspect, putty fill, and dry guild coat entire body surface and DA sand using 180-400 grit dry paper.
- 18) Re-clean bare metal using a wax and grease remover using low lint rags.
- 19) A PPG Delfleet® primer sealer with proper hardener and thinner shall be sprayed using a pressure pot spray gun and applying 1 full wet coat or 1.0-2.0 dry mils achieving full hiding and allow to flash off in spray booth for minimum of 60 minutes @ 70°F.
- 20) A PPG Delfleet® FBCH basecoat (color) with proper hardener and dry additive shall then be sprayed using a pressure pot set @ 45-60 PSI and achieving full hiding or 1.5-2.0 wet mils and allow to flash off in spray booth 45-60 minutes before applying clearcoat.
- 21) A PPG Delfleet® clearcoat with proper hardener and thinner shall be sprayed using a pressure pot spray gun and applying 2-3 full wet coats or 5.0 wet mils for a uniform gloss and allow to flash off in spray booth 10 minutes and bake for 120-140 minutes @ 125°F (surface temp.).
- 22) After cooling, DA sand heavy orange peel or runs using 1000 grit dry sand paper and final DA sand using 1500-2000 grit dry sand paper. Wipe off all surfaces to remove dust and debris. Buff unit as needed using 3M rubbing compound and a white wool pad and inspect until all sand scratches are removed.
- 23) Polish as needed using 3M Perfect-It-Polish and a black foam pad, repeat as necessary and inspect until all sand scratches are removed.

PAINT - ENVIRONMENTAL IMPACT

The contractor shall meet or exceed their current State regulations concerning paint operations pollution control and shall include measures to protect the atmosphere, water and soil. PPG Delfleet® Evolution paint shall be free of all heavy metal (lead & chromate) components. Paint emissions from sanding and painting shall be filtered and collected. All paint wastes shall be disposed of in an environmentally safe manner. Solvents used in cleanup operations shall be collected, sent off-site for distillation and returned for reuse.

One (1)
P1-10-1100 18

FASTENERS

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Prior to the assembly and reinstallation of exterior components; i.e. warning and DOT lights, handrails, steps, door hardware, and miscellaneous items, a Mylar isolation tape, or gasket shall be used to prevent damage to the finish painted surface. These components shall be fastened to body using either a plastic insert into body metal with stainless steel screws or zinc coated nut-surts into body surface using stainless steel bolts to resist corrosion from dissimilar metals.

ELECTROLYSIS CORROSION CONTROL

The vehicle shall be assembled using ECK brand or similar corrosion control compound on all high corrosion potential areas.

ECK protects aluminum and stainless steel against electrolytic reaction, isolates dissimilar metals and gives bedding protection for hardware and fasteners. ECK contains anti-seizing lubricant for threads. ECK is dielectric and perfect for use with electrical connectors.

PAINT FINISH - SINGLE COLOR

The body shall be painted with a single color of PPG Delfleet® Evolution per San Diego County Fire Protection District approved paint spray out provided.

Paint Color: Match Cab Chassis Provided Paint Color

One (1)
P1-21-1000

- Paint Color: Match cab/chassis supplied paint color.
- Paint Body: Undercoating

One (1)
P1-A0-1100 18

BODY UNDERCOATING

The entire underside of body shall be sprayed with black automotive undercoating. Undercoating shall cover all areas underside of body and wheel well area to help resist corrosion under the vehicle.

Interior Finish: Unpainted

One (1)
P1-30-1100 18

COMPARTMENT INTERIOR FINISH

The interior of all exterior body compartments shall be a "Maintenance Free" smooth unpainted finish. All body seams shall be finished with a caulk sealant for both appearance and moisture protection.

Reflective Striping

One (1)
P2-01-1110 18

REFLECTIVE STRIPE REQUIREMENTS

Material

All retroreflective materials shall conform to the requirements of ASTM D4956, *Standard Specification for Retroreflective Sheeting for Traffic Control*, Section 6.1.1 for Type I Sheeting.

All retroreflective materials used that are colors not listed in ASTM D4956, Section 6.1.1, shall have a minimum coefficient of retro-reflection of 10 with observation angle of 0.2 degrees and entrance angle of -4 degrees.

Any printed or processed retroreflective film construction used shall conform to the standards required of an integral colored film as specified in ASTM D4956, Section 6.1.1.

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Minimum Requirements

A retroreflective stripe(s) shall be affixed to at least 50 percent of the cab and body length on each side, excluding the pump panel areas, and at least 25 percent of the width of the front of the vehicle, not including mirrors or other protrusions.

The stripe or combination of stripes shall be a minimum of 4 in. (100 mm) in total width.

The 4 in. (100 mm) wide stripe or combination of stripes shall be permitted to be interrupted by objects (i.e., receptacles, cracks between slats in roll up doors) provided the full stripe is seen as conspicuous when approaching the apparatus.

A graphic design shall be permitted to replace all or part of the required striping material if the design or combination thereof covers at least the same perimeter length(s).

GRAPHICS PROOF

A color graphics proof of the reflective striping layout shall be provided for approval by San Diego County Fire Protection District prior to installation. The graphics proof shall be submitted to San Diego County Fire Protection District on 8.5" x 11" sheets with front, sides, rear and plan views, each on one (1) sheet. In addition if there is any special art work an additional sheet shall be provided showing all details. **Note:** The graphics color proof may not reflect the correct paint break lines on the chassis and body please refer to the paint section of your specifications for correct paint break lines.

Reflective Stripe Cab: Side, 6" Scotchlite, Medium Duty, 2-Door

One (1)
P2-05-2220

REFLECTIVE STRIPE - CAB SIDE

The reflective stripe material shall be 6" wide, 3M Scotchlite 680 series graphic film.

One (1)
P2-01-2010

Stripe Color: White

- This reflective stripe shall be white in color.

One (1)
P2-90-5410

Reflective Stripe Cab: Side 1" Scotchlite, Above/Below Main Stripe

There shall be a 1" Scotchlite reflective stripe located 1" above and a second 1" Scotchlite reflective stripe located 1" below the main stripe.

One (1)
P2-01-2055

Stripe Color: Black

- This reflective stripe shall be black in color.

One (1)
P2-07-2200

Reflective Stripe Cab: Front, 6" Scotchlite

REFLECTIVE STRIPE - CAB FRONT

The reflective stripe material shall be 6" wide, 3M Scotchlite 680 series graphic film.

One (1)
P2-01-2010

Stripe Color: White

- This reflective stripe shall be white in color.

One (1)
P2-90-4410

Reflective Stripe Cab: Front 1" Scotchlite, Above/Below Main Stripe

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There shall be a 1" Scotchlite reflective stripe located 1" above and a second 1" Scotchlite reflective stripe located 1" below the main stripe.

Stripe Color: Black

One (1)
P2-01-2055

- This reflective stripe shall be black in color.
Reflective Stripe Body: Side, 6" Scotchlite

One (1)
P2-20-1100 18

REFLECTIVE STRIPE - BODY SIDES

The reflective stripe material shall be 6" wide, 3M Scotchlite 680 series graphic film.

Stripe Color: White

One (1)
P2-01-2010

- This reflective stripe shall be white in color.
Reflective Stripe Body: Side 1" Scotchlite, Above/Below Main Stripe

One (1)
P2-90-3010

There shall be a 1" Scotchlite reflective stripe located 1" above and a second 1" Scotchlite reflective stripe located 1" below the main stripe.

Stripe Color: Black

One (1)
P2-01-2055

- This reflective stripe shall be black in color.
Stripe Layout: Angle-Up

One (1)
P2-C0-1020

The stripe shall extend from the front of cab in a straight line, then just ahead of the rear wheels the stripe shall angle up and extend straight back to the rear of the body.

Chevron Rear Body: Diamond Grade, Sides Full Height (WA)(WI)

One (1)
P2-65-1110

CHEVRON REFLECTIVE STRIPE - REAR SIDES PANELS

At least 50 percent of the rear-facing vertical surfaces, visible from the rear of the apparatus, excluding any pump panel areas not covered by a door, shall be equipped with retroreflective striping in a chevron pattern sloping downward and away from the centerline of the vehicle at an angle of 45 degrees. Each stripe shall be 6" width.

The rear side panels of the body on each side of a rear stairway or compartment shall have a chevron style reflective stripe, extending from bumper to full body height. Each chevron panel shall be a full sheet and shall have a 3M UV over laminate to protect from UV rays, scene damage, and everyday use.

The stripe material shall be 3M Diamond Grade.

Stripe Color: Red and FL Yellow-Green

One (1)
P2-65-A040

This reflective chevron stripe shall alternate red and fluorescent yellow-green in color.
Lettering, Art Flags and Decals

One (1)
P3-00-0100

LETTERING

GRAPHICS PROOF

A color graphics proof of the lettering layout shall be provided for approval by San Diego County Fire Protection District prior to installation. The graphics proof shall be submitted to San Diego County Fire

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Protection District on 8.5" x 11" sheets with front, sides, rear and plan views, each on one (1) sheet. In addition if there is any special art work an additional sheet shall be provided showing all details.

The following lettering shall be provided and installed on the completed unit as follows;
Lettering Location: Cab Sides

One (1)
P3-10-0500

SIDE CAB DOOR LETTERING

Fifty (50)
P3-10-2100
Lettering: SuperGold - 3" high (per letter)

There shall be fifty (50) 3" high SuperGold letters furnished and installed on the vehicle. Lettering shall have a clear 3M UV Protective Over Laminate applied before installation.

Provide details.
Lettering Location: Body Sides

One (1)
P3-10-0510

UPPER BODY SIDE LETTERING

Seventy Eight (78)
P3-10-1300
Lettering: Reflective - 5" high (per letter)
There shall be seventy eight (78) 5" high reflective letters furnished and installed on the vehicle.

Provide details.

Seventy Eight (78)
P3-05-1A10
Lettering Color: White
• This reflective lettering shall be white in color.

Seventy Eight (78)
P3-10-9200
Lettering: Shadow, Black
Specified lettering shall be provided with a black shadow.

One (1)
P3-10-0520
Lettering Location: Rear Body

REAR BODY LETTERING

Six (6)
P3-10-1400
Lettering: Reflective - 6" high (per letter)
There shall be six (6) 6" high reflective letters furnished and installed on the vehicle.

Provide details.
Lettering Color: White

Six (6)
P3-05-1A10
• This reflective lettering shall be white in color.

Twenty Five (25)
P3-10-2100
Lettering: SuperGold - 3" high (per letter)
There shall be twenty five (25) 3" high SuperGold letters furnished and installed on the vehicle. Lettering shall have a clear 3M UV Protective Over Laminate applied before installation.

Provide details.
Lettering Location: Cab Front

One (1)
P3-10-0530

FRONT OF CAB LETTERING

One (1)
P3-10-05A0
Lettering Location: Cab Roof

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CAB ROOF LETTERING

Three (3)
P3-10-1922 Lettering: Reflective - 22" high (per letter)

There shall be three (3) 22" high reflective letters furnished and installed on the vehicle.

Provide details.

Three (3)
P3-05-1A10 Lettering Color: White

- This reflective lettering shall be white in color.
Decal: Custom Logo, Scotchlite, 12" - 18"

Two (2)
P3-12-1030

CUSTOM DECAL LOGO - 12" -18"

Two (2) custom designed 12" - 18" 3M Scotchlite type retroreflective logo shall be provided and located on the completed vehicle. The exact design and/or artwork shall be provided by the San Diego County Fire Protection District prior to construction.

Two (2)
P3-12-1040 Decal: Copy of Custom Logo, Scotchlite, 12" - 18"

Two (2) copy of the above custom logo shall be provided and located on the completed vehicle as directed by San Diego County Fire Protection District.

One (1)
P3-11-0010 SVI Logo

SVI Manufacturer Badge:

The truck shall be provided with the SVI Winged Logo including all badges, QR Codes, and Mudflaps.
Door Details: Roll-up or Hinged, (ALL)

One (1)
A0-A0-1010

EXTERIOR COMPARTMENT DOORS

Roll-up Compartment Doors: ROM Series IV

One (1)
A0-A0-1120

ROLL-UP DOOR CONSTRUCTION - ROBINSON (ROM)

The vehicle shall be equipped with R•O•M Series IV roll-up exterior compartment doors. The R•O•M roll-up doors shall be complete with the following features;

Each shutter slat, track, bottom rail, and drip rail shall be constructed from anodized 6063 T6 aluminum. Shutter slats shall feature a double wall extrusion 0.315" thick with a concave interior surface to minimize loose equipment jamming the shutter door closed. Shutter slats shall feature an interlocking end shoe to prevent side to side binding of the shutter door during operation. Slat must have interlocking joints with an inverted locking flange. Slat inner seal shall be a one piece PVC extrusion; seal design will be such to prevent metal to metal contact while minimizing dirt and water from entering the compartment.

Shutter door track shall be one piece design with integral overlapping flange to provide a clean finished look without the need of caulk. Door track shall feature an extruded Santoprene rubber double lip low profile side seal with a silicone co-extruded back to reduce friction during shutter operation. Shutter bottom rail shall be a one piece double wall extrusion with integrated finger pull. Finger pull shall be curved upward with a linear striated surface to improve operator grip while operating the shutter door. Bottom rail shall have a smooth contoured interior surface to prevent loose equipment from jamming the shutter door. Bottom rail seal shall be made from Santoprene; it will be a double "V" seal to resist water

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and debris from entering compartment. Bottom rail lift bar shall be a one piece "D" shaped aluminum extrusion with linear striations to improve operator grip during operation. Lift bar shall have a wall thickness of 0.125". Lift bar shall be supported by no less than two pivot blocks; pivot blocks shall be constructed from Type 66 Glass filled reinforced nylon for superior strength. Bottom rail end blocks shall have incorporated drain holes which will allow any moisture that collects inside the extrusion to drain out.

Shutter door shall have an enclosed counter balance system. Counter balance system shall be 4" in diameter and held in place by two (2) heavy duty 18 gauge zinc plated plates. Counter balance system shall have two (2) over-molded rubber guide wheels to provide a smooth transition from vertical track to counter balance system; no foam material of any kind shall be permitted or used in this area.

The R•O•M Series IV roll-up compartment doors shall be free of manufacturing defects for a period of up to 7 years from date of purchase provided doors are used under conditions of normal use, regular periodic maintenance and service is performed, and doors were installed in accordance with R•O•M's instructions. Roll-up Compartment Doors: ROM, Std. Bottom Rail, 3.0"

One (1)
A0-A0-1124

ROM DOOR BOTTOM RAIL

All exterior compartment doors shall have the standard 3.0" tall bottom rail extrusion for easy one (1) hand opening and closing.

One (1)
P2-D0-1010

Reflective Stripe with Roll-up Doors

The specified retroreflective stripe material shall be applied on the roll-up compartment doors. The stripe shall be precision machine cut for each door slat of the roll-up doors. Under no circumstance will the stripe material be cut on roll-up door surface.

One (1)
A0-V1-5200 18

Body Height: 20" Raised Roof w/ Upper Body Comp'ts

BODY HEIGHT MEASUREMENTS

The vertical body dimensions shall be as follows:

AHEAD OF REAR AXLE

	<u>Description</u>	<u>Dimension</u>
A	Bottom of Subframe to Top of Body	83.7"
B	Bottom of Subframe to Bottom of Body	22.5"
C	Total Body Height	106.2"
D	Compartment Height Above Frame	48.0"
E	Compartment Height Below Frame	25.0"
F	Vertical Door Opening:	
	-with roll-up door	65.0"
	-with hinged door	68.5"

ABOVE REAR AXLE

	<u>Description</u>	<u>Dimension</u>
G	Vertical Door Opening - Above Rear Wheel	
	-with roll-up door	34.0"
	-with hinged door	37.5"

BEHIND REAR AXLE

<u>Description</u>	<u>Dimension</u>
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H	Bottom of Subframe to Bottom of Body	20.0"
I	Compartment Height Above Frame	48.0"
J	Compartment Height Below Frame	22.5"
K	Vertical Door Opening:	
	-with roll-up door	62.0"
	-with hinged door	65.5"

GENERAL

	<u>Description</u>	<u>Dimension</u>
L	Top of Body to Bottom of Drip Rail	33.5"

(Dimensions are approximate and subject to change during construction or design process.)

