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# Titan Fuel Tanks 7020317 Installation Instructions

XXL Mid-Ship Fuel Tank for Ford Super Duty

Part number: 7020317

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Scan for fitment, price and install help

**TITAN pt. no.: 02 0000 0214**

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

## TITAN Fuel Tanks™

## INSTALLATION INSTRUCTIONS

# Gen6





***Extended Capacity Replacement Tank for FORD, Super Duty Diesel Pickup Trucks***

**7020317** *For **2017+** FORD truck models F250, F350 & F450: Crew Cab, Long Bed (8 ft.)*

For patent information: http://titanfueltanks.com/patents

**No** drilling or cutting is required for this installation.

*Required Tools:*

1 ea. Ratcheting socket driver
2 ea. 10 mm, 13 mm, and 19 mm sockets
1 ea. 12 inch long socket driver extension
2 ea. 8 mm, 15 mm end wrenches
1 ea. Small flat blade screw driver
1 ea. Large flat blade screwdriver
1 ea. T-27 Torx bit
1 ea. Rubber Mallet
1 ea. Hook Pick

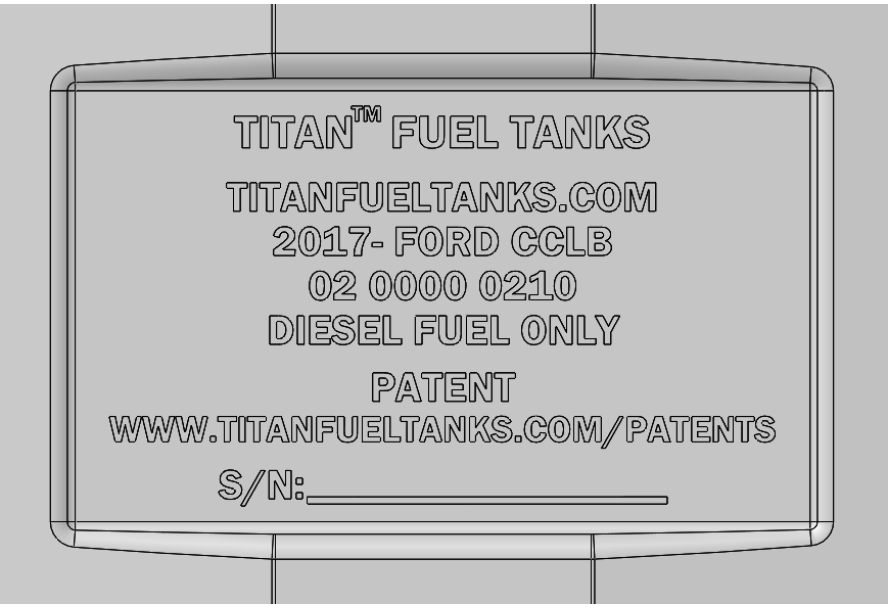
*Recommended Optional Tools:*

1 ea. Hydraulic transmission jack
1 ea. Impact wrench
1 ea. Vehicle Lift
1 ea. TITAN Fuel Caddy™ to transfer fuel.

