PROFORM GROUP

GUIDE TO REPLACEMENT FUEL TANKS

Proform Group is a top manufacturer and supplier of fuel tanks in the commercial vehicle sector. We manufacture our own line of aluminized steel and aluminum aftermarket tanks. Tanks are available in a variety of finishes, including powder coating, chemical agent-resistant coating (CARC), polishing, and acid etching. To ensure the quality of our products, we conduct rigorous quality inspections that test weld performance and potential leaks.

Our replacement fuel tanks can replace stock tanks from brands such as Volvo, Mack, Kenworth, Peterbilt, Freightliner, and many more.

Signs to Replace Your Fuel Tank

No matter the quality of the fuel tank, it will need to be replaced after a certain amount of time. The lifespan of a fuel tank ultimately comes down to the age of the vehicle and environmental exposure, such as:

- Salt or sand exposure
- Deep water exposure
- High humidity levels
- Dramatic temperature fluctuations

Plastic fuel tanks have become popular in recent years. While they do eliminate the risk of corrosion, plastic tanks have their limitations. Specifically, their vent and return lines will eventually fail, resulting in a complete fuel tank replacement.

One of the best ways to monitor tank failure is by relying on a fuel tank monitoring system. Not only do these systems measure fluid levels, but they also provide information to a host database, allowing for remote fuel monitoring. While systems will vary, they may also have sensors that monitor temperature, pressure, and other important variables. By relaying the relevant indicators and detecting issues before they worsen, fuel tank monitoring systems help the operator determine when a tank replacement is necessary.

Common indications that suggest it's time to replace the fuel tank include:

- Leaking fuel
- Overheating
- Engine struggles to start
- Other sensors provide a warning, such as a check engine light

The most obvious sign that a gas tank is in need of replacing is when a leak is noticeable.

In many cases, the fuel's odor becomes apparent before a puddle of fuel begins to form beneath the vehicle. When a leak is suspected, visually inspect the tank to confirm it is the source of the leak.

Fuel gauges provide another helpful indicator that the tank is leaking. Common signs of a damaged tank include:

- Unexplained decline in fuel efficiency
- Decreased fuel level after prolonged periods of inactivity
- Needing to fuel up more despite no changes in miles driven

Considerations

After a damaged fuel tank has been confirmed, it is time to start considering how to replace it. Plastic fuel tanks have become popular in recent years due to their low cost and corrosion resistance. However, plastic is not a perfect material for every situation. In addition to material, operators should consider three other key variables: tank fit, tested quality, and safety.

Material Construction: Aluminum vs. Steel

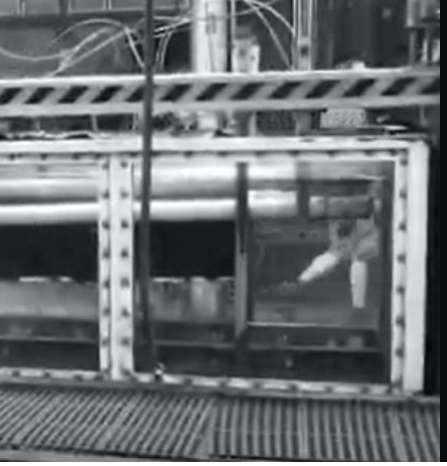
While plastic tanks provide advantages in corrosion resistance, they are not without their shortfalls. One example is hydrocarbon expansion, which is common in polyethylene tanks. When a polyethylene tank is first exposed to hydrocarbons, its dimensions will grow by about 2%. Any polyethylene tank installation must accommodate this one-time expansion. Plastic tanks also do not decompose, whereas aluminum and steel are easily recyclable. So which metal is better for fuel tanks, aluminum or steel?

Aluminum is notably lighter than steel, which enhances fuel efficiency and reduces operating costs. Especially during periods of high fuel costs, the savings provided by aluminum tanks make it the preferred material for fuel tanks.

Aluminum also provides wear resistance, particularly against rust and corrosion caused by salt and moisture. Painting steel fuel tanks will enhance their corrosion resistance, but aluminum does not need to be painted to offer the same level of protection against corrosion. In fact, polished aluminum may also be the preferred aesthetic.

Tank Fit

No matter the material of your new fuel tank, getting the right fit is of critical importance. While replacing a fuel tank is fairly simple, getting the wrong fit can lead to major problems down the road. It is important to triple-check measurements to prevent such catastrophes. Additionally, tanks should only be purchased from reputable vendors. Low-cost vendors tend to have lower standards for reliable measurements.



