



Pricing Administration Use Only				
HT-32692.00	00			Form Rev: August 05, 2019
Quote Number	Quote Revision	Shop Order Number	Serial Number(s)	Date

**Customer**

Werts Welding & Tank Service for Cardinal Stock

**Base Model Part Number**

38328.1

**Specified Model Description**

AVB6 9500-4D6 ST 21,3000//1500//2000//3000,3.3 PSI, 180 F, Standard Duty Petroleum Trailer (Can replace 2 BFLs with T-rings) 43'6"

**A. Vessel**

**1) Design**

: AVB6 9500-4 ST 21, Aluminum, Elliptical, Baffled, D.O.T. 406 trailer, Standard Duty Petroleum Trailer.

Code: DOT 406

Capacity: 9500 gallons plus 3% outage. (Capacities are nominal unless stated otherwise.) 60 gallons is the minimum outage for any size compartment.

Compartments: Four Compartments, front to rear. (3000//1500//2000//3000)

Shape: Elliptical, 20.83 GPI

Shell Material: Aluminum - 5454- alloy. All size / gauges are nominal.  
Top: 0.180  
Sides: 0.180  
Bottom: 0.206

Head and Baffle Material: Double heads between all compartments. 0.201 stiffened and shoed front and rear heads. 0.201 stiffened and shoed heads / baffles over kingpin. 0.186 stiffened and shoed baffles over rungear. 0.201 unstiffened compartment heads and 0.186 unstiffened surge heads between compartments.

Operating Pressure: Tested at 5 PSI, rated 3.3 PSIG

Design Temperature: -20 Degrees F. to 180 Degrees F.

Overall Length: 43'6"

Product: Gas, Diesel Fuel, or similar (Customer Responsibility)

**B. Construction**

**1) Frame**

: \* Front to rear aluminum framing. 44" Wide. Outriggers and pads at front and rear, outrigger at landing gear, outriggers as needed to mount accessories.

**2) Dam**

Dam Drains: Drains through ladder rails.

Overturn Protection: Overturn Protection, full length structural aluminum extrusion each side on top, dams front and rear with transverse, curbside rail doubles as vapor rail.

**3) Manhole**

: 4 \* Betts PPVL816AX, 16" aluminum cover with 10" offset fill. Includes vapor and sensor holes. Includes 6496ALB, pressure / vacuum vent mounted in 10" relief valve cover.

Gasket: 4 Buna-N gasket in cover

**4) Fill**

Gasket: 4 Buna-N gasket in 10" fill



**5) Splash deflector**

: 4 Splash shield-vortex breaker over each emergency valve.

**6) Capacity indicator**

: None

**7) Static cable**

: 4 1/8" stainless steel ground wire from manhole to bottom of tank.

**8) Rings**

: No Rings installed.

**C. Other Barrel Information**

**1) Weld finish**

: W-0 inside

**2) Material Finish**

Shell Material Finish: Buffed/Polished finish on shell sides.

Front Head Finish: Buffed/Polished finish on front head.

Rear Head Finish: Buffed/Polished finish on rear head.

**D. Venting and cleanouts**

**1) Venting**

: DOT-406 venting in manhole.

Pressure: None

Vacuum: None

**2) Cleanouts**

: None

Caps: None, No caps installed.

**E. Vapor Recovery**

**1) Provisions**

: 3" black nylon vapor recovery nipples connected to flashing rail. A hose connects the vapor recovery vent to the nylon vapor recovery nipple.

**2) Vent**

: \* 3.5" Bayco #VR6030SQ sequential vents, air operated for 16" manhole. Plumbed to Emergency valve operator. Threaded.

**3) Line**

: \* 4" aluminum pipe, at rear of overturn rail down with one outlet to curbside over rear of rear fender, one outlet curbside 15" to rear and 15" to front of discharge valve area, 4" outlet.

**4) Adaptor**

: 2 \* Bayco 4" x 4", vapor recovery adaptor, without poppet and interlock mount. Threaded. #VR4100NP.

: \* Bayco 4" x 4", vapor recovery adaptor, with poppet and interlock mount. Threaded. #VR4100.

Location: Rear VR outlet.

**5) Cap**

: 3 \* Bayco 4" orange nylon vapor cap,with chain. #VR4050PL. Specify qty.