One (1) Upper Body Compts: Open, (5) [18][20]

D0-20-12B0

FIVE (5) UPPER BODY COMPARTMENTS (OPEN)

The forward transverse compartment shall be 90.0" long x 27.0" wide x 28.5" deep. There shall be four (4) compartments parallel to the sides of the body, two (2) on each side. Each of these compartments shall be approximately 63" long x 28.0" wide x 28.5" deep. The side compartments shall be open under each door sill to allow for long equipment. Each compartment shall be integral with the body construction, and will not be bolted or add-on modules. The outside walls of each compartment will be double walled to prevent equipment from denting the outside painted surface.

Each compartment shall have a lift-up type compartment door hinged on the outboard side. Each door shall be fabricated from 3/16" aluminum tread plate. Each door shall have two (2) pneumatic type cylinders, one (1) at each end, attached to cast aluminum brackets mounted to the interior surface of the door to hold the door in both the opened and closed positions. Each door shall be mounted using multiple 16" long, equally spaced, 14 gauge stainless steel hinges, with 1/4" stainless steel pin. A polyester barrier film gasket shall be placed between stainless steel hinge and the body mounting surface as necessary to resist corrosion caused by dissimilar metals.

Each compartment door shall overlap a 2" vertical lip on the body roof to resist entry of moisture and sealed with automotive type rubber molding to provide a weather resistant seal.

Each roof compartment door shall have a chrome 7" handle bolted to center of each door.

Each compartment shall have a 13/16" drain hole located in floor of compartment with a 1" flexible drain tube that terminates below body.

NFPA door ajar system shall be automatically activated by an individual switch per compartment.
Compartment Lights: (1) OnScene Access PRO, White LED - Horiz

Five (5)
CZ-B0-2732

- Five (5) OnScene Access PRO white LED, full height compartment light(s), horizontally mounted.

One (1)
D0-50-1100 12

UPPER BODY WALKWAY

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A 34" wide, upper body walkway shall be provided at the center of body and recessed into the roof structure. The walkway shall be fabricated from NFPA compliant 3/16" aluminum tread plate with continuously welded cross seams to resist moisture penetration into apparatus body, No Exceptions. The walkway shall be supported with 2" x 2" tubing on 14" - 22" centers.

13/16" drains shall be installed at front of walkway connected to 1" flexible drain tubes that will terminate below the body.

One (1)
D0-50-1112 Walkway/Step Lights: (4) OnScene LED, Aluminum Housing

WALKWAY/STEP LIGHTS

There shall be four (4) OnScene Solutions Rough-Service 9" LED lights provided to illuminate the walkway or step area.

Each light shall be mounted in an extruded aluminum housing to protect against damage from personnel or equipment.

Lighting shall provide illumination at a minimum level of 2 fc (20 lx) on all work surfaces, steps, and walkways. Lighting shall be switchable but activated automatically when the vehicle park brake is set. Reflective Stripe: Walkway Edge

One (1)
P2-E0-1020

WALKWAY SAFETY DELINEATION

For increased visibility and safety, the front edge of walkway at top of stairway shall have two (2) rows of fluorescent yellow-green reflective squares provided between the diamond pattern of stepping surface to delineate stair tread edge.

One (1)
EF-50-1120 Rear Stairway Roof Access: Treads/Vertical Risers, Optional Step Compartments

ROOF ACCESS STAIRWAY

The rear of the body shall be provided with a minimum 34" wide roof access stairway recessed into the side rear compartments. Stairs treads shall be 9 1/2" minimum depth and formed from 3/16" NFPA compliant aluminum tread plate with uniformed riser height design. Stair treads will be continuously welded into side walls. Bolt-in tread design will not be acceptable.

Roll-out ladder design requiring set-up time and 8 plus feet behind apparatus or vertical ladders that do not allow firefighter to safely ascend or descend with equipment will not be acceptable.

STAIRWAY HANDRAILS

There shall be two (2) handrails provided, one (1) on each side wall of recessed center stairway providing three-points of contact at all times for safer access to roof compartments. The handrails shall be angled for optimum use during ingress or egress of the upper walkway area.

Handrails shall be NFPA compliant 1-1/4" knurled 304 stainless steel with welded end stanchions. Walkway/Step Lights: (2) OnScene LED, Aluminum Housing

One (1)
D0-50-1110

WALKWAY/STEP LIGHTS

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There shall be two (2) OnScene Solutions Rough-Service 9" LED lights provided to illuminate the walkway or step area.

Each light shall be mounted in an extruded aluminum housing to protect against damage from personnel or equipment.

Lighting shall provide illumination at a minimum level of 2 fc (20 lx) on all work surfaces, steps, and walkways. Lighting shall be switchable but activated automatically when the vehicle park brake is set. Step Compartment, Lower Two (2) Steps, Below Frame

One (1)
EF-80-1115

STEP COMPARTMENT - LOWER 2 STEPS

There shall be one (1) compartment located in the roof access stairway area below frame level. The compartment will cover the bottom two (2) steps and have a hinged lift-up 3/16" NFPA compliant aluminum tread plate step door. The compartment shall be manufactured to resist road debris, dirt and moisture from entering. The compartment shall be 33" wide x 24" high x maximum depth based on chassis mounted components and requirements for structural integrity of the body.

The compartment shall have an LED light that shall automatically activate when the door is opened and wired to the NFPA required hazard warning light provided in the cab.

Hinged Single Panel Door Handle: D-Ring, w/Lock

One (1)
CZ-42-1112

- The hinged door(s) shall have a stainless steel 6" offset bent D-ring locking handle. A gasket shall be placed between handle and door. Door latch shall be a single point latch flush mounted to exterior door panel.

One (1)
CZ-B0-2742

Compartment Lights: OnScene Access PRO, White LED

- One (1) OnScene Access PRO white LED light(s) mounted in cabinet(s). Step Compartment, Upper, Below Walkway

One (1)
EF-80-1130

STEP COMPARTMENT - UPPER

There shall be one (1) upper compartment located directly below walkway area. The compartment shall have a horizontally hinged brushed stainless steel door. The compartment shall be manufactured to resist road debris, dirt and moisture from entering. The compartment shall be approximately 26" wide x 8" high x maximum depth available.

Each Compartment shall have an OnScene LED light that shall be automatically activated when the door is opened and wired to the NFPA required hazard warning light provided in the cab.

Devices to secure specified equipment, compartment dividers, or UHMW plastic angles, or sheeting will be used for storage of specified equipment as required to prevent damage to equipment.

Hinged Single Panel Door Handle: D-Ring, w/Lock

One (1)
CZ-42-1112

- The hinged door(s) shall have a stainless steel 6" offset bent D-ring locking handle. A gasket shall be placed between handle and door. Door latch shall be a single point latch flush mounted to exterior door panel.

One (1)
CZ-B0-2742

Compartment Lights: OnScene Access PRO, White LED

- One (1) OnScene Access PRO white LED light(s) mounted in cabinet(s).

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- One (1)
D0-10-12C0
- Equipment: Rescue Tri-Pod
- Storage for One (1) rescue tri-pod(s). Manufacturer, model number and size of the tri-pod shall be provided in equipment section of specification or at pre-construction meeting when provided by San Diego County Fire Protection District.

Arizona Vortex

- One (1)
EF-80-1150
- Stairway Step: Fold-Down, 30" Wide

FOLD-DOWN STEP

There shall be one (1) 30" wide fold-down step located at the bottom of the roof access stairway to reduce the distance from the ground to the first step. The step surface shall be NFPA compliant aluminum treadplate. The step shall manually fold up into the stairway with an over-center gas shock to hold step in position during travel. The step shall activate the "Hazard Warning Light" in the cab when not in the stowed position.

- One (1)
EF-A0-1102
- Handrails: (2) Rear of Body, 24" Vertical, Stainless

REAR BODY HANDRAILS

There shall be two (2) 24" vertical handrails on rear body. Handrails shall be NFPA compliant 1-1/4" knurled 304 stainless steel with welded end stanchions.

A safety sign FAMA23, which warns of the proper climbing method, shall be visible to personnel entering the cab and at each designated climbing location on the body.

A safety sign FAMA24, which warns personnel not to ride on the vehicle, shall be located at the rear step areas and at any cross walkways.

- One (1)
A0-W0-3000
- Body Width: 100"/102" (WA)

BODY WIDTH DIMENSIONS

The body shall be 100.0" wide, and 102.0" wide at drip rails. Interior compartment depth dimensions shall be approximately:

<u>Area Description</u>	<u>Dimension</u>
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Transverse above subframe	95.0"
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- One (1)
A1-15-1100 18
- Compartment depth below subframe 24.5"
Compartment S1 (WA)

STREETSIDE COMPARTMENT - FRONT (S1)

- One (1)
CZ-10-1510 10
- Width: 49.5" Wall to Wall [45.0" S2S][WA]

The interior useable compartment width shall be approximately 49.5" wide.

- One (1)
CZ-30-7000 45
- Roll-up Door: ROM Series IV

- This compartment shall have a R•O•M series IV roll-up door.

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- One (1)
CZ-40-1010 45
 - The compartment door opening shall be approximately 42.5" wide.
Roll-up Door Finish: ROM Painted, Job Color, Single Color
 - The roll-up door slats and the door track components shall be painted to match the single tone exterior color.
- One (1)
CZ-40-2020
 - Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up
 - The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.
- One (1)
CZ-41-1120
 - Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)
 - A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.
- One (1)
CZ-41-1131
 - Door Lock: Roll-up, Manual Lock (Std)
 - The roll-up doors shall be manually operated with a key.
- One (1)
CZ-41-1314
 - Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall
 - One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.
- One (1)
CZ-41-2110
 - Drip Pan/Door Guard: Roll-up
 - One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.
- One (1)
CZ-51-1000 45
 - Compartment Threshold: Aluminum
 - Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.
- One (1)
CZ-A5-1140
 - Compartment Vent: Plastic Louvers
 - Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.
- One (1)
CZ-A0-0110 45
 - Compartment Components: Storage [WA]
- One (1)
CZ-91-1110
 - **COMPARTMENT LAYOUT**
Floor: Extended
 - The floor of the compartment above the frame rails shall be extended to the interior edge of the door. The floor shall have a 2" vertical lip and a 1" return to increase strength.
- One (1)
CZ-A0-1230
 - Shelf Trac: Aluminum (WA)
 - There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.
- Two (2)
CZ-A2-1135 45
 - Tray: OnScene, Stationary 1,000 lb., Transverse

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- Two (2)
CZ-A3-5022 45

 - There shall be two (2) OnScene Solutions 83 series aluminum tray base with 70% extension, and rating of 1,000 lbs. Slide-out tray(s) base shall be full width (street/curb) and as wide as the compartment layout or door opening permits, capable of extending out either side of the body located above the level of the chassis frame rails. Each slide base shall have a cable operated, spring loaded latch complimented by a large hand opening and red pull handle (Pull to Release) which will lock the tray in the closed, 40% extended and 70% extended positions.
 - Tray Pan: Smooth Aluminum 3/16", Transverse
 - Each tray shall be fabricated from 3/16" 3003 aluminum sheet and shall have welded corners to form a box type tray with an internal depth of approximately 3 1/2".
- Two (2)
P1-80-1100

 - Interior Component Finish: Un-painted
 - The above component(s) shall have a smooth un-painted finish.
- Two (2)
CZ-A4-1310

 - Vertical Partition: Tray, Smooth Aluminum, Adjustable
 - Vertical partition(s) shall be provided on slide-out tray base dividing the tray into left and right sides. Each vertical partition shall be horizontally adjustable; mounted on aluminum Shelf Trac on tray floor. The vertical partition(s) shall be 3/16" (.188) 3003H-14 alloy smooth aluminum sheet.
- Two (2)
CZ-A5-9101

 - Equipment Mounting: Slide Tray, None
 - Any equipment mounting on slide tray shall be provided by San Diego County Fire Protection District after delivery.
- Two (2)
P2-E0-1035 69

 - Reflective Stripe: Tray, Front/Side, Scotchlite
 - Reflective Scotchlite 2" wide stripe shall be provided on the front and side faces of the tray.
- Forty Eight (48)
P2-E1-0200

 - Stripe Color: Red/White
 - This reflective stripe shall be red/white in color.
- One (1)
CZ-B0-1130

 - 12 VDC Distribution Panel: Streetside S1 Front Lower
 - The 12 volt electrical distribution panel shall be located in the front lower compartment.
- One (1)
CZ-B0-2342

 - Compartment Lights: (2) OnScene Access PRO, White LED
 - Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.
- One (1)
CZ-L0-1110

 - Underbody Step: (1) SVI Slide-out DiamondBack Step
 - There shall be one (1) underbody slide-out step. Step surface shall be constructed from 9" deep DiamondBack non-slip vented aluminum stair treads mounted to underbody using Delron plastic slides for corrosion resistance. Step slide shall be securely held in both out and stored position, utilizing a heavy duty pneumatic cylinder designed to have an over center location which will assist the step in both extension and retraction. Each step shall be designed to hold 500 lbs.
- One (1)
CZ-L0-2140

 - Underbody Light: OnScene Access Pro, White LED
 - One (1) OnScene 10" Access Pro white LED ground light(s) shall be provided below the body. Light(s) shall be switchable but activated automatically when the park brake is set.
- One (1)
A2-15-1100 18

 - Compartment S2 (WA)

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STREETSIDE COMPARTMENT - AHEAD OF REAR WHEELS (S2)

- One (1)
CZ-10-1510 20 Width: 49.5" Wall to Wall [45.0" S2S][WA]
The interior useable compartment width shall be approximately 49.5" wide.
- One (1)
CZ-30-7000 45 Roll-up Door: ROM Series IV
- This compartment shall have a R•O•M series IV roll-up door.
 - The compartment door opening shall be approximately 42.5" wide.
- One (1)
CZ-40-1010 45 Roll-up Door Finish: ROM Painted, Job Color, Single Color
- The roll-up door slats and the door track components shall be painted to match the single tone exterior color.
- One (1)
CZ-40-2020 Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up
- The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.
- One (1)
CZ-41-1120 Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)
- A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.
- One (1)
CZ-41-1131 Door Lock: Roll-up, Manual Lock (Std)
- The roll-up doors shall be manually operated with a key.
- One (1)
CZ-41-1314 Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall
- One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.
- One (1)
CZ-41-2110 Drip Pan/Door Guard: Roll-up
- One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.
- One (1)
CZ-51-1000 45 Compartment Threshold: Aluminum
- Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.
- One (1)
CZ-A5-1140 Compartment Vent: Plastic Louvers
- Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.
- One (1)
CZ-A0-0111 45 Compartment Components: Storage [WA]

COMPARTMENT LAYOUT

- One (1)
CZ-91-1110 Floor: Extended
- The floor of the compartment above the frame rails shall be extended to the interior edge of the door. The floor shall have a 2" vertical lip and a 1" return to increase strength.
- One (1)
Shelf Trac: Aluminum (WA)

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CZ-A0-1230

- There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.

