



Bid Specification

Liberty I F-450 4x2 Braun Bid Spec

Reference: QUO0000001017 Rev: 0
 Purchaser: Braun
 Contact: Business Unit Test Contact
 Address:

Telephone:

Name	Specifications
Liberty	-72" Headroom -156"L Full Seam Welded Module



KKK Change Notice

Item Number	Name	
00-01-0001	GENERAL CONDITIONS	Y____N____
00-01-0019	BIDDER KKK-A-1822F CHANGE NOTICE 9 COMPLIANT Bidder shall be KKK-A-1822F Change Notice 9 compliant to meet SAE J3043 - Ambulance Equipment Mounts; Interior Stowage Accommodations; Equipment Mounting Devices: Installed Oxygen cylinder, cardiac monitor, and fire extinguisher mounting devices shall meet the performance requirements of SAE J3043.	Y____N____
00-01-0020	BIDDER KKK-A-1822F CHANGE NOTICE 10 COMPLIANT Bidder shall be: KKK-A_1822F Change Notice 10 compliant to meet: SAE J3058 - Ambulance Interior Storage Compartment Integrity; SAE J3057- Ambulance Modular Body Evaluation-Quasi-Static Loading for Type I and Type III Modular Ambulance Bodies; SAE J3102- Ambulance Patient Compartment Structural Integrity Test to Support SAE J3027 Compliant Litter Systems; SAE J3043 - Ambulance Equipment Mounts, Interior Stowage Accommodations, Equipment Mounting Devices; Installed suction mounting; to conform to all applicable requirements.	Y____N____
00-01-0022	BIDDER KKK-A-1822F CHANGE NOTICE 11 COMPLIANT Bidder cab console to meet SAE J3043; Ambulance Equipment Mount Device or Systems, to be KKK-A-1822F Change Notice 11 compliant and shall be labeled with its weight capacity.	Y____N____
00-01-0023	BIDDER KKK-A-1822F CHANGE NOTICE 12 COMPLIANT Revision to the existing standards include Temperature Conditions; Engine High-Idle Speed Control; Ambulance Emergency Lighting; Photometric, Chromaticity, and Physical Requirements; Tests, Warning Light System;	Y____N____



	Flood and Loading Light (Exterior); Bumpers and Steps; Doors; Equipment Mounting Devices; Oxygen Main Supply and Installation; Ventilation Criteria; Siren – Public Address System; and Test Criteria. -----	
00-01-0029	NO STS, HGAC, FSA, SOURCEWELL OR GPO CONTRACT REQUIRED -----	Y____N____
80-10-0000	KKK-A-1822F COMPLIANCE PACKAGE A KKK-A-1822F compliance sticker, electrical load analysis sticker, and payload sticker shall be installed in the oxygen compartment. Any deviations from KKK-A-1822F shall be listed in the vehicle delivery packet with a notation on the-compliance sticker. -----	Y____N____
00-01-0018	BIDDER KKK-A-1822F CHANGE NOTICE 8 COMPLIANT Bidder shall be KKK-A-1822F Change Notice 8 compliant to meet SAE J3026 - Ambulance Patient Compartment Seating Integrity and Occupant Restraint Standards, and SAE J3027 - Ambulance Litter Integrity, Retention, and Patient Restraint Standards. -----	Y____N____
Chassis		
Item Number	Name	
00-01-0006	DYNAMIC SIDE IMPACT & ROLLOVER TESTS Bidder shall perform Dynamic Side Impact & Rollover Tests with same module that was involved in side impact crash test. This module must be the same brand, make, and model for both tests. Video documentation to be provided to the Purchaser upon request. Crash test shall be performed within a controlled and repeatable environment, validated by a third party testing facility. -----	Y____N____
01-01-0166	TYPE I - AMBULANCE - LIBERTY- 72 INCH INTERIOR HEADROOM SPECIFICATION INTENT: Type I, 156-inch module, constructed with not less than 72.0-inches interior module height, an overall length of 294-inches, an overall width of 98-inches, and an overall height not to exceed 112-inches. -----	Y____N____
15-00-0010	FUEL TANK - FULL UPON FACTORY RELEASE The chassis fuel tank of the completed unit shall be full at time of release from the ambulance manufacturer's facility. -----	Y____N____
19F2450S	CHASSIS FORD F450 169" WB 4X2 DRW (84 C.A.) DIESEL ENGINE F4G FORD F450 CHASSIS CAB, 169" WB 4X2 DRW (84" C.A.) MECHANICAL • Axle -Mono-beam front axle w/coil spring suspension • Battery - Batteries Dual 750 CCA • Brakes – Four-wheel Disc Brakes; Anti-lock Brake System (ABS) • Emission 50-State Emissions System • Engine — 6.7L 4V OHV POWER STROKE V8 TURBO DIESEL B20 (*99T*) • Engine block heater (*41H*) • Operator Command Regeneration (*98R*)	Y____N____



- Rear-axle "Standard" width 4.10 Limited-slip w/DRW (*X4N*)
- Tires - 225/70R19.5G BSW Traction (THB)
- Transmission – TorqShift® Ten-Speed automatic w/Selectable Drive Modes (*44G*)

FUNCTIONAL

- Alternator: 397 amp (*67B*)
- Ambulance Prep Package (*47L*)
- Hood release
- Horn - dual electric
- Intelligent Oil-Life Monitor
- Shock absorbers - heavy -duty gas
- Sirius XM® Radio (Note: Includes a 6-month prepaid subscription. Service is not available in Alaska or Hawaii)
- Spare Tire, Wheel and Jack (Excludes carrier; includes Hydraulic Jack (*512* *61J*))
- Springs, rear auxiliary
- Stabilizer bars – front rear
- Trailer Brake Controller
- Transmission Power Take-Off Provision (62R)

EXTERIOR

- Bumper – front, chrome
- CAL SER VEH EXP (*936*)
- Color - Oxford White (*Z1*)
- Fender vents – front
- Front License Plate Bracket
- Fuel Tank — 40 gallon aft axle
- Glass – privacy
- Grille – two (2) bar, bright chrome
- Preferred Equipment Package XLT Trim (*653A*)
- Scuff plates – front, color-coordinated
- "Three Blink" Lane change signal
- Tow hooks – front (2)
- Trailer wiring – 7 wire harness w/relays, blunt cut labeled
- Wheels – 19.5" Argent Painted Steel
- Windshield Wipers – intermittent

INTERIOR/COMFORT/CONVENIENCE

- 4.2" LCD Productivity Screen in IP Cluster w/Compass display
- 12V Power point, auxiliary
- Adjustable Gas / Brake Pedal (62M)
- Air conditioning – single-zone, manual



- Air conditioning vents – black w/chrome ring and knob
- Auxiliary audio input jack
- Cabin Air Particulate Filter
- Carpet Delete (*166*)
- Coat hooks, LH/RH color-coordinated
- Dash top tray
- Daytime Running Lamps (DRL) (*942*)
- Dome lamp – LH/RH door activated I/P switch operated w/delay
- Door locks w/ backlit switches
- Door-trim – soft armrest, grab handle, power window/lock switches and reflector; front map pockets
- Gauges Meters - Fuel , Transmission temperature, Engine coolant temperature, Oil pressure (gas engine), and Turbo (diesel engine) gauges, Speedometer, Odometer, and Tachometer
- Handles, grab – driver front-passenger Handles, roof ride – front-passenger (also over rear-doors on Crew Cab)
- Headrests - driver and passenger 4 way adjustable
- Map lights – dual (front and rear w/Crew Cab)
- Mirror – rearview 11.5" day/night
- Outside Temperature Display
- Power Equipment Group – 1ST row (front-seat) windows w/one-touch up/down, power 2ND row (rear-seat) windows (Super/Crew Cab); power/door-locks w/backlit switches accessory delay
- Seat –Front, high-series cloth 40/20/40 medium earth grey (*3S*) split bench - 20% center under-seat storage, – w/center armrest, cupholder and storage (manual lumbar – driver’s side) — Four-way adjustable driver/passenger headrests
- Steering – power
- Steering wheel – Black urethane with tilt and telescoping steering wheel/column; includes three (3) button message control
- Sun visors – color-coordinated cloth, driver w/pocket, both driver and passenger w/covered mirrors
- Upfitter switches – 6 located in Overhead Console
- Power windows w/backlit switches

SAFETY/SECURITY

- AdvanceTrac® with RSC® (Roll Stability Control™)



- AutoLamp – Auto On/Off Headlamps with Rain lamp Wiper activated Headlamps
- Belt-Minder® (front safety belt reminder)
- Driver and passenger frontal and side airbag/curtain; passenger side deactivation switch
- Headlamps – Quad beam jewel effect halogen
- Lamps – Roof marker/clearance – LED
- Mirrors – manually telescoping (*54K*) /folding trailer tow with power/heated glass, heated convex spotter mirror, integrated clearance lamps/turn signals
- MyKey® owner controls feature
- Remote keyless entry and Perimeter anti-theft alarm
- Safety Belts – color-coordinated w/height adjustment (front-outboard seating positions only)
- Safety Canopy® System
- SecuriLock® Passive Anti-Theft System (PATS)
- Stationary Elevated Idle Control (SEIC)
- SOS Post-Crash Alert System™
- Under hood service light

DRIVER ASSIST

- Audible Lane Departure Warning (60C)
- Automatic High Beam – standard
- Pre-Collision Assist with Automatic Emergency Braking (AEB) and Forward Collision Warning (94P)
- Cruise Control (steering wheel mounted)
- SYNC® 3 – Enhanced Voice-Recognition Communications and Entertainment System with 911 Assist® and AppLink®, Apple CarPlay™, and Android Auto™•

