

TITAN pt. no.: 02 0000 0343

Important: Please read these instructions carefully and completely before starting the installation.

TITAN Fuel Tanks
INSTALLATION GUIDE
Gen6



**40 Gallon (151 Liters), Cross-Linked Polyethylene Replacement Tank system for
FORD Diesel-Fueled Vehicles**

8020017: For **2017+** FORD models F-350, F-450 and F-550 Narrow Frame, Cab and Chassis vehicles.

After-axle tank system replaces the original equipment mid-ship tank. This system provides a fuel tank and components allowing the conversion of a chassis-cab vehicle which is originally equipped with a mid-ship mounted tank to an after-axle configuration. **The following additional components will need to be procured from your Ford dealer to complete the modification:**

1 ea. Kit to move DEF tank from the outside of the frame on the passenger side of the vehicle to the inside of the frame on the driver's side.

1 ea. Ford/Motorcraft PFS-1147 sending unit w/pump.

Important Note: The tank accepts required OEM Ford/Motorcraft sending unit w/pump, part no. PFS-1147—not included. This is the same sending unit that is used in the OEM after-axle tank.

Required Tools:

- 1 ea. Ratcheting socket driver
- 1 ea. SET of metric sockets for removal of vehicle straps and brackets etc.
- 1 ea. 12 inch long socket driver extension
- 1 ea. 16 mm socket
- 1 ea. 19 mm end wrench
- 1 ea. Small flat blade screw driver
- 1 ea. Medium flat blade screw driver
- 1 ea. Needle nose pliers
- 1 ea. Mallet or small hammer

Recommended Optional Tools:

- 1 ea. Impact wrench

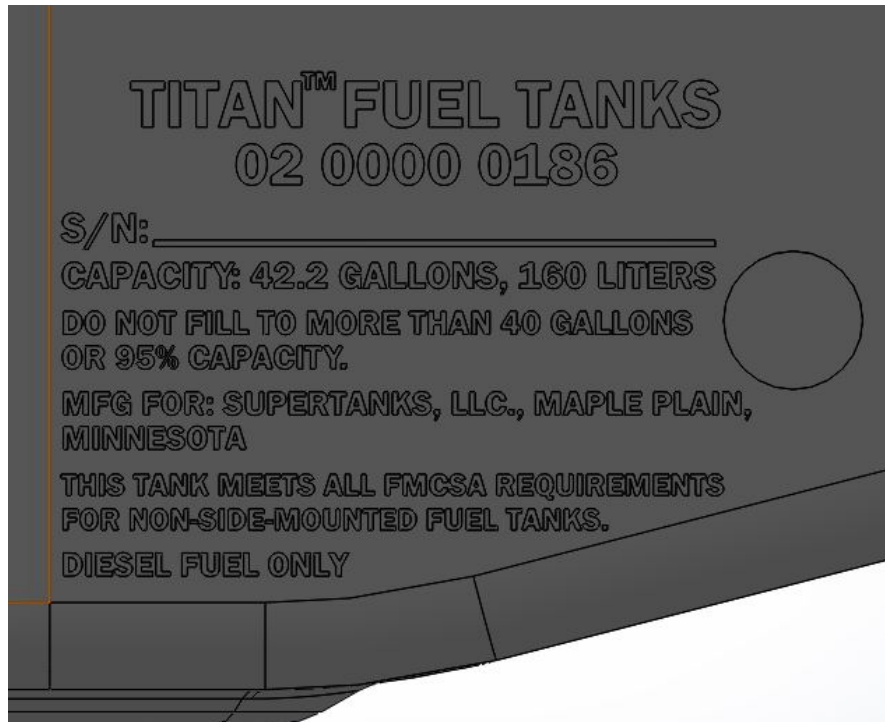
Generation 6

8020017 After-axle, Heavy Duty Cross-Linked Polyethylene Replacement Tank System to replace original equipment mid-ship tank

Parts List:

- | | |
|--------------------|--|
| 1 ea. 02 0000 0186 | Extra heavy-duty, 40* gallon, cross-linked polyethylene (XLHDPE) fuel tank |
|--------------------|--|

Part Identification: Name "TITAN™ FUEL TANKS" appears on the driver's side of the of the tank body.
The number "02 0000 0186" appears below the Lettering (See Fig. 1).