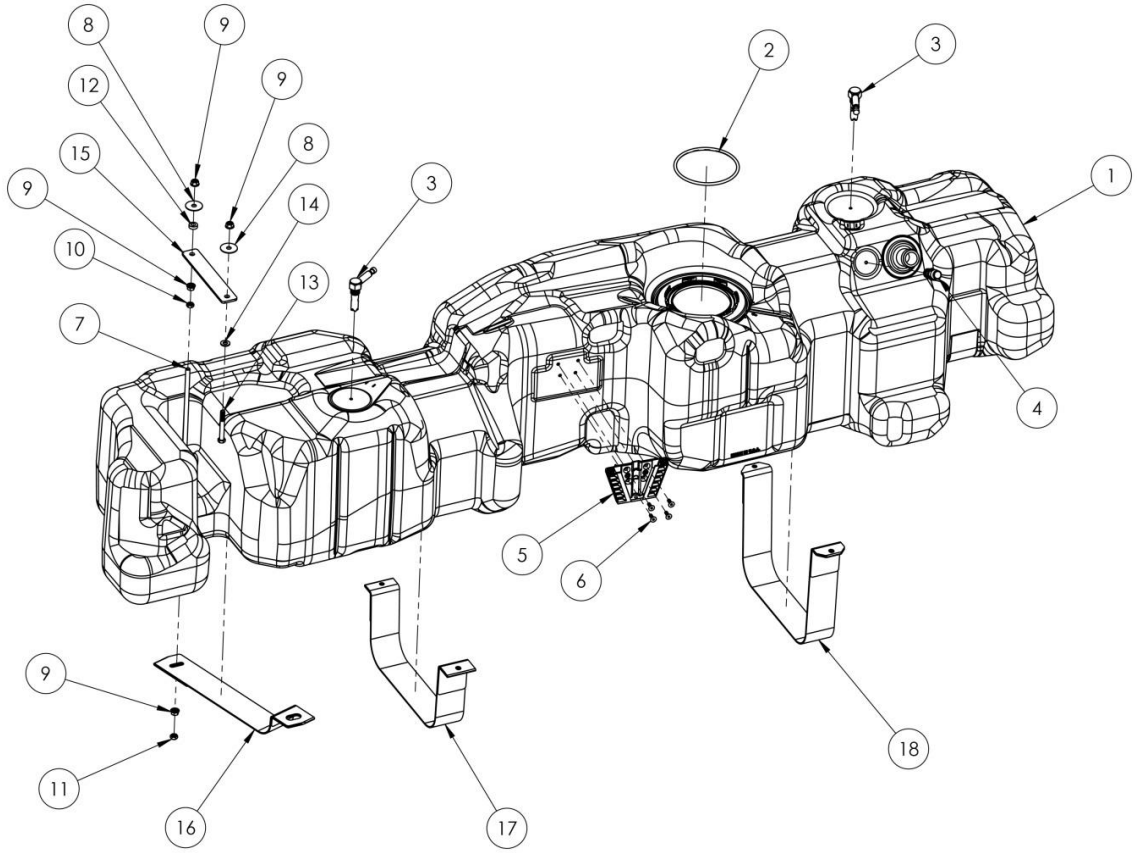


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**Tank Body Identification:**




***Note:*** *The tank body has the above identification on its bottom. Please check to be sure the tank is properly identified as the one to fit your vehicle.*






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| 7020317 Parts List | | | |
|---|---|---|---|
| Item | Description | TITAN Part Number | Quantity |
| 1 | 2017 Ford CCLB Tank Body | 02 0000 0210 | 1 |
| 2 | Orange O-Ring | 02 0000 0197 | 1 |
| 3 | Roll Over Valve | 99 0186 0000 | 2 |
| 4 | 1/2 NPT X 3/4" Hose Barb Adapter | 99 0000 0625 | 1 |
| 5 | Water Separator Mount | 02 0000 0195 | 1 |
| 6 | 1/4"-20 X 3/4" Flat Head Screw, Stainless Steel | 02 0000 0198 | 4 |
| 7 | 3/8"-16 X 16" Threaded Rod, Zinc-Plated Steel | 02 0000 0199 | 1 |
| 8 | 3/8" Oversized Flat Washer, Zinc-Plated Steel | 99 0000 0588 | 2 |
| 9 | 3/8"-16 Serrated Flange Locknut, Zinc-Plated Steel | 02 0000 0200 | 4 |
| 10 | 3/8"-16 Thin Hex Nut, Zinc-Plated Steel | 02 0000 0201 | 1 |
| 11 | 3/8"-16 Thin Nylon Locknut, Yellow Zinc-Plated Steel | 02 0000 0163 | 1 |
| 12 | 3/8" Spacer, Zinc-Plated Steel | 02 0000 0203 | 1 |
| 13 | 3/8"-16 X 3" Cap Screw, Zinc-Plated Steel | 99 0000 0882 | 1 |
| 14 | 3/8" Flat Washer, Zinc-Plated Steel | 99 0000 0883 | 1 |
| 15 | Cross Member Plate | 02 0000 0196 | 1 |
| 16 | Front Support | 02 0000 0211 | 1 |
| 17 | Front Strap | 02 0145 0000 F | 1 |
| 18 | Mid Strap | 02 0145 0000 M | 1 |

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

**NOTE: Take a moment and write the new TITAN™ Tank serial number in the back of this instruction booklet now. The serial number is found on the bottom of tank.**