WEIGHT RATINGS

- FRONT AXLE WEIGHT RATING 7000 lbs
- REAR AXLE WEIGHT RATING 12880 lbs
- GROSS VEHICLE WEIGHT RATING 16500 lbs

20-01-0105

SUSPENSION - LIQUID SPRING TYPE I

Y____N____

A CLASS®, or Compressible Liquid Adaptive Suspension System, shall be provided and installed. Utilizing a strut, with a compressible fluid as the spring/damping medium, and its sophisticated on-board microprocessor, CLASS® adapts the entire vehicle's response to road variations and the driver. Unlike current steel and air sprung suspension systems, CLASS® can automatically and instantaneously change the spring stiffness and damping at each wheel over a very broad range with minimal power consumption while the vehicle is being driven and without driver intervention. The system shall include an automatic lowering feature, which is activated by



	opening the rear patient compartment doors. There shall be a switch near the rear doors which will defeat the lowering feature. -----	
20-10-0206	BATTERY - TWO SYSTEM - F SERIES CHASSIS The vehicle shall have a 12 V two (2) battery system rated at 1500 cold cranking amps. Both batteries shall be securely installed in the Ford OEM locations, under the vehicle hood. -----	Y____N____
20-10-0221	ADDITIONAL BATTERY NOT REQUIRED Additional battery not required -----	Y____N____
20-10-0603	ENGINE BLOCK HEATER - OEM PLUG An engine block heater shall be included in the chassis with the 125 VAC power cord, located under the hood. -----	Y____N____
20-20-0252	HEAT SHIELDS, PROTECTIVE Three (3) aluminized steel protective heat shields shall be installed to the upper laterals above the exhaust system to help protect the module from the chassis exhaust system heat. This shall meet OEM guidelines for heat shields. -----	Y____N____
20-20-0277	HIGH IDLE SYSTEM, AUTOMATIC An aftermarket auto high-idle system shall be provided on the chassis. The high-idle shall be programmed to activate when the transmission is placed in the park position and the parking brake is activated. The system will automatically go to high idle, but will adjust itself as needed for higher or lower idle. If the module heat or a/c is activated the high idle will be overridden to 1500 rpm -----	Y____N____
20-21-0101	FLOOR CONSOLE F450 STANDARD CONSOLE - ALUMINUM A center floor console manufactured out of aluminum and covered in a black onyx scratch resistant, multi-use polychromatic coating with a clear epoxy finish shall be installed in the cab. The console face plates shall be removable for accessibility and serviceability. The Console System is to be SAE J3043 Ambulance Equipment Mount Device or Systems compliant and shall be labeled with its weighted capacity. PLEASE NOTE: Console drawings are for reference only and do not include all features depicted on the drawings. All consoles shall be designed, priced, and approved internally to allow for accurate BOM pricing. The prices shown are estimated for general budget pricing only and pricing is subject to design; must contact manufacturer for pricing validation. -----	Y____N____
20-30-0202	MIRRORS, EXT OEM MANUAL TELESCOPING WREMOTE & HEAT The chassis shall have OEM manual telescoping, folding trailer tow mirrors with power/heated glass, heated convex spotter mirror, integrated clearance lamps/turn signals. -----	Y____N____
20-30-0261	OEM AUTO-LOCK DISABLED (cab & module doors do not auto lock or unlock) The OEM auto-lock feature will be disabled. -----	Y____N____



20-30-0806	RUNNING BOARDS - STAR PUNCHED DIAMOND PLATE Aluminum diamond plate running boards with a star punched non-skid surface shall be provided on the cab. The running boards shall be bright dip anodized after they are formed to retain finish and increase corrosion resistance.	Y___N___
20-40-0206-40	WHEEL SIMS - STAINLESS WITH VALVE STEM EXTENSIONS - F-450 CHASSIS Stainless steel full wheel simulators shall be provided for the front and the outside rear wheels. Air Max valve extensions shall be provided to properly inflate the inner dual rear tires.	Y___N___
30-10-0030	BACKUP ALARM An (OSHA approved) back up alarm shall be installed with a disable control for silent backing. The disable control shall be located on the MCC (master control console). The back up alarm system shall automatically reset to the "on" mode when the transmission is taken out of reverse.	Y___N___
30-10-0753	SIREN, WHELEN 295-HFSA7-REMOTE WITH MICROPHONE (Meets CA Title 13) A Whelen 295-HFSA7 remote dualsiren amplifier shall be flush-mounted in the master control console located in the cab. The siren shall be capable of hands-free operation and shall be equipped with a noise canceling microphone. Note - Meets CA Title 13. Some features of this siren include: DUAL 200 WATT, FLUSH MOUNT SIREN with REMOTE SIREN AMPLIFIER • Six function siren plus radio repeat and public address. • Operates two 100-watt speakers. • Operates in dual (outputs 2 independent siren tones creating rich harmonic dual tone sound) or mono sound modes. • External dip switch programmable siren tones. • PTT (push to talk) switch on microphone overrides all siren functions. • Removable unidirectional microphone with adjustable microphone volume adjustable preset radio repeat volume. • SI TEST®, silent diagnostic test. • Quick disconnect plug for ease of service or replacement. 12 Siren Tones • Air horn • Wail • Yelp • Piercer • Manual Coast to Stop • Manual • Mechanical Coast to Stop • Hi/Low • Yelp 249 • Warble • Whoop • Mechanical Tone	Y___N___
30-10-0812	SIREN SPEAKERS, CAST PRODUCTS - IN FRONT BUMPER Two (2) Cast Products - 100-watt siren speakers, shall be installed in outer ends of the front bumper.	Y___N___
30-10-0817	SIREN SPEAKERS, ADDITIONAL NOT REQUIRED	Y___N___
Electrical		
Item Number	Name	
125AA101	OUTLET, 125VAC - ONE (1) INTERIOR DUPLEX - LEFT WALL ACTION AREA One (1) 2-wire +plus ground 125 VAC hospital grade duplex outlet shall be installed in the street side wall in the primary action area, with wiring	Y___N___



	connected to the shoreline. An indicator lamp shall be located within the 125 VAC outlet as a line monitor to indicate a live circuit. The outlet shall be labeled, "125 VAC".	
125AA201	----- OUTLET, 125VAC - ONE (1) INTERIOR DUPLEX - LEFT WALL REAR ACTION AREA One (1) 2-wire +plus ground 125 VAC hospital grade duplex outlet shall be installed in the street side wall in the rear action area, with wiring connected to the shoreline. An indicator lamp shall be located within the 125 VAC outlet as a line monitor to indicate a live circuit. The outlet shall be labeled, "125 VAC". -----	Y____N____
125IF201	----- OUTLET, 125VAC - ONE (1) INTERIOR DUPLEX - FRONT WALL CABINET One (1) 2-wire +plus ground 125 VAC hospital grade duplex outlet shall be installed in the mid front wall cabinet, with wiring connected to the shoreline. An indicator lamp shall be located within the 125 VAC outlet as a line monitor to indicate a live circuit. The outlet shall be labeled, "125 VAC". -----	Y____N____
12VAA101	----- OUTLET, 12VDC - ONE (1) - LEFT WALL ACTION AREA One (1) 12 VDC power point outlet shall be installed in the street side wall in the primary action area. The outlet shall be labeled, "12 VDC". A Schottky diode medical isolator shall be provided to protect the 12 VDC outlet. -----	Y____N____
12VIF201	----- OUTLET, 12VDC - ONE (1) FRONT WALL - CABINET One (1) 12 VDC power point outlet shall be installed in the patient compartment, in the front wall equipment area. The outlet shall be labeled, "12 VDC". A Schottky diode medical isolator shall be provided to protect the 12 VDC outlet. -----	Y____N____
30-06-0004	----- ELECTRICAL SYSTEM - WELDON V-MUX, MICRO PROCESSOR BASED A Weldon V-MUX 100% solid state microprocessor based multiplex system shall be installed to control the electrical functions. The system shall include load management, load shedding, power modulation, load sequencing capabilities and provide on-board diagnostics with real-time status reporting. The system shall consist of one (1) color control console (Vista) in the cab, one (1) color control console (Vista) in the patient compartment, a total of three (3) control nodes: two (2) High Content nodes and one (1) 8 X 16 node, and a module warning display with video input and monitoring capabilities. The system must be a Weldon V-MUX. No exception. Bidders who propose any other proprietary electrical system shall be considered as non-compliant. Documentation required with bid submission. Bidder must supply with his/her bid proposal, a listing of not less than 500 ambulances produced with the Weldon V-MUX system within the past 5 years. The documentation shall include a production order number, the purchaser's agency name, and the date the ambulance was delivered. Bids submitted without this documentation shall not be considered. -----	Y____N____



30-06-0010	VISTA IV MCC - PUSH BUTTON A Weldon V-MUX Vista IV interface module / display screen shall be provided and installed in the cab. The Vista module shall be operated through the use of push buttons. -----	Y____N____
30-06-0015	VISTA IV ACP - PUSH BUTTON A Weldon V-MUX Vista IV interface module / display screen shall be provided and mounted on an angled flip - down panel with chrome lever latches, in the patient compartment ACP area. The Vista module shall be operated through the use of push buttons. A temperature sensor shall be mounted to the bottom of the ACP panel. -----	Y____N____
30-06-0026	WARNING DISPLAY - MULTIPLEX ELECTRICAL SYSTEM A digital warning display shall be integrated into the cab display console and programmed through the multiplex system to provide visual and audible indications for: Parking brake set condition, Parking brake release condition, Patient status alarm (four color with reset capability), Individual outside storage compartment "door open" warnings in vehicle outline form, Low voltage alarm, Low oxygen pressure alarm. -----	Y____N____
30-06-0050	DAYTIME RUNNING LAMPS - MULTIPLEX ELECTRICAL SYSTEM The Headlights shall be activated at 30% intensity, for day time operation, when transmission is placed in drive, as a feature of the multiplex system. (if not standard on the chassis). -----	Y____N____
30-06-0076	MASTER CONTROL CONSOLE (MCC) - MULTIPLEX ELECTRICAL SYSTEM A floor mounted Master Control Console (MCC) shall be located in the cab. The console shall house the siren and the color microprocessor display screen, which will control all the Emergency Warning functions as well as also being able to control the Patient Compartment lighting and module heat/ac functions. -----	Y____N____
30-06-0101	ATTENDANT CONTROL PANEL (ACP) - MULTIPLEX ELECTRICAL SYSTEM The Attendant Control Panel (ACP) shall contain a color micro processor screen, which will control all equipment installed in the patient compartment. -----	Y____N____
30-06-0126	ELECTRICAL COMPARTMENT (PDQ) - MULTIPLEX ELECTRICAL SYSTEM The Power Distribution Quarters (PDQ) shall hold electrical components, (i.e. power distribution nodes, circuit breakers, etc). The electrical compartment shall have a hinged door with two (2) chrome locking lever latches and be shall located on the partition wall behind the attendant seat. -----	Y____N____
30-06-0150	SPARE CIRCUIT - MULTIPLEX ELECTRICAL SYSTEM One (1) spare 15 amp circuit shall be provided. -----	Y____N____
30-06-0175	WIRING HARNESS CONNECTORS - MULTIPLEX ELECTRICAL SYSTEM All wiring harnesses shall be connected via quick connect circular plug connectors. -----	Y____N____



