

## SPECIFICATION

**045847 - 11 FT Shop Body Upfit With Under hood Air Compressor and Crane For Use With 17K Chassis**

**Reference: Stahl, Warner, Omaha Standard, or Knapheide, meeting these specifications.**

**Note: " Refer to PCID 1075 for Delivery and Warranty Requirements".**

**Note :** All up fitting shall be in accordance with the chassis manufacturers body builders up fitter manual.

**Body Shall Include The Following Equipment:****Body - Installation:**

It shall be the responsibility of the successful vendor to have the shop body mounted on the chassis(s). The installation shall be engineered and approved by the vehicle manufacturer and shall have no adverse affect upon the manufacturer's warranty. When any portion of the complete vehicle is to be installed by anybody other than the bidder or the chassis manufacturer, they shall indicate the name of the sub-contractor performing such installation and the location of their plants. The foreman body dimensions shall cover the rear wheels.

Any other applicable changes required to accommodate this type unit is the responsibility of the bidder.

The body shall have a front mounted bulkhead and shall be a minimum 14 gauge steel with punched or expandable metal area in alignment with the cab rear window. It shall be constructed of sufficient strength to eliminate damage to the rear of the cab. The bulkhead shall not interfere with the visibility of the third brake light.

Proposed bulkhead shall be reviewed for acceptance prior to pilot model inspection by the Fleet Management Division. The bulkhead shall have a forward extension mounted to the driver's side, of sufficient size to support the base of the warning light and this extension shall have a gusset.

Frame rails shall be prepared by cleaning, priming and final painting.

The body shall be attached to the truck chassis using four (4) U-bolts, or bolt thru, lock nuts, and appropriate shear plates as required to comply with manufacturer's standards.

**Body Components:**

The front right cabinet shall be large enough to accommodate an acetylene tank and oxygen tank using 9.5 inch diameter bottles, minimum width 24 inches, with provisions to hang torch hose.

Cabinet shall be properly vented and all bottle-securing hardware included.

There shall be 4 compartments on each side Overall compartment depth shall be 24 in. minimum.

One (1) Roadside compartment shall be 70" long x 18" high or 76" long or 18" high minimum.

Piano hinge is unacceptable.

All door and compartment hinges shall be rod and nylon bushing or stainless steel heavy duty strap hinge with nylon or Teflon bushings and rubber door seals.

Vertical compartment doors shall have a limiting device, shock type or steel lock strap type. Chain or cable is acceptable on horizontal doors only.

All compartments shall be keyed alike, with no two individual completed units having the same keys.

The top left and right area's of the service body shall be covered with aluminum diamond deck (unpainted), and sealed all around.

Vertical compartment doors shall have a limiting device, shock type or steel lock strap type. Chain or cable straps on horizontal doors is unacceptable. Solid stock with a removable pin shall be utilized on all horizontal opening doors.

All compartments shall be equipped with one Stainless steel bolt on slam latch (rivits on latches are unacceptable). It is the vendors responsibility to make sure all compartment doors seal so if deemed necessary 2 slam latches will be accepted on the long horizontal tool boxe. All compartments shall be keyed alike, with no two individual completed units having the same keys.

The heavy-duty rear bumper shall be constructed with a minimum of 1/8 inch reinforced steel. The size and strength shall be in accordance with the truck manufacturer's step design. The platform on top of the bumper shall be Grip Strut material. The outer step edge must be serrated in lieu of plain, smooth metal edge. Overlay is not acceptable.

There shall be 2 Breakaway Buyers Truck Steps Part#5230710. Both should be hung 12" in from each edge of bumper.

There shall be a stainless steel grab handle on each rear side of the utility body to assist the operator in entering and exiting the bed area, Non-skid paint or rubber shall be utilized, (non-skid tape is unacceptable). Ref: Non skid paint, Gamma Laboratories (Tel. 304-489-2828.)

All compartment floors shall be covered with yellow DriDek (Tel: 800-348-2398).