(Fig. 1) Identifying text on side of the tank.

Note: Please check, before beginning to be sure the tank is properly identified as the one to fit your vehicle.

1 ea.	02 0000 0197	Bright Orange TITAN “O” Ring Gasket
1 ea.	98 0000 0402	TITAN Torque Ring™, Top Ring
1 ea.	99 0102 0000	Rollover Vent, Fill-Stop Valve (TEMCO), with 5/16”x 1.5” Fuel Hose Vent Line already installed on valve. Install valve with appropriate thread compound. Install so vent hose is pointed directly at center of sending unit hole.
1 ea.	02 0000 0213	¼” NPTF 316 SS Male Hex Plug [Place loose w/ instructions]
1ea.	02 0000 0195	Water Separator Mount for 2017 Ford Vehicles
1ea.	02 0000 0226	Water Separator Relocation Bracket
1ea.	02 0000 0225	Automotive Heat Insulation
2ea.	02 0000 0217	2011 Ford AFT Axle Tank Bottom Strap
2ea.	02 0000 0218	2011 Ford Aft Axle Tank Top strap
1ea.	02 0000 0337	Parts Kit For 8020017

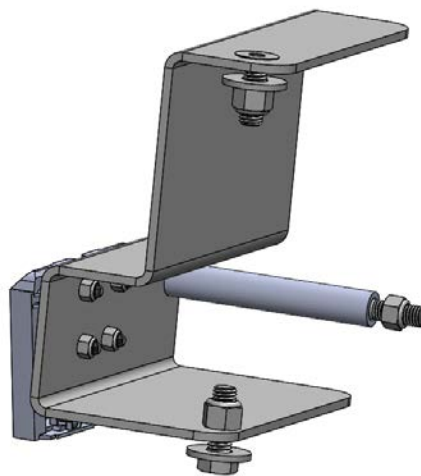
IMPORTANT NOTICE: Before installation, be sure to thoroughly inspect inside of the tank for ANY foreign debris!