30-06-0201	RADIO TIE-IN POINT - (1) 12V/40 AMP - CAB CONSOLE AREA One (1) set of 12 volt/40 amp radio tie-in points shall be installed in the cab console area of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud. -----	Y ____ N ____
30-06-0202	RADIO TIE-IN POINT - (1) 12V/40 AMP - PATIENT COMPARTMENT One (1) set of 12 volt/40 amp radio tie-in points shall be installed in the patient compartment attendant control panel area of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud. -----	Y ____ N ____
30-06-0203	RADIO TIE-IN POINT - (1) 12V/40 AMP - PDQ One (1) set of 12 volt/40 amp radio tie-in points shall be installed and mounted in the PDQ of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud. -----	Y ____ N ____
30-06-0225	EMERGENCY MASTER SWITCH - MULTIPLEX ELECTRICAL SYSTEM A single emergency master switch shall be supplied for activating all the emergency warning lights and shall be provided on the master control console screen. The emergency master switch will activate the module power automatically. There shall also be an Emergency Master Menu button which shall allow access to individual warning light functions. -----	Y ____ N ____
30-06-0250	CONTROL PANEL SWITCHES - MULTIPLEX ELECTRICAL SYSTEM The switches on the master control console and attendant control panel screens shall have dimmable perimeter backlighting for easy identification. -----	Y ____ N ____
30-06-0275	MODULE POWER SWITCH - MULTIPLEX ELECTRICAL SYSTEM A module power switch for the electrical system shall be provided on both the Master Control Console and the Attendant Control Panel screens. -----	Y ____ N ____
30-06-0285	MODULE DISCONNECT - MULTIPLEX ELECTRICAL SYSTEM An In-Power 15 minute, nonadjustable disconnect shall be installed to keep the module power switch engaged, after the ignition is switched to the "off" position. This disconnect can also be activated from the side and rear doorways to turn on the check-out lights. -----	Y ____ N ____
30-06-0300	VOLTMETER - MULTIPLEX ELECTRICAL SYSTEM One (1) digital voltmeter shall be provided on the master control console screen. -----	Y ____ N ____
30-06-0325	FLASHER - MULTIPLEX ELECTRICAL SYSTEM The flasher shall be provided within and programmed by the multiplex electrical system. -----	Y ____ N ____
30-06-0350	FLASHING HEADLIGHTS - MULTIPLEX ELECTRICAL SYSTEM The headlights (high beams) shall be programmed through the multiplex system to alternate flash (wig-wag), activated by a switch on the master control console screen labeled "Flashing Headlights", with the ignition on and module power and emergency master switches enabled. The flashing headlights are to be disabled when the low or high beams are activated.	Y ____ N ____



	They are also disabled when the transmission is placed in the neutral/park position. The flashing headlights shall have the capability to be reactivated with the "park override" switch in the "on" position if the low and high beams are off.	
30-06-0375	PARK OVERRIDE - MULTIPLEX ELECTRICAL SYSTEM A park override switch, located on the master control console screen, shall reactivate all lights disabled when the transmission is placed in the neutral/park position.	Y___N___
30-06-0400	LOAD MANAGER-SEQUENTIAL SWITCHING SYSTEM - MULTIPLEX ELECTRIC SYSTEM The load manager-sequential switching system shall be controlled by the microprocessor based electrical system. The emergency master button shall control the sequential switching of the emergency lights and/or other warning devices. The load manager shall automatically shed non-critical electrical loads during low voltage conditions to help prevent electrical system overload when the vehicle is stationary and the transmission is in the park position.	Y___N___
30-06-0450	FRONT CLEAR DISABLE SWITCH - MULTIPLEX ELECTRICAL SYSTEM Activation of the switch on the master control console screen shall disable all forward facing clear warning lights.	Y___N___
30-06-0475	CURBSIDE SCENE LIGHTS ON WITH CURBSIDE DOOR The Curbside scene lights shall be programmed to activate when the Curbside door is in the open position.	Y___N___
30-06-0500	REAR SCENE LIGHTS ON WITH REAR DOORS OPEN The rear scene lights shall be programmed to activate when the rear doors are in the open position.	Y___N___
30-06-0525	DISABLE SWITCH FOR REAR SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM A disable switch shall be installed at the rear door area to disable the rear scene lights.	Y___N___
30-06-0550	DISABLE SWITCH FOR SIDE SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM A disable switch shall be installed at the curbside door area to disable the curbside scene lights.	Y___N___
30-06-0575	REVERSE -TRANSMISSION- FUNCTIONS - MULTIPLEX ELECTRICAL SYSTEM The system shall be programmed to provide activation for the rear outboard warning lights, the rear side warning lights, the rear scene lights, and the rear side scene lights, when the transmission selector lever is placed into "reverse" position.	Y___N___
30-10-0050	BATTERY CONVERTER - CHARGER A Progressive Dynamics #PD9245C, 45 amp, 125 VAC to 13.6 VDC converter shall be connected to the shoreline inlet and be capable of maintaining the batteries when plugged in.	Y___N___



30-10-0110	ELECTRICAL CIRCUITS All electrical circuits shall have wiring and circuit protection suitable to the demand and must meet the national electric code (NEC) wiring requirements. All added on wiring (18 GA through 10 GA) shall be color coded and stamped with code numbers and functions every 4" for easy identification (all other wiring shall be color coded). SLX high temperature thermoplastic cross link wire shall be used. insulated cable shall be used for all under hood / underbody battery and charging system cable. High temperature (375° f) thermoplastic loom shall be used on all harnesses. -----	Y____N____
30-10-0190	GROUND FAULT CIRCUIT INTERRUPTER-GFCI A 125 VAC, 20 AMP circuit breaker with ground fault circuit interrupter (GFCI) electronic ground leakage detection shall be installed in the load center for the shoreline circuit. -----	Y____N____
30-10-0413	LIGHTS, OSS COMPARTMENTS - INCANDESCENT The outside storage compartments shall be equipped with Truck-Lite brand incandescent lights, activated by magnetic switches. (compartments #1, #2, #4, each contain two (2) clear 4" round lights, compartment #3 shall contain one (1) clear 4" round light, and compartment #5 shall contain two (2) clear 2-1/2" round lights) -----	Y____N____
30-10-0585	USB - DUAL OUTLET, ONE (1) INTERIOR LOCATED ON CONSOLE One (1) dual USB port outlet, 5 volt / 2.1 amp, shall be installed on the Master Control Console in the cab. The outlet shall have power and ground for charging equipment, such as cell phones, iPad, etc... -----	Y____N____
30-10-0657	RADIO ANTENNA BASES - TWO (2) Two (2) antenna bases with attached coax cables shall be installed on the module roof. The coax cables shall terminate in the PDQ. Access to the antenna bases shall be through adjacent module interior dome lights. -----	Y____N____
30-10-0901	SYSTEM ACTIVE AND CHECK OUT LIGHTS - 15 MINUTES A switch shall be located at the curb and rear entry doors that will allow activation of the V-MUX electrical system. There shall also be a check out light switch located at the curb and rear doors that will allow activation of the left LED angled lights prior to entering the module. The system shall be programmed to shut down automatically after 15 minutes unless the ignition is on. This shutdown delay shall be user adjustable. -----	Y____N____
30-10-1007	BRAKE OVERRIDE NOT REQUIRED Brake override not required. -----	Y____N____
30-11-0106	LIGHTS, DOME LED (8) WHELEN SUPER LED Eight (8) Super LED dome lights, Whelen #80C0EHCR, shall be provided in the patient compartment. The dome lights shall be controlled by separate switches for the left bank and right bank of lights. The dome lights shall be activated by switches on both the attendant control panel and the master control console. The dome lights shall be illuminated at 50% power whenever the patient compartment side or rear doors are opened. -----	Y____N____



30-11-0152	LIGHTS, RIDGEBACK LED PANEL (3) STREETSIDE - ANGLED Three (3) LED lights shall be mounted on the angled panel above the streetside interior cabinets. These lights shall be three way switched from the attendant control panel and the master control console. -----	Y___N___
30-11-0176	LIGHTS, RIDGEBACK LED PANEL (2) CURBSIDE - ANGLED Two (2) LED lights shall be mounted on an angled panel located above the curbside seating area. These lights shall be three way switched from the attendant control panel and the master control console. -----	Y___N___
30-12-0031	RECEPTACLE SHORELINE INLET-20 AMP, NON-AUTO EJECT A 125 VAC 20 amp non-auto eject shoreline inlet receptacle shall be installed. The receptacle cover shall be gray. A mating connector shall be shipped loose. The shoreline inlet receptacle shall be located on the forward left exterior near the driver's door, and shall be connected to the lighted patient compartment 125 VAC outlet. -----	Y___N___
USBAA101	OUTLET, USB - ONE (1) DUAL - LEFT WALL ACTION AREA One (1) dual USB port outlets, 5 volt / 2.1 amp, shall be installed in the vehicle, located on the streetside main action area in the patient compartment. The outlet shall have power and ground for charging equipment, such as cell phones, iPad, etc... -----	Y___N___

Exterior Lighting

Item Number	Name	
30-06-0410	WARNING LIGHTS FLASH PATTERN SIGNAL ALERT 75 - MULTIPLEX ELECTRICAL SYSTEM The default flash pattern for the warning lights shall be Signal Alert 75. These warning lights will be operated from a single button labeled "flashers" via the Multiplex System on the master control console. -----	Y___N___
30-25-0122	LIGHTS, ICC / LED CLEARANCE - ON MODULE FRONT - TECNIQ The vehicle shall have five (5) amber Tecniq LED (S33-AA00-1) clearance / ICC lights on the front of the module near the roof line. -----	Y___N___
30-25-0123	LIGHTS, ICC / LED CLEARANCE - ON MODULE REAR - TECNIQ The vehicle shall have five (5) red TECNIQ LED (S33-RR00-1) clearance / ICC lights on the rear of the module near the roof line. -----	Y___N___
30-26-3008	LIGHTS, REAR TAIL - WHELEN 600 LED STOP, TURN, & MINIMUM INTENSITY BACK-UP One (1) pair each of Whelen 600 series LED stop/tail lights, turn lights, and MINIMUM intensity LED back-up lights with chrome bezels shall be installed on the rear of the module. -----	Y___N___
30-26-7002	LIGHT, LICENSE PLATE LED - WHELEN OACOEDCR One (1) Whelen OACOEDCR LED license plate light with 45 deg angled chrome-plated bezel shall be installed on the rear of the module, lower left side. -----	Y___N___