**NOTE: The original equipment tank's rear strap will be reused on the new TITAN Tank.**

# I. Remove Original Equipment Tank

Step Description

1 Using best, safe practices, place the vehicle on a hoist that leaves the entire underside of the frame unobstructed.

2 Drain all the fuel from the original equipment (OEM) tank using a TITAN Fuel Caddy™, or a pump, or siphon.



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| Step | Description |
|---|---|
| 3 | Using a hook pick, loosen and remove the rubber seal that fits around the fuel fill spout and DEF fill tube (See Fig. 1). |
| 4 | Remove the bolts fastening the fuel fill spout (See Fig. 2). |
| 5 | Pull the fill spout assembly back toward the vehicle's frame and turn it so you have access to the hose clamps (See Fig. 3). |
| 6 | Disconnect the fill hose and vent line from the vehicle's fill spout. |
| 7 | Remove any shield which may be in the way of removing the tank. |
| 8 | There is a water separator attached to the side of the tank. It will have to have its electrical plug disconnected. Disconnect the electrical connection on the bottom of the separator (See Fig. 4) by depressing the clip on the plug and removing it. |
| 9 | Next, disconnect the fuel lines at the front of the tank (See Fig. 5). Release the red coupling by squeezing the two legs of the tab together and then pushing the tab towards the other side of the coupling. Note: This coupling operates differently from all others involved in the install. |
| 10 | Disconnect the other fuel line coupler (See Fig. 5) by following the instructions in Fig. 9, "Method for Disconnecting Fuel Line Couplings". |
| 11 | Support the OEM tank. |
| 12 | Loosen and remove OEM tank straps by undoing the bolts on straps at inboard and outboard of the tank and lower tank a few inches. Hold the factory "J-nuts" with an end wrench to prevent them from breaking. Retain the rear strap as it will be reused with the new TITAN tank. |
| 13 | Disconnect fuel gauge electrical connection from sending unit on top of the tank. |
| 14 | Remove the OEM tank from the vehicle. |



(Fig. 1) Loosen and remove rubber seal.




(Fig. 2) Remove the bolts holding he fill spout.



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(Fig. 3) Move fill spout assembly toward vehicle frame to gain access to the hose clamps.



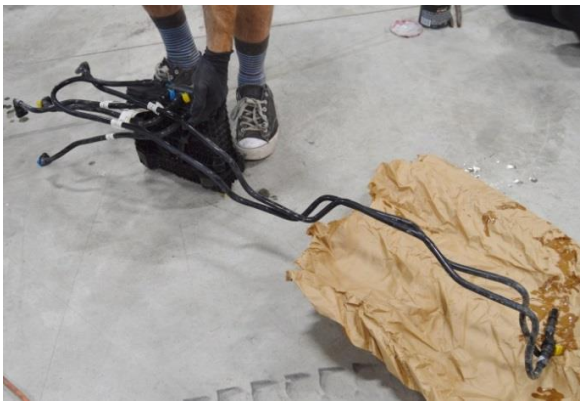
(Fig. 4) Disconnect electrical connection on the bottom of the water separator.



(Fig. 5) Fuel line connectors at front of tank.



(Fig. 6) Remove fuel lines from clips on OEM tank.



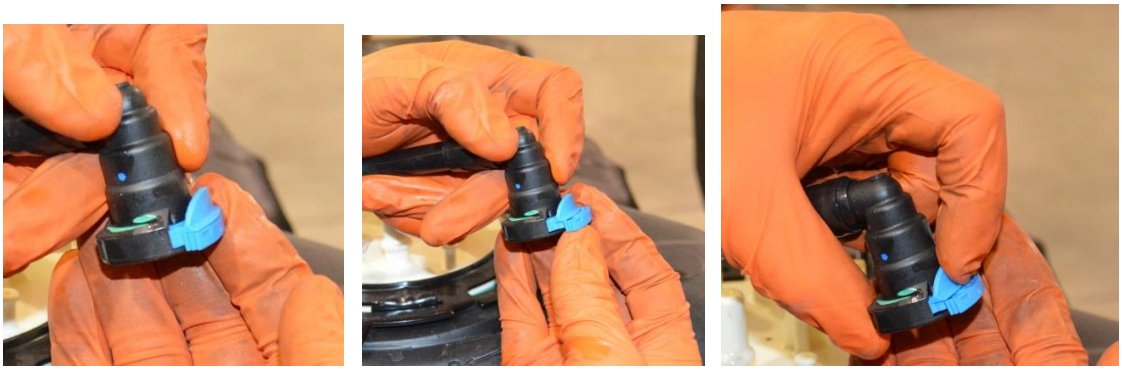
(Fig. 7) Remove water separator and attached fuel lines in one piece.



