

## SPECIFICATION

**050400 - Foreman Body Upfit For Use With 11K and 17K Chassis, Full Standard Doors**

**Reference:** Crest FBP9D, Warner, Stahl HD96T-09, Knapheide PVMXT-93C or Approved Equal.

**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 foreman 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 Equipment 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:**

Shall have three (3) compartments on curb side and (4) compartments on road side. **COMPARTMENTS SHALL BE 15" DEEP.**

**The front curbside compartment shall have two (2) adjustable shelves.**

**The top road side compartments shall have one (1) adjustable shelf each.**

There shall be a drip rail above all doors.

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

Piano hinge is unacceptable.

All door and compartment hinges shall be cadium plated rod with zinc cast hinge block and nylon bushing or stainless steel heavy duty strap hinge with nylon or Teflon bushings and automotive type rubber door seals.

Vertical compartment doors shall have a limiting device, shock type or steel lock strap type.

Horizontal compartment doors shall have a removable limiting device, steel lock strap type.

Horizontal compartment doors shall open down with hinge on bottom of the door and one latch at the top of the door.

Rubber bumpers shall be placed on the body to hit all horizontally opening doors that open downward to keep them from damage.

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 Bustin aluminum No. NST4 full size, or Bustin 628 steel, or Ohio Grating or IKG Industries serrated swage lock, with end band. The outer step edge must be serrated in lieu of plain, smooth metal edge. All edges shall be banded (skirting) on the outer perimeter. Overlay is not acceptable.

Two, 2" deep x 10" wide steps hung by 6" long 3/4" diameter cables shall be mounted, one under each side of bumper. Both hung 12" in from edge of bumper, step shall be Bustin steel grip grating.

A 12" non-slip grab handle on top of each cabinet at rear shall also be provided to assist operators when climbing into rear of body. (anti-slip tape is unacceptable)

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

**Hazardous or Flammable Materials Storage:**

There shall be 2 curbside cabinets 1 right front and 1 top center capable of storing flammable or hazardous materials such as (gas cans, aerosal cans, chainsaws, oil containers, compressed gas cylinders, paint cans etc.) Also on each of these 2 cabinets a sticker needs placed on the outside of the door referencing that they are capable of storing flammables. REF: EQN-1089B

There shall aslo be a sticker placed inside the right front compartment door explaining the vented tool boxes. REF: EQN-1089A

**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.

**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.

**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.  
 2- TLIA Amber warning, to be flush mounted to outer edges of the front grill per EQN-115  
 2 - TLIA Amber warning lights, grommet mounted, mounted 1 to each side of bed per EQN - 120M  
 2 - M6AD Amber warning lights  
 2 - M6BTDD Stop, Tail, Turn lights  
 2 - M6BUD Back-up lights  
 2 - 11-486152-000 Vertical black flange housing assembly. Above warning, STT, and back up lights shall be mounted within housing per EQN - 120M.  
 8 - W441D Harness side mating Deutch connectors.  
 Side warning lights are to be wired in conjunction with above light bar. 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 - PFP1PA Tripod pedestal work light with coiled cord, remote mount and plug to be supplied in the cab. A work Light receptacle shall be wired and mounted in the rear of the truck and one receptacle on the left front side of the body both filled with dielectric grease. Work light receptacles shall have a constant 12 volt power supply, circuit to be properly protected and have a chassis ground. Portable light retainer mounting location will 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.  
 The Warning lights / Light bar shall have a lighted, permanently labeled toggle switch located in the dash. Body wiring shall be Grote, Trucklite, or Prior Approved Equal.  
 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. Box SHALL NOT be obstructed and location shall be determined at pilot inspection  
 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.

**Front bulk head mounted Arrow board:** A Traffcon Bulkhead power tilt Rack shall be used to support a Trafcon MB3-15 PLWA wireless remote, power tilt arrow board. Rack and board shall be mounted high enough to ensure the beacon light is not hidden or its view is obstructed in any way. Beacon light mounting shall be moved to the center of the bulk head verses the drivers side when mounted with out an arrow board. REF EQN-120W. It shall be the awarded vendors responsibility to ensure that during none use of the chassis and arrow board that the arrow board does not drain the chassis battery to cause a no start issue.

**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 Mil. Thickness. Material shall have No VOCs and be applied utilizing a high pressure spray. D-ring hold downs shall not be sprayed.

**Safety:**

Vendor shall supply a first aid kit, Arbil First aid kit PN# SF00002155, no substitutes. Kit shall be 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.

**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.

**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.

<b>Buyers Products (216-974-888)</b>		<b>Wallace Forge Company (800-328-1203)</b>	
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

**Body Specifications:**

Length (O.D.):	112.4"
Length (I.D.):	110"
Width (O.D.):	95"
Cargo area floor width (I.D.)	64"
Floor Construction:	12 Gauge steel deck-plate floor
Side and end rails:	5 3/4" Formed steel side and end rails with square corners
Long sills:	6", 8.2# structural steel channel long sills gusseted to every cross member
Cross members:	5 3/4" high formed steel cross members on 18" centers
Tailgate:	15" hinged steel tailgate with rubber coated chain retainers
Toolbox construction:	14-gauge 2-sided; A40 galvanized steel with rotary slam action latches with keyed alike lock cylinders and compartment weather- proofing (Piano hinge is NOT ACCEPTABLE)
Curbside toolboxes:	80.38" L x 23" H x 15.25" D (CSR) 32" L x 46" H x 15 1/4" D (CSF)
Roadside toolboxes:	32" L x 18" H x 15.25 D (CSRU) 55.97" L x 23" H x 15.25" D (RSR) 56.41" L x 23" H x 15.25 D (RSM) 32" L x 18" H x 15.25 D (RSFU) 32" L x 18" H x 15.25 D (RSRU)
Bulkhead:	Special tapered bulkhead 10 gauge punched. Bottom half on bulkhead 18" high full width of cargo area bulkhead. Top half shall be 19" high with tapered sides.
Possum belly compartment:	Full length possum belly located between long sills to include lockable-hinged access door.
Splash shields:	Steel splash shields in front of rear wheels.

**Shovel Storage Basket:**

Shovel basket to be constructed with minimum .100 in aluminum pre-punched pan, all edges to have hem and minimum three (3) exterior cross supports for added strength.

Storage basket to be 10 in high x 20 in wide x 96 in long and mounted on top of street side compartment, per attached drawing. REF: EQN-134

**Drawings:**

EQN-80A	Revised	8-02-16	sheet 1	WIRING DIAGRAM
EQN-115	Revised	7-03-12	sheet 1	GRILL MOUNTED WARNING LIGHTS
EQN-120K	Revised	6-10-14	sheet 1	TYPICAL REFLECTIVE SHEETING
EQN-120M		9-28-11	sheet 1	CREW CAB BODY LIGHTING
EQN-120H	Revised	8-26-14	sheet 1	9' FORMANS BODY WITH ARROW BOARD
EQN-127A	Revised	1-02-09	sheet 1	CONSPICUITY TAPE
EQN-134	Revised	1-11-06	sheet 1	SHOVEL BASKET
EQN-202B	Revised	11-03-06	sheet 1	HITCH: WEIGHT DISTRIBUTING
EQN-171		7-21-16	sheet 1	FIRST AID KIT LOCATION
EQN-1083		5-24-18	sheet 1	Drings
EQN-1089A		6-18-18	sheet 1	Sticker Hazardous Inside
EQN-1089B		6-18-18	sheet 1	Sticker Hazardous Outside

**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, junction 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 securement 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.