One (1)

Tray: OnScene, Adjustable 1,000 lb., 47" D, 1/2 Compt. Depth

CZ-A2-2120 45

- There shall be one (1) OnScene Solutions 81 series aluminum tray base with rating of 1,000 lbs. Slide-out tray(s) base shall be approximately 47" deep and as wide as the compartment layout or door opening permits located above the body subframe and shall be vertically adjustable in height. Slide base shall extend depth specified, less 4". Each slide shall have a cable operated, spring loaded latch complimented by a large hand opening and red pull handle (Pull to Release) which will lock the tray in the closed and full extension positions.

One (1)

Tray Pan: Smooth Aluminum 3/16", 47" Dp

CZ-A3-5018 45

- Each tray shall be fabricated from 3/16" 3003 aluminum sheet and shall have welded corners to form a box type tray with an internal depth of approximately 3 1/2".

One (1)

Interior Component Finish: Un-painted

P1-80-1100

- The above component(s) shall have a smooth un-painted finish.

One (1)

Equipment Mounting: Slide Tray, None

CZ-A5-9101

- Any equipment mounting on slide tray shall be provided by San Diego County Fire Protection District after delivery.

One (1)

Reflective Stripe: Tray, Front/Side, Scotchlite

P2-E0-1035 65

- Reflective Scotchlite 2" wide stripe shall be provided on the front and side faces of the tray.

Twelve (12)

Stripe Color: Red/White

P2-E1-0200

- This reflective stripe shall be red/white in color.

One (1)

Tray: OnScene, Out/Down, Adjustable 250 lb., 30" D

CZ-A2-4145 45

- There shall be one (1) OnScene Solutions 84 series slide-out, drop-down style aluminum tray base with 90% extension, and rating of 250 lbs. Slide-out tray(s) base shall be approximately 30" deep and as wide as the compartment layout or door opening permits. It shall be located above the level of the chassis frame rails and shall be vertically adjustable in height. Each slide shall have a cable operated, spring loaded latch complimented by a large hand opening and red pull handle (Pull to Release) which will hold the tray in the closed position.

One (1)

Tray Pan: Smooth Aluminum 3/16", 30" Dp

CZ-A3-5014 45

- Each tray shall be fabricated from 3/16" 3003 aluminum sheet and shall have welded corners to form a box type tray with an internal depth of approximately 3 1/2".

One (1)

Interior Component Finish: Un-painted

P1-80-1100

- The above component(s) shall have a smooth un-painted finish.

One (1)

Equipment Mounting: Slide Tray, None

CZ-A5-9101

- Any equipment mounting on slide tray shall be provided by San Diego County Fire Protection District after delivery.

One (1)

Reflective Stripe: Tray, Front/Side, Scotchlite

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P2-E0-1035 62

- Reflective Scotchlite 2" wide stripe shall be provided on the front and side faces of the tray.

Nine (9) Stripe Color: Red/White

P2-E1-0200

- This reflective stripe shall be red/white in color.

One (1) Drawer Cabinet: Lista HS450, 40-1/4" W x 21-5/8" H

CZ-A4-3210

- One (1) Lista drawer cabinet, model HS450 shall be provided in compartment. The Lista cabinet shall be x 40-1/4" wide x 21 3/4" high x 22-1/2" deep. Cabinet shall have four (4) individual locking drawers as follows; one (1) 2", one (1) 3", one (1) 4", and one (1) 5".

One (1) Lista Cabinet: Individual Lock (RG)

CZ-A4-3280

Each cabinet shall be provided with a individual lock (RG) and two (2) keys.

One (1) Lista Cabinet: Drawer Option, Individual Drawer Latch (IDL)

CZ-A4-3285

Each cabinet drawer shall be provided with a individual latch (IDL).

One (1) Lista Cabinet: Color, Black

CZ-A4-3290

The cabinet shall be Black in color.

One (1) Compartment Lights: (2) OnScene Access PRO, White LED

CZ-B0-2342

- Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.

One (1) Underbody Step: (1) SVI Slide-out DiamondBack Step

CZ-L0-1110

- There shall be one (1) underbody slide-out step. Step surface shall be constructed from 9" deep DiamondBack non-slip vented aluminum stair treads mounted to underbody using Delron plastic slides for corrosion resistance. Step slide shall be securely held in both out and stored position, utilizing a heavy duty pneumatic cylinder designed to have an over center location which will assist the step in both extension and retraction. Each step shall be designed to hold 500 lbs.

One (1) Underbody Light: OnScene Access Pro, White LED

CZ-L0-2140

- One (1) OnScene 10" Access Pro white LED ground light(s) shall be provided below the body. Light(s) shall be switchable but activated automatically when the park brake is set.

One (1) Compartment S3 (WA)

A3-15-1320

STREETSIDE COMPARTMENT - ABOVE REAR WHEELS (S3)

One (1) Width: 59.5" Wall to Wall [55.0" S2S][WA]

CZ-10-1710 30

The interior useable compartment width shall be approximately 59.5" wide.

One (1) Roll-up Door: ROM Series IV

CZ-30-7000 55

- This compartment shall have a R•O•M series IV roll-up door.

- The compartment door opening shall be approximately 52.5" wide.

One (1) Roll-up Door Finish: ROM Painted, Job Color, Single Color

CZ-40-1010 55

- The roll-up door slats and the door track components shall be painted to match the single tone exterior color.

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- One (1)
CZ-40-2020 Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up
- The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.
- One (1)
CZ-41-1120 Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)
- A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.
- One (1)
CZ-41-1131 Door Lock: Roll-up, Manual Lock (Std)
- The roll-up doors shall be manually operated with a key.
- One (1)
CZ-41-1314 Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall
- One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.
- One (1)
CZ-41-2110 Drip Pan/Door Guard: Roll-up
- One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.
- One (1)
CZ-51-1000 55 Compartment Threshold: Aluminum
- Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.
- One (1)
CZ-A5-1140 Compartment Vent: Plastic Louvers
- Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.
- One (1)
CZ-A0-0111 54 Compartment Components: Storage [WA]
- COMPARTMENT LAYOUT**
- One (1)
CZ-91-1110 Floor: Extended
- The floor of the compartment above the frame rails shall be extended to the interior edge of the door. The floor shall have a 2" vertical lip and a 1" return to increase strength.
- One (1)
CZ-A0-1230 Shelf Trac: Aluminum (WA)
- There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.
- Two (2)
CZ-A2-1135 57 Tray: OnScene, Stationary 1,000 lb., Transverse
- There shall be two (2) OnScene Solutions 83 series aluminum tray base with 70% extension, and rating of 1,000 lbs. Slide-out tray(s) base shall be full width (street/curb) and as wide as the compartment layout or door opening permits, capable of extending out either side of the body located above the level of the chassis frame rails. Each slide base shall have a cable operated, spring loaded latch complimented by a large hand opening and red pull handle (Pull to Release) which will lock the tray in the closed, 40% extended and 70% extended positions.
- Two (2)
Tray Pan: Smooth Aluminum 3/16", Transverse

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CZ-A3-5022 57

- Each tray shall be fabricated from 3/16" 3003 aluminum sheet and shall have welded corners to form a box type tray with an internal depth of approximately 3 1/2".

Two (2)
P1-80-1100

Interior Component Finish: Un-painted

- The above component(s) shall have a smooth un-painted finish.

Two (2)
CZ-A4-1311

Vertical Partition: Tray, Smooth Aluminum, Adjustable (70"+)

- Vertical partition(s) shall be provided on slide-out tray base dividing the tray into left and right sides. Each vertical partition shall be horizontally adjustable; mounted on aluminum Shelf Trac on tray floor. The vertical partition(s) shall be 3/16" (.188) 3003H-14 alloy smooth aluminum sheet.

Two (2)
CZ-A5-9201

Equipment Mounting: Transverse Tray, None

- Any equipment mounting on transverse tray shall be provided by San Diego County Fire Protection District after delivery.

Two (2)
P2-E0-1035 89

Reflective Stripe: Tray, Front/Side, Scotchlite

- Reflective Scotchlite 2" wide stripe shall be provided on the front and side faces of the tray.

Forty Two (42)
P2-E1-0200

Stripe Color: Red/White

- This reflective stripe shall be red/white in color.

One (1)
CZ-B0-2442

Compartment Lights: (2) OnScene Access PRO, White LED

- Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.

One (1)
R2-BC-1100

Interior Outlet: 120 VAC, Compartment

- There shall be one (1) 120 VAC outlet(s) located in compartment.

One (1)
R2-D0-1210

Straight-Blade: 120V/20A, Interior

- The outlet receptacle(s) shall be 20 amp, straight-blade (NEMA 5-20R).

One (1)
R2-D1-2420

Outlet Powered By: Generator and Shore Power

- Outlet(s) shall be powered by both the on-board generator and shore power system through a relay system.

One (1)
R2-D3-0110

VAC Outlet Location: Forward Wall, Upper Left

- The outlet shall be located on forward wall, upper left area.

One (1)
A5-27-1100 20

Compartment S4 (WT) 30"Dp

STREETSIDE COMPARTMENT - REAR (S4)

One (1)
CZ-10-1615 20

Width: 56.5 Wall to Wall [52.0" S2S][WT]

The interior useable compartment width shall be approximately 56.5" wide.

One (1)
CZ-30-7000 52

Roll-up Door: ROM Series IV

- This compartment shall have a R•O•M series IV roll-up door.

- The compartment door opening shall be approximately 49.5" wide.

One (1)

Roll-up Door Finish: ROM Painted, Job Color, Single Color

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CZ-40-1010 52

- The roll-up door slats and the door track components shall be painted to match the single tone exterior color.

One (1) Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up

CZ-40-2020

- The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.

One (1) Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)

CZ-41-1120

- A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.

One (1) Door Lock: Roll-up, Manual Lock (Std)

CZ-41-1131

- The roll-up doors shall be manually operated with a key.

One (1) Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall

CZ-41-1314

- One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.

One (1) Drip Pan/Door Guard: Roll-up

CZ-41-2110

- One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.

One (1) Compartment Threshold: Aluminum

CZ-51-1000 52

- Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.

One (1) Compartment Vent: Plastic Louvers

CZ-A5-1140

- Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.

One (1) Compartment Components: Storage [WT]

CZ-A0-0121 52

COMPARTMENT LAYOUT

One (1) Floor: Non-Extended

CZ-91-1120

- The floor of the compartment above the frame rails shall cover the area directly above the frame rails ONLY (non-extended floor).

One (1) Shelf Trac: Aluminum (WA)

CZ-A0-1230

- There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.

One (1) Tray: Stationary 400 lb., 30" D

CZ-A0-1630 52

- There shall be one (1) 400 lbs. slide-out tray(s) approximately 30" deep and as wide as the compartment layout or door opening permits. The tray shall be fabricated from 3/16" 3003 aluminum sheet with a 3" vertical lip and welded corners to form a box type tray. The sliding tracks shall extend 100% of the slide

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length. The tray assembly shall utilize a pneumatic cylinder mounted on underside to hold the tray in both the extended and closed positions.

- One (1)
CZ-A5-9101 Equipment Mounting: Slide Tray, None
- Any equipment mounting on slide tray shall be provided by San Diego County Fire Protection District after delivery.
- One (1)
P1-80-1100 Interior Component Finish: Un-painted
- The above component(s) shall have a smooth un-painted finish.
- One (1)
P2-E0-1037 55 Reflective Stripe: Tray, Front, Scotchlite
- Reflective Scotchlite 2" wide stripe shall be provided on the front face of the tray.
- Four (4)
P2-E1-0200 Stripe Color: Red/White
- This reflective stripe shall be red/white in color.
- One (1)
CZ-A0-1730 52 Tray: Adjustable 400 lb., 30" D
- There shall be one (1) 400 lbs. slide-out tray(s) approximately 30" deep and as wide as the compartment layout or door opening permits. Each tray shall be vertically adjustable. Each tray shall be fabricated from 3/16" 3003 aluminum sheet with a 3" vertical lip and welded corners to form a box type tray. The sliding tracks shall extend 100% of the slide length. The tray assembly shall utilize a pneumatic cylinder mounted on underside to hold the tray in both the extended and closed positions.
- One (1)
CZ-A5-9101 Equipment Mounting: Slide Tray, None
- Any equipment mounting on slide tray shall be provided by San Diego County Fire Protection District after delivery.
- One (1)
P1-80-1100 Interior Component Finish: Un-painted
- The above component(s) shall have a smooth un-painted finish.
- One (1)
P2-E0-1037 55 Reflective Stripe: Tray, Front, Scotchlite
- Reflective Scotchlite 2" wide stripe shall be provided on the front face of the tray.
- Four (4)
P2-E1-0200 Stripe Color: Red/White
- This reflective stripe shall be red/white in color.
- One (1)
CZ-A2-2129 45 Tray: OnScene, Adjustable 1,000 lb., 64" D
- There shall be one (1) OnScene Solutions 81 series aluminum tray base with rating of 1,000 lbs. Slide-out tray(s) base shall be approximately 64" deep and as wide as the compartment layout or door opening permits located above the level of the chassis frame rails and shall be vertically adjustable in height. Slide base shall extend depth specified, less 4". Each slide shall have a cable operated, spring loaded latch complimented by a large hand opening and red pull handle (Pull to Release) which will lock the tray in the closed and full extension positions.
- One (1)
CZ-A3-5028 45 Tray Pan: Smooth Aluminum 3/16", 64" Dp
- Each tray shall be fabricated from 3/16" 3003 aluminum sheet and shall have welded corners to form a box type tray with an internal depth of approximately 3 1/2".
- One (1)
Interior Component Finish: Un-painted

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P1-80-1100

- The above component(s) shall have a smooth un-painted finish.

One (1) Vertical Partition: Tray, Smooth Aluminum, Adjustable

CZ-A4-1310

- Vertical partition(s) shall be provided on slide-out tray base dividing the tray into left and right sides. Each vertical partition shall be horizontally adjustable; mounted on aluminum Shelf Trac on tray floor. The vertical partition(s) shall be 3/16" (.188) 3003H-14 alloy smooth aluminum sheet.

One (1) Equipment Mounting: Slide Tray, None

CZ-A5-9101

- Any equipment mounting on slide tray shall be provided by San Diego County Fire Protection District after delivery.

One (1) Reflective Stripe: Tray, Front/Side, Scotchlite

P2-E0-1035 68

- Reflective Scotchlite 2" wide stripe shall be provided on the front and side faces of the tray.

Sixteen (16) Stripe Color: Red/White

P2-E1-0200

- This reflective stripe shall be red/white in color.

One (1) Tool Board: Accuride, Slide-Out, 24" D, Full Height

CZ-A4-1210

- There shall be one (1) slide-out smooth aluminum vertical tool board(s) approximately 24" deep. Each tool board(s) vertical exterior edge shall have a double 90 degree formed edge to provide an easy grip handle. The top and bottom of tool board(s) shall be provided with Accuride 9300 series slide tracks. Each board shall be rated for a maximum 200 lbs. evenly distributed load. Each tool board shall utilize a pneumatic cylinder to hold the tool board in both the opened and closed positions.

One (1) Tool Board Material, Aluminum, 24" D, Smooth

CZ-A4-1282

- The vertical tool board material shall be 3/16" (.188) 3003H-14 aluminum alloy sheet.

One (1) Interior Component Finish: Un-painted

P1-80-1100

- The above component(s) shall have a smooth un-painted finish.

One (1) Tool Board: Tool Mounting, Front Side

CZ-A4-12DF 20

- Front side.

One (1) Tool Board: Rescue Strut Mounting

CZ-A4-12C3

- The above toolboard(s) shall have mounting for the following struts and/or accessories.

One (1) Tool Board: Tool Mounting, Rear Side

CZ-A4-12DH 20

- Rear side.

One (1) Tool Board: Rescue Strut Mounting

CZ-A4-12C3

- The above toolboard(s) shall have mounting for the following struts and/or accessories.