30-27-1102	LIGHTS, ICC / LED CLEARANCE - ON MODULE SIDE - TECNIQ The vehicle shall have two (2) Tecniq (S330) red mini LED marker lights: one (1) red on each side at the rear of the vehicle which will also flash with turn signal. -----	Y___N___
ClearLENS	CLEAR LENSES ON ALL WARNING LIGHTS All warning lights to have clear lenses -----	Y___N___
FIL07T0002	LIGHTS FRONT INTERSECTION - 2 WHELEN 700 LED W/15 DEGREE TILT HOUSING Two (2) Whelen 700 series super LED warning lights, with water-proof connectors, shall be mounted in 15 degree tilt housings on the front chassis fenders, one (1) on each side. The lights shall operate from a switch on the master control console labeled "Flashers".NOTE: When vehicle is placed in park, the override switch must be on for intersection light(s) to remain on. -----	Y___N___
FILCLR1R	FRONT INTERSECTION LIGHT LOCATION 1 - RED The warning light located on front of the chassis fender in location 1 shall be red. -----	Y___N___
FILCLR2R	FRONT INTERSECTION LIGHT LOCATION 2 - RED The warning light located on front of the chassis fender in location 2 shall be red. -----	Y___N___
FWL090005	LIGHTS FRONT MODULE - 5 WHELEN 900 SUPER LED Five (5) Whelen 900 series super LED warning lights with chrome bezels shall be installed on the module front. The lights shall operate from a switch on the master control console, labeled "Flashers". -----	Y___N___
FWLCLR1R	FRONT WARNING LIGHT LOCATION 1 - RED The warning light located on the upper front of the module in location 1 shall be red. -----	Y___N___
FWLCLR2R	FRONT WARNING LIGHT LOCATION 2 - RED The warning light located on the upper front of the module in location 2 shall be red. -----	Y___N___
FWLCLR3W	FRONT WARNING LIGHT LOCATION 3 - WHITE The warning light located on the upper front of the module in location 3 shall be white. -----	Y___N___
FWLCLR4R	FRONT WARNING LIGHT LOCATION 4 - RED The warning light located on the upper front of the module in location 4 shall be red. -----	Y___N___
FWLCLR5R	FRONT WARNING LIGHT LOCATION 5 - RED The warning light located on the upper front of the module in location 5 shall be red. -----	Y___N___



GWL050002	LIGHTS GRILLE - 2 WHELEN 500 SUPER LED Two (2) Whelen 500 series super LED warning lights, with waterproof connectors shall be installed the grille area of the chassis. The lights shall operate from a switch on the master control console labeled "Flashers". -----	Y___N___
GWLC1R1R	GRILL WARNING LIGHT LOCATION 1 - RED The warning light located on the grill in location 1 shall be red. -----	Y___N___
GWLC1R2R	GRILL WARNING LIGHT LOCATION 2 - RED The warning light located on the grill in location 2 shall be red. -----	Y___N___
RCL090001	LIGHTS REAR MODULE, UPPER CENTER - 1 WHELEN 900 LED One (1) Whelen 900 series super LED warning light with chrome bezels shall be installed on the upper rear of the module, center location. The lights shall operate from a switch on the master control console, labeled "Flashers". -----	Y___N___
RCLCL1A	REAR CENTER MODULE LIGHT LOCATION 1-AMBER The warning light located on upper rear of the module in the center location shall be amber. -----	Y___N___
RIL070002	LIGHTS INTERSECTION REAR - 2 WHELEN 700 LED Two (2) Whelen 700 series super LED warning lights with, chrome flanges and water-proof connectors, shall be installed above the rear wheel wells, one (1) on each side. These lights shall operate from a switch on the master control console screen labeled "Flashers".NOTE: When vehicle is placed in park, the override switch must be on for intersection light(s) to remain on. -----	Y___N___
RILCL1R1R	REAR INTERSECTION LIGHT LOCATION 1 - RED The warning light located on above the rear wheel well at location 1 shall be red. -----	Y___N___
RILCL1R2R	REAR INTERSECTION LIGHT LOCATION 2 - RED The warning light located on above the rear wheel well at location 2 shall be red. -----	Y___N___
ROL090002	LIGHTS REAR MODULE, UPPER OUTER - 2 WHELEN 900 LED Two (2) Whelen 900 series super LED warning light with chrome bezels shall be installed on the upper rear of the module, in the outer location. The lights shall operate from a switch on the master control console, labeled "Flashers". -----	Y___N___
ROLCL1R1R	REAR OUTER MODULE LIGHT LOCATION 1 - RED The warning light located on upper rear of the module, in outer location 1 shall be red. -----	Y___N___
ROLCL1R2R	REAR OUTER MODULE LIGHT LOCATION 2 - RED The warning light located on upper rear of the module, in outer location 2 shall be red. -----	Y___N___



RS090002	LIGHTS REAR SCENE - 2 WHELEN 900 24 DIODE LED Two (2) Whelen 900 Series super LED scene/load lights with chrome bezels shall be installed on the upper rear of the module. The lights shall operate from a switch on the master control console, labeled "Rear Scene Lights". -----	Y____N____
SS090004	LIGHTS SIDE SCENE - 4 WHELEN 900 24 DIODE LED Four (4) Whelen 900 series 24 Diode LED scene lights with chrome flanges shall be installed, two (2) each module side. Streetside shall have one (1) scene light inboard of the module rear warning light, and one (1) scene light inboard of the module front warning light. Curbside shall have one (1) scene light inboard of the module rear warning light, and one (1) scene light below front warning light. These lights shall operate from switches on the master control console labeled "Left Scene Light" and "Right Scene Light". -----	Y____N____
STRPTRN	STRAIGHT PATTERN WARNING LIGHTS -----	Y____N____
SWL090004	LIGHTS SIDE WARNING - 4 WHELEN 900 SUPER LED Four (4) Whelen 900 series super LED warning lights with chrome flanges shall be installed, two (2) each module side. Streetside shall have one (1) warning light outboard of the side module rear scene light, and one (1) warning light outboard of the module front scene light. Curbside shall have one (1) warning light outboard of the side module rear scene light, and one (1) warning light outboard of the module front scene light. These lights shall operate from a switch on the master control console labeled "Flashers". -----	Y____N____
SWLCLR1R	SIDE WARNING LIGHT LOCATION 1 - RED The warning light located on side of the module, in outer location 1 shall be red. -----	Y____N____
SWLCLR2R	SIDE WARNING LIGHT LOCATION 2 - RED The warning light located on side of the module, in outer location 2 shall be red. -----	Y____N____
SWLCLR3R	SIDE WARNING LIGHT LOCATION 3 - RED The warning light located on side of the module, in outer location 3 shall be red. -----	Y____N____
SWLCLR4R	SIDE WARNING LIGHT LOCATION 4 - RED The warning light located on side of the module, in outer location 4 shall be red. -----	Y____N____

Module Features / Exterior

Item Number	Name	
39-00-0001	MODULE BODY CONSTRUCTION - SEAMLESS The module shall be fabricated entirely of parts cut and formed from .125" (minimum) thickness 5052-H32 flat aluminum sheet stock, using CNC machines capable of .0004" repeatability. This is the only alloy that may be used for body parts that are welded together.	Y____N____



The roll-cage type interior super-structure, aluminum partition and module shall all be welded together into a single unit to give optimum strength for patient and attendant protection. The module roof shall be designed with a minimum 1.5" crown to facilitate water run off.

The floor, roof, sides, and all exterior doors shall be fabricated from .125" (minimum) thick flat aluminum sheet stock. The exterior joints between the roof and side components shall be continuous full seam welded the entire length of the module. All exterior body panel joints shall be continuous full seam welded.

No VHB bonding tape or other adhesives shall be used in the construction of the ambulance module.

39-00-0002	SOLE SOURCE MODULE BODY CONSTRUCTION It is required that the manufacturer of this vehicle have the ability to manufacture a completed ambulance, with the exception of the chassis, within their own manufacturing facility. The modular body must be built in the manufacturer's facility and shall not be the product of a subcontractor or any company other than the manufacturer.	Y____N____
39-00-0005	AWS ALUMINUM CERTIFIED WELDERS AWS Aluminum Certified Welders shall construct the module. AWS certificates shall be required to be part of the completed bid packet. Bids without AWS certificates shall be considered non-compliant (no Exception). -----	Y____N____
39-10-0003	CONNECTIONS, MODULE The module shall be bolted to the chassis frame rail with (12) 5/8" -11 grade 8 bolts through OEM rubber insulating spacers installed on outriggers at twelve (12) separate locations (six each frame rail), providing noise insulation and easy removal for chassis replacement. The frame mounting bolts shall be properly torqued and secured with locktite. The system used for fastening the module to the frame shall be that approved by the chassis manufacturer.	Y____N____
40-00-0009	ALUMINUM PARTS - MODULE EXTERIOR All unpainted exterior aluminum parts shall be bright dip anodized after fabrication to retain the finish and increase corrosion resistance. -----	Y____N____
40-00-0010	CORROSION MINIMIZATION - MODULE All module contact with dissimilar metals shall be minimized with the use of nylon screw-hole inserts to prevent fastener contact with the module body, nylon hinge strips, ceramic coated stainless steel hinge bolts, and ECK brand corrosion inhibitor spray. -----	Y____N____
40-00-0019	DOOR SKINS, OUTSIDE STORAGE COMPARTMENTS - DIAMOND PLATE INTERIOR SKINS The interior door skins for all outside storage compartments shall be constructed of .063" thick aluminum diamond plate. -----	Y____N____



40-00-0020	DOOR CONSTRUCTION - GASKET PLACEMENT All exterior hinged module doors shall be constructed in an inverted pan-formed design. The pan shall be constructed from .125" thick 5052-H32 flat sheet aluminum. The exterior door skin shall be constructed of .190" thick aluminum and welded to the pan. Door gaskets shall be attached to the interior side of the door skin. Gaskets attached to interior door frames are not satisfactory and shall not be accepted.	Y____N____
40-00-0030	EXTERIOR COMPARTMENTS DESIGN All exterior compartments shall include these features: • Sound absorbing slip resistant polyurethane material shall be sprayed on the inside of all compartments and compartment shelving, slide out trays and closeouts. • Baffled seep holes shall be provided to prevent water from splashing or seeping into the exterior compartments. • Full-length, two-way adjustable, stainless steel hinges on all exterior compartment doors with 3/16" stainless steel hinge pins. • Compartment doors shall be installed, flush with the module body. • When double doors are provided, each door shall have an exterior handle, but only the forward door shall be lockable. (rearward door is secured when forward door is locked). All exterior compartments and passage doors shall be keyed alike. • Lockable, Eberhard "free-floating" type chrome plated handles with rotary locks. A gasket shall be installed under each handle to protect the paint. • Drip rails shall be installed above all exterior compartment doors.	Y____N____
40-00-0050	EXTERIOR COMPARTMENTS, VENTING A minimum of nine (9) square inches of venting shall be provided inside the #1, #2, #3, & #4 exterior storage compartments to provide for easier closure of the compartment doors.	Y____N____
40-00-0055	EXTERIOR COMPARTMENTS, VENTING - OXYGEN STORAGE A minimum of nine (9) square inches of venting shall be provided in the exterior oxygen storage compartment, to dissipate any leaking oxygen gas.	Y____N____
40-00-0060	EXTERIOR COMPARTMENTS - SWEEP-OUT Exterior module compartments shall be of a sweep-out design to aid in facilitation of the purchaser's routine care and cleaning of the vehicle. All exterior compartment floors, with the exception of the front ALS compartment shall be constructed to be flush with the bottom door frame.	Y____N____