Any area likely to be stepped on shall be covered with non-skid paint.

There shall be a total of six galvanized non rusting metal recessed D-ring style swiveling hold downs on the floor of body. One tie down in each corner of the body and the remaining two spaced evenly in the center of the body against the outer edge close to the walls each tied into a crossmember. REF EQN-1083

**Construction:**

All body parts are to be electrically full welded into one integral body.

For all threaded connections at least two (2) full threads shall be visible beyond the nut.

The fuel tank fill shall be positioned in such a way to ensure the filler nozzle can be set on automatic and nozzle will support itself with unrestricted flow.

**Hazardous or Flammable Materials Storage:**

All cabinets or compartments shall be capable of storing flammable or hazardous materials such as (gas cans, aerosal cans, oil containers, chainsaws, compressed gas cylinders, paint cans etc.) There shall aslo be a sticker placed inside the right front compartment door explaining the vented tool boxes. REF: EQN-1089B

**Compartment lighting:**

Each compartment shall have the Vista Compartment lighting System (Tel: 219-264-0711). The 3/8" LED rope lighting sections shall be mounted on the inside of each compartment door and shall occupy space on the left, top, and right of each compartment. Rope sections shall extend full lenght of compartment on left and right sides. All compartments lighting shall be controlled by a single illuminated rocker switch mounted within easy reach of the driver. All wiring shall be secured using "P" type clamps 12" maximum between securment points.

**Exhaust:**

All tool boxes above any exhaust tailpipe or within close proximity of muffler, DPF, etc. shall receive a heat shield plate to the box in order to protect it. Exhaust shall be extended to the outer most edge of the installed body.

**Mud Flaps:**

Mud flaps front and rear of rear tires, unmarked, full width of tires, and gusseted.

Length shall be consistent with the unloaded rear axle height, And in accordance with the PA State Inspection Laws.

The Flaps in front of the rear tires shall be constructed of 0.1406 in (10 gauge) steel.

The Flaps at the rear, of the rear tires, shall be constructed of 0.1406 in (10 gauge) steel, and include a rubber flap using 3 bolts and flat steel backed plates.

**Electrical:****Whelen Light Kit Part # PADOTSY5, Kit Contains the following lighting.**

1 - R10PADOT Light Bar to be mounted to the driver's side of the bulkhead. In no case shall the light bar be mounted on the roof of the vehicle.

4 - IONAD Amber warning lights grommet mounted 2 will be grill mounted per EQN-115 and 1 on each side of the bed per EQN-120M

4 - IONGROM Grommet mounts for the IONAD light.

2 - M6AD Amber warning lights per EQN - 120M

2 - M6BTTD Stop,Tail, Turn lights per EQN - 120M

2 - M6BUD Back-up lights per EQN - 120M

2 - M6 Series 3 Lamp Black Housing, vertical

10 - W441D Harness side mating Deutsch connectors.

The above lights are supplied with male and female Deutsch connectors that shall be utilized to connect the vendor supplied harness to each light source.

1 - Pioneer Tripod pedestal flood light with coiled cord and plug to be supplied in the cab. Work Light receptacle shall be wired and mounted in the rear of the truck and one receptacle on the left front of the body. Work light receptacles shall have a constant 12 volt power supply, circuit to be properly protected and have a chassis ground. Remote mounting location to be determined at pilot inspection.

Body builder to supply remaining marker and ICC lighting, they shall be protected against damage and shall also be shock mounted.

Connections shall be water tight. All Body lighting shall be LED.

All Amber Warning lights and Light bar shall be on a single lighted, permanently labeled toggle switch located in the dash.

Body wiring shall be Hostetler wiring harness kit SO-391-22DK

License plate lighting shall specifically be a Truck light 36 series PN# 36140C LED lamp with light bracket PN#36710

There shall be no splices outside of a sealed box or fixture.

