

**Truck-Sign, 19,500 lb., 2WD, Diesel, Cab and Chassis, 11 Foot body
With Automatic Transmission**

**Truck, Sign, Regular Cab, Diesel (064305)
Truck, Sign, With Crane, Regular Cab, Diesel (064405)
Truck, Sign, With Aerial Bucket, Regular Cab, Diesel (064505)
Truck, Sign, Extended Cab, Diesel (064525)
Truck, Sign, With Crane, Extended Cab, Diesel (064535)
Truck, Sign, With Aerial Bucket, Extended Cab, Diesel (064545)**

This dual-rear wheel model chassis shall be a manufacturer's standard cab model, which is engineered, certified and capable of towing a trailer, without brakes. 19,500 Lb. GVWR minimum with the manufacturer's rating certified on door. Chassis shall accommodate the specific body options referenced within this specification.

NOTE: REFER TO PCID1075 FOR DELIVERY AND WARRANTY REQUIREMENTS

Unit Shall Include the Following Optional Equipment:

Alternator: Manufacturers largest / heaviest duty available.
Air bags: Driver and passenger.
Air Conditioning: Standard.
Am/Fm Radio: Standard.
Manual Windows/Locks: Standard.
Seats: Shall be equipped with Vinyl 40/20/40 seats with center work console, Foam Padded with Seatbelts. (Cloth is Unacceptable)
Daytime Running Lights: (Aftermarket acceptable)
Blue Tooth: Standard

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 - M6BTDD 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 Grote, Trucklite, or Prior Approved Equal.

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

ENGINE

Diesel Engine:	Manufacturer's highest available horsepower and torque rating, standard or optional diesel engine, to include, immersion in-block type engine heater for water cooled engines, with water-proof plug and flush mounted in front sheet metal, engine oil cooler.
Front Bumper:	Chrome, Black, or Argent.
Fuel Tank:	Manufacturer's highest capacity standard tank, frame mounted (Tank filler positioned to ensure that filler nozzle can be set on automatic and nozzle will support itself, with unrestricted flow).
Exhaust pipe:	Exhaust pipe shall extend to outer edge of the body.
Limited Slip Differential:	Standard.
Lubricants:	Shall be synthetic where available, with drain plugs identified or painted red. (Engine oil excluded).
Rear Axle Ratio:	Shall be 4.88.
Rearview mirror:	Manual day/night
Tinted Windshield:	Manufacturers standard
Tires:	Truck and Body Company shall ensure that proper sized tires and wheels for GVWR are supplied. Tires shall be radial, all season mud and snow type tread.
Transmission:	Automatic Heavy duty with PTO provision with auxiliary oil cooler. NOTE: Electric shifted PTO and hydraulic pump shall be transmission mounted and be for use in stationary and mobile applications Trailer and Handling Package: To include rear stabilizer bar if available from the manufacturer as standard or optional equipment.
Exhaust:	All tool boxes above any exhaust tailpipe or within proximity of muffler, DPF, etc. shall receive a heat shield plate to the box to protect it. Exhaust shall be extended to the outer most edge of the installed body.
Mirrors:	Mirrors shall be manufacturer's standard heavy duty convex mirrors (aftermarket convex spot mirror acceptable) with extendable arms.
Paint:	Manufacturer's standard safety or school bus yellow.

OPTION :

STATE WIDE RADIO:

Vehicle electrical and electronics will conform to the Federal Communications Commission 47 C.F.R. Part 15 so as not to interfere with the operation of the PennDOT Land Mobile Radio, which is an authorized radio station under 47 C.F.R. Part 90.

Radio Antenna: There shall be a roof mount base, PCTEL model BMATM/NC25 and a VHF/700/800 Sti-Co RFMT-NT-V/U/C antenna. Assembly shall be mounted to the center of the cab roof (not to interfere with any cab shield), with the antenna cable routed to underneath the dash. There shall be a minimum of 4 feet of antenna cable coiled at the base of the floor to allow for connection of radio on spreader control pedestal. Antenna shall be prewired with a UHF MALE connection. **(No substitute, standardization).**

Power Distribution Center: There shall be a 4-way power/ground distribution center located on the underside of the dash for connection of the state radio. The lugs shall be configured in the following manner: (1) lug shall be a 30 ampere constant hot circuit, (1) lug shall be a 10 ampere ignition controlled circuit. (2) lugs shall be chassis ground. All connections shall be enclosed in a weatherproof enclosure.