40-00-0070	HANDLES, EBERHARD - CHROME FREE FLOATING TYPE Eberhard #EMC-1-2110 chrome "free-floating" handles shall be installed on each exterior module door. The handles shall be large enough to accommodate a gloved hand. -----	Y____N____
40-00-0080	INSULATION - POLYURETHANE SPRAY FOAM The walls, ceiling, passage doors, outside storage doors, the entire underside of the module floor (except for mounting pads), the underside of the outside storage compartments, the wheel wells, and the underside of the curbside step area shall be completely foam - in - place insulated with nominal 3/4" thick sprayed on Class I, urethane foam for thermal and acoustical insulation. The insulation shall comply with FMVSS #302 flame spread requirements. The underside of the body shall be properly prepared to ensure adhesion before the spray insulation is applied. -----	Y____N____
40-00-0091	THRESHOLD, STAINLESS STEEL - ALL OSS STORAGE COMPARTMENTS Each exterior storage compartment with a hinged door shall have a stainless steel lower threshold at the door opening to protect the paint as equipment is installed and removed from the compartment. -----	Y____N____
40-10-0066	DOOR SLIDING - MODULE CURBSIDE PASSAGE The module body shall include a sliding side entry door to access the curbside of the patient compartment. The door shall slide out and towards the rear of the module body. The door design must meet FMVSS 206 for sliding doors and shall have been cycle tested in excess of 100,000 cycles. The door shall not extend out more than 5 1/4" from the module when in the open position and shall be flush in the closed position. The door shall operate on a total of nine (9) casters and three (3) tracks for ease of operation. The door shall be held closed with two (2) rotary latches and two (2) locking tabs. The door must have a system to prevent the door from self closing, when unit is parked on an incline. A measured force of ten (10) pounds maximum shall be required to release the door from the open to closed position. A chrome locking handle shall be installed on the exterior of the door. The door shall be lockable from the inside and outside and shall shut on molded air-core, automotive type door seals to prevent any water from leaking into the vehicle interior. A drip rail shall be installed above the door. Documentation required: The bidder must submit with this bid proposal a listing of not less than 200 ambulances produced with curbside sliding doors in the past four years. The listing is to include a production order number, the purchaser's agency name, and date the ambulance equipped with the curbside sliding door was delivered. Failure to provide the required documentation shall be considered as non-responsive.	Y____N____
40-10-0072	LOWERED MODULE SIDES Module sides to be as low as possible and still comply with KKK-1822-F ramp break over angle. Lowered sides will allow easier entry into the	Y____N____



module as well as increased compartment storage.

40-10-0088

DOORS - REAR PASSAGE

Y____N____

There shall be a 47.50" wide x 59" high rear door opening in the patient compartment. The doors shall be flush without a protruding flange or lip. The right rear passage door shall have a lockable, chrome exterior handle. The left rear door shall have a non-locking, chrome exterior handle. All handles shall be installed with a gasket to protect the paint. The hinge shall be full length stainless steel with a 3/16" stainless steel hinge pin and shall be two-way adjustable. Each rear door shall have a two point slam action automotive type rotary latching system to the body. The right rear door shall lock to the body at the top and bottom, not to the left rear door. The doors shall have .213" steel door latch activator rods with clevis adjusters. The doors shall be lockable from the inside and outside. All doors shall shut on molded, air-core, automotive type door seals to prevent any water from leaking into the vehicle interior.

40-10-0103

FENDERETTES - POLISHED ALUMINUM

Y____N____

Polished aluminum fenderettes shall be installed around the rear wheel well openings.

40-10-0119

HOLD-OPEN - REAR DOORS - GRABBERS

Y____N____

Door grabbers (1 pair) with hard rubber inserts shall be installed on the rear doors, permitting a door hold open position of 130 degrees.

40-10-0130

EMERGENCY RELEASE LEVER, EXPOSED, REAR PATIENT PASSAGE DOORS

Y____N____

An emergency release lever shall be attached to each rear passage door latch and shall be operated with a sliding motion within a slotted track located towards the edge of the door frame. These levers shall provide an externally mounted means of actuating the latches from the patient compartment without the use of the interior door handles.

40-10-0186

LOCKS, MANUAL (NO POWER DOOR LOCKS)

Y____N____

The module passage and compartment doors shall have manual locking devices installed. All module doors shall be keyed alike.

40-10-0204

MUD FLAPS, REAR - BLACK RUBBER FIBERGLASS REINFORCED - THREE COLOR

Y____N____

Black rubber, fiberglass reinforced mud flaps with a minimum 1/4" thickness shall be bolted to the underside of the module behind the rear wheels. The width and length of the flaps shall provide adequate coverage of the rear dual wheels of the chassis. The mud flaps shall be three color with the bidder's logo.

40-10-0266

REAR STEP/BUMPER -FLIP-UP CENTER SECTION - STAR PUNCHED AND ANODIZED

Y____N____

The rear bumper shall be affixed to the chassis frame. The bumper shall be constructed with a hinged center section. Two (2) steel braces shall secure the step to the chassis frame. The outer 17" on each end of the bumper shall be constructed from heavy gauge stamped polished stainless steel bumper parts and shall provide smooth rounded corners. The step shall be constructed of star punched .125" thick aluminum diamond plate. Two



	(2) rear LED step illumination lights shall be provided. All diamond plate surfaces shall be bright dip anodized. Rear step installation shall comply with AMD standard 018. A strip of black PVC shall be installed on the face of the step to protect the patient cots during loading.	
40-10-0280	RUB RAILS, ANODIZED ALUMINUM Bright dip anodized polished aluminum rub rails shall be installed on the lower sides of the body below the outside compartment sill areas. The rub rails shall be offset 3/16" from the body to facilitate wash down of road debris.	Y____N____
40-10-0322	STEPWELL, CURBSIDE DOORWAY The curbside doorway step area shall be covered with a washable sprayed-on multi-use polychromaticcoating.	Y____N____
40-10-0340	STONE GUARDS, MOD FRNT -ANODIZED DIAMOND PLATE Bright dip anodized aluminum diamond plate stone guards shall be installed on the module front, one (1) each side.	Y____N____
40-10-0360	KICKPLATE/THRESHOLD, REAR DOORWAY - ANODIZED DIAMOND PLATE A bright dip anodized aluminum diamond plate kick plate shall be installed at the rear exterior doorway, providing a kick / scuff plate at the rear of the vehicle above the rear step.	Y____N____
40-10-0381	TOW HOOKS, MODULE REAR Two (2) tow hooks shall be provided in the rear step area and shall be securely fastened to the rear step braces.	Y____N____
40-10-0505	WINDOWS, PASSAGE DOOR - (CURB SLIDING, REAR FIXED) The curbside passage door shall have a 16" x 23" openable (sliding) window with removable screen. Each rear passage door shall have a 19" x 18" non-openable window. The distance between the rear window glass shall not exceed 6" to assure maximum vision to the rear. The windows shall have a 69% dark tint and shall be secured with black oxide coated fasteners. No warning lights shall be blocked from view when the curbside or rear doors are open.	Y____N____
OS102WELD	OSS #1 - OXYGEN STORAGE BRACKET WELDED IN FOR H or M CYLINDER An oxygen storage bracket shall be welded in OSS #1 for retention of "H" or "M" oxygen cylinders.	Y____N____
OS1LIBOP1	OSS #1 - OXYGEN STORAGE There shall be an outside storage compartment #1, Streetside forward, for housing an O2 cylinder. A bracket shall be welded in place for O2 cylinder retention.	Y____N____
OS1LIBSTD	OSS #1 - STREETSIDE FORWARD The shall be an outside compartment #1, streetside forward. The compartment shall have a hinged door with locking handle.	Y____N____



OS2LIBOP1	OSS #2 - (1) ADJUSTABLE SHELF There shall be an outside storage compartment #2, Streetside center, with one (1) adjustable shelf. -----	Y___N___
OS2LIBSTD	OSS #2 - STREETSIDE CENTER There shall be an outside storage compartment #2, Streetside center. The compartment shall have a hinged door with a locking handle. -----	Y___N___
OS2SHELF1	OSS #2 - SHELF ONE (1) ADJUSTABLE WITH TRACK Outside storage compartment #2 shall contain one (1) adjustable shelf with track. -----	Y___N___
OS3LIBOP1	OSS #3 - SHORT DOOR WITH OPEN STORAGE AREA There shall be an outside compartment #3, short door, Streetside rear, with open storage area. -----	Y___N___
OS3LIBSTD	OSS #3 - STREETSIDE REAR SHORT DOOR There shall be an outside storage compartment #3, streetside rear, with a hinged short door and a locking handle. -----	Y___N___
OS4BB	OSS #4 - BACKBOARD - SCOOP STRETCHER STORAGE Outside storage compartment #4 shall provide storage for backboard and a scoop stretcher. -----	Y___N___
OS4LIBOP1	OSS #4 - BACKBOARD/SCOOP STORAGE There shall be an outside storage compartment #4, Curbside rear, with storage for a backboard. -----	Y___N___
OS4LIBSTD	OSS #4 - CURBSIDE REAR There shall be an outside storage compartment #4, Curbside rear, with a hinged door and a locking handle. -----	Y___N___
OS5LIBOP1	OSS #5 - INSIDE/OUTSIDE ACCESS WITH (3) ADJUSTABLE SHELVES - #5B OPEN STORAGE AREA There shall be an outside storage compartment #5, Curbside forward, with three (3) adjustable shelves, and inside / outside and a battery compartment located below. -----	Y___N___
OS5LIBSTD	OSS #5 - CURBSIDE FORWARD There shall be an outside storage compartment #5, Curbside forward, with inside / outside access and a hinged door with a locking handle. -----	Y___N___

Module Interior / Patient Compartment

Item Number	Name	
50-00-0202	ROUNDED INTERIOR CORNERS Interior vertical edges shall have rounded/padded corners in the following locations: forward and aft edges of the CPR seat (if provided), the wall at the aft end of the squad bench, and the partition opening cabinet edges, along with the upper front wall cabinet (if provided). -----	Y___N___