I. Remove Original Equipment Tank

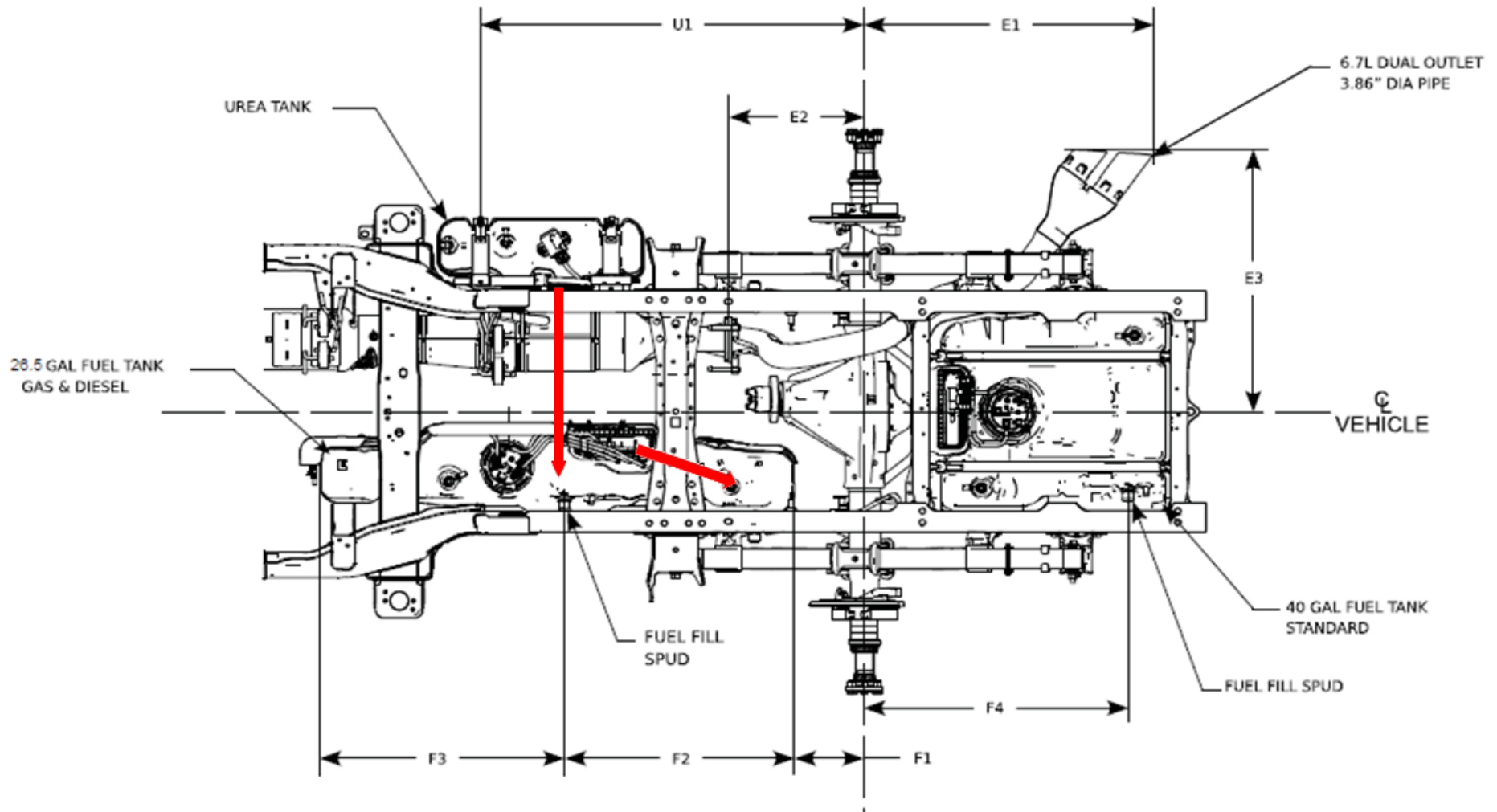
Step	Description
1	In a safe and approved manner, arrange the vehicle so that the stock tank is accessible and unobstructed.
2	Drain all the fuel from the original equipment (OEM) tank using a TITAN Fuel Caddy.
3	Disconnect the fuel lines located at the front of the mid-ship tank (See Fig. 2).
4	Disconnect the sending unit lines and the lines to and from the water separator (including electrical plugs). Set the fuel lines aside as they will not be needed on the new system.
5	Lower tank and remove the OEM tank and bracketry from the vehicle.
6.	Carefully remove the water separator from the mount on the side of the mid-ship tank.



(Fig. 2) Fuel line connections at front of tank.



(Fig. 3) Water separator relocation mounting bracket.



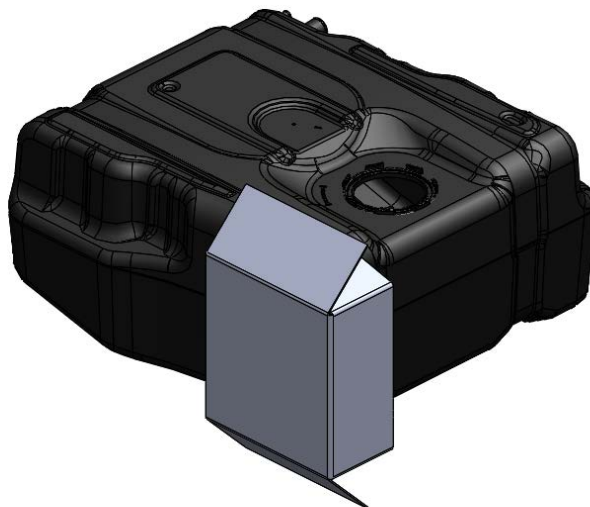
(Fig. 4) Red arrows show movement of DEF tank to inside of frame where mid-ship tank was and water separator from the side of the mid-ship tank to frame in front of shock absorbers.



(Fig. 5) PFS-1147 Sending Unit showing the protruding tab, seen on the left and the color coding of the hose connections.



(Fig. 6) Orientation of Sending Unit in TITAN tank with Gen6 Torque Ring™: Be sure the electrical plug is pointing away from the tank vent and toward the front of the vehicle as shown.



(Fig. 7) Install heat shield material to the corner of the tank as shown. The material is made to be folded and applied as shown. The shield has adhesive, but ultimately is held in place by the tank straps.

