





BUILDING A BETTER BOBTAIL

Each bobtail unit is designed from the ground up with the end user in mind. State-of-the-Art bobtails begin their fabrication process with computer aided design (CAD), and utilize computer aided manufacturing (CAM) to enhance the final fit and finish. Arrow Tank & Engineering's exclusive weight distribution software assures a safe and reliable bobtail by matching each vessel to the selected chassis. Results from these innovations are apparent in the performance of each completed bobtail.





Engineered to provide the ultimate protection for your investment, Arrow Tank's Stainless Steel Option is the "Real Deal". More than a shiny wrapper, this option includes glass bead blasted T304 SS deck, fenders, undercarriage parts including gussets, supports, & stiffeners. Even the attaching hardware is stainless steel. The end result is a #1 Bobtail regardless of age.



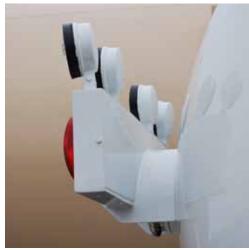
LIGHTING -Don't Be Left in the Dark

Bobtails are needed most in the harshest environments Mother Nature can offer. The lighting system is an extremely high priority it comes to safety and reliability. LED lighting and wiring harnesses manufactured by Betts Industries are standard equipment. LED fixtures draw minimal amperage and illuminate brighter making them much more visible than incandescent lamps. Wires are molded into a PVC jacketed harness and plug-in connections at each junction are sealed with shrink tube for superior protection from the elements.









Standard lighting components include high mount LED stop and turn lamps as extra measure of safety to warn following vehicles of your intended travel. This is especially helpful when making left handed turns on roads with 2-way traffic (opposing lanes). The stadium work lights cast a combined 200 watts of illumination to provide excellent visibility darkness. Additional assistance is provided via dual 50 watt docking lights mounted midship on front fender with 55° projection angle. Rock guards fabricated from stainless steel are a welded component inside the fenders to protect the fixtures (not shown).





PERFORMANCE

Often referred to as the cleanest piping in the industry, who are we to argue? The secret to success begin begins with our vessel fabrication that features internal pump discharge and internal bypass piping if desired. To enhance flow the pump discharge/re-entry piping is accomplished using a single piece of die formed pipe. Flanged connections are used throughout to improve safety, serviceability, and minimize leaks. Smooth bends enhance flow and reduce the equivalent length of pipe by 70% when compared to threaded elbows. Lastly, we use 2" piping all the way from pump to hose reel inlet to take full advantage of volume.







Meter discharge

Bypass return

Meter inlet





In today's competitive business environment time is money. For this reason we've included 3" spray fill standard equipment. Compared to a 2" fill, the 3" is capable of more than double the flow rate capacity with a blazing 449 GPM @10 psi differential.

Arrow Tank and Engineering, Inc.



CONVENIENCE

Arrow bobtails include a variety of components that improve operator performance through added conveniences. Most of these items are standard equipment such as;

- Multi-function RF remote systems with PTO, throttle, reel-out, and remote meter display capabilities
- Electronic register with ticket printer in cab including preset delivery functionality
- Adjustable and plentiful lighting outside the cab to assist in low visibility situations.
- Ultra flexible low temperature delivery hose for easy operation in all weather condition
- Quick acting hose end valve with 360° swivel greatly reduces hose management frustration
- Specific hose reel components that reduce fatigue and provide trouble-free long life performance
- · Cabinets, covers, and underbody toolboxes offer weather resistant protection and storage capabilities
- Easy to operate pumping system via air toggle switches and actuators that are virtually maintenance free
- 1/4 turn stainless steel full port ball valves with vented ball for reduced effort and blow-out proof stem

















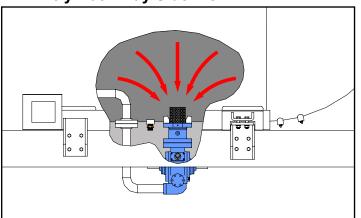


PUMPING SYSTEM

VESSEL LAYOUT & FABRICATION (IPD)

Vessel layout and design is paramount to successful bobtail fabrication. Arrow Bobtails feature internal pump discharge (IPD) which conceals a vast majority of the discharge piping inside the tank. Most notable benefits are improved safety, cleaner installations, and excellent protection from corrosion. Future chassis remounts are simple due to minimal exterior piping.

