

SWAB ALSF-96 "PIONEER" SERIES

BODY AND OPTIONAL EQUIPMENT

SPECIFICATIONS

Rev. 6/2016

INTENTION

The following specifications are submitted in order to describe and specify the design, construction, materials and equipment to be utilized and installed in the fabrication of a Quick Response unit to be used in the Emergency Services field.

DESCRIPTION

SWAB PIONEER SERIES fiberglass truck body having six (6) equipment storage compartments, three (3) accessible from left or right side of body, with/without rear compartment. Fabricated of 100% reinforced fiberglass of "one-piece" construction to eliminate seams and cracks.

CHASSIS INFORMATION

A standard "Pick-Up Chassis" having a wheelbase of sufficient length to provide a 56" cab-to-axle (C/A) dimension is required. Chassis must be equipped with a **single rear wheel** and **mid-ship fuel tank**. All other options are at the customer's preference. Current acceptable chassis are: Chevy/GMC 3500HD, Ford F-350, or Dodge Ram 3500*.

Chassis to be supplied by: _____

YEAR: _____ MAKE: _____ MODEL: _____

ENGINE: GAS ___ DIESEL ___

OPTIONAL EQUIPMENT:

NOTE – When ordering a chassis, select a Pick-Up with 8ft bed, NOT a chassis cab, and select the box delete option (if available with desired options). This configuration will supply the chassis with a mid-ship fuel tank, fuel fill kit, single rear wheel and correct cab to axle dimension. If chassis is supplied with a Pick-Up bed, a fuel fill kit may be required, at additional cost to the customer. Customer may also incur costs related to removal and handling of Pick-Up bed.

WEIGHT

The weight of the basic fiberglass unit exclusive of optional items and equipment – 920 pounds.

CONSTRUCTION

Full fiberglass-reinforced plastic "one-piece" construction throughout with smooth finish. Color gel coat molded into body during fabrication to match Ford Oxford White.

Four (4) 11 ga. tubular stainless steel cross-members molded into bottom of unit. Sides skirted with cut-outs at rear wheels of proper size to permit easy removal of wheels when required. Roof section to be reinforced underneath with channel for added strength.

Polished aluminum rain gutter molding installed around entire unit at roof line to prevent "run-off" from body roof into storage compartments.

Bottom of unit to be completely enclosed to reduce heat build-up around compartments and to provide a "dead-air" insulating space around compartments.

BODY DIMENSIONS

The overall body dimensions are: 98" Long x 78" Wide x 54" High.

BODY FLOOR PLAN SELECTED - _____

Refer to Swab Pioneer Series Floorplan chart.

COMPARTMENTS

Each body side compartment to be of "one-piece" molded fiberglass construction without cracks or seams to prevent dirt and/or moisture from entering compartment.

Rear "backboard" compartment (if included with selected floorplan) to be molded fiberglass in multiple sections with each seam sealed with proper sealant to prevent dirt and/or moisture from entering compartment.

Compartment openings to be fully sealed with ribbed, closed-cell, neoprene type gasket material, installed in such a manner as to make full contact with doors when closed and latched with door locking hardware.

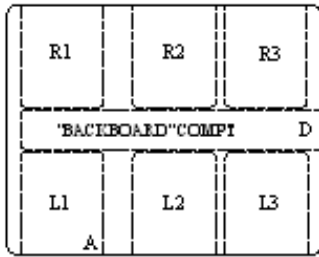
Body side compartments to have 16 gauge steel plates molded into fiberglass walls to serve as reinforcement plate for optional shelving.

COMPARTMENT DOORS

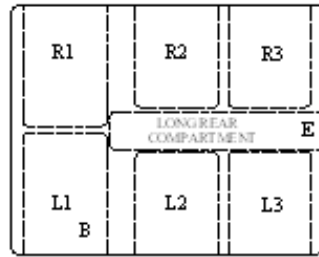
Each compartment door to be of full fiberglass-reinforced plastic construction. Doors to have full-height x 4" wide, 16ga. stainless steel backer plates imbedded inside of interior door panels at hinge location. Doors are to have smooth finish on both sides.

Doors to be hung on full-length special stainless steel hinges to permit full opening of door. Doors fastened to hinges using stainless steel fasteners to provide a fastener-free appearance on the outside of the door. Hinges fastened to body using stainless steel fasteners to provide for removal of door and hinge for repair or replacement.

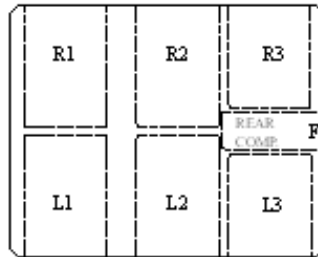
Doors equipped with Eberhard locking, polished stainless steel paddle handles, with lock cylinders keyed alike. Doors are to be secured by a cam lock and striker system using spring loaded, slam-shut latch mechanisms.



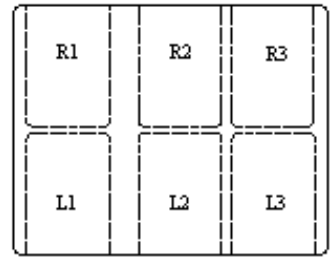
OPTION A



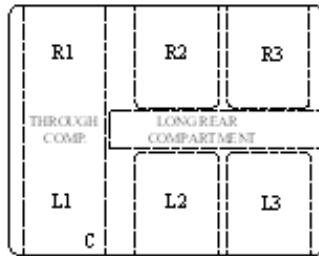
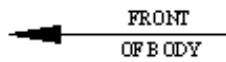
OPTION B



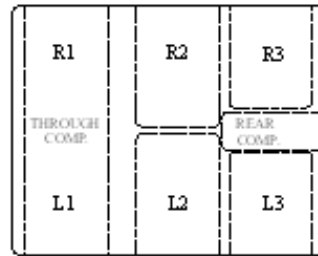
OPTION C



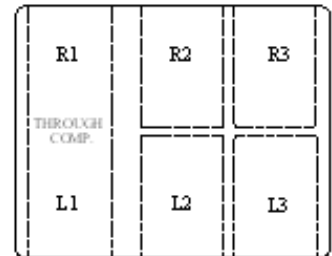
OPTION D



OPTION B1



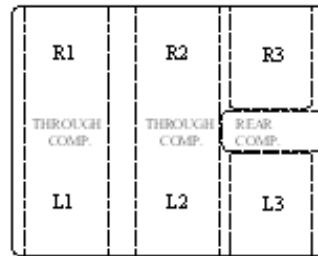
OPTION C1



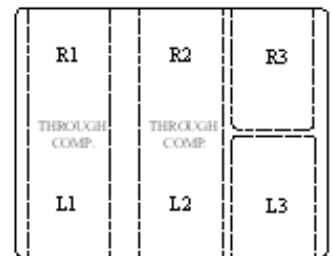
OPTION D1

SWAB PIONEER SERIES

FLOORPLANS



OPTION C2



OPTION D2

COMPARTMENT DIMENSIONS

MODIFIED SIDE COMPARTMENT (A)
25" WIDE X 30" HIGH X 30" DEEP

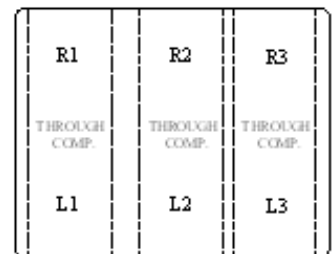
FULL DEPTH SIDE COMPARTMENT (B)
25" WIDE X 30" HIGH X 36" DEEP

THROUGH COMPARTMENT (C)
25" WIDE X 30" HIGH X 75" DEEP

"BACKBOARD" COMPARTMENT (D)
12" WIDE X 30" HIGH X 92" DEEP

LONG REAR COMPARTMENT (E)
12" WIDE X 30" HIGH X 64" DEEP

SHORT REAR COMPARTMENT (F)
12" WIDE X 30" HIGH X 30" DEEP



OPTION D3

FEDERAL & STATE DOT LIGHTING

All FMVSS and State required body marker lights, reflectors, dual back-up lights and dual license lights installed.

LICENSE PLATE LIGHTS – (2) TecNiq #L11-WC00-1 LED with chrome bases.

REAR DOT LIGHTS:

Brake/Tail/Turn/Back-Up Lights – (2) Code 3 #79STTRBZ, 7” x 9”, combination LED stop/tail/turn/back-up with chrome bezels, one (1) each lower rear body panel.

Upper/Center Mount Third Brake Light – (1) TecNiq #T10-RR00-1 Slim Line Red, Lo-Profile LED light installed in center of upper/rear roof rail, with chrome bezel.

REAR BUMPER & MUD GUARDS

Rear bumper to be fabricated from 3" steel channel/tube and reinforced to truck frame. Bright aluminum treadplate overlay installed on steel bumper and secured with required fasteners.

One (1) pair **SWAB** logo mud and splashguards installed at rear wheels.

MOUNTING

Body mounted onto truck chassis frame using three (3) mounting-points on each side of chassis frame. Each body mounting point is to have a rubber mounting isolator installed to reduce excess vibration and strain on body. Fiberglass body is to be mounted as low as possible consistent with proper tire clearance underneath but no lower than cab roof.