50-01-0408	LATCHES, CABINET, CN10 COMPLIANT AS APPLICABLE The ACP (attendant control panel) door, the PDQ (power distribution quarters) door, and the radio cabinet door shall be secured with chrome locking lever latches; all remaining interior hinged cabinet doors shall be secured with center squeeze latches. All interior drawers shall be secured with locking flush pull latches. Cabinet(s) shall be KKK-A-1822F Change Notice 10 compliant and conform to all applicable SAE J3058 requirements.	Y____N____
50-10-0229	LEFT WALL - ATTENDANT CONTROL PANEL - HINGED PANEL ANGLED WITH FLAT AREA A WELDON Vista Control Screen mounted on an angled flip – down panel secured with locking chrome lever latches The panel will be located to the immediate right of the attendant's seat. The forward portion of the panel will contain a flat area that may be used for future radio mounting, etc. -----	Y____N____
50-20-0507	PASS THROUGH - CAB TO MODULE, WINDOW OPENING A window opening shall be provided in the rear of the cab to accommodate pass-through communications to the patient compartment. A bellows shall be provided to connect the cab to the module. -----	Y____N____
50-41-0203	HEAT/AIR CONDITIONING, PROAIR IW-3856 700 CFM (56,000 BTU HEAT / 38,000 BTU COOL), BRUSHLESS BLOWER MOTOR A ProAir IW-3856 580 CFM heater/air conditioner system with 56,000 BTU heating capacity and 38,000 BTU cooling capacity utilizing a10-speed brushless blower motor controlled through, the pulse-width-modulated output of the microprocessor based electrical system, shall be provided for high volume air movement with minimal noise. The heater/air conditioner air return shall be filtered to minimize contamination of the heater/air conditioner cores. The cab and module environmental systems shall be simultaneously capable of heating in the front while cooling in the rear and vice-versa. A thermostatically controlled rear system shall be provided for heating and air conditioning the patient compartment. The temperature, whether heating or cooling, shall be controlled by a thermostat built into the attendant control panel screen, located in the street side cabinet and from the cab master control console screen. Heating and cooling may be selected automatically or manually. The heater/air conditioner system shall function only when the ignition system and the module power switch are on. The rear heater shall have EPDM/Nomex heater hoses. The rear air conditioner shall have barrier air conditioner hoses for R-134A refrigerant. Full module HVAC controls shall be located on both the rear ACP screen and the cab MCC screen. The module heat and ac system shall be installed in the upper portion of the front wall. Four (4) adjustable heat/ac vents shall be located above the heater/ac.	Y____N____
50-50-0115	SEATING - ATTENDANT - EVS HiBAC, SWIVEL BASE CN8 COMPLIANT A rear facing EVS HiBAC attendant seat shall be installed at the head of the patient cot. The seat shall be equipped with a sliding swivel base. The seat shall be KKK-A-1822F Change Notice 8 compliant with V4 harness style shoulder / seat belt and conform to all applicable FMVSS and SAE J3026	Y____N____



50-50-0121	requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The seat shall be padded and covered with color coordinated, cushioned vinyl. SEATING - ATTENDANT - CENTERED WITH COT The attendant seat shall be centered with the cot location.	Y____N____
50-50-0541	HOLD OPENS - SQUAD BENCH LID - GAS CYLINDERS Two (2) gas cylinders hold -opens shall be provided and installed to hold the cushioned lid in the open and closed position.	Y____N____
50-50-0556	SQUAD BENCH LID, PADDED WITH SHARPS /TRASH ACCESS	Y____N____
50-51-1001	CABINET CONSTRUCTION - INTERIOR - ALUMINUM All interior cabinets shall be constructed of .090" thick welded aluminum. Wood products shall not be used in the construction of any interior cabinet. All cabinet exteriors, interiors, drawer fronts, drawer interiors, and aluminum doors shall be sealed with a washable sprayed-on multi-use polychromatic coating.	Y____N____
50-51-1011	RECESSED ADJUSTABLE SHELF TRACK - CABINETS Unistrut 13/16" x 13/32", 19 gauge channel shall be installed in the interior cabinets that contain adjustable shelves. The track shall be welded in and recessed to reduce the number of fasteners and provide a cleaner look.	Y____N____
50-51-1013	HOLD OPENS FOR INTERIOR DOORS All interior cabinets with doors less than 6" tall shall have friction hinges as hold opens for door(s). Doors 6" and taller shall be designed using gas shocks as hold opens for the door(s).	Y____N____
50-51-1014	CATCH, MAGNETIC - ADHESIVE BACK FOR INTERIOR DOOR(S) OVER 36 INCHES All interior doors that are over 36" inches tall with a latch on the top of the door shall have an adhesive back magnetic catch installed on the bottom of the door.	Y____N____
50-51-2002	CABINET DOORS - CLEAR POLYCARBONATE All cabinet doors shall be clear polycarbonate material. The sliding cabinet doors shall be installed in aluminum track lined with PPL inserts to eliminate rattles and prevent the doors from opening during transit. An edge mounted aluminum handle shall be installed on each sliding cabinet door.	Y____N____
50-51-3001	CABINETS/ WALLS - POLYCHROMATIC COATING - MARBLE STONE All exposed side walls, the partition wall (on the patient compartment side only), the headliner, along with the cabinet and drawer fronts, aluminum doors, cabinet and drawer interiors shall be covered with a washable #99-7371 Marble Stone sprayed-on multi-use polychromatic coating, to create	Y____N____



	a laminate-free interior. -----	
50-51-4002	COUNTER TOP - RECESSED ALUMINUM - POLYCHROMATIC SPRAY COATED The counter top shall be recessed 3/4" to prevent equipment from sliding off. All counter top work surfaces shall be finished with multi-use polychromatic spray coating prior to being clear coated. -----	Y____N____
50-51-4050	COUNTER TOP ACCENT STRIPE NOT REQUIRED No counter access stripe -----	Y____N____
50-51-5001	UPHOLSTERY - PATRIOT PLUS CHARCOAL #8605 All cushions, head pads and seats shall be covered with Spradling International Patriot Plus Charcoal #8605 expanded vinyl upholstery material. The vinyl and all foam cushion material shall comply with FMVSS #302 flame spread requirements. -----	Y____N____
50-51-6001	LONPLATE II, NON-SLIP EMBOSSED SM. GRID - MICA (GRAY) #421 The floor in the patient compartment shall be covered with Lonseal "Lonplate II" non-slip; small grid (embossed) Mica (gray) #421, resilient sheet vinyl flooring material, which shall be coved 3-inches up the wall on the street side, and to the top of the squad bench base on the curbside. The flooring material shall be stripped and waxed before delivery. -----	Y____N____
50-60-0018	ASPIRATOR / SUCTION - SSCOR - WITH ELECTRIC PUMP - RECESSED An SSCOR suction system with a 12 VDC electric vacuum pump shall be recessed into the street side lower interior wall near the attendant's seat. The 12 VDC electric vacuum pump shall be mounted in the standard outside storage compartment. The system shall be activated by a switch on the attendant control panel. The SSCOR vacuum pump exhaust shall be vented to the exterior of the vehicle. -----	Y____N____
50-60-0220	EMBLEMS / SIGNS - REAR PATIENT COMPARTMENT Two (2) "No Smoking / Oxygen Equipped / Fasten Seat Belts" signs shall be provided. One (1) sign shall be installed in the cab and one (1) above the oxygen outlets in the patient compartment street side cabinet. -----	Y____N____
50-60-0256	EXHAUST VENTILATOR, 3-SPEED - MULTIPLEX ELECTRIC SYSTEM A three-speed, 250 CFM (minimum) exhaust fan meeting KKK-A-1822F requirements shall be provided and located in the street side cabinet in the patient compartment. The exhaust fan shall be pulse width modulated from a switch on the attendant control panel vista screen. The exhaust system shall have a louvered grille inside and a chrome vent outside. The exhaust system shall vent through the side of the vehicle, not through the roof. -----	Y____N____
50-60-0300	FLOOR CONSTRUCTION- PATIENT COMPARTMENT, NON-WOOD COMPOSITE The sub-floor in the patient compartment shall be constructed of .125" thick aluminum over .125" and .190" thick reinforcing hat sections and mounting laterals. The aluminum sub-floor shall be covered with a single piece of 3/4" non-wood composite material. All corner molding, edging and trim shall be anodized aluminum or stainless steel and shall be sealed	Y____N____



to prevent fluids from seeping under the cabinets.

50-60-0301	Wood floors are not satisfactory and shall not be accepted by the purchaser. FLOORING - COVE	Y____N____
	The patient compartment floor radius shall be coved with pre-formed floor coving material. The coving shall be installed behind the vinyl floor covering, along both the street side and curbside walls. -----	
50-60-0325	NO - GLOVE, DISPENSER - CURBSIDE ABOVE DOOR	Y____N____

50-60-0340	GRAB RAIL, 1-1/4" DIAMETER, (96") OVER COT AREA One (1) 1-1/4" diameter x 96" long stainless steel grab rail shall be installed on the ceiling for attendant/ patient balance control. The grab rail shall be attached to the ceiling with three (3) mounting brackets that secure it to the super structure of the module. Installation of the grab rail shall comply with AMD-008 requirements.	Y____N____
50-60-0391	HEADLINER - REAR PATIENT COMPARTMENT The headliner in the patient compartment shall be one-piece, seamless, .090 thick aluminum finished with sprayed-on multi-use polychromatic coating. -----	Y____N____
50-60-0435	IV HANGERS - PERKO TWO (2), WITH VELCRO STRAPS Install two (2) Perko #1309 IV hooks and straps. -----	Y____N____
50-60-0629	FLOW METER, OXYGEN - THORPE STYLE One (1) Thorpe style oxygen flow meter (15LPM) shall be shipped loose with the completed vehicle. -----	Y____N____
50-60-0652	OXYGEN SYSTEM, MANUAL SYSTEM The oxygen system shall be completely installed and include a pre-set oxygen regulator with a cylinder pressure gauge and a 200 PSI safety valve with all necessary piping and connections. The oxygen system shall be completely low pressure, and the regulator shall be fastened directly to the cylinder. The regulator shall be set to operate at approximately 50 PSI. The oxygen cylinder shall be installed so the system may be easily turned on and off at the main cylinder valve from the patient compartment. The oxygen cylinder shall be provided by the purchaser. The oxygen system monitor shall be readily available to the attendant while seated at the head of the cot as part of the microprocessor based electrical system. Flexible conductive oxygen hose with a minimum 900 lbs. burst rating shall be installed between the regulator and the oxygen receptacles. The system shall be tested and tagged in conformance with NFPA-56-F and KKK-A-1822F. The manual O2 system shall have flexible conductive oxygen hose with a minimum of 900 lb. burst rating installed between the O2 storage	Y____N____