OPTION: Power windows, Power Locks, Power and heated mirrors with manual extendable arms

OPTION: FLOCS System per EQN-351A.

OPTION: Yellow, Ref: Dupont F9885 for shade. If aftermarket, paint shall be

OEM quality, including but not limited to door jams and under hood etc. Warranty shall be the same as OEM manufactures warranty.

Unit Shall Also Include the Following Equipment:

- Running Boards: Shall have one pair of R.O.M Roughneck running boards Bustin Style. They must be full length of cab entry area on both sides. (Installed) REF: EQN-170 drawing
- There shall be an ECCO model 450 back-up alarm, shock mounted.
- There shall be a 4.5 inch LED dome light, with switch, installed and centered over the front seat that can operate with the ignition switch in the off position. (Ref: Optronics part number# OPTILL22CB or approved equal).
- All switches shall be permanently labeled and backlit.
- There shall be two (2) front tow hooks, installed.
- There shall be an emergency triangle warning kit, with storage box, mounted in cab.
- There shall be a minimum 5 LB. 3A:40B:C type fire extinguisher, rechargeable with vehicle mount, installed in the cab for easy and quick access. A label shall be applied to the outside of the door closest announcing its location for easy access
- Manufacturer's standard heavy-duty rubber floor covering.
- 12 VDC to 120 VAC 1800-watt power inverter, REF: Dimensions Pure Sine Inverter (651-270-1971) model 12/1800N
- Hyd Post pounder and puller (Ref: Reliable Equipment sign driver, PN# REL-SPD, puller REL-SPP) Flat face o-ring quick coupler shall be utilized compatible to hook to hydraulic lines.

HITCH:

- There shall be a hitch, as per EQN-202B. 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. All below components shall be supplied within the 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

	<u>Buyers Products</u>	<u>OR</u>	<u>Wallace Forge Company</u>
Combo ball hitch with 2 inch hard chrome ball:	BH8-2000		23071911
Pintle mounting plate:	PM-87		2200170 PADOT
Bolt kit:	8520		2117240
Hitch pin:	HP6253 WC		HP58412

(064305), & (064525): SIGN BODY: Sign body shall be furnished as per EQN-483, Type I and the specification below.

- The body and compartments shall be comparable to the Stahl model 129 or Warner S129MDWSP (dual wheel) 11foot sign body (steel).
- The bulkhead shall be reinforced for severe duty.
- Compartment tops and rear of body shall be a minimum of 14 gauge, zinc coated.
- The load-bed floor shall be a minimum 12 gauge tread-plate floor, zinc coated, or Electra-life coating.
- Compartment doors shall be double paneled with reinforcement and automotive type rubber door seals around the entire perimeter. Hinges shall be stainless steel or have nylon bushings riveted to body. Piano type hinges are unacceptable.
- Compartments shall have paddle lock or slam latches made of stainless steel. Handles shall be in a recessed section. All latches should be bolted on no rivets.
- All vertical doors shall have a positive locking system to ensure doors will not blow closed on the operator due to wind. All horizontal doors shall be fitted with a limiting device to ensure that the door will not contact the body when open.
 - Compartment A (front) approx. 18 x 37 x 21 with (2) adjustable material tray with dividers.
 - Compartment B approx. 18 x 42 x 21 with (1) adjustable material tray with dividers.