ELECTRICAL

General Overview (12VDC)

Electrical system installed using minimum 14 gauge WGXL Crosslink Thermoplastic insulated stranded wire to each load carrying circuit. All LED warning/DOT light wiring to be minimum 18 ga. color coded stranded type, or as otherwise specified by lighting manufacturer. Each circuit color-coded, maintaining individual wire color from circuit breaker to load. Wiring installed in high temperature Zip Loom (300 degree rating) where exposed. All connections made with solderless terminals. Wiring harness installed with all required attachments and grommets installed where wiring passes through metal or fiberglass.

General Overview (110VAC)

110-volt wiring installed as required with minimum 12 gauge SJ type cable with waterproof junction boxes as required, box connections and wiring clips. All required attachments and grommets installed where wiring passes through metal or fiberglass.

WARNING LIGHTS AND SIREN EQUIPMENT

All customer specified warning light and siren equipment to be installed in accordance with manufacturer's installation instructions.

Light/siren circuits to be switched through a solenoid or relay to protect cab console/panel switch. All required weatherproof gaskets and mounting brackets installed.

DELIVERY PREPARATIONS

Customer's chassis oil, grease levels checked and filled to recommended levels. Anti-freeze solution brought to original level after installation of body heater system, if so equipped. Batteries fully charged. Unit weighed and road tested. All auxiliary equipment serviced and tested for proper operation. Unit is to be thoroughly cleaned inside/outside.

INSPECTION(S)

Swab Wagon Company, Inc. requests that customers inspect progress on their new apparatus at least once during the build process. All travel expenses related to inspections shall be incurred by the dealer/customer. Swab Wagon Company does offer our company camp facility, Happy Valley, free of charge as a courtesy to our out-of-town customers.

The customer is welcome to perform as many inspection visits as they wish (within reason). All inspections are to be scheduled in advance with Swab sales personnel. Inspection teams are requested to not exceed six (6) fire company personnel.

Customers who fail to perform any inspections of their unit while in production, forfeit the right to request any changes (free of charge) to the placement of items, not specifically spelled out in the specifications, after the completed unit is delivered.

CHANGES & ADDITIONS

All Changes & Additions to contract, including additional charges or credits, shall be submitted to customer for approval. All submissions, accepted or rejected, shall be returned to SWAB. In the case of an accepted Change & Addition, the work shall not be implemented until such time as the necessary documents have been returned to SWAB and the conditions (terms), if any, of the order have been satisfied.

WORKMANSHIP

The design, construction and finish to above body and equipment to equal or exceed previous SWAB Pioneer Series fiberglass bodies.

UNITED STATES MANUFACTURER

Manufacture of body, to include sub-frame, fiberglass construction, installation of body onto chassis, and installation of all electrical and specified optional equipment, to be performed by a company located solely within the continental United States. – NO EXCEPTION.

MANUFACTURING HISTORY

Completed unit, exclusive of chassis, to be produced by a company having been in the continuous manufacture of motorized emergency equipment for a minimum of seventy (70) years. Company to also have a minimum of forty (40) years of experience in the production of fiberglass truck bodies. Bidder to present evidence of manufacturing history with their bid. – NO EXCEPTION.

Bidder to present a list of a minimum of ten (10) similar units built within the past five (5) years, including Company Name, Contact Name, Address, Phone Number, description of unit built, and photographs. Bidders to present copies of sales literature for type of apparatus being bid. – NO EXCEPTION.

BID DRAWINGS

Bidder to present two (2) copies of a large-size (24" x 48") drawing in 1/16th scale, showing (at a minimum) the curb side view, curb side body view, street side body view, front view, rear body view, and body floorplan of the proposed vehicle. Drawings must be detailed and specific to the truck being bid, showing all specified equipment in the locations discussed in the bid specs. Drawing to show overall length, width, and height measurements, compartment box sizes, and any other pertinent dimensions. Generic drawings, or drawings of trucks deemed "similar", submitted with the bid, will be considered non-responsive and will result in the rejection of the bid. – NO EXCEPTION.

AFFILIATED ORGANIZATION MEMBERSHIPS

Bidder to have been a member in good standing of the National Truck Equipment Association (NTEA) and the National Fire Protection Association (NFPA) for a minimum of twenty (20) years. Bidder to present evidence of their long-standing membership with these organizations. Purchaser has a keen interest in working with a contractor who demonstrates a dedication to staying current with federal motor vehicle laws, safety standards, and best manufacturing practices pertaining to the Truck Equipment and Emergency Equipment industries.

WARRANTY

Following new SWAB Pioneer Unit warranty to be provided when body is installed by Swab Wagon Company, Inc. (SWAB) at their facility in Elizabethville, PA.

- [A]** Body and sub-frame, to include doors/hinges, body mounts/isolators, rear step bumper supports, original gel coat finish, etc. warranted to be free of defects, to original purchaser of unit, for a period of five (5) years, or 80,000 miles on original chassis, whichever is first to occur, from date of delivery. Chassis to carry original chassis manufacturer's warranty.
- [A1]** Body and sub-frame warranty voided if the in-service weight of the vehicle exceeds the GVWR of the chassis. "In-service weight" means the body is loaded with all equipment, with full fuel tank(s), with a driver and passenger(s) in each available cab seating position.
- [A2]** All warranty work for body, sub-frame, doors/hinges, etc. to be performed at SWAB facility in Elizabethville, PA, whereby the unit shall be returned and picked-up at owner's and/or dealer's expense, after completion of warranty work.
- [A3]** Body and sub-frame warranty voided if body is transferred to a different chassis, during the warranty period, by an entity other than SWAB, unless written consent is obtained prior to work.
- [A4]** Should body be transferred to a different chassis within body and sub-frame warranty period, warranty to revert to original 5-year warranty from original date of delivery, regardless of mileage of the original chassis from which body was removed.
- [A5]** SWAB to be notified should vehicle be involved in any sort of collision, regardless of apparent damage to the body or sub-frame at that time. Body and sub-frame warranty voided if structural issues arise after unit was involved in an accident and owner failed to notify SWAB.

- [B]** Fabricated body components, to include exterior trim pieces, adjustable compartment shelves/mounts, backboard compartment dividers/shelves, oxygen cylinder compartments, custom tool mount installations, etc., to be warranted for a period of two (2) years from date of delivery.
- [B1]** Warranty does not cover dulling and/or surface corrosion of exterior bright aluminum treadplate finishes due to exposure to corrosive winter road treatments commonly used in Northern states, or corrosive cleaning agents such as an engine degreaser.
- [B2]** Warranty voided if shelves and/or trays are loaded beyond their stated weight capacity, found within these specifications.
- [C]** Individual manufactured components (i.e. heat/cool units, warning lights, inverters, slide-out tray mechanisms, etc.) to carry respective manufacturer's warranty. Vehicle owner and/or selling dealer shall be responsible for labor costs to replace defective equipment where no labor reimbursement is included with manufacturer's warranty. Customer and/or dealer shall be responsible for shipping costs if component manufacturer requires return of the defective item to fulfill their warranty requirements.
- [D]** Electrical work to be warranted for a period of two (2) years from date of delivery to original owner for 100% of the expense to perform required replacement/repair to correct defects in electrical design/installation. Manufactured electrical components to carry individual manufacturers' warranty per paragraph [C] above.
- [E]** Paint work (when optioned) to carry a three (3) year warranty, from date of delivery to original owner, for 100% of expense to perform repainting as provided by the PPG Commercial Refinish Product Warranty. Paint warranty to include:
- Peeling or delaminating of the topcoat and/or other layers of paint
 - Cracking or checking due to failure of the product
 - Excessive loss of gloss caused by cracking, checking, and hazing.
- Paint warranty does not include:
- Paint deterioration cause by blistering or other film degradation due to rust or corrosion originating from the substrate
 - Hazing, chalking, or loss of gloss caused by improper care, abrasive polishes, cleaning agents, heavy-duty pressure washing, or aggressive mechanical wash systems
 - Paint deterioration caused by abuse, scratches, chips, gloss reduction, accidents, acid rain, chemical fallout or acts of nature
 - Repairs done over previously refinished area unless stripped to the original gel coat.
 - Failure on finishes performed by non-PPG Commercial Certified Technicians or by non-PPG Commercial Certified Centers
 - Failures on finishes due to inadequate film builds
 - Failure due to improper cleaning or surface preparation or failure to follow the product use instructions.
- [F]** Warranty Procedure - Upon notification, SWAB will perform required repair/replacement work under the following procedures: (NOTE - SWAB reserves the right to stipulate which procedure warranty will be performed by.)
- [F1]** At owner's location by SWAB service personnel.
- [F2]** At owner's location by SWAB approved/qualified outside contractor or selling dealer upon receipt by SWAB of estimate/quotation for said work.

