

## SPECIFICATION

049700 - Steel Survey Body Upfit For Use With 11K and 17K Chassis

**Reference:** Stahl, 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 survey 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 survey body dimensions shall cover the rear wheels.

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

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:**

Minimum height for inside of canopy 60 inches

There shall be a Betts M77V-10-0066, 7 in dome light with switch or Truck-Lite 80354 dome light with switch, mounted in the center inside roof with a Betts 56V-10-0066 switch and boot assembly mounted on the right inside within arms reach.

There shall be glass panels in the rear doors.

Lower glass panels shall be protected with steel mesh or expandable metal.

All doors shall have rubber seals that contact them around their entire perimeter.

There shall be a drip rail above all doors.

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.

All compartments shall be equipped with one Stainless steel bolt on slam latch (rivits on latches are unexceptable). 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 box. All compartments shall be keyed alike, with no two individual completed units having the same keys.

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 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:**

There shall be 2 cabinets 1 right front curb side and 1 left front street side 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.

**Bed Liner:**

Center Cargo Area shall have a Linex brand sprayed bed liner no substitutes. Shall cover floor and all sides including door 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.

**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 length 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 securing points.

**Safety:**

Vendor shall supply a first aid kit, that meets requirements of ANSI Z308.1-2015 Class A. The Kit shall be in a weather proof steel case and placed in the front compartment on the driver's 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

**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 at 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 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.

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

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

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.

**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 6808 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

**Drawings:**

EQN-80A	Revised	08-02-18	sheet 1	WIRING DIAGRAM
EQN-120K	Revised	06-10-14	sheet 1	TYPICAL REFLECTIVE SHEETING
EQN-120M		09-28-11	sheet 1	CREW CAB BODY LIGHTING
EQN-127A	Revised	01-02-09	sheet 1	CONSPICUITY TAPE
EQN-1096		07-16-18	sheet 1	SURVEY BODY DRAWING
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, 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.