**F. Valving and Piping**

**1) Seal provisions**

: None

**2) Sump**

: 4 4" aluminum drain pocket

: 4 \* Aluminum sump trough.

Location: in each compartment

**3) Emergency Valve**

: 4 \* Betts EV46911ALTS 4" x 4" 90 degree, internal, hi flow, aluminum, air operated, Teflon seals and Victaulic outlet, attached to sump. Internal Air Cylinder.

**4) Emergency Valve Operator**

: \* Betts Air Control kit includes master control push/pull incorporated into air distributor. One emergency trip located roadside, front of tank.

Location: Mounted in enclosure cabinet.

EVO Lines: Air tubing.

EVO Location: Mounted in separate EVO cabinet.

**5) Pipe**

: 4" aluminum schedule 10 pipe, with large radius elbows, ending center at aluminum locator bracket with flanged outlet.

Flanged Gaskets: 4 All gaskets in discharge piping to be Viton.

Couplings: Aluminum coupler on groove-groove connections with Baylast gaskets.

**6) Outlet valve**

: 4 \* Dixon/Bayco openable API adaptor with aluminum handle and no sight bubble. #5204NG.

**7) Sight glass**

: 4 \* Jikoh sight glass, mounted prior to outlet. #JDG-105. Compatible with ethanol.

**8) Adaptor**

: 4 \* Dixon Bayco 4" aluminum male gravity drop adaptor(s) with cap(s) and chain(s), Baylast seal. #4540.

**G. Walkway and Ladder**

**1) Walkway**

Top center: Non-skid tape, full length of barrel between overturn rails.

Location: Walkway drains through ladder hand rails at rear.

**2) Ladder**

: Aluminum tubular walk through, with serrated rungs and large platform step, and integral grab handles.

Ladder Location: Mounted at rear head, centered. With step below bumper.

Location: Walkway drains through ladder hand rails at rear.



## H. Cabinet

### 1) Cabinet

- : \* Aluminum cabinet 30" high X 48" wide X 28" deep, two door cabinet without center post.  
Location: curbside in front of rungear  
Includes Betts light
- : \* Aluminum cabinet 30" high X 20" wide X 9" deep, one door cabinet.  
Location: Mounted in front of, and flush with 48" cabinet.  
This enclosure cabinet contains overfill monitor, receptacles, EV operator.

## I. Hose Carriers

### 1) Hose Carrier

- : Aluminum trough 4" high x max width x full length of barrel with brackets. Hose trough doubles as fenders on one side of trailer. Includes straps.
- Carrier Location: Mounted curbside

### 2) Gauge Stick Tube

- : \* Aluminum gauge stick tube 2" diameter x 16' long.
- Location: Mounted off outriggers curbside at rear. Front of tube open with removable pin, rear capped with small drain hole.

## J. Lights and Wiring

### 1) Lights

- : 12-volt, Truck-Lite flange mount LED lamp system complying to FMVSS.  
Combination center marker / turn signals, one each side.

### 2) Wiring

- : 7-way wiring, with junction boxes.

### 3) Rear Lights

- : Enclosed in Aluminum light boxes, one each side of tank.

### 4) Stop Light

- : Truck-Lite flange mount, 60 series, 26 diode LED, oval stop light mounted on rear head.

### 5) Extra Lights

- : \* Betts clear incandescent 570006 light(s) with clear lens and switch.  
Location: in 48" cabinet.
- : \* Betts 325503 swivel LED floodlight(s) with 20 amp toggle switch.  
Location: on front of enclosure cabinet to illuminate work area.

### 6) Nose box

- : Standard 7 way, J560 receptacle with out circuit breakers.
- Location: Nose box mounted lower roadside of front head.

## K. Overfill system

### 1) Overfill system

- : \* Scully Vehicle Identification Prover, VIP chip for overfill system #08836.
- : \* Dixon Bayco, Flo-tech FT2804 Checkmate two wire system, one top optic sensor (per compartment) with one optic and one thermistor socket.
- Location: monitor and dual sockets all located in enclosure cabinet.



## L. Interlock

### 1) Interlock bar

: Aluminum safety bar with lock pin; over centralized discharge and vapor outlets.  
Activates (1) brake interlock valve

### 2) Interlock valve

: \* Brake interlock Bayco 5000AIHD valve mounted at outlet.