- [F3]** At the location of the selling dealer, where unit shall be returned to the dealer's location at owner's and/or dealer's expense.
- [F4]** At SWAB facilities in Elizabethville, PA, where unit shall be returned to SWAB location at owner's and/or dealer's expense.
- [G]** Where warranty work is to be performed by selling dealer and/or approved outside contractor, at owner's location or dealer's location, parts required for the repair shall be provided free of charge by SWAB. Should selling dealer utilize part(s) out of their inventory, SWAB shall replace part(s), free of charge, or reimburse dealer for dealer's cost on the parts, including shipping expenses.
- [H]** All claims for warranty repairs must be filed with SWAB **PRIOR** to repairs being started. All claims must be filed within the above specified warranty periods. Where possible, notification of warranty claim shall include photographic evidence of the equipment failure or defect. SWAB reserves the right to deny any and all warranty claims that have been started and/or completed without proper notification to SWAB.
- [I]** All warranties voided by accident repair(s), body modification(s), and/or transfer to new chassis by an entity other than SWAB, unless approved in writing by SWAB. All warranties voided upon transfer of ownership of Pioneer body to another party from original owners.
- [J]** Electrical warranty voided by alterations and/or modifications to electrical system, when performed within the warranty period, by entity other than SWAB unless approved in writing by SWAB. Repairs by chassis dealer to the chassis original electrical system does not constitute a void of SWAB warranty, nor is notification of said chassis dealer work requested by SWAB.
- [K]** Dealer-installed equipment, to include lettering and striping, radios, winches, etc., to carry Dealer and/or component manufacturer's warranty on said equipment/work. Customer is responsible for obtaining written warranty from Dealer for any and all dealer-installed equipment.
- [L]** Warranty period shall commence when unit is placed into service by owner. Owner to notify SWAB of date that unit was placed into service. When reporting "in service" date to SWAB, include production-quality digital photographs (5 – 8 mega-pixel) of unit sitting in front of station or other appropriate setting, showing completed unit with all lettering, lighting, and any other owner or dealer-installed equipment. Photographs to include (minimum) driver and passenger-side front quarter and driver and passenger-side rear quarter. Photographs may be used for SWAB marketing purposes. If no date is reported to SWAB, along with requested photographs, then the warranty period will be effective starting the day the unit is delivered from SWAB to selling dealer and/or customer.

COMPLETION ESTIMATE

Completion of a Pioneer unit is estimated at 15 weeks from the receipt of the chassis, providing the body has been produced prior to receipt of chassis. This is also dependent upon the number of options specified on the unit. SWAB will not be held responsible for delays caused by chassis production, or delays in material delivery from customer or vender supplied equipment.

DETAILED SPECIFICATIONS

These detailed specifications and drawings are provided for the purpose of outlining details of manufacture and production and shall remain the property of SWAB. Specifications and/or drawings shall not be transferred to other agencies, associations, or individuals without the express permission being granted by SWAB. These detailed

specifications and/or drawings may be used in the preparation of public papers. Specifications are subject to change without notice.

INSURANCE

SWAB **does not** carry insurance on Customer owned vehicles (cab & chassis); and as such will not be liable to loss or damage due to fire, theft, vandalism, windstorm or any other Acts of God.

MATERIAL / EQUIPMENT SUBSTITUTION

Due to the constant updating and improvement of designs and equipment by chassis manufacturers, and subsequent changes in model numbers and designs of chassis-specific, after-market equipment items, Swab Wagon Company, Inc. reserves the right to substitute model numbers of equipment items for the specific model year of the chassis being supplied without notice to the customer. Due to constant updating and improvements of designs by our suppliers, Swab Wagon Company reserves the right to supply equipment items equal, or superior to, the model numbers of the equipment items contained within these specifications, without notice to the customer.

CUSTOMER/DEALER SUPPLIED EQUIPMENT

SWAB Wagon Company, Inc., is an OEM (Original Equipment Manufacturer) for most major emergency equipment component manufacturers (such as Whelen, Code 3, Fire Research, Hale, Zico, Onan, etc., etc.). SWAB is therefore very competitive with equipment pricing as compared to equipment distributors, who do not typically receive as deep of a manufacturers discount as an OEM.

Customer and/or dealer supplied equipment items must be received by SWAB no later than sixty (60) days from date of contract signing or issuance of purchase order. Equipment delays can and will cause production delays and loss of labor efficiency. SWAB will not be held to production deadlines when customer/dealer supplied equipment is not received by SWAB per the sixty (60) day receipt requirement. All equipment shipments must bear the job (customer) name on the packing list.

Customer/dealer will furnish to SWAB an itemized check list of all customer-supplied equipment items that will be shipped to SWAB. Check list must be furnished to SWAB within ten (10) days of contract signing or issuance of purchase order.

All claims for equipment received in a damaged condition shall be the responsibility of the customer and/or dealer. The customer/dealer shall also be responsible for securing RMA (return materials authorization), also known as RGA (returned goods authorization), and any costs incurred by SWAB for returning equipment shipments.

SWAB reserves the right to refuse customer/dealer supplying of OEM-class equipment which SWAB is in business to sell.

OPTIONAL EQUIPMENT ITEMS

Listed below are some of the more commonly requested options, however, should your organization have other needs, please contact your representative or SWAB Wagon Company, Inc. We will gladly listen to your ideas and develop the solutions for your situation. Warning lights and/or equipment not limited to items specified below, other warning light/equipment manufacturers and models are available.

CHASSIS MODIFICATIONS & EQUIPMENT

GRILL GUARD

One (1) Westin Sportsman Grill Guard installed per manufacturer's installation instructions. Grill Guard to have a polished stainless steel finish.

WARN #12,000 WINCH W/ STAINLESS GRILL GUARD

One (1) Warn #M12,000, 12,000 lbs. electric winch installed with Warn Trans4mer polished stainless steel grille guard assembly. Grille guard to include polished stainless steel headlight brush guards, and polished stainless steel winch mounting plate. Winch to include 125' of 3/8" aircraft cable, clevis hook, 4-way roller fairlead, and 25' remote control. Winch connected to 12-volt chassis battery power supply with appropriate battery cable.

TUBULAR CAB STEPS

One (1) pair of Westin Platinum 4" oval step bars. Step bars to have polished stainless steel finish. Step bars installed per manufacturer's installation instructions with supplied hardware.

ALUMINUM TREADPLATE CAB STEPS

One (1) pair of Dee Zee Brite-Tread aluminum treadplate cab steps installed. Steps powder-coated to prevent oxidation. Steps include forward built-in mud flap. Steps installed per manufacturer's installation instructions with supplied hardware.

NFPA COMPLIANT CAB STEPS

One (1) pair of running boards fabricated and installed onto chassis. Running boards are to be fabricated from Perf - O - Grip material for maximum traction. The outer edges will be finished with aluminum treadplate. Steps to be attached to the chassis by custom made brackets.

AUTOMATIC SAFETY LOCKS

One (1) Kussmaul Safety Lock 3 system, #091-155, installed per manufacturer's installation instructions. This simple controller bypasses the ignition switch when activated by the closure of a momentary switch. The operator may then remove the ignition key without shutting the engine down. Movement of the vehicle is prohibited by interlocking the SAFETY LOCKS with a switch operated by the foot brake, a neutral safety switch on the gearshift or a parking brake operated switch. Operating any one of these will cause the relay in the SAFETY LOCKS to drop out and interrupt the ignition circuit to stop the engine. The authorized operator need only insert the key and turn on the ignition to operate the vehicle. With the key in the lock and turned on, the ignition circuit is completed as normal and the opening of the SAFETY LOCKS relay has no effect on engine operation.

HIDDEN UNLOCK SWITCH

One (1) weatherproof momentary toggle switch located on the exterior of the vehicle to unlock cab and body doors should the key and fob be accidentally locked within the vehicle. Switch installed in customer-specified, inconspicuous location. ****Option requires Body Power Door Lock option.**

REAR VIEW CAMERA

One (1) Hanscom K. Package #5211, rear view camera with 5" Color LCD display. Camera to be mounted to the rear of the body. Monitor will be mounted in place of the rear view mirror. Camera and monitor to be color and night vision ready.

HIGH IDLE – FORD SUPER-DUTY W/ AMBULANCE PREP. PKG.

Switch installed on cab center console to engage built-in high idle function included with Ford Ambulance Prep. Package. High-idle to activate only if chassis transmission is in PARK/NEUTRAL and parking brake is engaged. Safety override feature to cancel high idle function if parking brake is released or if brake pedal is depressed in an attempt to shift vehicle out of PARK/NEUTRAL. ****Option required for use of inverter unit, or if 12-volt utility and emergency load exceeds alternator output at idle.**

HIGH IDLE – NON-AMBULANCE PREP. CHASSIS

One (1) InPower #DBT-LD-03 "Green" Electronic Throttle Module installed for specific chassis make and engine. Module connects to engine management computer on chassis via the OBDII port. High idle module to sense drop in voltage and will automatically increase engine idle until voltage is stabilized, saving fuel over a traditional high-idle with a pre-set RPM. High-idle to activate only if chassis transmission is in PARK/NEUTRAL and parking brake is engaged. Safety override installed to cancel high idle function if parking brake is released or if brake pedal is depressed in an attempt to shift vehicle out of PARK/NEUTRAL. ****Option required for use of inverter unit, or if 12-volt utility and emergency load exceeds alternator output at idle.**

BODY MODIFICATIONS & EQUIPMENT

POWER DOOR LOCKS**

Eberhard polished stainless steel paddle-type door handles equipped with Eberhard power door locking system. System to include actuators mounted adjacent to each door handle on inside of compartment doors. Supplied wiring harness connected to each actuator and power door lock module located in body 12-Volt electrical enclosure. Module interfaced with chassis door locks with separate wiring harness. Body door locks to lock and unlock with chassis doors via chassis remote key fob (if so equipped). Compartment door lock actuators to be separate components from door handles to allow field replacement of the actuator without replacement of the entire handle – NO EXCEPTION. Cover constructed of .080" smooth aluminum installed on top of door lock actuator and back of paddle handle to protect moving parts from heavy items shifting inside of compartment boxes. ****Option requires chassis to have power door locks.**

DOOR RETAINERS

All body side compartment doors equipped with Cleveland double-spring cadmium-plated retainers to hold doors at 90-degrees to body side when open. Rear compartment door (if equipped) to have spring-type retainer installed to hold door past 90-degrees to allow additional door opening clearance for narrow compartment.