Tested Quality

Every part of a commercial vehicle should have high standards of quality, and fuel tanks are no exception. Tanks should be properly tested for weld quality and leaks to ensure their functionality and reliability.

Safety

The safety of the new fuel tank is largely intertwined with its quality. A high-quality semi-truck fuel tank that meets the right measurements and other performance specifications should also meet all applicable safety standards.

Replacement Process: Proform's Capabilities

If you're in the market for an aftermarket diesel fuel tank, you should work with a reputable manufacturer that produces and tests their tanks to ensure optimal performance. At Proform Group, we manufacture fuel tanks and fuel tank systems to your exact specifications using quality materials. We pressure test and inspect our products so that you receive a long-lasting tank you can rely on. Proform Group is U.S. DOT and ISO 9001:2015 certified, and we follow all industry best practices, which include FMCSA testing our fuel tanks.

Proform not only takes great pride in the quality of our fuel tanks but also in how we deliver those tanks to our clients. For responsive customer support and quick deliveries, our customers can trust our reliable distribution network. We have short lead times in getting the tanks to our distribution partners, who perform installation.

In case of accidents where customers need an immediate replacement, we can send them to our distributors to get a quick, reliable replacement. Customers simply send us the semi-truck model number, the tank's part number, size requirements, and any other relevant specifications.

Join Proform's Distributor Network

Our distribution network is growing every day. Our partners continue to work with us due to our reliable products and quick turnaround times. We can produce any fuel tank on the market and consistently meet or exceed current fuel tank system standards.

Replacing a Fuel Tank Yourself

While replacing a fuel tank is a fairly straightforward process, mistakes can be costly and dangerous. We always recommend that clients rely on the expertise of one of our distribution partners for safe installation. But if you need to install it yourself, these guidelines should be helpful.

- Be in a well-ventilated area. Even with a fully drained tank, fumes are likely to remain present. Excessive fuel fume inhalation can cause people to pass out, creating a major safety risk. Outdoor replacements or replacing in a well-ventilated area will help keep you safe.
- Have a fire extinguisher ready. In case something goes wrong, keep yourself and others safe by having a Class B fire extinguisher handy.

Replacing a Fuel Tank Yourself cont.

- Drain the fuel. Make sure the drained fuel is stored safely and properly. Do not drill holes in the old tank; rely on the drain plug which is often located at the bottom of the tank.
- Stay organized. Keep notes or take pictures to remain organized during the replacement process. Depending on the vehicle, there is a good chance you will have to remove other components—like the suspension or fuel lines—to complete the tank replacement.

Custom-Made Aftermarket Fuel Tanks From Proform Group

Proform Group is one of the most trusted commercial fuel tank manufacturers in North America. All of our manufacturing is done in-house in our Ohio, Arkansas, and Oklahoma facilities. We also produce battery boxes, air tanks, and other assemblies for the commercial vehicle industry.

Whether you want to join our distribution network or need to purchase new fuel tanks for semi-trucks, we're here for you. **Contact us** to learn more about our replacement fuel tanks and other capabilities.

About Proform Group, Inc.

Founded in 2001 in Columbus Ohio, PGI has over 330,000 square feet of manufacturing, assembly and warehouse space and 140+ team members working to provide industry leading American made welded products.

In Muskogee, OK PGI's 125,000 sq. ft. Manufacturing and Assembly plant has been in operation since our 2006 acquisition producing Fuel Tanks, Battery Boxes and School Bus Fuel Tanks and Crash Cage Assemblies for the US & Canadian school bus market. This facility is complemented with in-house Powder Coat Paint line, Stamping Presses, Plasma Cutting, and various Fabrication Break Presses soon to include a new Laser Fabrication Line.

The largest PGI manufacturing and assembly location boasts robotic and CNC MIG welding, seam and resistance welding, powder coatings, chemical etching and polishing capabilities. Stamping presses and rolling mill processes are also on site.

Our Ohio location in Columbus, is an 85,000 sq. ft manufacturing assembly plant including JIT warehouse in operation since 2001, with over 3,000 different components warehoused and assembled for JIT and Line Sequenced delivery with a combined several million different possible variations.

CONTACT US

RESOURCE LIBRARY

4400 Don Cayo Dr. Muskogee, OK 74403

ddaniels@proformgroupinc.com

proformgroupinc.com