There shall be a seven-way trailer (Pin Type) receptacle mounted on rear filled with dielectric grease. Per EQN - 80A

A color-coded electrical wiring chart and schematic shall accompany each body.

All wires shall be in a protective covering. Any loose hanging wires are unacceptable.

**HITCH:**

There shall be a hitch installed, Per EQN-202B, there shall be provisions made to hook up a breakaway cable. The Upper Portion Of Hitch Shall Be Painted With Non-Skid Paint If extending to or outside body perimeter and is likely to be stepped on. Below hardware shall be supplied in truck cab. Hitch and below receiver parts shall not interfere with any part of the bumper or body no matter what configuration on the mounting plate is used.

	Buyers Products (216-974-888)	Wallace Forge Company (800-328-1203)
Combo Ball Hitch W/ 2 inch Hard Chrome Ball:	BH8-2000	23071911
Pintle Mounting Plate:	PM-87	2200170 PADOT
Bolt Kit:	8520	2117240
Hitch Pin:	HP6253 WC	HP58412
<b>American Van (1800-526-4743)</b>		
5" Hitch vise:	HDV-5	
Hitch Vise Mount	HVM-10	

**Safety:**

Vendor shall supply a first aid kit, that meets requirements of ANSI Z308.1-2015 Class A. The Kit shall in a weather proof steel case and placed in the front compartment on the drivers side with a sticker applied to the outside of the door stating the location of the first aid kit. There shall be a bracket designed to fit underneath the first shelf that the first aid kit will slide into to allow quick access to it. There will also be a first aid sticker placed on the shelf. REF: EQN-171 Drawing. REF: Arbill Industries Inc. 215-501-8450

**Bed Liner:**

Center Cargo Area shall have a Linex brand sprayed bed liner no substitutes. Shall cover floor and all sides including tailgate interior. Shall be a minimum of 150 Mils. Thickness. Material shall have No VOCs and be applied utilizing a high pressure spray. D-ring hold downs shall not be sprayed.

**Paint:**

Body priming and painting to ensure full coverage to all areas of the body  
 Color of the body, including inside and outside of compartments, and the bed, shall be cab manufacturer's standard safety or school bus yellow, or optional PennDOT yellow DuPont F9885 for shade. ( Powder Coat, if available from factory.) It will be the responsibility of the successful vendor to ensure color of the body matches the cab.  
 All metal surfaces to be painted shall be cleaned and prepared by abrasive blasting to 1-1/2 mil profile in accordance with Steel Structure Painting Council Standard SSPC-SP-6.  
 A rust preventative treatment shall be applied.  
 Conspicuity tape on body as per EQN-127A. Red/white on sides of body and cab,  
**Alternating Red / Yellow Reflective sheeting shall be mounted diagonally (45 degree angle) on the rear of body as per EQN-120K.**  
 ICC Rear Under ride Protector, hitch and grip strut ladders shall be painted black.  
 Front lower leading edge of cabinets shall have a minimum 12 inch high aluminum diamond plate for chip resistance.

**Auxiliary Air System:**

VMAC VR70 AIR COMPRESSOR SYSTEM, (there shall be a switch that only allows compressor to run when the vehicle is placed in park/neutral).  
 The installation of the compressor, tank and control console shall be properly mounted and bracketed.  
 The installation shall include compressor, tank, control console, all necessary hardware and brackets, and complete accessories.  
 There shall be two (2) 50 ft hoses, one with 0.250 in quick couplers complete and one on a housed (out of the weather, on the road side) reel (one only), spare 50 ft hose shall be shipped in the utility body.  
 Filter moisture separator, Chicago Pneumatic #CA-048360.  
 Line lubricator Chicago Pneumatic #CA-048361.  
 Pressure regulator Chicago Pneumatic #CA-048362 to adjust to OSHA approved levels of 30 psi.  
 Two (2) connectors Chicago Pneumatic #CA-048363.  
 The before-mentioned unit shall be assembled, mounted on a convenient service panel and shall incorporate a master gate valve.  
 The service end shall have a service 'T' with (0.50 in) female and (0.250 in) female connectors.  
 Tank vibration mounts.  
 If the compressor requires the batteries for the truck to be relocated from underhood. They shall be moved to the street side front cabinet and properly secured. The cabinet shall be properly vented to allow circulation of air.