SHELF TRACK MATERIAL

Four (4) 20" lengths of #TB9029/34 adjustable shelf track material installed in customer-specified side compartment(s). Shelf tracks installed at compartment backer plate locations, two (2) each side of compartment box. Tracks to be positioned approx. 4-1/2" from back compartment wall and 4-1/2" from compartment door opening. Eight (8) sets of spring-loaded shelf track clips and fasteners included for each set of shelf tracks, shipped loose.

TOTAL QUANTITY: _____ **LOCATION(S):** L1___ L2___ L3___ R1___ R2___ R3___

ADJUSTABLE COMPARTMENT SHELF

Adjustable compartment shelf installed in customer-specified side compartment(s). Adjustable shelf to be constructed of 3/16" smooth aluminum and have 1" lip on front and back edge. Shelf to sit on 1-1/4" x 1-1/4" x 1/8" aluminum angles to create a 1-1/2" deep shelf pan. Shelf fastened to angles with (2) truss head bolts, one (1) each side of shelf. Shelf angles installed on four (4) 20" long #TB9029/34 aluminum side wall shelf tracks. Spring-loaded shelf track clips and fasteners provided for each shelf. Shelf to utilize available full depth of compartment box.

TOTAL QUANTITY: _____ **LOCATION(S):** L1___ L2___ L3___ R1___ R2___ R3___

SLIDE-OUT TRAY

Innovative Industries SlideMaster Model #SM2-LP, 70% extension, 300 lbs. capacity, steel construction, slide

system installed on compartment floor of customer-specified compartment(s). Slide system to feature lock-in/lock-out mechanism. Tray constructed of 3/16" smooth aluminum with 2" lips on all four sides. Tray to be maximum width and depth as allowed by compartment door opening and compartment depth clearance. Tray bolted to slide system mounting surface with slide system bolted through compartment floor. Four (4) 14 ga. steel backer plates installed underneath compartment floor at slide mounting locations.

TOTAL QUANTITY: _____ **LOCATION(S):** L1___ L2___ L3___ R1___ R2___ R3___

ADJUSTABLE SLIDE-OUT TRAY

Innovative Industries SlideMaster Model #SM2-LP, 70% extension, 300 lbs. capacity, steel construction, slide system installed on aluminum angles and mounted to #TB9029/34 aluminum shelf tracks in customer-specified compartment(s). Shelf tracks to be 20" in length and include spring-loaded shelf track clips and fasteners. Slide system to feature lock-in/lock-out mechanism. Tray constructed of 3/16" smooth aluminum with 2" lips on all four sides. Tray to be maximum width and depth as allowed by shelf tracks and compartment depth clearance.

TOTAL QUANTITY: _____ **LOCATION(S):** L1___ L2___ L3___ R1___ R2___ R3___

DUAL DIRECTIONAL SLIDE-OUT TRAY

Innovative Industries SlideMaster #M2D-72-22, 70% extension, 1,000 lbs. capacity, steel construction, dual direction slide system mounted on floor of thru-compartment area in customer-specified thru-compartment(s) . Slide system to feature lock-in/lock-out mechanism. Tray constructed of 3/16" smooth aluminum with 2" lips on all four sides. Tray to be maximum width and depth as allowed by compartment door opening and compartment depth clearance. Tray bolted to slide system mounting surface with slide system bolted through compartment floor. Eight (8) 14 ga. steel backer plates installed underneath compartment floor at slide mounting locations. ** **OPTION REQUIRES TRANSVERSE COMPARTMENT.**

TOTAL QUANTITY: _____ **LOCATION(S):** L1/RI___ L2/R2___ L3/R3___

ADJUSTABLE DUAL DIRECTIONAL SLIDE-OUT TRAY

Innovative Industries SlideMaster #M2D-72-22, 70% extension, 1,000 lbs. capacity, steel construction, dual-direction slide system installed on aluminum angles and mounted to #TB9029/34 aluminum shelf tracks in customer-specified thru-compartment(s). Slide system to feature lock-in/lock-out mechanism. Tray constructed of 3/16" smooth aluminum with 2" lips on all four sides. Tray to be maximum width and depth as allowed by shelf tracks and compartment depth clearance. ** **OPTION REQUIRES TRANSVERSE COMPARTMENT.**

TOTAL QUANTITY: _____ **LOCATION(S):** L1/RI___ L2/R2___ L3/R3___

LOW PROFILE BACKBOARD COMPARTMENT SLIDE-OUT TRAY – 150lbs. CAPACITY

Slide-out tray installed on floor of rear backboard compartment. Slide system to be two (2) Accuride #9301, 60" long, 100% extension ball bearing slides. Slides fastened horizontally to 3/4" marine-grade plywood to create compartment sub-floor. Tray constructed of 1/8" smooth aluminum with 2" lip on front and half the length of the tray sides. Back of tray to have an 8" high back and sides to keep items on tray. Tray to be approx. 10" W x

60" L with spring-loaded latch installed at side of tray. Tray to have 150 lbs. weight capacity. Four (4) 14 ga. steel backer plates installed underneath compartment floor at tray sub floor mounting locations. **** OPTION REQUIRES BACKBOARD COMPARTMENT.**

LOW PROFILE BACKBOARD COMPARTMENT SLIDE-OUT TRAY – 225lbs. CAPACITY

Slide-out tray installed on floor of rear backboard compartment. Slide system to be three (3) Accuride #9301, 60" long, 100% extension ball bearing slides. Slides fastened horizontally to 3/4" marine-grade plywood to create compartment sub-floor. Tray constructed of 1/8" smooth aluminum with 2" lip on front and half the length of the tray sides. Back of tray to have an 8" high back and sides to keep items on tray. Tray to be approx. 10" W x 60" L with spring-loaded latch installed at side of tray. Tray to have 225 lbs. weight capacity. Four (4) 14 ga. steel backer plates installed underneath compartment floor at tray sub floor mounting locations. **** OPTION REQUIRES BACKBOARD COMPARTMENT.**

DRI-DEK COMPARTMENT SURFACE DECKING

Heavy poly vinyl tiles installed on all exposed horizontal compartment surfaces, to include compartment floors, adjustable shelves, and slide-out and/or dual-direction trays, to provide dry, skid-free compartment surfaces. Dri-Deck tiles not installed underneath floor-mounted items such as pull-out trays, dual-direction trays, refrigerators, command desks, etc.

DRI-DEK COLOR CHOICE (SELECT ONE): BLACK ___ BLUE ___ YELLOW ___ RED ___ WHITE ___ GREEN ___

PHARMACEUTICAL LOCK BOX

Pharmaceutical lock box fabricated from .125 aluminum with stainless steel piano hinge and locking 6" D-handle latch. Lock box securely bolted to shelf track with a minimum of four (4) bolts. Lock box designed to be mounted in any compartment with existing shelf track. Lock box standard size is approximately 12" wide X 12" high X 22" deep. Custom sizes are available. ****OPTION REQUIRES AT LEAST ONE COMPARTMENT TO HAVE SHELF TRACK MATERIAL INSTALLED.**

TOTAL QUANTITY: ___ **LOCATIONS:** L1 ___ L2 ___ L3 ___ R1 ___ R2 ___ R3 ___

OXYGEN BOTTLE STORAGE RACK

Oxygen bottle storage rack capable of storing two (2) "E" or two (2) "D" oxygen bottles (or 1 of each) up to 5 1/4" diameter. Fabricated from .100 aluminum and installed in customer specified compartment. Bottle rack is designed to be mounted in any compartment with existing shelf track. ****OPTION REQUIRES AT LEAST ONE COMPARTMENT TO HAVE SHELF TRACK MATERIAL INSTALLED.**

TOTAL QUANTITY: ___ **LOCATIONS:** L1 ___ L2 ___ L3 ___ R1 ___ R2 ___ R3 ___

BACKBOARD THRU-HOUSING/SHELF/DIVIDER & RETAINER

Forward wall of backboard compartment removed from approx. 9" above floor to ceiling of compartment. Corresponding cut-out made in center/back wall of the L1/R1 thru-compartment area to allow backboards to protrude into forward compartment area, creating a partial front-body thru-compartment area. Backboard housing constructed of .125" smooth aluminum, painted white to match compartment box interior, installed at backboard opening to act as a stop for the backboards. Shelf constructed in backboard compartment to provide storage for two (2) 18" W x 74" L customer-supplied backboards, with center divider fabricated from .063 aluminum. Customer to supply exact dimensions of backboards to be stowed in compartment so proper shelf height adjustment can be made. 1" Nylon strap with footman loops and center snap clasp installed to retain backboards in compartment. Approximately 9" of clearance left underneath backboards for storage of a tent, long pelican case, or installation of a low-profile slide-out tray. * **OPTION ONLY AVAILABLE WITH FLOORPLAN B1.**

BACKBOARD COMPARTMENT DIVIDER/RETAINER

Backboard divider installed in backboard compartment capable of securely retaining customer supplied backboards/stokes basket. Divider is to be fabricated from .063 aluminum and 1/2" CDX plywood. Velcro strap installed to secure board(s) and/or stokes basket within compartment. The compartment layout is to be approved prior to the start of fabrication.

