

Stock Super Squad #227XXS

BUILD SPECIFICATIONS

WARD APPARATUS SPECIFICATION NEW ALL-ALUMINUM NINE FOOT (9') SUPER SQUAD RESPONDER BODY

BODY DESIGN:

The body shall be modular in design, capable of being removed and remounted on a new chassis. Body integrity and strength to be independent of chassis mounting. Body is specifically designed to enable custom layout of interior compartments.

BODY MATERIALS:

The following shall be the minimum acceptable materials, gauge, and finish used: Aluminum Sheeting - All exterior panels shall be 5052-H32 aluminum of .125" thickness. Aluminum Diamond Plate - All diamond plate shall be 3003-H14 aluminum of .125" thickness. Body Mounting - All body mounting bolts to be minimum Grade 5. Exterior Fasteners - All exterior nuts, bolts, and screws shall be stainless steel.

CORROSION PROTECTION:

Electrolysis Corrosion Kontrol (ECK) shall be used to prevent dissimilar metal corrosion. ECK shall be used for door latches, door hinges, trim plates, fenderettes, etc. ECK shall be applied to every external fastener hole prior to component mounting.

BODY SUPER-STRUCTURE:

The body super-structure shall be constructed of square aluminum tubing and custom extrusions. All framing and supports shall be welded to create a fully enclosed structure. This construction technique provides high strength and durability and enables custom design of interior compartments.

The side wall structure shall be constructed of 2.0" x 2.0" x .125" 6063-T52 alloy square aluminum tubing, the side wall structure shall be welded and gusseted to the sub structure.

The roof structure shall be constructed of 2.0" x 2.0" x .125" 6063-T52 alloy aluminum tubing in a lateral pattern, maximum 20-inch spacing. The roof structure shall be welded to the side-wall structure.

All side walls shall be surfaced using a .125" aluminum sheet, welded and bonded to body side wall structure. The body roof shall be surfaced using .125" aluminum diamond plate.

A side body impact rail manufactured of 6063-T52 alloy extruded aluminum shall be welded to the apparatus side wall structure. It shall receive the body side sheet by means of a groove, which runs continually fore to aft of the side wall structure.

BODY FLOOR CONSTRUCTION: Welded aluminum tubing with full-length 5.0" "C" channel for chassis mounting, 0.188" aluminum floor, 0.90" aluminum belly-pan



UNDERCOATING:

The underside of the vehicle including all metal work shall be sprayed with SEM ROCK-IT XC urethane automotive undercoating. The ROCK-IT XC product is designed to prevent chipping, cracking, or marring of painted and unpainted surfaces after exposure to high impact sand, gravel, and other abrasive materials. This undercoating shall aid in preventing corrosion and will provide a sound and vapor barrier to the aluminum body structure.

BODY MOUNTING: Minimum (6) locations, attaches floor sub-structure to chassis frame, includes neoprene pad for isolation

BODY FRONT SHEETING: .125" smooth aluminum, painted job color

STONE GUARDS:

The front body corners shall have .125" aluminum diamond plate protective guards. The stone guards shall be bolted to the body and provide coverage at a minimum of 24" high from the base of the body.

BODY REAR SHEETING: 125" smooth aluminum sheeting, painted job color

BODY CORNERS, EXTRUDED:

The exterior body corners and roof perimeter shall be capped with a radiused (2.44") custom aluminum extrusion and welded to the wall and roof structure. Body corners create additional protection from physical and environmental damage to the super-structure.

APPARATUS BODY PAINT FINISH:

Paint shall be PPG FBCH. Two (2) coats urethane base coat shall be applied according to paint manufacturer certified processes. After the base coats have cured properly, two (2) coats of a high solids urethane clear shall be applied. All surface imperfections shall be removed by buffing and polishing. Note: Body to be paint matched to chassis OEM paint.

BODY ROOF SHEETING: .125" aluminum diamond plate

REAR BODY CHEVRONS: "Diamond Grade" Chevron reflective striping, minimum 50% rear body panel

REFLECTIVE STRIPE: Four-inch (4") white "Scotchlite" stripe installed chassis & body length

RUB RAILS:

A two (2) part impact and rub rail system shall be used for body side protection. A polished aluminum rub rail .75" thick x 3" wide shall be bolted to the body "impact" rail to aid in collision protection. The outside vertical edges shall be chamfered for an aesthetic appearance and to reduce the chance of personnel injury.