**Crane:**

Per EQN-120J, Ref: Autocrane 3203PRX-HW or equivalent. Original crane manufacturer's color is acceptable. A boom rest with tie down strap shall be used to store the unit when not in use. Body manufacture is responsible for engineering body to incorporate mounting and use of the crane with out damage to the body. Manual pull out with crank down jack stabilizer system shall be installed to support the stability of the vehicle while loaded crane is in operation. There shall be a stabilizer for both left and right side of the truck. Installer shall be responsible to ensure the vehicle sits on a level plane when the jacks and crane are in the stowed position so the truck does not appear to "lean" towards the crane side of the vehicle. Leveling shall be accomplished by modifying the suspension appropriately as needed. If the crane manufacturer

**Drawings:**

EQN-80A	Revised	08-02-18	sheet 1	WIRING DIAGRAM
EQN-115	Revised	07-03-12	sheet 1	GRILL MOUNTED WARNING LIGHTS
EQN-120Y	Revised	08-28-14	sheet 1	11' SHOP BODY
EQN-120K	Revised	06-10-14	sheet 1	TYPICAL REFLECTIVE SHEETING
EQN-120M	Revised	09-28-11	sheet 1	CREW CAB BODY LIGHTING
EQN-127A	Revised	01-02-09	sheet 1	CONSPICUITY TAPE
EQN-202B	Revised	07-27-16	sheet 1	HITCH: WEIGHT DISTRIBUTING
EQN-171		07-21-16	sheet 1	FIRST AID KIT LOCATION
EQN-1083		05-24-18	sheet 1	D-RINGS
EQN-1089B		06-18-18	sheet 1	HAZARD WARNING STICKER

**Installation Practices**

All lights shall meet all Federal and State regulations.  
 All wire splices shall be insulated with heat shrink materials or removable connectors that create a water tight connection.  
 All wires shall be securely fastened with no wires hanging or protruding where they are exposed to the risk of damage.  
 All junction boxes shall be located inside of the utility body, in a location that will not compromise storage space. For easy accessibility, junctions boxes must not be obstructed in any way.  
 All electrical connections shall be treated with di-electric grease. All wiring shall be secured using "P" type clamps at intervals not to exceed 12" between securment points.  
 All wires shall be in a protective covering and protected from chaffing, rubbing and getting pulled or torn from external sources.  
 Any alterations / relocation to fuel fill, DEF tank, exhaust, Etc. to allow installation of body shall be made in a professional manner using new materials.  
 Any place steel and aluminum contact each other Mylar or an approved equal shall be used as a buffer.  
 Laminate rubber is unacceptable. All vertical and horizontal seams of the body sides shall utilize full penetration welds in accordance with standard welding practices as set forth by the American Welding Society and sealed water tight to create one integral body. All corners shall be angled or rounded for safety and all weld splatter removed. All mounting procedures shall be in accordance with NTEA standards.

**The use of any of the following items or practices WILL NOT BE ACCEPTED.**

Non-steel fittings on hydraulic pressure lines. Excessive use of elbows on hydraulic lines.  
 Use of thread tape on hydraulic fittings. Use of galvanized fittings or components on hydraulic system. Improper hydraulic line size.  
 Use of high-pressure hose for hydraulic suction line. Scotchlok-type wire splices.  
 Non-insulated wire splices. Improper hose or wire routing near exhaust, over-sharp edges or through holes without grommets, or sharp edges.  
 Improperly prepared, primed and painted surfaces.  
 Non-fused electric circuits.  
 Hydraulic circuits without pressure relief protection.  
 Loose hanging wires that are not secure or are pulled tight so they are suspended with no support.