II. Prepare Replacement Tank

Step	Description
7	Using a pair of diagonal cutting pliers, remove the protruding tab from the PFS-1147 sending unit (See Fig. 5).
8	For this application, IGNORE the "TAB LOCATION" marking on the tank body.
9	The new TITAN fuel tank comes with the sending unit mounting hardware and "O" ring gasket required for installation.
10	Carefully place the sending unit into the new TITAN replacement tank. Make sure the "O" ring gasket is placed properly under the sending unit to seal correctly. Before installing the sending unit into the replacement tank, BE SURE THE INSIDE OF THE TANK IS FREE OF DIRT OR DEBRIS OF ANY KIND.
11	Carefully orient the sending unit so the electrical plug is pointing AWAY from the tank vent and toward the front of the vehicle (See Fig. 6).
12	Place the TITAN Torque Ring™, Top Locking Ring on top of the sending unit and tighten it clockwise as far as it will go.
13	The system includes a heat shield which must be attached to the tank as shown in Fig. 7. Fold the heat shield as shown and apply. The shield has adhesive, but ultimately the tank straps hold it on.
14	Install the TITAN Water Separator Relocation Mounting Bracket (See Fig. 3) on the vehicle frame as shown in Figs. 8 & 9. The bracket goes ahead of the shock absorber on the driver's side. The holes for the bracket's fasteners already exist in the frame.
15	Install the water separator, which was removed from the stock mid-ship tank, on the polymer water separator mount attached to the water separator relocation mounting bracket (See Figs. 8 & 9). Plug the separator into its electrical cord.



(Fig. 8) Water separator mounted on TITAN Mounting Bracket.



(Fig. 9) Top view of TITAN water separator relocation mounting bracket installed on vehicle frame.