OXYGEN BOTTLE STORAGE CABINET

One (1) bottle storage rack capable of storing four (4) "standard E" size oxygen cylinders. Fabricated of .125 aluminum and installed between compartments R1 and R2. Compartment to have door constructed of .125" aluminum treadplate with full-length stainless steel hinge and Simmons plated lift-and-turn style latch. If body is to be painted, door to be smooth aluminum painted job color instead of treadplate.

COMMAND DESK

Slide-out command desk(s) fabricated from aluminum with clear plexiglass hinged overlay. Desk top is to be angled toward front with a storage area below. Command desk installed on one (1) Innovative Industries model SM2-LP, 70% extension slide system, with lock-in/lock-out mechanism. Command desk bolted to slide system mounting surface with slide system bolted through compartment floor. Four (4) 14 ga. steel backer plates installed underneath compartment floor at slide mounting locations. Desk dimensions are approximately 24" wide, 2" height in front - 4" height in rear and a depth of 24".

TOTAL QUANTITY: ____ **LOCATIONS:** L1 ____ L2 ____ L3 ____ R1 ____ R2 ____ R3 ____

FIRE EXTINGUISHER & BRACKET

Amerex 5lb. Dry-Chem ABC fire extinguisher with vehicle-mount bracket installed on existing adjustable shelf track in compartment. Bracket secured to track with two (2) track nuts and bolts. ****OPTION REQUIRES AT LEAST ONE COMPARTMENT TO HAVE SHELF TRACK MATERIAL INSTALLED.**

TOTAL QUANTITY: _____ LOCATIONS: L1____ L2____ L3____ R1____ R2____ R3____

WHEEL HOUSING FENDERETTE - POLISHED

One (1) pr. Cast Products Model C1185-3 polished aluminum fenderettes installed, with concealed hardware, on body at rear wheel body cut-outs.

WHEEL HOUSING FENDERETTE – RUBBER

One (1) pr. Rubber Flex-lite fenderettes installed, with concealed hardware, on body at rear wheel body cut-outs.

STOKES BASKET STORAGE RACK, ROOF MOUNTED

One (1) roof mounted storage rack for customer supplied stokes basket. Aluminum rails installed on roof to guide stokes basket into protective hood. U-shaped brackets with quick-release pins installed at rear of body to secure basket to roof. Front protective hood detachable from roof for access to service panel. Storage rack painted to match body and/or roof color.

12VDC ELECTRICAL EQUIPMENT - UTILITY

EMERGENCY SERVICE PACKAGE

***PACKAGE IS REQUIRED IF ADDING TYPICAL EMERGENCY EQUIPMENT TO UNIT.**

Cab Center Console -- One (1) aluminum, floor-mounted/ between-seat switch console installed with switch panel and rearward open map/book area. Console to be constructed of 1/8" smooth aluminum with lid constructed of 1/2" black marine grade plastic board. Outer perimeter of console lid to have 1/4 round edge applied. Console to be painted with Zolatone series 20 Black Onyx color. Console to include Carlin clam-shell type lighted rocker switches with back-lite labels for all specified 12VDC loads. Havis-Shield console equipment brackets provided for each specified siren, traffic advisor, and radio head being installed. ***Console lid layout to be finalized by customer prior to start of production.**

Ventilated Electrical Enclosure -- One (1) ventilated aluminum enclosure to house all 12-volt relays, circuit breakers, and control modules constructed and installed on back wall of compartment L-2. Each component identified by number/color and function and listed within control panel. Main service cable shall be 1/0 stranded insulated cable, rated to 210 amps continuous service and protected by a 200 amp automatic reset circuit breaker. Enclosure to provide for ease of transfer of body/equipment to new chassis.

Battery Switch – All 12-volt utility and warning circuits to engage/disengage with chassis ignition switch via one (1) InPower #SSC20-200, 200-amp, solid state battery disconnect device, installed in 12-volt electrical enclosure. Chassis electrical system to remain unaltered.

CENTER CONSOLE OPTIONS

RADIO HEAD INSTALLATION – Installation provided for one (1) customer-supplied radio head and antenna. Antenna installed on the chassis roof behind the light bar at the time of light bar installation, with coaxial cable ran to center console. The radio head will be installed in the cab console lid according to the customer's layout design. Inside the center console will be a 12v constant hot, 12v ignition switched, and a ground post installed to be used by the radio. Havis-Shields mounting bracket supplied for specific make/model of radio being installed. **All final radio hookup and programming to be the responsibility of the customer.**

QUANTITY OF RADIOS: _____

USB CHARGING PORT – One (1) Kussmaul #091-219, 3.1 amp total output, dual-USB charging port installed in cab switch panel. Port to have one (1) 1.0 amp output and one (1) 2.1 amp output. USB Port hooked-up to be constant hot for continuous charging of cell phones, table computers, etc.

12-VOLT OUTLET – Installed in customer-specified console location.

CUP HOLDERS – Two (2) 3” diameter black plastic drink holders recessed into lower (between seat) portion of console.

ARM RESTS – One (1) pair of padded arm rests installed on top/lower portion of console. Arm rests covered in black Naugahyde material.

RECESSED 12-VOLT ELECTRICAL ENCLOSURE

12-Volt electrical enclosure moved from back wall of compartment L-2 and recessed into right/side wall of compartment L-1. *****OPTION REQUIRED IF BODY FLOORPLAN LAYOUT C2, D2, OR D3 IS CHOSEN.**

TECNIQ LED STRIP COMPARTMENT LIGHTING

All side compartment to have TechNiq #E41 strip lighting installed. One (1) light strip installed on back side of each forward aluminum shelf track, two (2) strips per compartment, 18” in length each. Compartments without aluminum shelf tracks to have light strips installed on compartment side walls. Light strips secured to back side of shelf tracks with 3M VHB industrial adhesive. Light strips to produce approx. 150 lumens of light per every 4.5” section of lighting, cast in a 180-degree array from the surface of the light strip. Light strips to have a lifespan of approximately 50,000 hours, are shock, vibration, and moisture-resistant, and carry a lifetime manufacturer’s replacement warranty. Low-profile light strips do not interfere with placement of any adjustable shelves, slide-out trays, or other compartment equipment. Rear-facing compartment (if equipped) to have two (2) 4” round LED lights recessed in the ceiling. All lights interfaced with individual door ajar switches.

ON SCENE SOLUTIONS LED STRIP COMPARTMENT LIGHTING

All side compartments to have On Scene Solutions Access LED strip lighting installed. One (1) light strip installed on back side of each forward aluminum shelf track, two (2) strips per compartment, 20” in length each. Compartments without aluminum shelf tracks to have light strips installed on compartment side walls. Light strips to produce 400 lumens of light per every 18” of length, encased in durable 5/8” Lexan tube, fully sealed waterproof design, have a lifespan of approximately 50,000 hours, and carry a 5-year manufacturer’s replacement warranty. Lights installed with manufacturer’s mounting brackets, set on a 45-degree angle to project more light into the compartment box. Rear-facing compartment (if equipped) to have two (2) 4” round LED lights recessed in the ceiling. All lights interfaced with individual door switches.

LED GROUND LIGHTING

Eight (8) TecNiq #E100 LED ground lights installed with stainless steel brackets. Each light to produce 675 lumens of light output with a 120-degree X 50-degree area of light broadcast. Lights are water and shock proof, have a service life of approx. 50,000 hours, and a limited lifetime warranty. Lights installed as follows: Two (2) lights installed underneath front bumper, one (1) light installed under each cab step, one (1) light centered under each compartment L-1 and R-1, one (1) light installed on a 45-degree angle at each rear corner of the body. Lights automatically activated by the chassis park circuit.

12V OUTLET

12-VOLT accessory outlet(s) installed in customer specified compartment(s) or cab location(s). Body compartment 12-VOLT accessory outlet(s) positioned approx. 10" from compartment opening. Cab outlets are typically installed on top of or on back of the center console.

TOTAL QUANTITY: _____ LOCATIONS: L1 _____ T/L _____ B/L _____ T/R _____ B/R _____
L2 _____ T/L _____ B/L _____ T/R _____ B/R _____
L3 _____ T/L _____ B/L _____ T/R _____ B/R _____
R1 _____ T/L _____ B/L _____ T/R _____ B/R _____
R2 _____ T/L _____ B/L _____ T/R _____ B/R _____
R3 _____ T/L _____ B/L _____ T/R _____ B/R _____
CAB _____ LOCATION _____

12-VOLT CHASSIS SUPPORTED BODY HEATING/COOLING SYSTEM

One (1) Danhard, Inc air conditioning (16,000BTU) and heating (24,000BTU) unit installed in top forward section of body. Body to have removable panel mounted on roof for easy access/repairs. Air channeled to each body side compartment through a fiberglass plenum installed above the compartments. Duct louver installed in compartment for supply air, return louver installed in lower rear side of compartment to recycle heated/cooled air. Unit connected to chassis heating and cooling system with required hoses, connections, relays and cab mounted controls. Hoses routed to body from engine to be shielded with loom. Regulating valve installed in cab heater supply hose to regulate flow to cab and body.