IPD Entry Cut-Away Side View



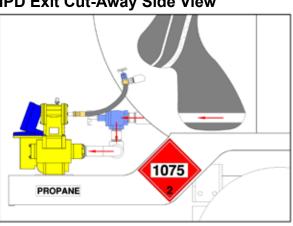
IPD starts with a single piece of die formed 2 inch pipe that is connected to the pump and point of entry. The smooth bend promotes flow and welded flange connections minimize any chance of leaks.

IPD Exit Cut-Away Side View

downstream and exits near the meter. Meter vapor return

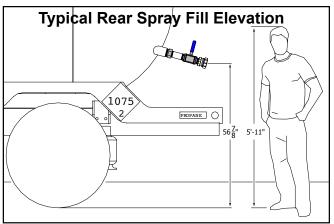
Product flows

is made using minimal piping courtesy of the vessel design.

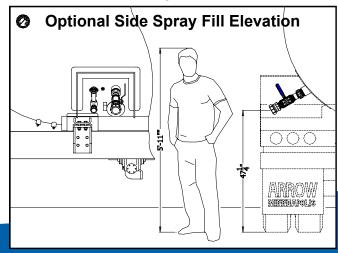


SPRAY FILL OPTIONS

NOT ONE SIZE FITS ALL. Over the past decade chassis frame heights have drastically increased. This trend has a direct correlation to the accessibility of the spray fill connections which are now 6-12 inches higher.



As show below, Optional Side Fill reduces connection height by nearly 10". Dual Fills & Float Gauge in front head also available.



Arrow Tank and Engineering, Inc.



WHAT, WHERE & HOW IS IT CONNECTED?

Every bobtail manufactured today has something in common. They all feature a variety of electronic devices spliced into the chassis used to manage the delivery. And, that's about where the similarity ends.

What is connected?

- RF remote shut-off systems & electronic registers
- Engine Throttle & Engine Kill
- Lap top/handheld computers, GPS receivers
- Wireless peripheral devices
- Chassis lighting

Where is it connected?

- Can you find a blown fuse without tearing apart the truck?
- Does the fuse found supply the correct device?
- Is the fuse found rated correctly for the device?
- Who can I call if I'm having trouble?

How is it connected?

- Where is the wiring routed for the device?
- What type of wire is used?
- · How can I find it?



When a device is down - truck down!

Careful planning and care is a key ingredient to this aspect of Arrow Bobtails. Trust us on this one, we have done our homework!

A centrally located power distribution center (PDM) is at the core of the system for powering onboard delivery electronic devices.

DECKLINE II

ELECTRICAL SYSTEM



Inside the PDM are fused circuits and relays used to manage Arrow Tank installed electronics onboard. Each circuit and relay is clearly labeled to identify the device and correct amperage.

Did you know?

Chassis manufactures leave the inside frame rail on passenger side clear for bodybuilders. Don't feel bad if you didn't know because some of our competitors are also unaware.

Heavy wall jacketed wire with additional shielding in blue poly split loom within the chassis frame rail for an extra measure of protection. No guessing here, "If it's blue, it's Arrow."



We also have electrical wiring diagrams for all our lighting systems and chassis interface. The diagrams label each chassis circuit number, location of the splice and when necessary amperage draw and balance of load remaining. Let's be realistic. At some point in time you may need to service your bobtail. Since many of our customers reside all over the country and often in the "boon dogs", we want whoever is doing the work to be informed of our electrical system. For that very reason, we have gone to the extra measures to design a proven system that is best in industry. Remember, a poor electrical job is the Grim Reaper when it comes to operating a dependable and productive bobtail.



Arrow Tank & Engineering

HISTORY...

From quote to completed bobtail, Arrow Tank & Engineering will take extra measures to make certain your needs are satisfied. Serving the industry fabricating vessels and bobtails for over 50 years the most important value we've learned is to "listen to our customers".

NOT JUST A BOBTAIL...

A bobtail serves as a multifunction tool for the marketer. A bobtail is not just a vehicle that pumps gas; it also acts as a mobile office, information center, and a top source for advertising.

QUALITY & DEPENDABILITY...

We do not build "cookie cutter" bobtails and will not sacrifice quality in materials or craftsmanship to sell merely based on price. We use only the highest quality materials in the bobtails we manufacture. Take a close look at our bobtails and let them speak for themselves. From Sales to Engineering to Production every employee at Arrow Tank puts their stamp of pride on each bobtail we manufacture.

TOTAL VALUE...

Based on the materials and quality our bobtails are competitively priced. Arrow Bobtails have stood the test of time and we continue to improve. The performance and quality engineered in the bobtails we manufacture is second to none.