Location: at rearmost vapor outlet

## M. Pump System

### 1) Hydraulic Lines

: None

### 2) Meter

: None

### 3) Meter Installation

: None

## N. Chassis

### 1) Upper 5th Wheel

: 5/16" Heavy duty with A.A.R. style double hubbed kingpin.

### 2) Skid Plate

: Aluminum skid plate.

### 3) Landing Gear

: SAF Holland Atlas 55, 2-speed, load bearing, sealed gear box, 55,000 lbs. rated lift capacity with 10"x10" swivel type sand shoes. Black Armour coating. No Lube, 5 year Warranty.

Bracing: Stainless steel, with cross brace.

Crank location: Crank handle located on roadside

Tire carrier: None.

### 4) Suspension

: Hendrickson Intraax AANT23K, 23000 lb., tandem axle with standard 49" axle spacing. 5.75" diameter Hendrickson integrated axles.

Suspension Hangers: Galvanized hangers with soft coat applied to axle and trailing arm. (Bolt-on suspensions with aluminum subframe only)

Dump valve: None

Subframe: \* Extruded aluminum sub frame, 44 wide, with aluminum fender supports.

Bumper: Aluminum, straight, weld-on. D.O.T. code, per FMVSS223

Bumper Overlay: \* Bright mill finish aluminum bumper overlay, full width DOT compliance per FMVSS223

Under-ride Protection: None (no under ride required, Wheels back exempt.)

### 5) Axles

Beam: Straight

Track: \* 77-1/2" track (Requires 44" Wide Subframe.)

Spindle: OEM Standard P spindles (parallel) same inner and outer bearing

Wheel seals: OEM Standard



Hub & drums: \* HXL7 Ready to Roll, Maxx22T Disc Brake with Dura-light Hub  
 Miscellaneous: None

**6) Brakes**

: \* SEE HUB AND DRUM for brakes. Included in hub and drum option.  
 Anti-lock / Roll stability: OEM Standard 4S/2M with tandem axle roll stability for air-ride suspension.  
 Brake chambers: \* SEE BRAKES for air chambers. Included with air disc brake option.  
 Brake lining: \* SEE BRAKES for brake lining. Included with air disc brake option.  
 Slack adjusters: \* No slack adjusters required, SEE BRAKES. Included with air disc brake option.  
 Valves: OEM Standard  
 Gladhands: Gladhand, Phillips, Quick Release  
 Air system: Two aluminum tank system. 2800 cu. in. each, or equivalent, meeting FMVSS 121 D.O.T. specifications

**7) Wheels**

: Alcoa Ultra One with clean buff finish, 22.5 x 8.25 aluminum.

**8) Tires**

: \* 11R-22.5 Continental Conti EcoPlus HT3, 14ply.

**9) Fenders**

Front: 0.5 \* Aluminum flat  
 Rear: 0.5 \* Rear fender, aluminum, flat, tandem.

**10) Mud flaps**

: White with Heil logo. Front and rear, HEIL, anti-sail, anti-spray flaps.

**O. Miscellaneous**

**1) Decals**

: Standard warning and safety package, Complying to FMVSS. HM-183, Vapor and Chevron exhibit "C" Form. Decals in English. Heil nameplate on front end dam and rear bumper.

**2) Conspicuity Tape**

: Discontinuous tape

**3) Customer Logo**

: None

**4) Document holder**

: \* Betts PS-1 document holder. Specify Location.  
 Location: Mounted streetside on landing leg bracket.

**5) Calibration**

: Computer generated theoretical calibration chart, 1/2" increments. Based on innage.

**6) Placards**

: \* Four Aluminum slide-in on brackets, one mounted each side of trailer.  
 Location: and one each mounted front and rear

**7) Paint**

: None. No paint or primer installed on trailer.



### 8) Product Indicator

: 4 \* 8 sided product indicator, no aluminum cover.  
Location: Belknap: Empty, Prem Unlead, Unlead Plus, Reg Unlead, Diesel, AvGas, Jet Fuel, Ethanol

### 9) Fire Extinguisher

: None

### 10) Cone holder

: \* Aluminum, combination cone and bucket holder with straps to secure both cones and bucket.  
Location: Curbside in front of piping.

### 11) Warranty

: Heil Trailer Silver Warranty Package.

### 12) Tests

: Vapor tested and certified to EPA Method 27-CA Air Resources Board standards and manholes sealed.  
Location: send 2 sets of test paperwork with each trailer.