Black Scotchlite reflective striping to be applied to the recessed center of rub rail to provide additional body side illumination. An additional four (4) reflectors to be installed, two (2) each side of body.



DRIP RAILS: Polished aluminum rain gutters installed over compartment doors

WHEEL WELL LINERS: Welded aluminum inner liners provided at rear wheel wells

REAR WHEEL FENDERETTES:

The wheel well openings shall be trimmed with polished stainless steel fenderettes, bolted into place.

COMPARTMENTATION

COMPARTMENT CONSTRUCTION: Compartments to be sweep-out design with stainless steel door sills. All side body storage compartments are to be identical in design & dimension. Compartments shall have a clear opening of 29" H x 28 1/8" W x 18" D with hinged doors. Rear storage compartment shall have a clear opening of 29" H x 34 1/8" W x 101" D. All compartment walls shall be covered with .125" aluminum sheet. The body compartments to have light gray Zolatone equivalent finish with all seams sealed

ADJUSTABLE SHELF CHANNEL:

Vertically mounted Uni-Strut channel shall be provided and installed in all exterior compartments where necessary for the installation of infinitely adjustable shelving and trays. The channels shall be of such design to allow square type spring loaded, self-tightening nuts to be attached inside of the channel.

COMPARTMENT LAYOUT: Each side body compartment to include one (1) vertically adjustable shelf of .188" sanded finish aluminum with 1 1/2" lip. Rear compartment to include slide-out tray fabricated from 1.88" sanded finish aluminum with a 1 1/2" lip and mounted on 1,000-pound capacity SlideMaster slides with IMS push/pull red ball latch

COMPARTMENT DOOR CONSTRUCTION: Swing door of .125" aluminum sheeting, stainless steel hinge, weather-stripping, 18-ga brushed stainless interior panel, pneumatic strut to hold door open 90+ degrees. Rear compartment door to open approximately 150-degrees for complete access to slide-out tray. Door to secure in the open position by plunger and rubber socket to rear body exterior wall.

ELECTRIC COMPARTMENT DOOR LATCH: TriMark 030-1450 series handle latches, power actuators enabled via a cab console switch

ELECTRICAL/WARNING SYSTEMS

ELECTRICAL SYSTEM:

All wiring and electrical equipment to be compliant with any applicable NFPA 1901 criteria for Special Service Fire Apparatus and SAE standards. All lighting and reflectors shall meet Federal Motor Vehicle Standards. A master warning device switch that energizes all optical warning devices shall be provided. Class 1 Electrical System with Carling rocker-type switches, if needed. Protected environment for electrical system.

POWER DISTRIBUTION QUARTERS: Protected environment for electrical systems. Includes positive door latches and automatic lighting with removal of access door.



BATTERY CONTROL SYSTEM, IGNITION SWITCH: Battery master control through chassis ignition switch, 200-amp solenoid, constant duty

BATTERY CHARGER:

Kussmaul Auto Charge Low Profile LPC 20 Series, digital display mounted on chassis cab console, driver side

KUSSMAUL 120-VOLT SUPER AUTO EJECT: Kussmaul 20-amp, automatic shoreline dis-connect, NEMA 5-20P male receptacle to auto eject with chassis starter, located street-side forward lower skirt

COMPARTMENT STRIP LIGHTING: Maxima MLS Series LED strip lighting, both sides, auto with door open

"DOOR OPEN" WARNING LIGHT: Federal Signal COM1MC-R 4-LED red warning light at console

ELECTRONIC SIREN: One (1) Federal Signal, model PF200R siren/light controller with 100/200 watts output. Siren control to include selectable siren tones with P/A and noise-canceling microphone

SPEAKER SYSTEM: Federal DynaMax ES100C speaker installed behind the front bumper

FRONT LIGHT BAR: Federal Signal Allegiant Serial LED 53" light bar with red/white lights shall be installed on the vehicle

FRONT LOWER WARNING LIGHTS: Federal Signal MPS1220U-RW LED lights, grille mounted, chrome bezels, red/white LED light with clear lens