One (1) Tool Board: Mounting, Horizontally Adjustable

CZ-A4-12H2

- Each tool board shall be horizontally adjustable; mounted on aluminum shelf Trac on compartment floor.

One (1) Reflective Stripe: Tool Board, Scotchlite

P2-E0-1048

- Reflective Scotchlite stripe shall be provided on both sides of the tool board.

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- One (1)
P2-01-2020 Stripe Color: Red
- This reflective stripe shall be red in color.
- One (1)
CZ-A4-1210 Tool Board: Accuride, Slide-Out, 24" D, Full Height
- There shall be one (1) slide-out smooth aluminum vertical tool board(s) approximately 24" deep. Each tool board(s) vertical exterior edge shall have a double 90 degree formed edge to provide an easy grip handle. The top and bottom of tool board(s) shall be provided with Accuride 9300 series slide tracks. Each board shall be rated for a maximum 200 lbs. evenly distributed load. Each tool board shall utilize a pneumatic cylinder to hold the tool board in both the opened and closed positions.
- One (1)
CZ-A4-1282 Tool Board Material, Aluminum, 24" D, Smooth
- The vertical tool board material shall be 3/16" (.188) 3003H-14 aluminum alloy sheet.
- One (1)
P1-80-1100 Interior Component Finish: Un-painted
- The above component(s) shall have a smooth un-painted finish.
- One (1)
CZ-A4-12DF 20 Tool Board: Tool Mounting, Front Side
- Front side.
- One (1)
CZ-A4-12C3 Tool Board: Rescue Strut Mounting
- The above toolboard(s) shall have mounting for the following struts and/or accessories.
- One (1)
CZ-A4-12DH 20 Tool Board: Tool Mounting, Rear Side
- Rear side.
- One (1)
CZ-A4-12C3 Tool Board: Rescue Strut Mounting
- The above toolboard(s) shall have mounting for the following struts and/or accessories.
- One (1)
CZ-A4-12H2 Tool Board: Mounting, Horizontally Adjustable
- Each tool board shall be horizontally adjustable; mounted on aluminum shelf Trac on compartment floor.
- One (1)
P2-E0-1048 Reflective Stripe: Tool Board, Scotchlite
- Reflective Scotchlite stripe shall be provided on both sides of the tool board.
- One (1)
P2-01-2020 Stripe Color: Red
- This reflective stripe shall be red in color.
- One (1)
CZ-A4-1321 Vertical Partition: Bolted
- Partition shall be bolted in position at base and top of partition.
- One (1)
CZ-B0-2482 Compartment Lights: (2) OnScene Access PRO, White LED
- Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.
- One (1)
CZ-L0-1110 Underbody Step: (1) SVI Slide-out DiamondBack Step
- There shall be one (1) underbody slide-out step. Step surface shall be constructed from 9" deep DiamondBack non-slip vented aluminum stair treads mounted to underbody using Deltron plastic slides for corrosion resistance. Step slide shall be securely held in both out and stored position, utilizing a heavy

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duty pneumatic cylinder designed to have an over center location which will assist the step in both extension and retraction. Each step shall be designed to hold 500 lbs.

One (1)
CZ-L0-2140 Underbody Light: OnScene Access Pro, White LED

- One (1) OnScene 10" Access Pro white LED ground light(s) shall be provided below the body. Light(s) shall be switchable but activated automatically when the park brake is set.

One (1)
B1-15-1100 18 Compartment C1 (WA)

CURBSIDE COMPARTMENT - FRONT (C1)

One (1)
CZ-10-1510 40 Width: 49.5" Wall to Wall [45.0" S2S][WA]

The interior useable compartment width shall be approximately 49.5" wide.

One (1)
CZ-30-7000 45 Roll-up Door: ROM Series IV

- This compartment shall have a R•O•M series IV roll-up door.

One (1)
CZ-40-1010 45 Roll-up Door Finish: ROM Painted, Job Color, Single Color

- The compartment door opening shall be approximately 42.5" wide.

One (1)
CZ-40-2020 Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up

- The roll-up door slats and the door track components shall be painted to match the single tone exterior color.

One (1)
CZ-41-1120 Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)

- The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.

One (1)
CZ-41-1131 Door Lock: Roll-up, Manual Lock (Std)

- A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.

One (1)
CZ-41-1314 Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall

- The roll-up doors shall be manually operated with a key.
- One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.

One (1)
CZ-41-2110 Drip Pan/Door Guard: Roll-up

- The drip pan/door guard shall be manually operated with a key.
- One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.

One (1)
CZ-51-1000 45 Compartment Threshold: Aluminum

- Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.

One (1)
CZ-A5-1140 Compartment Vent: Plastic Louvers

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- One (1)
CZ-A0-0112 45

- Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.

Compartment Components: Storage [WA]
- One (1)
CZ-91-1110

COMPARTMENT LAYOUT

Floor: Extended

 - The floor of the compartment above the frame rails shall be extended to the interior edge of the door. The floor shall have a 2" vertical lip and a 1" return to increase strength.
- One (1)
CZ-A0-1230

Shelf Trac: Aluminum (WA)

 - There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.
- Two (2)
CZ-A2-1136 45

Tray: OnScene, Stationary 1,000 lb., Transverse Opposite Side

 - There shall be two (2) OnScene Solutions 83 series aluminum tray base with 70% extension, and rating of 1,000 lbs. Slide-out tray(s) base shall be approximately 94" deep; capable of extending out either side of the body located above the level of the chassis frame rails. (Specified in opposite side compartment.)
- One (1)
CZ-B0-2342

Compartment Lights: (2) OnScene Access PRO, White LED

 - Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.
- One (1)
CZ-C0-1105

Load Center: 120/240 VAC (Location Only)

 - 120/240 VAC load center location.
- One (1)
R2-BC-1100

Interior Outlet: 120 VAC, Compartment

 - There shall be one (1) 120 VAC outlet(s) located in compartment.
- One (1)
R2-D0-1210

Straight-Blade: 120V/20A, Interior

 - The outlet receptacle(s) shall be 20 amp, straight-blade (NEMA 5-20R).
- One (1)
R2-D1-2421

Outlet Powered By: Generator and Shore Power

 - Outlet(s) shall be powered by both the on-board generator and shore power system through a relay system.
- One (1)
R2-D3-0110

VAC Outlet Location: Forward Wall, Upper Left

 - The outlet shall be located on forward wall, upper left area.
- One (1)
CZ-L0-1110

Underbody Step: (1) SVI Slide-out DiamondBack Step

 - There shall be one (1) underbody slide-out step. Step surface shall be constructed from 9" deep DiamondBack non-slip vented aluminum stair treads mounted to underbody using Delron plastic slides for corrosion resistance. Step slide shall be securely held in both out and stored position, utilizing a heavy duty pneumatic cylinder designed to have an over center location which will assist the step in both extension and retraction. Each step shall be designed to hold 500 lbs.
- One (1)
CZ-L0-2140

Underbody Light: OnScene Access Pro, White LED

 - One (1) OnScene 10" Access Pro white LED ground light(s) shall be provided below the body. Light(s) shall be switchable but activated automatically when the park brake is set.
- One (1)

Compartment C2 (WA)

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CURBSIDE COMPARTMENT - AHEAD OF REAR WHEEL (C2)

One (1) Width: 49.5" Wall to Wall [45.0" S2S][WA]

CZ-10-1510 40

The interior useable compartment width shall be approximately 49.5" wide.

One (1) Roll-up Door: ROM Series IV

CZ-30-7000 45

- This compartment shall have a R•O•M series IV roll-up door.
- The compartment door opening shall be approximately 42.5" wide.

One (1) Roll-up Door Finish: ROM Painted, Job Color, Single Color

CZ-40-1010 45

- The roll-up door slats and the door track components shall be painted to match the single tone exterior color.

One (1) Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up

CZ-40-2020

- The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.

One (1) Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)

CZ-41-1120

- A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.

One (1) Door Lock: Roll-up, Manual Lock (Std)

CZ-41-1131

- The roll-up doors shall be manually operated with a key.

One (1) Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall

CZ-41-1314

- One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.

One (1) Drip Pan/Door Guard: Roll-up

CZ-41-2110

- One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.

One (1) Compartment Threshold: Aluminum

CZ-51-1000 45

- Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.

One (1) Compartment Vent: Plastic Louvers

CZ-A5-1140

- Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.

One (1) Compartment Components: Storage [WA]

CZ-A0-0112 45

COMPARTMENT LAYOUT

One (1) Floor: Extended

CZ-91-1110

- The floor of the compartment above the frame rails shall be extended to the interior edge of the door. The floor shall have a 2" vertical lip and a 1" return to increase strength.

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- One (1)
CZ-A0-1230 Shelf Trac: Aluminum (WA)
- There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.
- One (1)
CZ-A2-2120 45 Tray: OnScene, Adjustable 1,000 lb., 47" D, 1/2 Compt. Depth
- There shall be one (1) OnScene Solutions 81 series aluminum tray base with rating of 1,000 lbs. Slide-out tray(s) base shall be approximately 47" deep and as wide as the compartment layout or door opening permits located above the body subframe and shall be vertically adjustable in height. Slide base shall extend depth specified, less 4". Each slide shall have a cable operated, spring loaded latch complimented by a large hand opening and red pull handle (Pull to Release) which will lock the tray in the closed and full extension positions.
- One (1)
CZ-A3-5018 45 Tray Pan: Smooth Aluminum 3/16", 47" Dp
- Each tray shall be fabricated from 3/16" 3003 aluminum sheet and shall have welded corners to form a box type tray with an internal depth of approximately 3 1/2".
- One (1)
P1-80-1100 Interior Component Finish: Un-painted
- The above component(s) shall have a smooth un-painted finish.
- One (1)
CZ-A5-9101 Equipment Mounting: Slide Tray, None
- Any equipment mounting on slide tray shall be provided by San Diego County Fire Protection District after delivery.
- One (1)
P2-E0-1035 65 Reflective Stripe: Tray, Front/Side, Scotchlite
- Reflective Scotchlite 2" wide stripe shall be provided on the front and side faces of the tray.
- Twelve (12)
P2-E1-0200 Stripe Color: Red/White
- This reflective stripe shall be red/white in color.
- One (1)
CZ-A2-3148 41 Tray: OnScene, Out/Down, Stationary 250 lb., 45" D, 1/2 Compt. Depth
- There shall be one (1) OnScene Solutions 84 series slide-out, drop-down style aluminum tray base with 90% extension, and rating of 250 lbs. Slide-out tray(s) base shall be approximately 45" deep and as wide as the compartment layout or door opening permits located above the level of the chassis frame rails. Each slide shall have a cable operated, spring loaded latch complimented by a large hand opening and red pull handle (Pull to Release) which will hold the tray in the closed position.
- One (1)
CZ-A3-5016 41 Tray Pan: Smooth Aluminum 3/16", 45" Dp
- Each tray shall be fabricated from 3/16" 3003 aluminum sheet and shall have welded corners to form a box type tray with an internal depth of approximately 3 1/2".
- One (1)
P1-80-1100 Interior Component Finish: Un-painted
- The above component(s) shall have a smooth un-painted finish.
- One (1)
P2-E0-1035 Reflective Stripe: Tray, Front/Side, Scotchlite
- Reflective Scotchlite 2" wide stripe shall be provided on the front and side faces of the tray.
- One (1)
Stripe Color: Red/White

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P2-E1-0200

- This reflective stripe shall be red/white in color.
Storage Module: Air Bags, 7 Plus
- There shall be one (1) storage module(s) for air bags. The module shall be fabricated from 1/8" (.125) 3003H-14 aluminum alloy sheet. Circular notches shall be provided along the front edge to ease the access to the air bags. Each bay shall be sized to hold the air bag and a matching piece of 1/2" plywood (plywood not provided).

Module shall be designed to store the following air bags;

- **Module to include control kit**
Four (4) OnScene Solutions Velcro Cargo Straps 62-78"
CZ-A4-6115
- There shall be four (4) OnScene Solutions Velcro cargo straps provided to secure the stored equipment.
Compartment Lights: (2) OnScene Access PRO, White LED
One (1) CZ-B0-2342
- Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.
12 VDC Fuse Block(s): Blue Sea, 6 Position
One (1) N0-21-1100
- There shall be one (1) Blue Sea Systems ST series blade type fuse block(s) with screw type terminals for both positive and negative buss with cover provided for distribution of up to six (6) 30 amp, 12 VDC circuits.
12 VDC Fuse Block: 60 Amp Circuit
One (1) N0-21-110B
- The fuse block shall be protected by a 60 amp maxi fuse located at the source.
12 VDC Fuse Block: Battery Direct Circuit
One (1) N0-21-111A
- Fuse block shall be wired battery direct.
12 VDC Fuse Block: Location, Top Left Interior
One (1) N0-21-112A
- Fuse block shall be located in the top left interior corner.
Underbody Step: (1) SVI Slide-out DiamondBack Step
One (1) CZ-L0-1110
- There shall be one (1) underbody slide-out step. Step surface shall be constructed from 9" deep DiamondBack non-slip vented aluminum stair treads mounted to underbody using Delron plastic slides for corrosion resistance. Step slide shall be securely held in both out and stored position, utilizing a heavy duty pneumatic cylinder designed to have an over center location which will assist the step in both extension and retraction. Each step shall be designed to hold 500 lbs.
Underbody Light: OnScene Access Pro, White LED
One (1) CZ-L0-2140
- One (1) OnScene 10" Access Pro white LED ground light(s) shall be provided below the body. Light(s) shall be switchable but activated automatically when the park brake is set.
- Compartment C3 (WA)
One (1) B3-15-1320
- CURBSIDE COMPARTMENT - ABOVE REAR WHEEL (C3)**
Width: 59.5" Wall to Wall [55.0" S2S][WA]
One (1) CZ-10-1710 50
- The interior useable compartment width shall be approximately 59.5" wide.

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- One (1)
CZ-30-7000 55 Roll-up Door: ROM Series IV
- This compartment shall have a R•O•M series IV roll-up door.
- One (1)
CZ-40-1010 55 Roll-up Door Finish: ROM Painted, Job Color, Single Color
- The compartment door opening shall be approximately 52.5" wide.
 - The roll-up door slats and the door track components shall be painted to match the single tone exterior color.
- One (1)
CZ-40-2020 Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up
- The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.
- One (1)
CZ-41-1120 Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)
- A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.
- One (1)
CZ-41-1131 Door Lock: Roll-up, Manual Lock (Std)
- The roll-up doors shall be manually operated with a key.
- One (1)
CZ-41-1314 Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall
- One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.
- One (1)
CZ-41-2110 Drip Pan/Door Guard: Roll-up
- One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.
- One (1)
CZ-51-1000 55 Compartment Threshold: Aluminum
- Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.
- One (1)
CZ-A5-1140 Compartment Vent: Plastic Louvers
- Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.
- One (1)
CZ-A0-0112 54 Compartment Components: Storage [WA]
- COMPARTMENT LAYOUT**
- One (1)
CZ-91-1110 Floor: Extended
- The floor of the compartment above the frame rails shall be extended to the interior edge of the door. The floor shall have a 2" vertical lip and a 1" return to increase strength.
- One (1)
CZ-A0-1230 Shelf Trac: Aluminum (WA)
- There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.