50-60-0660	compartment and the oxygen receptacle(s). The system shall be tested and tagged in conformance with NFPA-56-F and KKK-A-1822F. PADDED EDGING PROTECTION Padded corner edging shall be installed where necessary on exposed corners and edges in the patient compartment for patient and attendant protection. -----	Y____N____
50-60-0661	PADS, HEAD AND BACK Vinyl upholstered, foam cushioned head/back pads shall be installed as follows: the lower edge of the upper front wall cabinet (above the partition doorway or window), above the rear doors, above the side door, and on the street side wall behind and each side of the CPR seat. The pads shall be covered with a flame retardant color coordinated vinyl upholstery material.	Y____N____
50-60-0709	SHARPS AND TRASH CONTAINERS - ACCESS THRU SQUAD BENCH LID A 6.9 qt. #BD5489 sharps container, and a 8 qt. trash container shall be installed in the forward end of the squad bench base. The containers shall be accessed through the squad bench lid, and covered with a 3/8" thick clear acrylic hinged lid with a biohazard warning label. -----	Y____N____
50-60-0718	SQUAD BENCH FACE - VINYL FLOORING MATERIAL The face of the squad bench shall be covered with vinyl flooring material. -----	Y____N____
50-60-0730	DOOR PANELS - MODULE PASSAGE DOORS - FULL LENGTH ALUMINUM - W/ACCESS PANELS The inner door panels shall be manufactured from aluminum, and covered with a washable sprayed-on multi-use polychromatic coating. The panels shall run the full length of the door and will contain a removable latch access panel. -----	Y____N____
50-60-0761	STAINLESS STEEL WALL PROTECTION - INTERIOR STREETSIDE A brushed stainless steel panel shall be provided on the street side wall from the bottom of the CPR seat -----	Y____N____
50-60-0820	TURTLE TILE - SKID-RESISTANT MAT, CURBSIDE STEPWELL Skid resistant charcoal gray turtle tile matting shall be installed in the curbside step well. -----	Y____N____
50-60-1602	OXYGEN OUTLET (2) LEFT WALL - OHIO MED - ACTION AREA Two (2) Ohio Medical flush mounted, quick release wall outlets shall be installed in the forward street side cabinet action area. -----	Y____N____
50-60-1640	OXYGEN OUTLET (1) RIGHT WALL - OHIO MED - HEAD SQ BENCH One (1) Ohio Medical flush mounted, quick release wall outlet shall be installed in the right wall above the head end of the squad bench. -----	Y____N____
50-61-0001	ASSIST HANDLES, (6) BLACK RUBBER A total of six (6) 10-7/8" black vulcanized rubber with steel core assist handles shall be provided and installed: one (1) handle on each rear door, one (1) on the curbside door, one (1) at the curbside doorway and two (2) at the rear doorway. -----	Y____N____



50-62-0301	COT FASTENER - STAT-TRAC SINGLE - CENTER POSITION CN8 COMPLIANT A Stat Trac, single-position (center mount) cot fastener shall be installed on the module floor to accommodate a Ferno series cot. 0.625" thick aluminum tapping plate(s) shall be installed below the aluminum floor to secure the cot floor mounting plates. -----	Y____N____
AA1LIBOP1	PRIMARY ACTION AREA WITH SUCTION CONTROL, 125VAC/12VDC/DUAL USB OUTLETS, (2) OXYGEN OUTLETS, VISTA SCREEN ON AN ANGLED FLIP-DOWN PANEL -----	Y____N____
AA2LIBOP1	SECONDARY ACTION AREA WITH 125VAC OUTLET -----	Y____N____
CPROP3	SEATING - CPR - EVS WITH V4 HARNESS A CPR seat shall be installed on the street side of the patient compartment aft of the main action area counter. The CPR seat shall be KKK-A-1822F Change Notice 8 compliant with V4 harness style shoulder / seat belt and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The head pad and back pad will be constructed of energy absorbing material. The seat bottom, backrest, and headrest shall be padded and covered with color coordinated, cushioned vinyl. -----	Y____N____
IC1LIBOP1	NO #1 CABINET No Cabinet Behind Squad Bench -----	Y____N____
IC2LIBOP1	SQUAD BENCH WITH RECESSED SHARPS/WASTE AND (2) EVS V4 SEATS. SECOND PATIENT TRANSPORT ON THE SQUAD BENCH. The Curbside wall shall have a squad bench with two (2) EVS V4 seats, base storage, a split lid with hold opens, and a recessed sharps and trash container. -----	Y____N____
IC3LIBOP1	(2) ANGLED LED LIGHTS OVERHEAD WITH OXYGEN OUTLET MOUNTED TO THE WALL The Curbside overhead seating area shall have an angled panel with two (2) LED lights, and an upper wall mounted oxygen outlet. -----	Y____N____
IF1LIBC1	CABINET - FRONT WALL, UPPER #1 - SLIDING DOORS Front wall interior cabinet #1 shall have a fixed frame and a set of sliding polycarbonate doors. Both doors shall have a full length handle with the outermost door to have a handle on both ends. The cabinet shall contain one (1) adjustable shelf. -----	Y____N____
IF1LIBOP1	PROAIR 3856 HEAT/AC AND CABINET WITH SLIDING POLYCARBONATE DOORS WITH (1) ADJUSTABLE SHELF -----	Y____N____



	A ProAir 3856 Heat / AC system and a cabinet with sliding polycarbonate doors shall be installed in the upper front wall.	
IF2LIBOP1	CABINET - UPPER/LOWER WITH HINGED POLYCARBONATE DOORS, CENTER SQUEEZE LATCHES, (1) ADJ. SHELF PER CABINET The interior lower front wall shall have two (2) cabinets located to the right, enclosed by hinged polycarbonate doors. One (1) 125VAC duplex outlet and one (1) 12VDC power point outlet shall be located inside the uppermost cabinet, upper right hand corner.	Y____N____
IF3LIBOP1	CABINET - VENTED RADIO CABINET WITH PDQ ABOVE The Power Distribution Quarters (PDQ) compartment and a vented radio compartment below the PDQ, shall be installed in the front wall to the left.	Y____N____
IF3LIBRAD	CABINET - FRONT WALL, LOWER BELOW PDQ (SINGLE VENTED DOOR) A radio cabinet with a vented, hinged aluminum door, secured by a chrome locking lever latch, shall be located on the front lower left wall. Door to open towards rear of the module.	Y____N____
IF3PDQ	CABINET - PDQ The Power Distribution Quarters (PDQ) shall hold electrical components, (i.e. power distribution nodes, circuit breakers, etc). The electrical compartment shall have a hinged door with (2) two chrome locking lever latches and be shall located on the partition wall behind the attendant seat.	Y____N____
IF4LIBOP1	PASS-THROUGH WINDOW OPEN TO THE CAB The front wall center, shall have a Pass -Through open to cab.	Y____N____
IF-CNT-NO	COUNTER TOP NOT REQUIRED	Y____N____
IS1LIBOP1	CABINET - FIXED FRAME WITH SLIDING POLYCARBONATE DOORS AND (1) ADJ. SHELF The left wall, upper rear interior cabinet (#1) shall be enclosed by one (1) set of sliding polycarbonate doors attached to a fixed frame. The doors shall have full length handles with the outer most sliding door to have handles on both ends. The cabinet shall contain one (1) adjustable shelf.	Y____N____
IS2LIBOP1	CABINET - FIXED FRAME WITH SLIDING POLYCARBONATE DOORS AND (1) ADJ. SHELF The left wall, upper interior cabinet (#2), above the attendant control panel shall be enclosed by one (1) set of sliding polycarbonate doors, with a fixed frame. The doors shall have full length handles with the outer most sliding door to have handles on both ends. The cabinet shall contain one (1) adjustable shelf.	Y____N____
IS3LIBOP1	CABINET - SLIDING POLYCARBONATE DOORS WITH (1) ADJ. SHELF, FULL DEPTH STORAGE ABOVE SHORT OSS #3 The left wall rear interior cabinet (#3) shall be enclosed by one (1) set of sliding polycarbonate doors attached to a fixed frame. The doors shall have full length handles with the outer most sliding door to have handles on	Y____N____



	both ends. The cabinet shall contain one (1) adjustable shelf and shall provide full depth storage above short OSS #3. -----	
IS4LIBOP1	CABINET - HINGED POLYCARBONATE DOOR WITH CENTER SQUEEZE LATCH AND (1) ADJUSTABLE SHELF The left wall interior cabinet (#4), below the secondary action area, shall be enclosed by a side hinged, polycarbonate door with center squeeze latch, and contain one (1) adjustable shelf. -----	Y____N____
IS5LIBOP1	RECESSED SUCTION CANISTER An SSCOR suction system with a 12 VDC electric vacuum pump shall be recessed into the street side lower interior wall near the attendant seat. The 12 VDC electric vacuum pump shall be mounted in the #2 outside storage compartment. The system shall be activated by a switch on the attendant control panel. The SSCOR vacuum pump exhaust shall be vented to the exterior of the vehicle. (must use SSCOR pump and tubing) -----	Y____N____
IS-CNT2-RAL	COUNTER TOP, RECESSED ALUMINUM - REAR ACTION AREA The Secondary Action Area shall have a rounded aluminum counter top, recessed 1.25" to prevent equipment from sliding off. All counter top work surfaces shall be finished with multi-use poly-chromatic spray coating prior to being clear coated. -----	Y____N____
IS-CNT-RAL	COUNTER TOP, RECESSED ALUMINUM The countertop in the Rear Action area shall be recessed aluminum. -----	Y____N____
SQ-BN-BASE	SQUAD BENCH BASE W/STORAGE A storage area shall be provided in the squad bench base. The squad bench base shall be constructed of .090" thick aluminum for maximum storage capacity and minimum weight. The interior of the squad bench shall be sprayed with sound absorbing polyurethane material. -----	Y____N____
SQSTOP3	SEATING - CN8 COMPLIANT TWO (2) EVS V4 A Squad bench seat with two (2) EVS individual seating positions will be installed on the curb side of the patient compartment. The squad bench seat shall be KKK-A-1822F Change Notice 8 compliant with (2) V4 harness style shoulder / seat belts and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The headrest and backrest will be constructed of energy absorbing material. The seat bottom, backrest, and headrest shall be padded and covered with color coordinated, cushioned vinyl material. -----	Y____N____

Paint / Graphics

Item Number	Name	
60-01-0001	PAINT PROCEDURE All non-anodized aluminum module body surfaces shall be completely chemically steam cleaned, filled with premium body filler as needed,	Y____N____



60-01-0002	sanded smooth and primed with an epoxy primer and then primed again with a high solid primer. The cured primer surfacer shall be DA sanded with 320 grit and cleaned. A high solid primer shall then be applied, where needed, as a sealer. PAINT MODULE - OEM WHITE PLUS CLEAR COAT The module shall be painted with a low voc Axalta polyurethane paint, to match the OEM chassis color, at a dry thickness of no less than 2 to 2.5 mils. The entire module shall be clear-coated, using an Axalta Process, sprayed over the final paint coat.	Y____N____
60-01-0004	BUFFING, PAINT - MODULE The paint on the module sides shall be buffed to a high shine using a recommended paint buff system.	Y____N____
60-01-0005	STANDARDS AND SPECIFICATIONS FOR VEHICLE PAINT APPEARANCE Standards and Specifications for Vehicle Paint Appearance 1. PURPOSE: To provide cosmetic standards that represent a common language and set of shared expectations of the appearance quality the Bidder's vehicle. This and associated documents define the appearance acceptability and non-acceptability criteria for the Bidder's Ambulance. These standards represent a realistic balance between our Customer expectations and the derived output from our current manufacturing process. Any output required beyond these objectively based requirements requires extraordinary means and comes with associated costs and timing. 2. SCOPE: These standards apply to all of the Bidder's vehicles being produced beginning in calendar year 2016. 3. DEFINITONS: 3.1 Class A Surfaces are defined as: A. Highly Visible or reflective surfaces that cause the viewer's eye to focus on that area of the vehicle. B. The exterior of the vehicle from 36 inches off of the ground to 96 inches off of the ground. C. Areas that passengers of the vehicle would view in a normal viewing direction of (+/- 45 degrees) and a distance of (24 Inches – 36 inches). 3.2 Class B Surfaces are defined as; A. Less visible area that is viewed as a general area. This would include areas beyond the normal viewing direction as specified in Class A surfaces including those higher than 96 inches off of the ground or lower than 36 inches off of the ground. B. Another description would include areas seen peripherally. C. Any area that must be viewed at an unusual angle. 3.3 Class C Surfaces are defined as; A. Any area that must be viewed by close inspection. B. This would include the roof area of a cab. C. Any area that would be visible less than 1% of the time such as door jams or the back of doors including those on the module 3.4 Class D Surfaces are defined as; A. Areas that the consumer will be unable to evaluate without removal of other component parts.	Y____N____



- B. Any area that must be viewed at an abnormal or unusual angle.
- C. Any area that can only be seen when lying on the ground, from under the vehicle, or require a ladder to see, such as the roof.