SIDE UPPER WARNING LIGHTS: Federal Signal FR7C-R FireRay LED series upper warning lights with chrome bezels, two (2) each body side, red LED light with clear lens

SIDE LOWER WARNING LIGHTS: Federal Signal MicroPulse MPS1220U-RW LED lights, chrome bezels, two (2) each side of apparatus, red/white LED light with clear lens

REAR UPPER WARNING LIGHTS: Federal Signal FR7C-R FireRay series LED lights, chrome bezels, one (1) each rear upper body corner, red LED light with clear lens

SIDE BODY SCENE LIGHTS: Federal Signal FR7 FireRay LED lights, chrome bezels, two (2) each upper body side

REAR BODY SCENE LIGHTS: Federal Signal FR7 FireRay LED lights, chrome bezels, one (1) each upper rear body corner

TRAFFIC DIRECTING LIGHT BAR: Federal Signal CN Signal Master 31" traffic directing light bar, model CNSM8R-2654044, control at cab console



REAR TURN SIGNAL, BACK-UP, BRAKE, AND WARNING LIGHTS: Federal Signal FireRay FR6 LED lights, four (4) light cluster mounted in chrome housing

REVERSE ACTIVATED REAR SCENE LIGHTS: The rear scene lights to automatically activate whenever the apparatus transmission is in reverse mode

LED CLEARANCE LIGHTS: Federal Signal COM1M 4-light LED, seven (7) red and two (2) amber, per ICC, FMVSS regulations.

LED UNDERBODY LIGHTS: TecNiq Series E10 LED under-body lights, stainless steel brackets, three (3) each side

LICENSE PLATE BRACKET, REAR: Cast Products recessed aluminum license plate holder with lighting

CHASSIS RELATED ACCESSORIES

CAB CONTROL CONSOLE: Between chassis bucket seats, .125" aluminum, removable top cover plate, all required light and warning controls, single map/binder storage pocket, two (2) cup holders, Zolatone coating

PRE-WIRED ANTENNA CABLES: Two (2) RG58U coax cables pre-wired, chassis roof to cab console

DUAL USB PORT: Kussmaul Dual USB charging port, LED indicator, console installed

REAR BUMPER: Full width of body, aluminum diamond plate, extends minimum 5" from body

RUNNING BOARDS:

Running boards shall be installed beneath the cab and crew area doors on both sides of the chassis. They shall be fabricated from aluminum diamond plate and be structurally reinforced for maximum strength. Running board to be enclosed on leading edge to protect against road debris from front tire.

CAB STEP LIGHTS: Federal Signal COM145LC-W white LED step light at each cab door, activates with parking lights and Park position

BACK-UP ALARM: Federal Signal Evacuator electronic back-up alarm

FUEL FILL DOOR (GASOLINE): Flush mounted fuel filler guard with a hinged door, labeled

TOW EYES, REAR: There shall be two (2) tow eyes mounted directly to the rear chassis framework

TIRE PRESSURE MONITORING DEVICES: LED tire pressure alert management system (Vecsafe equal)

MUD FLAPS - REAR: Black rubber mud flaps installed at rear wheels

WARNING LABELS AND INFORMATION PLATES: Innovative Control labels to per NFPA requirements



DELIVERY REQUIREMENTS:

VEHICLE ROAD AND SYSTEMS INTEGRITY TESTING: A complete and thorough road test and systems integrity test shall be conducted at the time of vehicle completion, and prior to delivery.

MANUALS: Sub-system component manuals to be provided at delivery

CHASSIS:

2022 Ford F350 SRW 4x4 Crew Cab XL Value Package, 179" Wheelbase 6.2L SOHC V8 Flex Fuel Gasoline Engine TorqShift 10-Speed Automatic Transmission 4x4 Electronic Shift on the Fly Transfer Case Skid Plates GVWR: 11,400lbs Tires: LT275/70Rx18E BSW AT Tires Heavy-Duty Alternator, 240-Amp XL Package w/Chrome Bumper 18" Argent Painted Steel Wheels Power Equipment Group Includes Power Windows & Locks, Remote Keyless Entry Driver and Passenger Power Remote Heated Folding Mirrors Steering Wheel Mounted Cruise Control Interior Medium Earth Gray Exterior Race Red