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- Two (2) Tray: OnScene, Stationary 1,000 lb., Transverse Opposite Side
CZ-A2-1136 55
- There shall be two (2) OnScene Solutions 83 series aluminum tray base with 70% extension, and rating of 1,000 lbs. Slide-out tray(s) base shall be approximately 94" deep; capable of extending out either side of the body located above the level of the chassis frame rails. (Specified in opposite side compartment.)
- One (1) Compartment Lights: (2) OnScene Access PRO, White LED
CZ-B0-2442
- Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.
- One (1) Compartment C4 (WT) 30"Dp
B5-27-1100 20
- CURBSIDE COMPARTMENT - REAR (C4)**
- One (1) Width: 56.5 Wall to Wall [52.0" S2S][WT]
CZ-10-1615 20
- The interior useable compartment width shall be approximately 56.5" wide.
- One (1) Roll-up Door: ROM Series IV
CZ-30-7000 52
- This compartment shall have a R•O•M series IV roll-up door.
- One (1) The compartment door opening shall be approximately 49.5" wide.
CZ-40-1010 52
- Roll-up Door Finish: ROM Painted, Job Color, Single Color
- The roll-up door slats and the door track components shall be painted to match the single tone exterior color.
- One (1) Door Ajar Switch: Mechanical Type, Harsh Environment - Roll-Up
CZ-40-2020
- The door shall be equipped with a CPI harsh environment mechanical type door ajar switch located inside compartment interior door track to activate compartment lighting and door ajar signal in cab when door is opened.
- One (1) Door Lock: Amdor/ROM, Keyed, 1250 (SVI Std)
CZ-41-1120
- A keyed 1250 cylinder lock shall be provided on bottom rail of the roll-up door.
- One (1) Door Lock: Roll-up, Manual Lock (Std)
CZ-41-1131
- The roll-up doors shall be manually operated with a key.
- One (1) Door Pull Strap: Elastic, Roll-up, Footman Loop, Mid Side Wall
CZ-41-1314
- One (1) 1" wide elastic nylon strap shall be provided to assist in closing the compartment door. The strap shall be fastened to the lower left inside door sill with a nickel plated Footman loop secured to back of door. The strap shall extend from door to a nickel plated Footman loop secured to wall or vertical slot of Shelf-Trac on left side of the door opening.
- One (1) Drip Pan/Door Guard: Roll-up
CZ-41-2110
- One (1) aluminum drip pan/door guard shall be provided below door roll area. Drip pan/door guard shall have thumb nuts making it easily removable without tools with a maintenance-free, un-painted finish. A plastic drain line shall be provided on each end of the drip pan to lower door threshold.
- One (1) Compartment Threshold: Aluminum
CZ-51-1000 52
- Compartment threshold protection shall be provided on the bottom edge of the compartment door sill. The threshold protection shall be an extruded aluminum shape with an un-painted anodized finish.
- One (1) Compartment Vent: Plastic Louvers

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CZ-A5-1140

- Two (2) 3-1/2" x 3-1/2" black plastic louvered vents shall be provided in the lower compartment.

One (1)

Compartment Components: Storage [WT]

CZ-A0-0121 52

COMPARTMENT LAYOUT

One (1)

Floor: Non-Extended

CZ-91-1120

- The floor of the compartment above the frame rails shall cover the area directly above the frame rails ONLY (non-extended floor).

One (1)

Shelf Trac: Aluminum (WA)

CZ-A0-1230

- There shall be vertically mounted aluminum Shelf-Trac welded to compartment walls for specified component installation. Shelf-Trac extrusion shall have side extruded channels for use in mounting or securing special ancillary items, without need for drilling into body.

Two (2)

Shelf: Adjustable, 30" D

CZ-A0-1315 52

- There shall be two (2) adjustable shelf/shelves approximately 30" deep. Each shelf shall be fabricated from 3/16" 3003 aluminum sheet with a 2" vertical flange along the front and rear edges.

Two (2)

Equipment Mounting: Adjustable Shelf, None

CZ-A5-9001

- Any equipment mounting on adjustable shelf shall be provided by San Diego County Fire Protection District after delivery.

Two (2)

Interior Component Finish: Un-painted

P1-80-1100

- The above component(s) shall have a smooth un-painted finish.

One (1)

Tool Board: Accuride, Slide-Out, 24" D, Full Height

CZ-A4-1210

- There shall be one (1) slide-out smooth aluminum vertical tool board(s) approximately 24" deep. Each tool board(s) vertical exterior edge shall have a double 90 degree formed edge to provide an easy grip handle. The top and bottom of tool board(s) shall be provided with Accuride 9300 series slide tracks. Each board shall be rated for a maximum 200 lbs. evenly distributed load. Each tool board shall utilize a pneumatic cylinder to hold the tool board in both the opened and closed positions.

One (1)

Tool Board Material, Aluminum, 24" D, Smooth

CZ-A4-1282

- The vertical tool board material shall be 3/16" (.188) 3003H-14 aluminum alloy sheet.

One (1)

Interior Component Finish: Un-painted

P1-80-1100

- The above component(s) shall have a smooth un-painted finish.

One (1)

Tool Board: Tool Mounting, Front Side

CZ-A4-12DF 20

- Front side.

One (1)

Tool Board: Hand Tool Mounting

CZ-A4-12C1

- The above toolboard shall have mounting for the following hand tools.

One (1)

Tool Board: Tool Mounting, Rear Side

CZ-A4-12DH 20

- Rear side.

One (1)

Tool Board: Hand Tool Mounting

CZ-A4-12C1

- The above toolboard shall have mounting for the following hand tools.

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- One (1)
CZ-A4-12H2 Tool Board: Mounting, Horizontally Adjustable
 - Each tool board shall be horizontally adjustable; mounted on aluminum shelf Trac on compartment floor.
- One (1)
P2-E0-1048 Reflective Stripe: Tool Board, Scotchlite
 - Reflective Scotchlite stripe shall be provided on both sides of the tool board.
- One (1)
P2-01-2020 Stripe Color: Red
 - This reflective stripe shall be red in color.
- One (1)
CZ-A4-1210 Tool Board: Accuride, Slide-Out, 24" D, Full Height
 - There shall be one (1) slide-out smooth aluminum vertical tool board(s) approximately 24" deep. Each tool board(s) vertical exterior edge shall have a double 90 degree formed edge to provide an easy grip handle. The top and bottom of tool board(s) shall be provided with Accuride 9300 series slide tracks. Each board shall be rated for a maximum 200 lbs. evenly distributed load. Each tool board shall utilize a pneumatic cylinder to hold the tool board in both the opened and closed positions.
- One (1)
CZ-A4-1282 Tool Board Material, Aluminum, 24" D, Smooth
 - The vertical tool board material shall be 3/16" (.188) 3003H-14 aluminum alloy sheet.
- One (1)
P1-80-1100 Interior Component Finish: Un-painted
 - The above component(s) shall have a smooth un-painted finish.
- One (1)
CZ-A4-12DF 20 Tool Board: Tool Mounting, Front Side
 - Front side.
- One (1)
CZ-A4-12C1 Tool Board: Hand Tool Mounting
 - The above toolboard shall have mounting for the following hand tools.
- One (1)
CZ-A4-12DH 20 Tool Board: Tool Mounting, Rear Side
 - Rear side.
- One (1)
CZ-A4-12C1 Tool Board: Hand Tool Mounting
 - The above toolboard shall have mounting for the following hand tools.
- One (1)
CZ-A4-12H2 Tool Board: Mounting, Horizontally Adjustable
 - Each tool board shall be horizontally adjustable; mounted on aluminum shelf Trac on compartment floor.
- One (1)
P2-E0-1048 Reflective Stripe: Tool Board, Scotchlite
 - Reflective Scotchlite stripe shall be provided on both sides of the tool board.
- One (1)
P2-01-2020 Stripe Color: Red
 - This reflective stripe shall be red in color.
- One (1)
CZ-A4-1321 Vertical Partition: Bolted
 - Partition shall be bolted in position at base and top of partition.
- One (1)
CZ-C0-0110 22 Reel Mounting: Reel #1

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- One (1)
CZ-C0-3520 Reel: 120 VAC, 200' of 10/3 [TR][ML][ECR1618-17-18]{22.75" W}
- One (1) Hannay ECR1618-17-18 electric cable reel(s) capable of storing 200' of 10/3 electric cable. Reel(s) shall be designed to hold 110% of the capacity of cord length, with fully enclosed 45 amp, three (3) conductor collector rings. Reel(s) shall be mounted to channel structure that allows for side-to-side adjustment of reel position.
 - Power rewind control(s) shall be in a position where the operator can observe the rewinding operation and not be more than 72 in. (1830 mm) above the operator's standing position, and shall be marked with a label indicating its function and shall be guarded to prevent accidental operation.
 - A label shall be provided in a visible location adjacent to reel with following information: Current rating, Current type, Phase, Voltage, and Total cord length.
- One (1)
CZ-C0-3B32 Electrical Cable: Black, 200' of 10/3
- The cable reel shall equipped with 200' of 10/3 SEOW black cable, a molded plastic ball clamp, and a single heavy duty L5-30 twist-lock female plug at the end.
- One (1)
CZ-C0-3C10 Power Distribution Box: Akron Brass EJBX, Gray
- One (1) Akron model EJBX series, cast aluminum electrical power distribution box with gray powder coat painted finish shall be provided. The power distribution box shall meet all requirements described in NFPA 1900. The power distribution box shall include the following outlets mounted on a backlit face plate;
- One (1)
CZ-C0-3C11 Power Distribution Box: 12" Pigtail with L5-30 Plug
- A 12" pigtail that terminates in an L5-30 configuration to match the cable on the cord reel. The outlet configuration shall include:
- One (1)
CZ-C0-3C2D 120 VAC, 5-20 Duplex Straight Blade [Opt #5]
- One (1) 120 VAC, 5-20 duplex straight-blade receptacle
- One (1)
CZ-C0-3C2D 120 VAC, 5-20 Duplex Straight Blade [Opt #5]
- One (1) 120 VAC, 5-20 duplex straight-blade receptacle
- One (1)
CZ-C0-3C2F 120 VAC, L5-15 Dual Twist Lock [Opt #7]
- One (1) 120 VAC, L5-15 dual twist lock receptacles
- One (1)
CZ-C0-3C2F 120 VAC, L5-15 Dual Twist Lock [Opt #7]
- One (1) 120 VAC, L5-15 dual twist lock receptacles
- One (1)
CZ-C0-3C2V Power Distribution Box: Mounting, EJB-VMT, Vertical Mount, Treadplate
- One (1) Akron Brass model EJB-VMT aluminum treadplate vertical mounting bracket for specified power distribution box shall be provided and mounted in compartment per San Diego County Fire Protection District.
- One (1)
CZ-FA-1110 Reel Fairlead: Stationary Mount
- The fairlead roller shall be mounted directly to the reel.
- One (1)
CZ-B0-2482 Compartment Lights: (2) OnScene Access PRO, White LED
- Two (2) OnScene Access PRO white LED, full height compartment lights, vertically mounted.

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One (1)
R2-BF-1100 Interior Outlet: 120 VAC, 4' Outlet Strip

- There shall be one (1) approximate 4' long 120 VAC outlet strip(s) with straight blade household type outlets provided.

One (1)
R2-D1-2421 Outlet Powered By: Generator and Shore Power

- Outlet(s) shall be powered by both the on-board generator and shore power system through a relay system.

One (1)
R2-D3-0240 VAC Outlet Location: Rearward Wall, Upper Center Right

- The outlet shall be located on rearward wall, upper center right area (above frame level).

One (1)
CZ-L0-1110 Underbody Step: (1) SVI Slide-out DiamondBack Step

- There shall be one (1) underbody slide-out step. Step surface shall be constructed from 9" deep DiamondBack non-slip vented aluminum stair treads mounted to underbody using Delron plastic slides for corrosion resistance. Step slide shall be securely held in both out and stored position, utilizing a heavy duty pneumatic cylinder designed to have an over center location which will assist the step in both extension and retraction. Each step shall be designed to hold 500 lbs.

One (1)
CZ-L0-2140 Underbody Light: OnScene Access Pro, White LED

- One (1) OnScene 10" Access Pro white LED ground light(s) shall be provided below the body. Light(s) shall be switchable but activated automatically when the park brake is set.

One (1)
C1-10-1210 Roof Access Stairway ILO Compartment

ROOF ACCESS STAIRWAY

The rear of the body shall be provided with a recessed center stairway in lieu of a compartment.
Additional Body Options, 18'

One (1)
E0-00-0200

BODY OPTIONS AND UPGRADES

Eighteen (18)
E1-10-1110 Plastic Tile: Dri-Dek 1/2", Compt. Floors, Shelving, and Trays (LR, WA)

PLASTIC FLOOR AND SHELF TILE

Dri-Dek 12" x 12" x 9/16", self-draining plastic inter-locking material shall be cut to size and cover all compartment floors, shelves, and trays.

Eighteen (18)
E1-10-1210 Plastic Tile Color: Dri-Dek, Black

- The plastic floor tile shall be black.

Eighteen (18)
E1-10-1212 Plastic Tile Color: Dri-Dek, Edge Trim, Black

- The plastic edge trim shall be black.

One (1)
E9-10-1100 Receiver: Rope Anchor Point and/or Portable Winch

ROPE ANCHOR OR PORTABLE WINCH RECEIVERS

The completed unit shall have an integrated receiver or anchor system for use with removable rope anchor point and/or a portable electric winch, when specified.

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Receivers or anchors installed at any location on the apparatus for use as removable winch anchors shall be designed and affixed to provide at least a 2.0 to 1 straight line pull no-yield safety factor over the load rating of the removable winch.

Receivers or anchors installed at any location on the apparatus for use with rope operations shall be designed and affixed to the apparatus to provide at least a 9,000 lbf (40,000 N) no-yield condition with a straight line pull.

A safety sign FAMA28 shall be located on or near each receiver or anchor stating the maximum straight line pull rating.

Side receiver(s) (if specified) shall have the following load rating:

	<u>STRAIGHT PULL</u>	<u>SAFE</u> <u>TY</u> <u>FACT</u> <u>OR</u>
Rope Tie Off :	600 Lbs.	15:1
Winch:	5,000 Lbs.	2:1

Front and/or rear receiver(s) (if specified) shall have the following load rating:

	<u>STRAIGHT PULL</u>	<u>SAFE</u> <u>TY</u> <u>FACT</u> <u>OR</u>
Rope Tie Off :	600 Lbs.	15:1
Winch:	Winch Load Rating (9,000 Lbs. Max)	2:1

The following items shall be provided to accomplish rope rescue and/or portable winch operation;
Receiver: Rope Anchor Point, Roof Mount

Four (4)
E9-10-1115

ROOF LOCATIONS

- Four (4) rope anchor point receiver(s) shall be provided and located on outboard edges of body roof area. The receiver(s) shall be manufactured using 2" x 2" x 1/4" wall steel trailer style receiver tube welded to 6" x 4" x 1/2" thick steel plate base and bolted to body structure. Anchor point will add 3-1/4" to body height and does not extend beyond body (without anchor point). The receiver assembly shall have a black

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powder coat paint finish. Each receiver location shall have a stainless steel scuff plate to protect paint on upper body. Reinforcements to body shall be added as necessary to increase the structural integrity and to provide a working weight rating of 600 lbs., with a 9,000 lbs. maximum load based upon using a 15:1 safety factor to match typical 1/2" rescue rope ratings.

Each receiver location shall have a stainless steel scuff plate that extends a minimum of 12" down to protect paint on upper body

Four (4)
E9-10-1122 Rope Anchor: Removable, 3/4" Steel, Upper Body

ACCESSORIES

- Four (4) removable rope anchor(s) shall be provided for use with upper body specified receivers. Each rope anchor shall be fabricated from 3/4" steel, 2" high x 11.5" long with a 3" OD/2" ID eyelet. Eyelet end shall have radiused edge to prevent damage to rope or carabineer. Each rope anchor shall have a black powder coat paint finish.
- A steel 5/8" x 3" hitch pin shall lock the rope anchor into the receiver tube.
Rope Anchor: Removable, 3/4" Steel, Lower Body

Two (2)
E9-10-1120

ACCESSORIES

- Two (2) removable rope anchor(s) shall be provided for use with lower body specified receivers. Each rope anchor shall be fabricated from 3/4" steel, 2" high x 11.5" long with a 3" OD/2" ID eyelet. Eyelet end shall have radiused edge to prevent damage to rope or carabineer. Each rope anchor shall have a black powder coat paint finish.
- An aluminum mounting bracket shall be provided to store rope anchor(s) inside a body compartment as close to receiver location as possible.
Portable Winch: Not Provided

One (1)
E9-10-2105

A portable winch shall not be provided with completed unit.