4. PROCEDURE:

4.1 General Inspection Requirements:

- A. Cosmetic inspection by the Bidder or its suppliers shall use the TIME and DISTANCE method of inspection as described in different sections of this document.
- B. The Cosmetic standards defined in this document shall be used for training personnel, checking surface quality produced by any process and used in making "Accept/Reject" decisions.

4.2 Viewing Conditions:

- A. All visual inspection will be made under normal artificial lighting, unaided and viewed in a manner that duplicates the typical end use of the vehicle. During cosmetic inspection, only visual qualities (appearance) of the part surface shall be considered. Surfaces shall be viewed without the aid of magnification, at an angle approx. 45° to normal of the surface to be inspected.

4.3 The following are Inspection criteria:

- A. Inspection shall be conducted using the unaided eye.
- B. Viewing distance shall be 18" or 24" as specified by surface class.
- C. Viewing angle shall be at a minimum of 45° to the surface.
- D. Light source shall be fluorescent light; the light source shall provide optimal viewing and minimized glare and shadowing of the vehicle.
- E. Where subjectiveness intervenes in the assessment, form/fit/function shall take precedent.

4.4 The following table shall be used to determine viewing distance and duration:

Codes:	Class A	Class B	Class C	Class D
Viewing Distance:	18 inches	18 inches	24 inches	24 inches
Viewing Time:	10 seconds	5 seconds	3 seconds	3 seconds
Viewing Area:	50 Inches SQD	50 Inches SQD	50 Inches SQD	50 Inches SQD

4.5 Conditions and Acceptance Criteria

- A. The total number of defects per surface shall not exceed the acceptable limit.

4.6 Specific boundary samples are logged in the Bidder's Database and reviewed annually at a minimum for applicability.

4.7 These standards do not apply to an OEM chassis in which case, OEM acceptance standards apply unless it has been quoted to meet the Bidder's Appearance Standards.

4.8 Any OEM chassis painted by the Bidder will conform to the original OEM acceptance standards unless it has been quoted to meet the Bidder's Appearance Standards.

Specification Limits For Vehicle Appearance (Exterior)

ITEM "A" Surface "B" Surface "C" Surface "D" Surface

Bare Substrate NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT ALLOWED

Pin Hole/Solvent Pop .5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT 1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT 1.5 mm max.



size/2 per 50 inches Squared /must be a minimum of 25 inches apart -
MUST NOT BE DEEPER THAN THE CLEAR COAT 2.0 mm max. size/3 per 25
inches Squared / must be 12 inches apart - MUST NOT BE DEEPER THAN
THE CLEAR COAT
Chips/Damage NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT
ALLOWED
Cracking NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT ALLOWED
Fish Eyes NOT ALLOWED NOT ALLOWED NOT ALLOWED Must match
Boundry Sample
Dings NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT ALLOWED
Dirt - Must "feel" flat .5 mm max. size/1 per 50 inches Squared /must be a
minimum of 50 inches apart 1.0 mm max. size/1 per 50 inches Squared
/must be a minimum of 50 inches apart 1.5 mm max. size/1 per 50 inches
Squared /must be a minimum of 25 inches apart 2.0 mm max. size/ 3 per
25 inches Squared / must be 12 inches apart
Dry Spray NONE ALLOWED NONE ALLOWED NONE ALLOWED Must match
Boundry Sample
Mottling - Color Specific Must match Boundry Sample Must match Boundry
Sample Must match Boundry Sample Must match Boundry Sample
Off Color to Cab or other Module elements Visually acceptable to the
Master Plaque or the Delta E is not greater than 1.5 Visually acceptable to
the Master Plaque or the Delta E is not greater than 1.5 Visually acceptable
to the Master Plaque or the Delta E is not greater than 1.5 Visually
acceptable to the Master Plaque or the Delta E is not greater than 1.5
Orange Peel Equivalent to # 10 panel MIN. Equivalent to # 10 panel MIN.
Equivalent to # 10 panel MIN. Equivalent to # 7 panel MIN.
Overspray NONE ALLOWED NONE ALLOWED NONE ALLOWED Must match
Boundry Sample
Paint Drops/Drips NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
ALLOWED
Pits/Porosity NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
ALLOWED
Crooked Mask Lines NONE ALLOWED NONE ALLOWED NONE ALLOWED
NONE ALLOWED
Burn Through NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
ALLOWED
Sags/Runs NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
ALLOWED
Scratches NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
ALLOWED
Polishing Swirls (Scratches) Minimal amount of micro scratches from
polishing are acceptable, must not be felt or able to be seen from 24 inches
Minimal amount of micro scratches from polishing are acceptable, must
not be felt or able to be seen from 24 inches Minimal amount of micro
scratches from polishing are acceptable, must not be felt or able to be seen
from 24 inches Minimal amount of micro scratches from polishing are
acceptable, must not be felt or able to be seen from 24 inches
Shrinking NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
ALLOWED
Thin Paint NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
ALLOWED



Water Spots/Rinse Blisters NONE ALLOWED NONE ALLOWED NONE
 ALLOWED NONE ALLOWED
 Wet Mark NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
 ALLOWED
 Wrinkling NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE
 ALLOWED

Specification Limits For Vehicle Appearance (Interior)

ITEM "A" Surface "B" Surface "C" Surface "D" Surface

Bare Substrate NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT
 ALLOWED

Pin Hole/Solvent Pop NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Chips/Damage NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Cracking NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Dirt - Must "feel" flat NOT ALLOWED NOT ALLOWED 1mm in diameter or
 1.5mm surface area (L x W) at a minimum of 400 mm apart.

N/A

Dry Spray NOT ALLOWED NOT ALLOWED ALLOWED N/A

Off Color to other Module elements NOT ALLOWED NOT ALLOWED NOT
 ALLOWED N/A

Overspray NOT ALLOWED NOT ALLOWED ALLOWED N/A

Paint Drops/Drips NOT ALLOWED NOT ALLOWED 1mm in diameter N/A

Pits/Porosity NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Crooked Mask Lines NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Sags/Runs NOT ALLOWED NOT ALLOWED SAG - 2mm Wide by 2mm Long
 by .5mm High MAX / RUN - 3mm WIDE by 2mm Long by .5mm High MAX

N/A

Scratches NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Shrinking NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Thin Paint NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

Wrinkling NOT ALLOWED NOT ALLOWED NOT ALLOWED N/A

ITEM "A" Surface "B" Surface "C" Surface "D" Surface

Bare Substrate NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT
 ALLOWED

Pin Hole/Solvent Pop .5 mm max. size/1 per 50 inches Squared /must be a
 minimum of 50 inches apart - MUST NOT BE DEEPER THAN THE CLEAR
 COAT 1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50
 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT 1.5 mm max.
 size/2 per 50 inches Squared /must be a minimum of 25 inches apart -
 MUST NOT BE DEEPER THAN THE CLEAR COAT 2.0 mm max. size/3 per 25
 inches Squared / must be 12 inches apart - MUST NOT BE DEEPER THAN
 THE CLEAR COAT



Chips/Damage NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT ALLOWED

Cracking NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT ALLOWED

Fish Eyes NOT ALLOWED NOT ALLOWED NOT ALLOWED Must match Boundary Sample

Dings NOT ALLOWED NOT ALLOWED NOT ALLOWED NOT ALLOWED

Dirt - Must "feel" flat .5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart 1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart 1.5 mm max. size/1 per 50 inches Squared /must be a minimum of 25 inches apart 2.0 mm max. size/ 3 per 25 inches Squared / must be 12 inches apart

Dry Spray NONE ALLOWED NONE ALLOWED NONE ALLOWED Must match Boundary Sample

Mottling - Color Specific Must match Boundary Sample Must match Boundary Sample Must match Boundary Sample Must match Boundary Sample

Off Color to Cab or other Module elements Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5 Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5 Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5 Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5

Orange Peel Equivalent to # 10 panel MIN. Equivalent to # 10 panel MIN. Equivalent to # 10 panel MIN. Equivalent to # 7 panel MIN.

Overspray NONE ALLOWED NONE ALLOWED NONE ALLOWED Must match Boundary Sample

Paint Drops/Drips NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Pits/Porosity NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Crooked Mask Lines NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Burn Through NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Sags/Runs NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Scratches NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Polishing Swirls (Scratches) Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches

Shrinking NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Thin Paint NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Water Spots/Rinse Blisters NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED

Wet Mark NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED



Wrinkling NONE ALLOWED NONE ALLOWED NONE ALLOWED NONE ALLOWED
 Gaps in Diamond Plate at intersection of Cab Steps N/A NONE ALLOWED
 N/A N/A

60-10-0108 CAB - OEM PAINT Y____N____

60-25-0101 REFLECTIVE - BLACK MATERIAL IN RUB RAILS Y____N____
 Rub rails shall incorporate a 5/8" wide black reflective scotchlite safety
 accent stripe.

60-30-0200 REFLECTIVE - DOOR REFLECTIVITY Y____N____
 Reflective material (25" x 2.5" red/silver chevron style), meeting FMVSS 108
 requirements, shall be installed on the lower interior stainless steel panel
 of each rear door and hinged side door.

If a sliding side door is provided, it shall have a 1.50" x 40.00" white
 reflective stripe installed on the rear facing edge.

Vehicle Manuals

Item Number	Name	
80-20-0001	VEHICLE MANUALS (1) PACKAGE SET One (1) Delivery Manual Package shall be supplied with the vehicle, and shall include the following items:	Y____N____
	- Ambulance manufacturer parts, service and operation manuals - OEM chassis owner's guide - Complete 12 VDC and 125 VAC wiring schematics for all included standard and optional systems - Multiplex Electrical system programming - electronic media	
90-10-0007	STATEMENT OF LIMITED WARRANTY NEW AMBULANCES	Y____N____