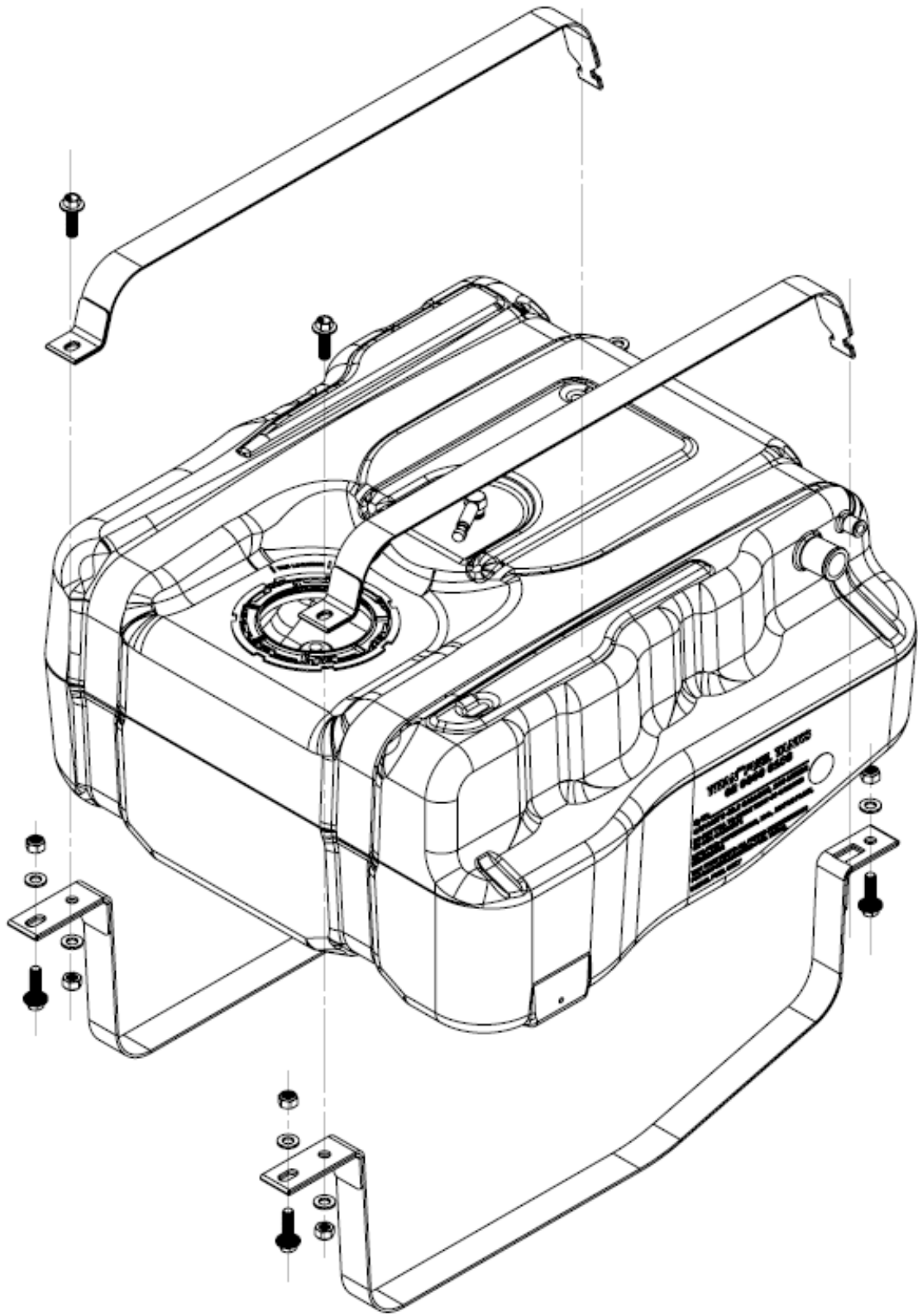


(Fig. 10) Using the wire kit supplied, cut and splice the sending unit electrical cable where shown by the arrow above so it will reach the rear, after-axle tank.

- 16 A wiring, extension kit is included with the TITAN system. Using the kit, cut and splice the sending unit electrical cable where shown (See Fig. 10) so it will reach the rear, after-axle tank.

III. Install Replacement Tank in Vehicle

<u>Step</u>	<u>Description</u>
17	Attach the TITAN after-axle tank to the rear of the chassis using the included strap set. Be sure to tighten all bolts securely (See Figs. 11-13).
18	Attach the sending unit electrical plug



(Fig. 11) Exploded view of after-axle tank strap assembly.



(Fig. 12) Rear of vehicle, showing how tank straps are attached to the frame.

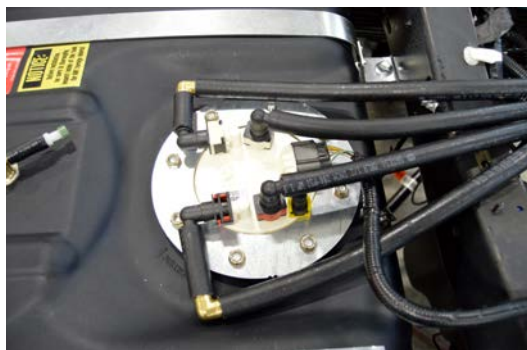


(Fig. 13) Front of TITAN tank, showing how tank straps are attached to the frame.

* All capacities are approximate



(Fig. 14) Water separator couplings showing color coding.



(Fig. 15) Hoses from sending unit (older Gen V mounting system shown).



(Fig. 16) Hose routing from sending unit to water Separator (older Gen V mounting system shown).

- 19 Attach the hose set to the sending unit, water separator and engine supply lines (See Fig. 2). The hoses are color coded with tape strips. **The color codes match the illustrations in Figs. 2, 5 and 14. Connect the hoses by the codes shown in the illustrations.** See Figs. 15 & 16 for suggestions of hose routing.
- 20 Using the Ford DEF mounting kit from your Ford dealer, move the DEF system to the driver's side of the vehicle, inside the frame rail.
21. Move the filler neck and vent assembly from the mid-ship OEM tank to the new TITAN after-axle tank.
- 22 Important: Fill the tank, operate and check for leaks. Double check all fasteners and connections to be sure they are tight.



Installation Complete

Be sure to return the completed warranty registration for your new Titan fuel tank; or you can register on-line at www.titanfueltanks.com

Write your tank's Serial Number here: _____

A tank must be registered within sixty (60) days of receipt for the warranty to be valid.

Warranty is void if product is improperly installed.

For questions or customer service call (800) 728-4982



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www.titanfueltanks.com

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