One (1)
E9-10-3230 Receiver: Rope Anchor and/or Portable Winch, Streetside, Forward Lower

STREETSIDE LOWER BODY

- There shall be one (1) 2" x 2" x 1/4" wall steel receiver tube(s) with black hammertone powder coat paint finish located on streetside below body ahead of rear wheels for use with removable rope anchor and/or a portable electric winch (when specified).
- A steel 5/8" x 3" hitch pin shall be provided with each receiver tube.
Receiver: Rubber Cover

One (1)
E9-10-A210

- The receiver(s) shall have one (1) rubber cover(s) provided.
Receiver: Rope Anchor and/or Portable Winch, Curbside, Forward Lower

One (1)
E9-10-3330

CURBSIDE LOWER BODY

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- There shall be one (1) 2" x 2" x 1/4" wall steel receiver tube(s) with black hammertone powder coat paint finish located on the curbside below body ahead of rear wheels for use with removable rope anchor point and/or a portable electric winch (when specified).

One (1)
E9-10-A210

- A steel 5/8" x 3" hitch pin shall be provided with each receiver tube.
Receiver: Rubber Cover

One (1)
EB-10-1300

- The receiver(s) shall have one (1) rubber cover(s) provided.
Lower Rub Rail: OSS, 18' Body

LOWER SIDE BODY PROTECTION - RUB RAIL

OnScene Solutions rub rails shall be provided below the compartment door openings on both the streetside and curbside.

The rub rail shall be fabricated from 6063 extruded aluminum, measuring approximately 2-3/4" high x 1-3/8" thick with tapered aluminum end caps. The rub rail shall be bolted to the body using stainless steel bolts and 1-1/2" diameter x 5/8" thick rubber mount isolators to prevent damage to the body.

The rails shall incorporate LED clearance marker lighting recessed into the rail fascia to avoid damage to the light in case of impact. The rub rail shall have an accessory mounting track integrated into the backside of the rail to allow mounting of accessories such as ground lighting.

One (1)
P2-F0-1300 18

Reflective Stripe: Rubrail, DG, White

3M™ Diamond Grade™ striping shall be provided in the rub rail. The striping shall be white in color.

One (1)
EC-10-1110

Gravel Guards: Stainless, Front Lower Corners

FRONT GRAVEL GUARDS

Gravel guards shall be provided on front lower body corners. Guards shall be 12" high, extend from behind cab or step and wrap around to the front compartment door opening fabricated from 20 gauge brushed stainless steel.

One (1)
N0-10-2100 18

12 VDC System: Commercial, (WA)

LOW VOLTAGE ELECTRICAL SYSTEM- 12 VDC

General

Any low voltage electrical systems or warning devices installed on the fire apparatus shall be appropriate for the mounting location and intended electrical load.

Where wire passes through sheet metal, grommets shall be used to protect wire and wire looms. Electrical connections shall be with double crimp water-tight heat shrink connectors.

All 12 VDC wiring running from front to back of vehicle body shall be run in full length electrical wiring raceway down each side of body.

Wiring

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All electrical circuit feeder wiring supplied and installed by the fire apparatus manufacturer shall meet the requirements of NFPA Chapter 10.

The circuit feeder wire shall be stranded copper or copper alloy conductors of a gauge rated to carry 125% of the maximum current for which the circuit is protected. Voltage drops in all wiring from the power source to the using device shall not exceed 10%. The use of star washers for circuit ground connections shall not be permitted.

All circuits shall otherwise be wired in conformance with SAE J1292, *Automobile, Truck, Truck-Tractor, Trailer, and Motor Coach Wiring*.

Wiring and Wire Harness Construction

All insulated wire and cable shall conform to SAE J1127, *Low Voltage Battery Cable*, or SAE J1128, *Low Voltage Primary Cable*, type SXL, GXL, or TXL.

All conductors shall be constructed in accordance with SAE J1127 or SAE J1128, except where good engineering practice dictates special strand construction. Conductor materials and stranding, other than copper, shall be permitted if all applicable requirements for physical, electrical, and environmental conditions are met as dictated by the end application. Physical and dimensional values of conductor insulation shall be in conformance with the requirements of SAE J1127 or SAE J1128, except where good engineering practice dictates special conductor insulation. The overall covering of conductors shall be moisture-resistant loom or braid that has a minimum continuous rating of 194°F (90°C) except where good engineering practice dictates special consideration for loom installations exposed to higher temperatures. The overall covering of jacketed cables shall be moisture resistant and have a minimum continuous temperature rating of 194°F (90°C), except where good engineering practice dictates special consideration for cable installations exposed to higher temperatures.

All wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection. The wiring connections and terminations shall be installed in accordance with the device manufacturer's instructions. All ungrounded electrical terminals shall have protective covers or be in enclosures. Wire nut, insulation displacement, and insulation piercing connections shall not be used.

Wiring shall be restrained to prevent damage caused by chafing or ice buildup and protected against heat, liquid contaminants, or other environmental factors.

Wiring shall be uniquely identified at least every 2 ft (0.6 m) by color coding or permanent marking with a circuit function code. The identification shall reference a wiring diagram.

Circuits shall be provided with properly rated low voltage over current protective devices. Such devices shall be readily accessible and protected against heat in excess of the over current device's design range, mechanical damage, and water spray. Circuit protection shall be accomplished by utilizing fuses, circuit breakers, fusible links, or solid state equivalent devices.

If a mechanical-type device is used, it shall conform to one of the following SAE standards:

- 24) SAE J156, *Fusible Links*
- 25) SAE J553, *Circuit Breakers*

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- 26) SAE J554, *Electric Fuses (Cartridge Type)*
- 27) SAE J1888, *High Current Time Lag Electric Fuses*
- 28) SAE J2077, *Miniature Blade Type Electrical Fuses*

Switches, relays, terminals, and connectors shall have a direct current (dc) rating of 125% of maximum current for which the circuit is protected.

Power Supply

A 12 V or greater electrical alternator shall be provided. The alternator shall have a minimum output at idle to meet the minimum continuous electrical load of the vehicle, at 200°F (93°C) ambient temperature within the engine compartment, and shall be provided with full automatic regulation.

Minimum Continuous Electrical Load

The minimum continuous electrical load shall consist of the total amperage required to simultaneously operate the following in a stationary mode during emergency operations:

- 1) The propulsion engine and transmission
- 2) All legally required clearance and marker lights, headlights, and other electrical devices except windshield wipers and four-way hazard flashers
- 3) The radio(s) at a duty cycle of 10 percent transmit and 90% receive (for calculation and testing purposes, a default value of 5 A continuous)
- 4) The lighting necessary to produce 2 fc (20 lx) of illumination on all walking surfaces on the apparatus and on the ground at all egress points onto and off the apparatus, 5 fc (50 lx) of illumination on all control and instrument panels, and 50 percent of the total compartment lighting loads
- 5) The minimum optical warning system, where the apparatus is blocking the right-of way
- 6) The continuous electrical current required to simultaneously operate any fire pumps, aerial devices, and hydraulic pumps
- 7) Other warning devices and electrical loads defined by the purchaser as critical to the mission of the apparatus

If the apparatus is equipped to tow a trailer, an additional 45 A shall be added to the minimum continuous electrical load to provide electrical power for the federally required clearance and marker lighting and the optical warning devices mounted on the trailer.

The condition of the low voltage electrical system shall be monitored by a warning system that provides both an audible and a visual signal to persons on, in, or near the apparatus of an impending electrical system failure caused by the excessive discharge of the battery set.

The charge status of the battery shall be determined either by direct measurement of the battery charge or indirectly by monitoring the electrical system voltage.

If electrical system voltage is monitored, the alarm shall sound if the system voltage at the battery or at the master load disconnect switch drops below 11.8 V for 12 V nominal systems, 23.6 V for 24 V nominal systems, or 35.4 V for 42 V nominal systems for more than 120 seconds.

A voltmeter shall be mounted on the driver's instrument panel to allow direct observation of the system voltage.

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Electromagnetic Interference

Electromagnetic interference suppression shall be provided, as required, to satisfy the radiation limits specified in SAE J551/1, *Performance Levels and Methods of Measurement of Electromagnetic Compatibility of Vehicles, Boats (up to 15 m), and Machines (16.6 Hz to 18 GHz)*.

Wiring Diagram

A complete electrical wiring schematic of actual system shall be provided with finished apparatus. Similar or generic type electrical schematics shall NOT BE ACCEPTABLE.

Low Voltage Electrical System Performance Test

A low voltage electrical system test certification shall be provided with delivered apparatus.

12 VDC Control Center: Weldon Multiplex, Commercial, (PM)(WA)(WS)

One (1)
N0-11-2110

12 VOLT MULTIPLEX CONTROL CENTER

The apparatus shall be equipped with a Weldon V-MUX multiplexed 12 volt electrical system that will provide complete diagnostic capability, No Exception. The system shall have the capability of delivering multiple signals via a CAN bus, utilizing specifications set forth by SAE J1939. The system shall be node based to maximize stability so that failure of one node does not affect the operation of the other nodes. The system shall use shielded twisted-pair wire for transmission of system function signals. The shielded wire shall provide protection against EMI and RFI noise interruptions.

The multiplex system shall be responsible for providing power management functions as well as load shedding. The warning light system shall be controlled by the multiplex system. The system shall be capable of displaying text and/or graphic messages on a display module. The system shall be based on solid-state technology and shall include self-contained diagnostic indicators.

Outputs:

The outputs shall perform all the following items without added modules to perform any of the tasks;

1. Load Shedding: The system shall have the capability to load shed with 8 levels any output. This means you can specify which outputs (barring NFPA restrictions) you would like load shed. Level 1 12.9v, Level 2 12.5V, Level 3 - 12.1V, Level 4 - 11.7V, Level 5 11.3V, Level 6 10.9V, Level 7 10.5, Level 8 10.1. Unlike conventional load shedding devices you can assign a level to any or all outputs.
2. Load Sequencing: The system shall be able to sequence from 0 8 levels any output. With 0 being no delay and 1 being a 1 second delay, 2 being a 2 second delay and so on. Sequencing reduces the amount of voltage spikes and drops on your vehicle, and can help limit damage to your charging system.
3. Output Device: The system shall have solid-state output devices. Each solid-state output shall be a MOS-FET (Metal Oxide Semiconductor - Field Effect Transistors); MOS-FETs are solid-state devices with no moving parts to wear out. A typical relay when loaded to spec has a life of 100,000 cycles. The life of a FET is more than *100 times* that of a relay.

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4. Flashing Outputs: The system shall be able to flash any output in either A or B phase, and logic is used to shut down needed outputs in park, or any one of several combined interlocks. The flash rate can be selected at either 80, 160 or 200 FPM. This means any light can be specified with a multiplex truck with no need to add flashers. Flashing outputs can also be used to warn of problems or other unique idea you may come up with.
5. PWM: The modules shall have the ability to PWM at some outputs so that a headlight PWM module is not needed.
6. Diagnostics: An output should be able to detect either a short or open circuit. The system should be able report in “real time” a text based message that points the maintenance person to a specific output.

Inputs:

1. The inputs shall have the ability to switch by a ground or vbatt signal.
2. The inputs shall be filtered for noise suppression via hardware and software so that RF or dirty power will not trick an input into changing its status.

Auto-Throttle:

The multiplex system shall be able to perform automatic high idle via a network gateway or by using an existing output on a module to provide the proper signals to an OEM Engine ECU. This task should be handled with existing inputs and outputs.

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Displays:

Displays shall be able to provide real time information regarding load shedding and system status, such as network traffic/errors or shorts and open circuits.

System Network:

The multiplex system shall contain a Peer-to-Peer network. A Master Slave Type network is not suitable for this type of unit. A Peer-to-Peer network means that all the modules are equal on the network; a Master is not needed to tell other nodes when to talk, **No Exceptions**.

System Reliability:

The multiplex system shall be able to perform in extreme temperature conditions, from 40° to +85° C (-40° to +185° F.) The system shall be sealed against the environment, moisture, humidity, salt or fluids such as diesel fuel, motor oil or brake fluid. The enclosures shall be rugged to withstand being mounted in various locations or compartments around the vehicle. The modules shall be protected from over voltage and reverse polarity.

WELDON CERTIFICATION

A letter shall be provided with bid submittal that the Contractor has successfully completed the Weldon training requirements for Level 1 of the V-MUX Certified Supplier Program and is authorized to design, build, and service V-MUX electrical systems.

Cab Console: Center, Commercial, Multiplex, 2-Door

CAB CONSOLE

A center cab console shall be provided between the Driver's and Officer's seats extending to rear wall of cab. Console shall be as large as possible and fabricated of 1/8" smooth aluminum. A textured powder coat paint finish shall be provided for durability and finished appearance.

Console shall include;

Cab Console: Forward Control Position, Multiplex

- Forward section of cab console shall include;
 - Multiplex Display: Weldon Vista IV, Touch-Screen w Buttons Comm Cab, SVI Supply
- **MULTIPLEX SYSTEM INTERFACE DISPLAY** Weldon V-MUX Vista IV multiplex system interface display(s) with touch-screen control shall be provided in cab. The full-color Vista interface display allows the user to control warning and scene lighting, HVAC controls (when specified), and view on-board diagnostics including service information. This display has a wide operating temperature range, automatic screen switching in response to current conditions, and a sleep mode option to eliminate night glare. The following features shall be included;
 - 800 x 480 resolution
 - Four video ports
 - Flash updates with USB memory stick
 - Display inside and outside temperature (when specified)
 - Automatic climate control (when specified)

One (1)
N0-12-0005

One (1)
N0-12-0012

One (1)
N0-11-6119

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- 100% Configurable (OEM Level)
- Field re-programmable
- Peer to peer network
- On-board diagnostics / service information
- Colors change to indicate button status
- Video Ready for: Backup camera, Thermal camera, DVD, GPS...

Touchscreen with button option.

One (1)
N0-12-0020 Cab Console: Forward Position, Driver

- Forward section, driver side of cab console shall include;

One (1)
N0-14-6001 Cab Console: NO Components

- No components provided at this position.

One (1)
N0-12-0022 Cab Console: Forward Position, Officer

- Forward section, officer side of cab console shall include;

One (1)
N0-14-6001 Cab Console: NO Components

- No components provided at this position.

One (1)
N0-12-0030 Cab Console: Panel Position, Forward

- Cab console, panel position forward shall include;

One (1)
10-S5-0122 Accessory Mounting: Radio, 3" Filler Plate

- There shall be one (1) communications radio and/or siren 3" filler plate(s) with black powdercoat paint finish provided for future radio/siren location in specified console.

One (1)
N2-22-1100 Siren: Whelen 295SLSA1, 100/200 Watt, Hands-Free, Selectable Tones

ELECTRONIC SIREN

One (1) Whelen model 295SLSA1 electronic siren control with selectable 100 or 200 watt output, hands-free operation, user selectable siren tones, park kill, and standard hard wired microphone shall be provided and installed in cab within easy reach of Driver. Siren power shall be wired through the master warning light switch.

One (1)
10-S5-0120 Accessory Mounting: Radio, 3" Recessed

- There shall be one (1) communications radio and/or siren 3" recess mount(s) with black powdercoat paint finish in specified console.