- Compartment C approx. 18 x 42 x 21 with (1) adjustable material tray with dividers.
 - Compartment D approx. 15 x 51 x 18.
 - Compartment A shall have 2 locking stainless steel paddle handles. Compartments B, C, D & E will have (1) each.
 - Compartment E approx. 13.50 x 20 x 14.
 - Post bin shall be approx. 129" x 21" x 8" with a reinforced front bin wall. The door shall be bottom hinged. There shall be a second post in approx. 4" x 24" x 48" located in the center of the rear body, below the cargo area.
- There shall be a grab handle extending approx. 12" above the catwalk and mounted to both sides with anti-skid paint.
 - The platform on top of the rear bumper shall be grip strut material. The outer edge of the bumper 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 hung 12" in from edge of bumper.
 - Receiver (2" square) mounted in or under bumper, in either case; it shall be a Class III hitch. There shall be "D" rings (2) for safety chain connection.
 - There shall be two grip strut steps on each side of the rear body to allow access to the grip strut catwalk that extends the width and length of the lower rear right side compartment top. A positive locking system shall be incorporated to ensure platform cannot over extend or accidentally extend while traveling. Lock shall be able to be operated from ground level only. When the platform is extended out there should also be a locking system that will not allow the platform to go in. Lock shall also be operated from ground level.
- Compartment G approx. 33 x 55.75 door opening and be 35" deep with (1) front hinged door. There shall be vertical sign holders on 2" centers to fit the entire width and height throughout the compartment.
 - Compartment H approx. 15" x 45" door opening, approx. 35" deep, minimum. There shall be a shelf mounted 16" from the top
 - Compartment J approx. 26" x 49" door opening, 35" deep. There shall be three (3) pull-out material trays mounted in the rear half of compartment. Trays shall be evenly spaced. The forward half of the compartment shall have vertical sign holders on 4" centers covering the entire height and depth of compartment.
 - Compartment K approx. 20" x 42.75" door opening, 37" deep. Shall house the two 50' hydraulic tool hose reels, the 1600 watt inverter and the Whelen portable work light

OR

- Compartment A (front) approx. 18.88 x 48.50 x 21 with (2) adjustable material tray with dividers
 - Compartment C1 approx. 18.88 x 25.18 x 21 with (1) adjustable material tray with dividers
 - Compartment C2 approx. 18.88 x 25.18 x 21 with (1) adjustable material tray with dividers
 - Compartment D approx. 15.38 x 27 x 18
 - Compartment A shall have 2 locking stainless steel paddle handles. Compartments C1, C2, D & E will have (1) each.
 - Compartment E approx. 13.50 x 20 x 14
 - Post bin shall be approx. 100" x 21" x 8" with a reinforced front bin wall. The door shall be bottom hinged. There shall be a second post in approx. 4" x 24" x 48" located in the center of the rear body, below the cargo area.
- There shall be a grab handle extending approx. 12" above the body and mounted to both sides.
 - There shall be a grip strut step bumper (not installed) approx. 14" deep. Receiver (2" square) mounted in or under bumper, in either case it shall be a Class III hitch. There shall be "D" rings (2) for safety chain connection.

- There shall be two grip strut steps on each side of the rear body to allow access to the grip strut catwalk that extends the width and length of the lower rear right side compartment top. Cat walk shall be extendable over the side of the body by use of a release lever that is accessible from the ground. A positive locking system shall be incorporated to ensure platform cannot over extend or accidentally extend while traveling. Lock shall be able to be operated from ground level only. When the platform is extended out there should also be a locking system that will not allow the platform to go in. Lock shall also be operated from ground level.
- Compartment G approx. 26 x 55.75 door opening and be 37" deep with (1) front hinged door. There shall be vertical sign holders on 2" centers to fit the entire width and height throughout the compartment.
- Compartment J approx. 26.88" x 49" door opening, 37" deep. There shall be three (3) pull-out material trays mounted in the rear half of compartment. Trays shall be evenly spaced. The forward half of the compartment shall have vertical sign holders on 4" centers covering the entire height and depth of compartment.
- Compartment K approx. 20" x 42" door opening, 35" deep. Shall house the two 50' hydraulic tool hose reels, the 1600 watt inverter and the Whelen portable work light.

(064405) & (064535) : SIGN BODY WITH CRANE: Sign body shall be furnished as per EQN-483, Type II and the specification below.