***System is not available on Dodge Ram Chassis.**

DUAL POWER 12V/110V BODY HEATING/COOLING SYSTEM

One (1) Hoseline, Inc. 3000 Series System, #3025CT-DUAL, 110V/12V air conditioning and heating unit installed in top/forward section of body. Body to have removable panel mounted on roof for easy access/repairs. Air channeled to each body side compartment through a fiberglass plenum installed above the compartments. Duct louver installed in compartment for supply air, return louver installed in lower rear side of compartment to recycle heated/cooled air. Unit installed with required hoses, fittings, and electrical boxes. Unit tied in with chassis A/C and heat system, and 12-volt electrical system. Hoses routed thru body to be shielded with loom.

One (1) Hoseline #TMC2007 Low-Profile dual condenser unit installed on body roof. Stand-alone 110V compressor unit with bracket installed on side of chassis frame, underneath body.

System to provide 12,000 BTU cooling and 9,180 BTU heating at 580 CFM when running off of shoreline (110V). System to provide 30,000 BTU cooling and 36,000 BTU heating when vehicle is running and system is being supported by chassis A/C and heat system (12V).

Digital thermometer and control unit mounted on cab center console or in body compartment L-2. Digital thermometer sensor routed to return air location in compartment L-1. Electric control box, environmental control box, and 110V-12V converter located behind and/or underneath rear cab seat**.

**** Location of electrical components contingent upon style of cab and available space. Components may have to be located in a body compartment.**

**** System requires a 30-amp shoreline connection.**

SCENE LIGHTS – TECHNIQ K70 SERIES LED

Six (6) TechNiq #K70, 7" x 3", High-Output LED Scene lights with chrome bezels installed in upper body roof rail and wired to switch on cab console/panel. Two (2) each installed on left side, right side and rear of unit. Rear scene lights to be interfaced with chassis reverse circuits.

SCENE LIGHTS – WHELEN 700 SERIES LED

Six (6) Whelen 700 Series (70C0ELZR) Super LED Scene lights with chrome bezels installed in upper body roof rail and wired to switch on cab console/panel. Two (2) each installed on left side, right side and rear of unit. Rear scene lights to be interfaced with chassis reverse circuits.

SCENE LIGHTS – WHELEN M7 LED

Six (6) Whelen M7 (M7ZC) Super LED Scene lights with chrome bezels installed in upper body roof rail and wired to switch on cab console/panel. Two (2) each installed on left side, right side and rear of unit. Rear scene lights to be interfaced with chassis reverse circuits.

COMPARTMENT DOOR “OPEN” INDICATOR

Indicator light installed in cab headliner near the windshield to indicate one or more of the compartment doors are unlatched. All body compartment doors to be wired to indicator light. Light to be a Whelen OS Series RED LED with a chrome flange.

BACK-UP ALARM

One (1) Ecco 510 back-up alarm installed on rear of chassis and wired to chassis reverse circuitry.

WHELEN 700 SERIES LED BRAKE/TAIL/TURN/BACK-UP LIGHT UPGRADE

Rear brake/tail/turn/back-up lights to be Whelen #700 Series LED, to include two (2) #70BTT stop/tail lights, two (2) #70A00TAR turn indicators with populated arrows, and two (2) #70C00WCR back-up lights, in place of standard TecNiq #K60 series lights. Upper/center third brake light to be a Whelen #70BTT in place of standard TechNiq #T10 lo-profile brake light. All lights installed with individual Whelen chrome flanges. All other standard DOT lighting will remain the same.

WHELEN M6 SERIES LED BRAKE/TAIL/TURN/BACK-UP LIGHT UPGRADE

Rear brake/tail/turn/back-up lights to be Whelen #M6 Series LED, to include two (2) Whelen #M6BTT stop/tail lights, two (2) #M6T turn indicators with arrows, and two (2) #M6BUW back-up lights, in place of standard TecNiq #K60 series lights. Upper/center third brake light to be a Whelen #M6BTT in place of standard TechNiq #T10 lo-profile brake light. All lights installed with individual Whelen chrome flanges. All other standard DOT lighting will remain the same.

WHELEN LED BRAKE/TAIL/TURN/BACK-UP HOUSING UPGRADE

Whelen 700 Series or Whelen M6 Series LED brake/tail/turn/back-up lights installed in two (2) Whelen #7CAST3 triple-light polished (cast aluminum) housings OR two (2) Whelen #M6FCV3 triple-light chrome (plastic) housings. Housings installed in place of individual chrome light flanges. ***Option requires selection of either Whelen 700 Series B/T/T/BU upgrade or Whelen M6 Series B/T/T/BU upgrade option.**

FIRE RESEARCH LED PUSH-UP POLE LIGHTS

Two (2) Fire Research Spectra LED Scene Lights, model SPA530-Q15, side mount push up telescopic lights shall be installed. Lights installed one (1) each side rear of body. The light pole shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall rotate 360 degrees. The outer pole shall be a grooved aluminum extrusion and qualify as an NFPA compliant handrail. The pole mounting brackets shall have a 2 3/4" offset. Wiring shall extend from the pole bottom with a 4' retractile cord.

The lamphead shall have sixty (60) ultra-bright white LEDs, 48 for flood lighting and 12 to provide a spot light beam pattern. It shall operate at 12/24 volts DC, draw 13/6.5 amps, and generate 15,000 lumens of light. The lamphead shall have a unique lens that directs flood lighting onto the work area and focuses the spot light beam into the distance. The lamphead angle of elevation shall be adjustable at a pivot in the mounting arm and the position locked with a round knurled locking knob. The lamphead shall be no more than 5 3/8" high by 14" wide by 3 3/4" deep and have a heat resistant handle. The lamphead and mounting arm shall be powder coated. The LED scene light shall be for fire service use.

Fire Research Spectra –SW option raised pole hazard light switch for 530 pole shall be installed. The magnetic switch shall be mounted in a Spectra lower steady rest bracket. A magnet shall be mounted in the extension pole. The switch contacts shall close when the pole is raised.

Fire Research Spectra –ON option switch shall be installed on the Spectra lamphead. The weatherproof on-off toggle switch shall be mounted in a switchbox below the lamphead. The switchbox shall be powder coated white.

110VAC ELECTRICAL EQUIPMENT

AUTO-EJECT SHORELINE

One (1) Kussmaul 20 amp Auto-Eject shoreline receptacle, 091-20WP-120, installed with Kussmaul weatherproof cover at panel between compartment L-1 and L-2. Wired to one (1) 20 amp duplex receptacle for optional 110-volt electrical items specified by customer. One (1) matching female plug supplied for installation by customer's electrician at customer's facilities.

FACEPLATE COLOR: _____

SUPER AUTO-EJECT SHORELINE

One (1) Kussmaul 20 amp Super Auto-Eject shoreline receptacle, 091-55-20-120-BW, installed with Kussmaul weatherproof cover at panel between compartment L-1 and L-2. Super Auto-Eject to be installed on aluminum plate, painted job color, to allow removal of entire unit for serviceability. Shoreline wired to one (1) 20 amp duplex receptacle for optional 110-volt electrical items specified by customer. One (1) matching female plug supplied for installation by customer's electrician at customer's facilities.

FACEPLATE COLOR: _____

BATTERY CONDITIONER WITH AUTO-EJECT – 18 AMP

One (1) Kussmaul Auto Charge 1000 Kit (#51-02-1204) Automatic Battery Charger and Power Supply installed and wired to battery system and 110-Volt shoreline. One (1) Kussmaul 15 amp Auto-Eject shoreline installed on upper/side of body between compartment boxes L-1 and L-2. Waterproof single bar graph display mounted on panel above Auto-Eject. One (1) 110VAC duplex receptacle installed at conditioner location. Conditioner mounted on compartment floor in front of 12-VOLT panel in L-2. Auto-Eject faceplate color to be **RED**.

LOW-PROFILE BATTERY CONDITIONER – 20 AMP

One (1) Kussmaul 20 LPC (#091-207-12), 20-amp, fully automatic battery charger/conditioner installed on compartment floor in front of 12-VOLT panel in L-2 OR behind cab seats (**NOTE – contingent on style of cab and available space**). Weatherproof Battery Deluxe Indicator display installed between compartments L-1 and L-2. Deluxe Indicator Display bezel to match color of Auto-Eject cover unless otherwise specified. One (1) 110VAC duplex receptacle installed at conditioner location. Conditioner wired to batteries as required. ***Requires 20-amp Auto-Eject Shoreline option.**

LOW-PROFILE BATTERY CONDITIONER – 40 AMP

One (1) Kussmaul 40 LPC (#091-200-12), 40-amp, high-output fully automatic battery charger/conditioner installed on compartment floor in front of 12-VOLT panel in L-2 OR behind cab seats (**NOTE – contingent on style of cab and available space**). Weatherproof Battery Deluxe Indicator display installed between

compartments L-1 and L-2. Deluxe Indicator Display bezel to match color of Auto-Eject cover unless otherwise specified. One (1) 110VAC duplex receptacle installed at conditioner location. Conditioner wired to batteries as required. ***Requires 20-amp Auto-Eject Shoreline option.**

ROOFMOUNT 110V HEATING/COOLING UNIT W/ AUTO-EJECT

One (1) Duo-Therm roof top air conditioner (11,000 BTU) with heat strip (5,600 BTU) installed and secured to body roof. Air to be distributed to the side compartments thru the fiberglass plenum installed above the compartment ceilings. Directional louver cut into compartment ceiling will allow flow of incoming air. Return louver installed in lower rear side of compartment to recycle heated/cooled air. Thermostat installed in customer specified side compartment and wired to Duo-Therm unit. Dedicated 20-amp Kussmaul Auto-Eject shoreline, #091-20WP-120, for heat/cool unit installed in panel between compartments L-1 and L-2 and wired directly to Duo-Therm unit.