One (1)
N2-30-1010 Siren Operation: Siren Head Only

The specified siren functions shall be controlled by siren mounted switches.

One (1)
N0-12-0032 Cab Console: Panel Position, Center

- Cab console, panel position center shall include;

One (1)
10-S5-0122 Accessory Mounting: Radio, 3" Filler Plate

- There shall be one (1) communications radio and/or siren 3" filler plate(s) with black powdercoat paint finish provided for future radio/siren location in specified console.

One (1)
Cab Console: Panel Position, Rearward

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N0-12-0034

- Cab console, panel position rearward shall include;
Accessory Mounting: Radio, 3" Filler Plate
 - There shall be one (1) communications radio and/or siren 3" filler plate(s) with black powdercoat paint finish provided for future radio/siren location in specified console.
- One (1)
10-S5-0122
- One (1)
N0-18-1100

BATTERY SYSTEM

Any body builder supplied battery connections shall be heavy duty type with cables terminating in heat shrink loom. Heavy duty battery cables shall provide maximum power to the electrical system. Where required, the cables shall be shielded from exhaust tubing and the muffler. Large rubber grommets shall be provided where cables enter the battery compartment.

Where an enclosed battery compartment is provided, it shall be ventilated to the exterior to prevent the buildup of heat and explosive fumes. The batteries shall be protected against vibration and temperatures that exceed the battery manufacturer's recommendation.

One (1)
N0-18-2300

Battery Switch: Switched Ignition

BATTERY SWITCH

One (1) battery "On/Off" switch shall be provided and located in cab within easy reach of Driver.
Battery Indicator Light

One (1)
N0-18-2390

- A green "BATTERY ON" pilot light shall be visible from the driver's position.
- One (1)
N0-18-3100

BATTERY SOLENOID

Battery switch shall consist of a minimum 200 ampere, constant duty solenoid to feed from positive side of battery.

One (1)
N0-19-1015

Battery Conditioner: Blue Sea P12, 25 Amp

BATTERY CONDITIONER

One (1) Blue Sea model P12 battery charger with 120 VAC input, and 25 amp 12 VDC output shall be provided. The P12 is a four stage, three output, dry mount charger designed for use in harsh environments where reliability, ease of use, and high performance are of primary importance. Backed by a 5-year warranty.

Five Critical Features Extend Battery Life

- User Defined Charge Profiles for setting voltages to match the battery manufacturer's recommendations
- User Defined Absorption Stage Values determine when the charger should exit Absorption Stage in order to prevent overcharging
- Charge Coordination™ integrates with Blue Sea Systems' Automatic Charging Relays to separate battery banks while the P12 is operational
- PreFloat™ Stage prevents over charging by individually moving batteries out of Absorption Stage

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SVI Trucks

- Battery Temperature Compensation adjusts charging voltage up (for colder batteries) or down (for warmer batteries) as recommended by battery manufacturers for proper battery performance

Additional Features

- Rugged finned aluminum case dissipates heat
 - Universal line voltage 90–265V AC, 45–65 Hz for worldwide use
 - Large bright full graphic control screen with user interface
 - Plain-language text in English, French, Italian, German and Spanish
 - Intuitive screens provide fault alerts and plain language diagnostics
- Battery System: Blue Sea EV Charge Indicator

One (1)
N0-19-8105

BATTERY CHARGE INDICATOR

A Blue Sea EV battery charger display shall be provided and located near driver's door area. It can display a graphical representation of voltage with or without connection to a P12 battery charger. When connected to a P12 battery charger it can display the charger's summary screen, displaying voltage, current charging stage, and faults from the charger with other features as follows;

- Drop in replacement for traditional rectangular displays
 - Automatically detects 1-3 battery banks
 - AC charge indication verifies that power is connected and the battery charger is charging
 - Plain language fault indication relays if there is a fault with the battery charger
 - Dip switch selectable screen configuration allows the display to show voltage bar graphs or the P12 Battery Charger summary screen
 - Displays voltage bar graphs even when AC power is not present
 - Optional standby mode shuts off screen after 4 hours of inactivity
 - Automatic ON based on motion with integrated knock sensor
 - Bright, daylight readable, OLED display
- Charge Indicator Location: Driver Step Area

One (1)
N0-19-8190

- The charge indicator display shall be located at Driver step area.
- Shore Power Inlet: Kussmaul Super Auto Eject, 20 Amp

One (1)
N0-19-A120

SHORE POWER INLET

One (1) Kussmaul 120 VAC, 20 amp Super Auto-Eject shore power inlet(s) shall be provided. The shore power connection shall automatically disengage from vehicle when chassis ignition is engaged.

The protective ground from the shoreline inlet shall be bonded to the vehicle frame.
Cover: Auto Eject, 20amp, Red

One (1)
N0-19-A29B

- Auto eject inlet cover color shall be red.
- Shore Power Inlet Location: Driver Door

One (1)
N0-19-A310

- The shore power plug shall be located near the Driver door area.
- Backup Camera: ASA Voyager, 1 Rear Camera

One (1)
N0-25-B110

REAR VIEW CAMERA

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There shall be one (1) ASA Voyager rear observation camera system provided and installed on completed unit. The system shall include one (1) model VCMS155 high resolution box style camera with white housing installed on rear of body.

One (1)
N0-25-C130

Camera Display: Displayed on Cab/Chassis Provided Single Multiplex Screen

The camera(s) shall be wired to the cab/chassis supplied single multiplex display. The rear camera shall activate when the transmission is placed in reverse. If a right camera is provided it shall activate with the right side turn signal and if a left camera is provided it shall activate with the left side turn signal. All camera(s) shall also be activated by a button on the display(s).

One (1)
N1-10-1518

Tail Lights: Whelen M6 LED, (4) Light Chrome Bezel

TAIL LIGHTS

Rear body tail lights shall be vertically mounted and located per Federal Motor Vehicle Safety Standards, FMVSS and Canadian Motor Vehicle Safety Standards CMVSS. The following lights shall be furnished;

- Two (2) Whelen specified lower Zone "C" warning lights
- Two (2) Whelen M6 Series M62T amber LED turn signal lights
- Two (2) Whelen M6 Series M62BTT red LED stop/tail lights
- Two (2) Whelen M6 Series M62BU LED back-up lights with clear lens

One (1)
N1-12-1110

Each of the lights above shall be mounted in an M6FCV4, 4-light chrome finish bezels.

Midship Marker/Turn Signal: Whelen 2" LED

MIDSHIP MARKER/TURN SIGNAL

Two (2) Whelen model T0A00MAR 2" round amber LED midship body clearance marker/turn signal lights shall be provided and installed, one (1) light on each side of the body, in forward wheel well of rear axle.

Midship marker/turn lights shall be wired to the headlight circuit of the chassis.

One (1)
N1-12-2100

Clearance Lights and Reflectors: Truck-Lite Model 18, LED

MARKER LIGHTS

The body shall be equipped with all necessary side and rear clearance lights and reflectors in accordance with Federal Motor Vehicle Safety Standards (FMVSS) and Canadian Motor Vehicle Safety Standards (CMVSS). Clearance lights on body shall be connected to the clearance light circuit of the chassis.

One (1)
N1-12-4200

License Plate: LED Light and Bracket

LICENSE PLATE LIGHT

One (1) Arrow #437 chrome plated LED license plate light shall be installed on the rear of the body.

License plate light shall be wired to the headlight circuit of chassis. A fastener system shall be provided for license plate installation.

One (1)
N4-20-0102

Front Scene Light: Cab Brow

FRONT SCENE LIGHT(S)

The following front scene lights shall be mounted on chassis brow above windshield.

One (1)

Front Scene: HiViz FT-B-46-W, 46" LED White

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N4-32-1054

The front of the cab shall include one (1) HiViz model FireTech FT-B-46-W LED scene light provided and installed on the brow of the cab.

The light shall be low in profile with a mounting bracket allowing installation between the top edge of the windshield and the bottom of the light bar. The bar shall be mounted using a adjustable mounting feet along the length of the extrusion to allow attachment to the face of the cab or body. Once mounted, the fixture shall be adjustable 50 total degrees.

The scene light shall be powered by the 12 VDC electrical system. and have 36 LEDs divided between three (3) independent circuits;

- Circuit 1 shall have 9 x 5 w LED's passing light through individual 10 degree "spot" optics
- Circuit 2 shall have 18 x 5w LED's passing light through individual 25-40 degree "scene" optics
- Circuit 3 shall have 24 x 5w LEDs passing light through individual 60-90 degree "flood" optics

The housing shall be powdercoat painted white.

One (1)
N4-20-0033

Light Control: Multiplex Display(s)

The lights shall be controlled at the multiplex display(s) in the cab.

Four (4)
N4-20-1150

Side Scene VDC (1): Whelen M9 Series, 24 LED, Chrome

SIDE LED SCENE LIGHTS

There shall be four (4) Whelen M9 Series Model M9LZC , 9" x 7" surface mounted Scene Light(s) provided on the upper Body. Light quantity shall be divided equally per side. The M9LZC configuration shall consist of 24 clear Super-LEDs and a clear gradient optic polycarbonate lens with chrome flange. The M9LZC series light shall have 6,500 useable lumens each.

Two (2) switches shall be provided, one (1) for the streetside scene lights, and one (1) for the curbside scene lights.

Four (4)
N4-20-0033

Light Control: Multiplex Display(s)

The lights shall be controlled at the multiplex display(s) in the cab.

One (1)
N4-20-A150

Rear Scene VDC (2): Whelen M9 Series, 24 LED, Chrome

REAR LED SCENE LIGHTS

Two (2) Whelen M9 Series Model M9LZC , 9" x 7" surface mounted scene light(s) shall be provided on the upper rear body to light the work area. The M9LZC configuration shall consist of 24 clear Super-LEDs and a clear gradient optic polycarbonate lens with chrome flange. The M9LZC series light shall have 6,500 useable lumens each.

The above scene lights shall light to a level of at least 3 fc (30 lx), measured at 25 equally spaced points on a 2.5 ft (750 mm) grid with in a 10 ft x 10 ft (3 m x 3m) square to the rear of vehicle.

One (1)
N4-20-0033

Light Control: Multiplex Display(s)

The lights shall be controlled at the multiplex display(s) in the cab.

One (1)
N4-23-1100

Rear Scene Light Activation in Reverse

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Two (2)
N4-32-1216

The rear scene lights shall also be activated when the apparatus is in reverse.
Side Scene VDC (1): HiViz Recessed Flood LED 2.18 Series, White

SIDE LED SCENE LIGHTS

There shall be two (2) HiViz recessed model FT-MB-2.18-F-W-REC 24.53" flood LED scene light(s) provided on the upper body. Light quantity shall be divided equally per side. The recessed series light shall have 13,305 useable lumens each. Each light shall have a white finish.

Two (2)
N4-20-0033

Two (2) switches shall be provided, one (1) for the streetside scene lights, and one (1) for the curbside scene lights.

Light Control: Multiplex Display(s)

One (1)
N5-05-1200

The lights shall be controlled at the multiplex display(s) in the cab.
Warning Light System (WA)

WARNING LIGHT PACKAGE

One (1)
N5-09-1100

NFPA Warning Light Package

Each apparatus shall have a system of optical warning devices that meets or exceeds the requirements of this section.

The optical warning system shall consist of an upper and a lower warning level. The requirements for each level shall be met by the warning devices in that particular level without consideration of the warning devices in the other level.

For the purposes of defining and measuring the required optical performance, the upper and lower warning levels shall be divided into four (4) warning zones. The four zones shall be determined by lines drawn through the geometric center of the apparatus at 45 degrees to a line drawn lengthwise through the geometric center of the apparatus. The four (4) zones shall be designated A, B, C, and D in a clockwise direction, with zone A to the front of the apparatus.

Each optical warning device shall be installed on the apparatus and connected to the apparatus's electrical system in accordance with the requirements of this standard and the requirements of the manufacturer of the device.

A master optical warning system switch that energizes all the optical warning devices shall be provided.

The optical warning system on the fire apparatus shall be capable of two (2) separate signaling modes during emergency operations. One (1) mode shall signal to drivers and pedestrians that the apparatus is responding to an emergency and is calling for the right-of-way. One (1) mode shall signal that the apparatus is stopped and is blocking the right-of-way. The use of some or all of the same warning lights shall be permitted for both modes provided the other requirements of this chapter are met.

A switching system shall be provided that senses the position of the parking brake or the park position of an automatic transmission. 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 the 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

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the right-of-way shall be energized. The system shall be permitted to have a method of modifying the two (2) signaling modes.

The optical warning devices shall be constructed or arranged so as to avoid the projection of light, either directly or through mirrors, into any driving or crew compartment(s). The front optical warning devices shall be placed so as to maintain the maximum possible separation from the headlights.

Steadily burning, non flashing optical sources shall be permitted to be used.
Control System: Whelen

One (1)
N5-09-1201

One (1)
N2-22-2201

No CORE System

One (1)
N5-20-1000

Upper Level: Whelen

UPPER LEVEL OPTICAL WARNING DEVICES

The upper-level optical warning devices shall be mounted as high and as close to the corner points of the apparatus as is practical to define the clearance lines of the apparatus. The upper-level optical warning devices shall not be mounted above the maximum height, specified by the device manufacturer.

One (1)
N5-20-2000

Zone A - Front, Comercial

ZONE A - FRONT WARNING LIGHTS

See Chassis Modification section for cab mounted warning lights.
Zones B & D - Side Upper Rear

One (1)
N5-20-3000

ZONES B AND D - SIDE WARNING LIGHTS

UPPER REAR CORNER WARNING LIGHTS

Warning Lights: (2) Whelen M9 Series, Red, Clear Lens

One (1)
N3-05-M203

There shall be two (2) Whelen M9 linear super-LED Light(s) with full-fill optic provided, one (1) each side. The light head shall include an integral flasher with programmable flash patterns and Hi/Lo intensities.

Each Light shall have:

- Red LEDs
- Clear Lens

Two (2)
N3-10-1171

Light Bezel: Whelen M9, Chrome

Each light shall have a chrome flange.

One (1)
N3-15-M253

Flash Pattern: Whelen M6, M7 and M9, Action Scan, Factory Default

- Flash Pattern shall be (factory default) Action Scan.
- Flash Pattern: Whelen M-Series, No Low Power

One (1)
N3-15-M600

- The Low Power option will **NOT** be provided for the above lighting group.

One (1)

Light Control: Multiplex Display(s)

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N4-20-0033

The lights shall be controlled at the multiplex display(s) in the cab.
Upper Front Warning Lights (Not required by NFPA)

One (1)
N5-20-3500

UPPER FORWARD CORNER WARNING LIGHTS

One (1)
N3-05-M203
Warning Lights: (2) Whelen M9 Series, Red, Clear Lens

There shall be two (2) Whelen M9 linear super-LED Light(s) with full-fill optic provided, one (1) each side. The light head shall include an integral flasher with programmable flash patterns and Hi/Lo intensities.

Each Light shall have:

- Red LEDs
- Clear Lens

Two (2)
N3-10-1171
Light Bezel: Whelen M9, Chrome

Each light shall have a chrome flange.

One (1)
N3-15-M253
Flash Pattern: Whelen M6, M7 and M9, Action Scan, Factory Default

- Flash Pattern shall be (factory default) Action Scan.
Flash Pattern: Whelen M-Series, No Low Power

One (1)
N3-15-M600
• The Low Power option will **NOT** be provided for the above lighting group.

One (1)
N4-20-0033
Light Control: Multiplex Display(s)

The lights shall be controlled at the multiplex display(s) in the cab.