- Same as Type I except unit shall be fitted with a minimum 3,200 lb crane, mounted on a reinforced compartment on the load bed front. Autocrane 3203PRX or IMT 1015 or equal. Manual pull out and crank down out riggers shall be provided along with a boom rest.

(064505) & (064545) : SIGN BODY WITH AERIAL BUCKET: Sign body shall be furnished as per EQN-483, Type III and the specification below.

- Same as Type I except unit shall be fitted with a telescopic fiberglass upper boom hydraulic aerial lift.
- Height shall be a minimum of 30 feet ground to bottom of bucket.
- Reach from centerline of rotation shall be a minimum of 20 feet. Rotation shall be 370 degrees (non-continuous).
- Platform bucket capacity shall be a minimum of 300 LBS.
- Platform bucket shall be fiberglass with a minimum of one step.
- Bucket shall be minimum 24 inch x 24 inch x 42 inch high.
- There shall be a bucket platform cover for inclement weather.
- There shall be hydraulic feather able controls located in/on the bucket to allow 1) up/down, 2) rotate, 3) extend/retract, 4) tilt, 5) engine speed control for hydraulic tool circuit, 6) engine start/stop.
- There shall be override protection provided at the lower control station.
- Platform bucket shall have a tool tray and safety harness.
- There shall be a hydraulic power tool outlet at the bucket platform. The hydraulic power tool circuit shall be capable of operating tools rated at 7 to 9 GPM.
- The hydraulic tank and circuits shall be properly sized to allow the hydraulic tools to be operated with the telescoping boom at full extension.
- There shall be an emergency electric operating system with DC pump and motor and all necessary hardware and fittings.
- Hydraulic system shall be a transmission driven PTO pump. Regardless of design, hydraulics shall be on demand live hydraulics always stationary or mobile.
- The pedestal/mainframe, turntable/turret and lower boom shall be steel weldment or tube/s formed into box structures. All pins and fasteners used in conjunction with the lift shall be plated. Only graded bolts are acceptable.
- All necessary structural adaptability shall be material and labor with the truck chassis made to ensure a compatible system capable of severe duty service.
- The unit shall be fitted with a system to eliminate boom creep and to lock cylinder in case of line failure.

- The unit shall be an Altec Model AT30G arm lift AF-TEL34FB/PT or HiRanger T292 or UTEM or prior to bid approved equal. (There shall be an internal, within boom, tool circuit. External reel is unacceptable.)
- 180° platform rotator is acceptable if supplied with no loss in bucket lift capacity.

SAFETY:

- The cab shall have conspicuity tape as Per EQN-127A.
- Alternating Red / Yellow Reflective sheeting shall be mounted diagonally (45 degree angle) on the rear of body as per EQN-120K.
- The body shall have conspicuity tape as Per EQN-483, sheet 4, and 5.
- Any area likely to be stepped on shall be covered with non-skid paint, tape is unacceptable.
- 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

DRAWINGS:

EQN-170		07-19-16	sheet 1	RUNNING BOARDS
EQN-80A	Revised	08-02-18	sheet 1 of 1	WIRING DIAGRAM
EQN-115	Revised	07-03-12	sheet 1 of 1	GRILL WARNING LIGHTING
EQN-120K	Revised	06-20-14	sheet 1 of 1	TYPICAL REFLECTIVE SHEETING
EQN-120M	Revised	09-28-11	sheet 1 of 1	CREW CAB BODY LIGHTING
EQN-127A	Revised	01-02-09	sheet 1 of 1	CONSPICUITY TAPE
EQN-202B	Revised	07-27-16	sheet 1 of 1	HITCH: WEIGHT DISTRIBUTING
EQN-351A	Revised	06-19-13	sheet 1 & 2	FAST LUBE OIL CHANGE SYSTEM
EQN-483	Revised	08-29-14	sheet 1 – 8	SIGN TRUCK-STANDARD CAB
EQN-171		07-21-16	sheet 1	FIRST AID KIT LOCATION

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