110V HEATING UNIT W/ AUTO-EJECT SHORELINE

One (1) Ventilair 110-volt heater installed in roof cavity and attached to fiberglass plenum and controlled by a bi-metal thermostat unit mounted in one of the main heated compartments. Inlet vents to be installed in the ceiling with the capability of being completely closed. Return vents installed in lower rear side of compartment(s). Dedicated 20-amp Kussmaul Auto-Eject shoreline, #091-20WP-120, for heating unit installed in panel between compartments L-1 and L-2 and wired directly to Ventilair unit.

Heat may be used in all six (6) compartments, but for the most efficient operation at least two (2) compartments should be closed off. Thermostat located in one of the heated compartments.

110VAC OUTLET

***SHORELINE REQUIRED**

20amp/110VAC duplex receptacle(s) installed in customer specified compartments or chassis cab locations. Body compartment 110-VOLT receptacles(s) positioned approx. 12" from compartment opening. Cab outlets are typically installed on front or on back of the center console.

TOTAL QUANTITY: _____ **LOCATIONS:** L1 _____ T/L _____ B/L _____ T/R _____ B/R _____
 L2 _____ T/L _____ B/L _____ T/R _____ B/R _____
 L3 _____ T/L _____ B/L _____ T/R _____ B/R _____
 R1 _____ T/L _____ B/L _____ T/R _____ B/R _____
 R2 _____ T/L _____ B/L _____ T/R _____ B/R _____
 R3 _____ T/L _____ B/L _____ T/R _____ B/R _____
 CAB _____ LOCATION _____



WARNING LIGHTS AND SIRENS

Swab Wagon is an OEM (Original Equipment Manufacturer) for most brands of Warning Lights and Sirens. You may choose any products from Whelen, Code 3, Sound Off Signal, Weldon, and others. The “packages” listed below are for the most commonly requested lighting and locations; feel free to custom build your own package with as many or as few lights as your territory and budget requires.

HEADLIGHT WIG-WAG FLASHER

One (1) Whelen UHF-2150A headlight flasher installed and wired to chassis headlights and a switch on cab center console. Headlight flasher system is to be wired so that it is disabled when the chassis is placed into park.

HIDE-A-WAY WARNING LIGHT SYSTEM

Whelen Vertex self-contained LED hide-a-way flashers installed in the chassis headlight housings and/or fog light housings and wired to a switch on the cab center console. If system is supplied with white lights, flasher will be wired to become disabled when the chassis is placed into park.

NUMBER OF LIGHTS: TWO _____ FOUR _____

LED COLORS:

D/S: HEADLIGHT _____ FOG LIGHT _____

P/S: HEADLIGHT _____ FOG LIGHT _____

WHELEN JUSTICE SERIES SUPER-LED FRONT BAR LIGHT

One (1) Whelen Justice Series NFPA-Spec Super-LED bar light installed on forward cab roof. Bar light controlled by switches installed on cab center console. Bar light configured as follows:

- Model JE2NFPA 56” in length
- Four (4) corner red Linear-LED’s
- Two (2) front-facing white CON3 Super-LED’s
- Four (4) front-facing red CON3 Super-LED’s
- Permanent mount kit

WHELEN FREEDOM IV SERIES SUPER-LED FRONT BAR LIGHT

One (1) Whelen Edge Freedom IV Series NFPA-Spec Super-LED bar light installed on forward cab roof. Bar light controlled by switches installed on cab center console. Bar light configured as follows:

- Model F4N2VLED, 55” in length
- Four (4) corner red Linear Super-LED’s
- Two (2) front-facing linear red Super-LED’s
- Two (2) front-facing linear white Super-LED’s
- Permanent mount kit.

Note – Options can be added to above Whelen NFPA-Spec bar lights, however bar light must have two (2) front-facing white LED warning lights, wired for response and scene modes.

BUILD-A-BAR FORM – FRONT BAR LIGHT

Please provide a description of the desired bar light, with as much detail as possible as to the type/color/location of the lighting contained within.

BAR LIGHT MAKE: _____

MODEL: _____

LENGTH: 55" +/-

CORNER LED'S COLOR: _____ **LENSES:** COLORED ___ CLEAR ___

FRONT-FACING WARNING LIGHTS (FROM DS TO PS):

POS. #1 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #2 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #3 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #4 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #5 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #6 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #7 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #8 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #9 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

POS. #10 COLOR(S): _____ **TYPE:** _____ **LENS:** COLORED ___ CLEAR ___

TAKE-DOWN LIGHTS: POSITION(S): _____ **TYPE:** _____

ALLEY LIGHTS: Y ___ N ___ **TYPE:** _____

TRAFFIC PRE-EMPTOR: Y ___ N ___ **MAKE/MODEL:** _____

OTHER NOTES: _____

WHELEN JUSTICE SUPER-LED MINI REAR BAR LIGHT(S)

One (1) Whelen Justice JY Series 22" mini bar light, #MJY****P, installed on center of rear body roof, or one (1) each side if two (2) lights are optioned. Mini bar light to have four (4) corner Linear6 Super-LED modules, and two (2) rear-facing CON3 Super-LED modules. Customer to specify RED, BLUE, or AMBER, or a combination thereof, for each light position.

QUANTITY: ONE ___ TWO ___

WHELEN MINI FREEDOM IV SUPER-LED REAR BAR LIGHT

One (1) Whelen Freedom IV Series 22" mini bar light, #F4M****P, installed on center of rear body roof, or one (1) each side if two (2) lights are optioned. Mini bar light to have four (4) corner Linear-LED Modules, and one (1) single long 12 Super-LED rear-facing light head. Customer to specify RED, BLUE, or AMBER, or a combination thereof, for each light position.

QUANTITY: ONE ___ TWO ___

BUILD-A-BAR FORM – REAR BAR LIGHT(S)

Please provide a description of the desired rear bar light(s), with as much detail as possible as to the type/color/location of the lighting contained within.

BAR LIGHT MAKE: _____

MODEL: _____

LENGTH: _____

QUANTITY: ONE ___ TWO ___

CORNER LED'S COLOR: _____ LENSES: COLORED ___ CLEAR ___

REAR-FACING WARNING LIGHTS (FROM DS TO PS):

POS. #1 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #2 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #3 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #4 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #5 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #6 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #7 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #8 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #9 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

POS. #10 COLOR(S): _____ TYPE: _____ LENS: COLORED ___ CLEAR ___

ALLEY LIGHTS: Y ___ N ___ TYPE: _____

BUILT-IN TRAFFIC ADVISOR: Y ___ N ___

OTHER NOTES: _____

WHELEN SIREN AND SPEAKERS

One (1) Whelen 295SLSC1 electronic siren with microphone installed per manufacturer's installation instructions in cab console/panel. Siren installed with Havis-Shield's equipment bracket. Two (2) Whelen SA315P 100 watt speakers installed per manufacturer's installation instructions and wired to above electronic siren on cab console/panel.

WHELEN CENCOM SIREN/CONTROLLER AND SPEAKERS

One (1) Whelen CenCom Sapphire, Model CCSRN36 electronic siren and light controller with microphone installed per manufacturer's installation instructions in cab console/panel. Siren/controller installed with Havis-Shield's equipment bracket. Two (2) Whelen SA315P 100 watt speakers installed per manufacturer's installation instructions and wired to above electronic siren on cab console/panel. CenCom siren/controller unit to take place of standard Carlin-type switches included with Emergency Service Package center console. *Note – If a traffic advisor is to be specified, please indicate if it is to be controlled through the CenCom, or if a stand-alone traffic advisor controller is desired.*

CAST PRODUCTS SIREN SPEAKER UPGRADE

Two (2) Cast Products “through-the-bumper” siren speakers installed per manufacturer's installation instructions and wired to electronic siren, in lieu of Whelen SA315P 100-watt siren speakers. Cast Products speakers to be specific to make and model of chassis.

WHELEN HOWLER SIREN AND SPEAKER ADD-ON

One (1) Whelen Howler low frequency tone siren and speaker system installed per manufacturer's installation instructions. The Howler system can be added onto any 100-200 watt siren.

FEDERAL ELECTRONIC “Q” SIREN w/ FEDERAL SPEAKERS

One (1) Federal electronic Q-siren (E-Q2B) installed per manufacturer's installation instructions in cab console/panel. Siren head installed with Havis-Shields equipment bracket. One (1) Federal BP200-Q 200 watt speaker with chrome Q-Siren grille installed per manufacturer's installation instructions and wired to above electronic siren on cab console/panel.

AIR HORN SYSTEM

Two (2) Buell Strombos air horns, one 10” and one 12”, installed in chassis front bumper per manufacturer's installation instructions, connected to one (1) Gast compressor, Model 3HBB-19-M322, and one (1) 6" x 25" Buell air storage tank mounted on chassis. Air Horn activation method is to be determined prior to installation, standard option will be a momentary switch that is installed onto the cab center console.