One (1)
N5-20-4000
Zone C - Rear Upper

ZONE C - REAR WARNING LIGHTS

One (1)
N3-05-M202
Warning Lights: (1) Whelen M9 Series, Red, Clear Lens

There shall be one (1) Whelen M9 linear super-LED Light(s) with full-fill optic provided. The light head shall include an integral flasher with programmable flash patterns and Hi/Lo intensities.

Each Light shall have:

- Red LEDs
- Clear Lens

One (1)
N3-10-1171
Light Bezel: Whelen M9, Chrome

Each light shall have a chrome flange.

One (1)
N3-15-M253
Flash Pattern: Whelen M6, M7 and M9, Action Scan, Factory Default

- Flash Pattern shall be (factory default) Action Scan.
Flash Pattern: Whelen M-Series, No Low Power

One (1)
N3-15-M600
• The Low Power option will **NOT** be provided for the above lighting group.

One (1)
N4-20-0033
Light Control: Multiplex Display(s)

The lights shall be controlled at the multiplex display(s) in the cab.

One (1)
N6-20-1000
Lower Level: Whelen

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LOWER LEVEL OPTICAL WARNING DEVICES

To define the clearance lines of the apparatus, the optical center of the lower-level optical warning devices in the front of the vehicle shall be mounted on or forward of the front axle centerline and as close to the front corner points of the apparatus as is practical.

The optical center of the lower-level optical warning devices at the rear of the vehicle shall be mounted on or behind the rear axle centerline and as close to the rear corners of the apparatus as is practical. The optical center of any lower-level device shall be between 18 in. and 62 in. (460 mm and 1600 mm) above level ground for large apparatus, and 18 in. and 48 in. (460 mm and 1600 mm) above level ground.

A midship optical warning device shall be mounted right and the left sides of the apparatus if the distance between the front and rear lower-level optical devices exceeds 25 ft (7.6 m) at the optical center. Additional midship optical warning devices shall be required, where necessary, to maintain a horizontal distance between the centers of adjacent lower-level optical warning devices of 25 ft (7.6 m) or less. The optical center of any midship mounted optical warning device shall be between 18 in. and 62 in. (460 mm and 1600 mm) above level ground.

One (1)
N6-20-2001

Zone A - Front

ZONE A - FRONT WARNING LIGHTS, LOWER

One (1)
N6-20-3040

See Chassis Modification section for cab mounted warning lights.

Zones B & D - Rear Wheel Well

One (1)
N3-05-M003

ZONES B AND D - BODY LIGHT (BODY WHEELWELL AREA)

Warning Lights: (2) Whelen M6 Series LED, Red, Clear Lens

There shall be two (2) Whelen M6 linear super-LED Light(s) with full-fill optic provided, one (1) each side. The light head shall include an integral flasher with programmable flash patterns and Hi/Lo intensities.

Each Light shall have:

- Red LEDs
- Clear Lens

Two (2)
N3-10-1151

Light Bezel: Whelen M6, Chrome

Each light shall have a chrome flange.

One (1)
N3-15-M253

Flash Pattern: Whelen M6, M7 and M9, Action Scan, Factory Default

One (1)
N3-15-M600

- Flash Pattern shall be (factory default) Action Scan.
Flash Pattern: Whelen M-Series, No Low Power
- The Low Power option will **NOT** be provided for the above lighting group.
Light Control: Multiplex Display(s)

One (1)
N4-20-0033

The lights shall be controlled at the multiplex display(s) in the cab.

One (1)
N6-20-3060

Zones B & D - Body Intersection, Rear

ZONES B AND D - BODY INTERSECTOR LIGHT (BODY REAR CORNERS)

One (1)
N3-05-I001

Warning Lights: (2) Whelen ION Series, Red, Clear Lens, Chrome

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There shall be two (2) Whelen surface mount ION Series LED light(s) with wide angle optic provided, one (1) each side. The light head shall include an integral flasher with programmable flash patterns.

Each light shall have:

- Red LEDs
- Clear Lens
- Chrome Flange

One (1)
N4-20-0033 Light Control: Multiplex Display(s)

The lights shall be controlled at the multiplex display(s) in the cab.
Zone C - Rear Lower

One (1)
N6-20-4000

ZONE C - REAR WARNING LIGHTS (LOWER REAR CORNERS)

One (1)
N3-05-M003 Warning Lights: (2) Whelen M6 Series LED, Red, Clear Lens

There shall be two (2) Whelen M6 linear super-LED Light(s) with full-fill optic provided, one (1) each side. The light head shall include an integral flasher with programmable flash patterns and Hi/Lo intensities.

Each Light shall have:

- Red LEDs
- Clear Lens

Two (2)
N3-10-1151 Light Bezel: Whelen M6, Chrome

Each light shall have a chrome flange.

One (1)
N3-15-M253 Flash Pattern: Whelen M6, M7 and M9, Action Scan, Factory Default

- Flash Pattern shall be (factory default) Action Scan.

One (1)
N3-15-M600 Flash Pattern: Whelen M-Series, No Low Power

- The Low Power option will **NOT** be provided for the above lighting group.

One (1)
N4-20-0033 Light Control: Multiplex Display(s)

The lights shall be controlled at the multiplex display(s) in the cab.
VAC System (WA)

One (1)
R0-05-1200 18

LINE VOLTAGE ELECTRICAL SYSTEM

One (1)
R0-20-1025 Generator: 30 kW, PTO, 1 Phase

PTO GENERATOR

The vehicle shall be equipped with an PTO generator system with a capacity of 30,000 watts at 120/240 VAC, 250/125 amps, single phase. Current frequency shall be stable at 60 hertz.

The transmission's PTO port and PTO, or the split shaft PTO, and all associated drive shaft components shall be rated to support the continuous duty torque requirements of the generator's continuous duty rating as stated on the power source nameplate.

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Where the generator is driven by the chassis engine and transmission through a split shaft PTO, the driving compartment speedometer shall register when the generator drive system is engaged.

Where the generator is driven by the chassis engine and transmission through a split shaft PTO and a chassis transmission retarder is furnished, it shall be automatically disengaged for generator operations.

The direct drive generator shall be mounted so that it does not change the ramp break-over angle, angle of departure, or angle of approach as defined by other components, and it shall not extend into the ground clearance area.

The direct drive generator shall be mounted away from exhaust and muffler areas or provided with a heat shield to reduce operating temperatures in the generator area.

GENERATOR BONDING

A minimum of four (4) 16" x 2 gauge copper ground straps shall be bolted to body sub-frame and chassis sub-frame for proper bonding of high voltage system. The conductor shall have a minimum amperage rating, as defined in 310.15, "Ampacities for Conductors Rated 0–2000 Volts," of *NFPA 70*, of 115 percent of the rated amperage on the power source specification label.

GENERATOR ENGAGEMENT

A "Generator Engaged" indicator shall be provided in the driving compartment to indicate that the generator shift has been successfully completed.

An "OK to Operate Generator" indicator shall be provided in the driving compartment to indicate that the generator is engaged (if not always engaged), the transmission is in the proper gear (if required, automatic transmissions only), and the parking brake is engaged (if applicable).

An interlock system shall be provided to prevent advancement of the engine speed in the driving compartment or at any operator's panel unless the parking brake is engaged, and the transmission is in neutral or the output of the transmission is correctly connected to a pump or generator instead of the drive wheels.

WARRANTY PERIOD

Provided such goods are operated and maintained in accordance with written instructions, this generator warrants that the PTO generators shall be free from defects in material and workmanship for a period of five (5) years or one thousand (1,000) hours, whichever comes first, from the date of delivery to the first purchaser.

Generator Control: Multiplex Display

One (1)
R0-40-0030

GENERATOR CONTROL

The generator shall be engaged at the multiplex display(s) in the cab.
Generator Mount: Below Chassis Frame Rails

One (1)
R1-10-1110

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GENERATOR MOUNTING

The generator shall be mounted below the chassis frame rails. The generator mounting brackets shall be fabricated using steel plate and/or tubing and powder coat primed and painted black. The generator mounting shall be bolted to the side of the chassis frame rail and removable so that the generator can be lowered from under apparatus for service, if necessary. The generator case shall not extend below the bottom edge of the apparatus body.

Generator Manuals

One (1)
R1-15-1610

MANUALS AND SCHEMATICS

Two (2) complete manuals on parts list, maintenance, wiring schematics, hydraulic schematics, circuit boards, voltage regulator board and other components shall be provided on delivery.

Generator Drive: PTO, 3000EVS

One (1)
R1-20-1101

POWER-TAKE-OFF GENERATOR DRIVE

There shall be a "Hot Shift" power-take-off (PTO) installed on the transmission PTO opening of the chassis. The "Hot Shift" PTO is provided to allow the engagement of the PTO at higher engine RPM speeds. The PTO output shall be connected to the generator through hollow tube type driveline with heavy duty universals.

The engagement of the PTO shall be in the chassis cab with a rocker switch and red pilot light to note engagement of the PTO or via the V-Mux screen if so equipped.

The power supply to the PTO engagement control shall be wired to the parking brake and a neutral position transmission switch to prevent engagement unless the vehicle is stopped and transmission has been placed in neutral.

The installation of the engine, transmission, driven accessories (power takeoffs (PTO), etc.) shall meet the engine and transmission manufacturers' installation recommendations for the service intended.
PTO, Allison 3000EVS, 4/8 O'Clock, Chelsea 280 Series

One (1)
R1-21-1012

Model part number shall be Chelsea 280 series.

Generator Control: OEM Electronic Engine

One (1)
R1-25-1120

ENGINE SPEED CONTROL

An engine speed auxiliary control device (high idle switch or throttle) shall be installed to maintain a stable cycle output from generator when the apparatus is parked.

An interlock shall prevent the operation of the engine speed auxiliary control device unless the parking brake is engaged and the transmission is in neutral or park, or the parking brake is engaged and the engine is disengaged from the drive wheels.

The engine shall be prevented from regulating its own engine speed during times when engine rpm control is critical for consistent apparatus functions such as generator, water pump, or aerial operation.

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One (1)
R2-20-2120 Loadcenter: Eaton BR Series, 125 A, 1 Phase

LOADCENTER

The loadcenter shall be an Eaton BR Series specifically designed for protection and distribution of AC line voltage such as lighting and small motor branch circuits. The loadcenter enclosure is made of 16 gauge galvanized sheet steel with a galvanized coating provided for corrosion protection. All trims used on BR loadcenters are chromate sealed and finished with an electro-disposition epoxy paint (ANSI-61) which exceeds requirements for outdoor and indoor applications. A combination surface/flush cover with integral door is supplied with indoor loadcenters rated from 100 through 400 amperes. All plug-in loadcenters are CSA listed to file LL98266. CSA Certified to C22.2 No.29, to loadcenter type and CSA listing.

One (1)
R1-30-1130 Generator Gauge Panel: Accuvim CL, Single Phase

GENERATOR MONITORING PANEL

An Accuenergy Acuvim II multifunction power and energy meter shall be provided to properly monitor the generator performance and load demand during operation. The Accuenergy Acuvim CL includes a digital RS485 communication port running Modbus protocol. The electrical parameters can be viewed on a backlit LCD screen. Unit shall be capable of displaying the following;

- Generator frequency in hertz
- Line 1 current in amperes
- Line 2 current in amperes
- Generator voltage in volts
- Meter running time

One (1)
R2-38-1100 Shore Power Inlet: Battery Charger

SHORE POWER INLET - BATTERY CHARGER

One (1)
R2-41-1100 Reference 12V Section for Inlet Size / Type

The above mentioned shore power inlet, and battery conditioner shall be specified in the 12 volt section. 120/240 VAC Exterior Outlets

One (1)
R2-A0-1100

120/240 VAC OUTLETS AND CIRCUITS

The generator and or shore power shall supply the 120/240 volt electrical equipment and outlets outlined below. Proper circuit protection shall be installed as noted:

One (1)
R2-10-1200 18 VAC Wiring System (WA)

LINE VOLTAGE ELECTRICAL SYSTEM

All components, equipment, and installation procedures shall conform to *NFPA 70, National Electrical Code*, except where superseded by the requirements of this chapter. Where the requirements of this chapter differ from those in *NFPA 70*, the requirements in this chapter shall apply.

One (1)
R2-10-4100 Receptacle and Equipment Labeling

Receptacle Label

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Each receptacle shall be marked with a label indicating the nominal line voltage (120 volts or 240 volts) and the current rating in amps of the circuit. If the receptacle is DC or other than single phase, that information shall also be marked on the label.

All receptacles and electrical inlet devices shall be listed to UL 498, *Standard for Safety Attachment Plugs and Receptacles*, or other recognized performance standards.

Receptacles used for DC voltages shall be rated for DC service.
Electrical Wiring Schematic

One (1)
R2-10-5100

Wiring Schematics

An "As-Built" Wiring diagrams for line voltage systems shall be provided to include the following information;

- (x) Pictorial representations of circuit logic for all electrical components and wiring
- (y) Circuit identification
- (z) Connector pin identification
- (aa) Zone location of electrical components
- (ab) Safety interlocks
- (ac) Alternator–battery power distribution circuits
- (ad) Input/output assignment sheets or equivalent circuit logic implemented in multiplexing systems

One (1)
T2-00-0000

CAMERA/MAST SYSTEM

One (1)
T2-00-0050

No Camera/Mast System

CAMERA MAST SYSTEM

One (1)

No camera and mast system shall be required on completed unit.
== SVI Supplied Equipment, Special Service, NFPA 1900 - 2403.010 03/01/24 ==

One (1)
X0-02-1011

Special Service Equipt: 30,001-40,000 GVWR. - 4,000 Lbs.

EQUIPMENT PAYLOAD WEIGHT ALLOWANCE

In compliance with NFPA 1900 standards, the special service vehicle shall be designed for an equipment loading allowance of 4,000 lbs. of San Diego County Fire Protection District provided equipment based on a 30,001 - 40,000 pound gross vehicle weight rating.
Special Service Minor Equipment List: NFPA 1900

One (1)
X0-03-1010

EQUIPMENT

One (1)
X0-05-1100

The following equipment shall be furnished with the completed special service vehicle;
Assorted Fasteners

- One (1) container of assorted stainless steel nuts, bolts, screws and washers used in the construction of the apparatus shall be provided with the completed apparatus.

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- One (1)
X0-10-1500
- Wheel Chocks: (2) Zico SAC-44-E, Folding, 44" Tires
- There shall be two (2) Zico SAC-44-E NFPA approved folding aluminum wheel chocks provided for 44" diameter tires that together will hold the vehicle when loaded to its GVWR or GCWR, on a hard surface with a 20 % grade, with the transmission in neutral, and the parking brake released.
- One (1)
X0-10-A110
- Wheel Chocks: Folding, Mounted Behind Rear Wheels, Streetside
- The wheel chock(s) shall be mounted behind rear wheels, below body on streetside.
- Two (2)
X0-60-1102
- Flashlight: Streamlight, FireBox, LED E-Spot
- Two (2) Streamlight FireBox LED flashlight(s) with shoulder strap shall be provided be provided with 540/330 lumen output and 7/15 hour run time.. Each flashlight shall be orange in color and have a 12 volt DC charger and vehicle mount kit. Each flashlight shall have a LED E-Spot spotlight style bulbs and reflectors with 2 ultra-bright LED taillights. The flashlight(s) shall be wired to battery direct unless otherwise specified by San Diego County Fire Protection District.
- One (1)
X1-99-1000
- Remaining NFPA 1900 Equipment: Special Service, Purchaser Supplied
- REMAINING NFPA MINOR EQUIPMENT BY PURCHASER**
- All other minor equipment not specified above, but recommended by NFPA 1900 for special service vehicles section A.8.4 shall be supplied and mounted by San Diego County Fire Protection District before the unit is placed in emergency service.
- One (1)
- == SVI Dealer, List Discount - 2403.010 03/01/24 ==