LOAD MANAGER / LIGHT SEQUENCER

One (1) Kussmaul Model 091-32 Load Manager installed and wired to customer specified warning devices, 5 maximum. Load manager has low voltage monitoring capabilities to prevent electrical overloads. Load manager will automatically sequence lights on and off. Load manager includes console/panel mounted indicator to signal which mode unit is in and also, a remote manual override switch.

WHELEN LED WARNING LIGHT PACKAGE – BASIC

Basic LED light package consisting of the following:

- Grill Lights:** Two (2) Whelen LINZ6 RED Warning Lights installed, one (1) each side on upper grill cross bar.
- Intersection Lights:** Two (2) Whelen LINZ6 RED Warning Lights installed, one (1) each side front cab fender.
- Body Lights:** Six (6) Whelen 700 Series RED Warning Lights installed in the upper roof rail section of the fiberglass body, two (2) each side and two (2) rear.

Above warning lights to be installed using Whelen Chrome Flanges. Lights will be wired to switches on the cab center console. Lights will be installed using Whelen’s default flash pattern, any special programming or additional sync wiring may be subject to additional labor costs.

WHELEN LED WARNING LIGHT PACKAGE – DELUXE

Deluxe LED light package consisting of the following:

- Grill Lights:** Four (4) Whelen LINZ6 Warning Lights installed on grill cross bars, two (2) upper and two (2) lower. Two (2) RED lights and two (2) WHITE lights installed color.
- Intersection Lights:** Two (2) Whelen LINZ6 RED warning lights installed, one (1) each side cab front fender.
- Body Lights:** Ten (10) Whelen M7 Series Warning Lights installed, (8) RED and two (2) AMBER. Two (2) RED lights installed each upper side roof rail, two (2) RED lights installed rear roof rail, and two RED lights lower/rear body panels, below S/T/T/BU lights. Two (2) AMBER lights installed upper rear body panels, or below the scene lights (if equipped). Four (4) Whelen M4 Series RED Warning Lights installed, two (2) each lower side body panels, below compartments L-1/R-1 and L-3/R-3.

Above warning lights to be installed using Whelen Chrome Flanges. Lights will be wired to switches on the cab center console. Lights will be programmed to customer selected flash pattern (if desired), and will be synchronized using the wiring provided by Whelen. Lights will flash in a wig-wag “X” pattern unless otherwise instructed.

WHELEN TAL65 LED TRAFFIC ADVISOR

One (1) Whelen Model TAL65 5MM LED traffic advisor, 36” in length, installed on rear roof rail. One (1) Whelen Model TACTLD1 control head installed in cab center console and wired to traffic advisor.

WHELEN TAZ86 LED TRAFFIC ADVISOR

One (1) Whelen Model TAZ86 LINZ6 LED traffic advisor, 30.5” in length, installed on rear roof rail. One (1) Whelen Model TACTLD1 control head installed in cab center console and wired to traffic advisor.

WHELEN TADF6 DUO TRAFFIC ADVISOR

One (1) Whelen Model TADF6 500 Series Linear LED DUO traffic advisor, 37" in length, installed on rear roof rail. DUO technology has the ability to flash different colors in the same light bar, changing from Traffic Advisor to warning signals. One (1) wireless remote controller included to allow for changing of patterns on the fly.

WARNING LIGHT PACKAGE – CREATE YOUR OWN

Get a quote on the warning light package of your choice by submitting a list of the lights you would like to use. We are an OEM supplier for Whelen, Code 3, Federal, Weldon, Power Arc, SoundOff Signal and others. Please include the following in your list: Location, Quantity, Brand, Model, LED Color, Lens Color and any special instructions (example: specific flash pattern, light syncing or mounting option).

PAINTING, LETTERING & STRIPING

The Pioneer fiberglass body will have a gel coat color molded into the body during fabrication. This color is a shade of white that will closely match Ford Oxford White. Gel Coat requires slightly different maintenance than paint/clear-coat and may not remain “glossy” as long as a painted and clear coated body. For those wanting the body to match the chassis color, please choose a painting package below. Compartment box interiors and the insides of the compartment doors to remain white gel coat unless additional painting is optioned.

COLOR-MATCH BODY GEL COAT FINISH

Pioneer body to be finished with a gel coat matched to chassis OEM color, or customer-supplied color sample. Interior door panels and compartment boxes to be standard white gel coat. **NOTE – Gel coat finish has slightly less gloss than the base/coat clear/coat finish supplied on the cab. Gel coat finish does not weather like a base coat/clear coat finish. Over time, finish will dull, although it can be cleaned and polished to its’ original gloss. Body finish may also fade at a different rate than the factory base coat/clear coat finish on the cab.**

PIONEER BODY AND CHASSIS PAINTING

Disassembly – All bolt on body exterior hardware, trim panels and moldings removed prior to painting preparation, to include compartment doors.

Preparation – All exterior body surfaces thoroughly sanded with dual action air disc type sander using #180 grit sandpaper followed by #320 grit sandpaper prior to prime painting.

Prime Painting – All specified area prime-painted with PPG #F3950 non-sanding primer/sealer. Prior to finish painting, two (2) additional coats of color paint shall be applied and then the entire painted surface to be finish sanded with #400 grit sand paper.

Finish Painting – All exterior body surfaces finish painted with two (2) wet-on-wet coats of PPG Delfleet “Evolution” base coat and two (2) wet-on-wet coats #F3925 clear.

Finish paint to be applied using individual one (1) quart siphon feed air spray guns set at 50-60 PSI regulated pressure.

Finish painting to be performed in twelve thousand (12,000) CFM down draft paint booth having 12,000 CFM Trane air replacement/heat unit and two (2) six thousand (6,000) CFM under floor exhaust fans to maintain atmospheric pressure during painting operation, while exchanging booth air one (1) time per minute.

BODY PAINTING:

Single Color – # _____

Two-Tone – Upper # _____
Lower # _____

REASSEMBLY – All removed body hardware, trim panels and moldings to include compartment doors to be reinstalled using specified hardware fasteners.

NOTE – If any part of body being painted is not being matched to chassis cab, paint sample(s) will be sent to customer for approval prior to painting.

CHASSIS PAINTING

Chassis cab painting to include removal of all applicable door/window gaskets, door handles, interior door panels, grille, headlight assemblies, trim pieces, emblems, etc. Cab thoroughly sanded and prime painted prior to finish painting per above painting specs. Painting to include door jams and edges of hood. Underside of hood left factory color. All removed items re-installed after finish painting.

Single Color – # _____

Two-Tone – Upper # _____
Lower # _____

NOTE – Paint sample(s) will be sent to customer for approval prior to painting.

STANDARDIZED NFPA STYLE STRIPING PACKAGE

Although the Pioneer Body does not officially fall under any category regulated by the NFPA 1901 standards, this package emulates the reflective striping required in the standard.

Side Stripe: A side stripe or combination of stripes shall be a minimum of 4” in total width. This stripe needs to be affixed to at least 50% of the cab and body length. Striping material to be 3M Scotchlite 680 Series.

Rear Chevron: The rear facing vertical surface shall be equipped with retro reflective striping in a chevron pattern sloping downward and away from the centerline of the vehicle at an angle of 45 degrees. Striping to be 3M “Diamond Grade” 983 Series. Each stripe in the chevron shall be a single color alternating between RED and LIME-YELLOW. Each stripe will be 4” in width. Outside (cut) edges of Diamond Grade striping to have 3M Edge Sealer applied.

Conspicuity Tape: All chassis and body compartment doors will have 2” wide RED/WHITE reflective conspicuity tape applied to the lower interior edges. The outward ends of all

slide out trays that protrude beyond the body of the apparatus shall have conspicuity tape applied.

CUSTOM LETTERING AND/OR STRIPING PACKAGES

Customer to supply detailed drawings or photos of desired graphics package. Unless otherwise requested the standard material used will be Avery A7 Reflective Vinyl. Other materials, as well as painted stripes are also available.

PRICE QUOTATION

Net Price Quotation – above Swab Pioneer Fiberglass Utility body and equipment, installed on minimum ¾ ton pick-up truck chassis with 56" C/A, F.O.B. Elizabethville, PA..... \$.

TERMS & CONDITIONS:

Payment

Without Purchase Order:

Ten percent (10%) order deposit with signed proposal.

Forty percent (40%) when body has been painted and mounted.

Balance due, including Changes & Additions, prior to taking possession of accepted/completed unit.

With Purchase Order: *(copy of purchase order must be submitted with signed proposal)*

Net due on acceptance of completed unit. Purchase orders accepted at the sole discretion of Swab Wagon Company, Inc. Progress payments may be requested for multiple-unit orders. Credit references may also be requested.

Above price quotation firm for sixty (60) days from date of submittal.

Additional items ordered after the start of production, such as equipment and custom tool mounting, to be performed on a time and materials basis at a \$68.00/hr labor rate unless separately quoted by sales person.

CONTRACT SIGNATURES

Quote Submitted:
Swab Wagon Company, Inc.

Stuart A. Margerum
Treasurer

Approved: ____/____/2015

Sign: _____

Print: _____

Position: _____

Purchase Order Number: _____