(Fig. 8) It is a good practice to apply a small amount of grease to the water separator mounting bracket to aid in installation of the separator.



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(Fig. 9): **Method for Disconnecting Fuel Line Couplings:** The majority of the couplings involved in this installation are of the quick connect type shown in left photo above. To disconnect, a) Slide the tab that has teeth on its edge outwards as shown in the center photo. b) Next, press the rounded button, as shown in the right photo, and pull the coupling apart.

## II. Prepare Vehicle and Replacement Tank

| Step | Description |
|---|---|
| 15 | Remove the guard located on the top of the OEM hold-down ring. |
| 16 | Disconnect all of the fuel lines from the sending unit. |
| 17 | Remove the fuel lines from the clips on the top and front of the tank (See Fig. 6). |
| 18 | On the side of the OEM fuel tank, use a T-27 Torx bit and driver to loosen and remove the screw, located on the bottom of the water separator, which holds it to the mounting bracket. With the screw removed, using a rubber mallet, carefully tap the water separator up and out of its mounting bracket on the tank (See Fig. 10). Be very careful not to strike any of the fittings on the bottom of the water separator. The water separator and the fuel lines attached may be removed together (See Fig. 7 ). |
| 19 | Loosen the OEM hold-down ring on the sending unit by turning it counter-clockwise (See Fig. 11).Remove the sending unit from the OEM tank. |
| 20 | The new TITAN tank comes with an O-ring to seal for the sending unit. Make sure the new O-ring gasket is placed into the gland (groove) at the sending unit opening. |
| 21 | Place the sending unit into the TITAN tank (See Fig.12). Be sure to turn the sending unit so that the tab lines up with the “tab location” arrow on the tank (See Fig. 13). |
| 22 | Place the hold down ring from the OEM tank onto the sending unit and tighten it clockwise as far as it will go (See Fig 14). Be sure the studs that hold the OEM guard are lined up in the same position as they were on the OEM tank. |
| 23 | Move the fill hose and vent hose from the OEM tank to the new tank, install and |



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tighten securely. IMPORANT: Be sure to install the hoses in the same orientation as they were on the OEM tank.

24 Install the water separator on the TITAN tank by sliding it into the mounting bracket and tightening down the hold-down screw on the bottom. It is a good idea to apply a small amount of grease to the mounting bracket to aid installation (See Fig. 8).

25 Install the fuel lines on the sending unit as they were on the OEM tank. Install the guard on the top of the hold-down ring being careful not to over-tighten the studs. The tank should appear as in Fig. 16 .

26 The Front Support Assembly is included as a kit with the tank. Assemble and install it on the vehicle's cross member as shown in Fig.15 leaving the bottom "Front Support Plate" off for now. See an exploded view, showing all of the parts, in Fig. 17. Be sure all of the nuts holding the support to the vehicle's cross member are tightened to 15 lb.-ft. of torque.

**NOTE:** Be sure that the threaded rod of the Front Support Assembly does not protrude above the vehicle's cross member so far as to make contact with the vehicle's aluminum body.



(Fig 10) Using a rubber mallet, carefully tap the water separator up and out of its mounting bracket on the OEM tank.



(Fig. 11) Loosen hold-down ring by turning it counterclockwise as shown.



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(Fig. 12) Place sending unit into the TITAN tank.



(Fig. 13) Line the tab on the sending unit up with the tab location arrow on the TITAN tank.



(Fig. 14) Reuse the OEM hold-down ring to mount the sending unit in the TITAN tank. Tighten by turning it clockwise as far as it will go.



(Fig. 15) Partially assembled Front Support Assembly installed on the vehicle's cross member.



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(Fig. 16) TITAN 7020317 tank shown with sending unit, water separator, fuel lines, sending unit guard, and fill and vent hoses installed; ready for installation into the vehicle.



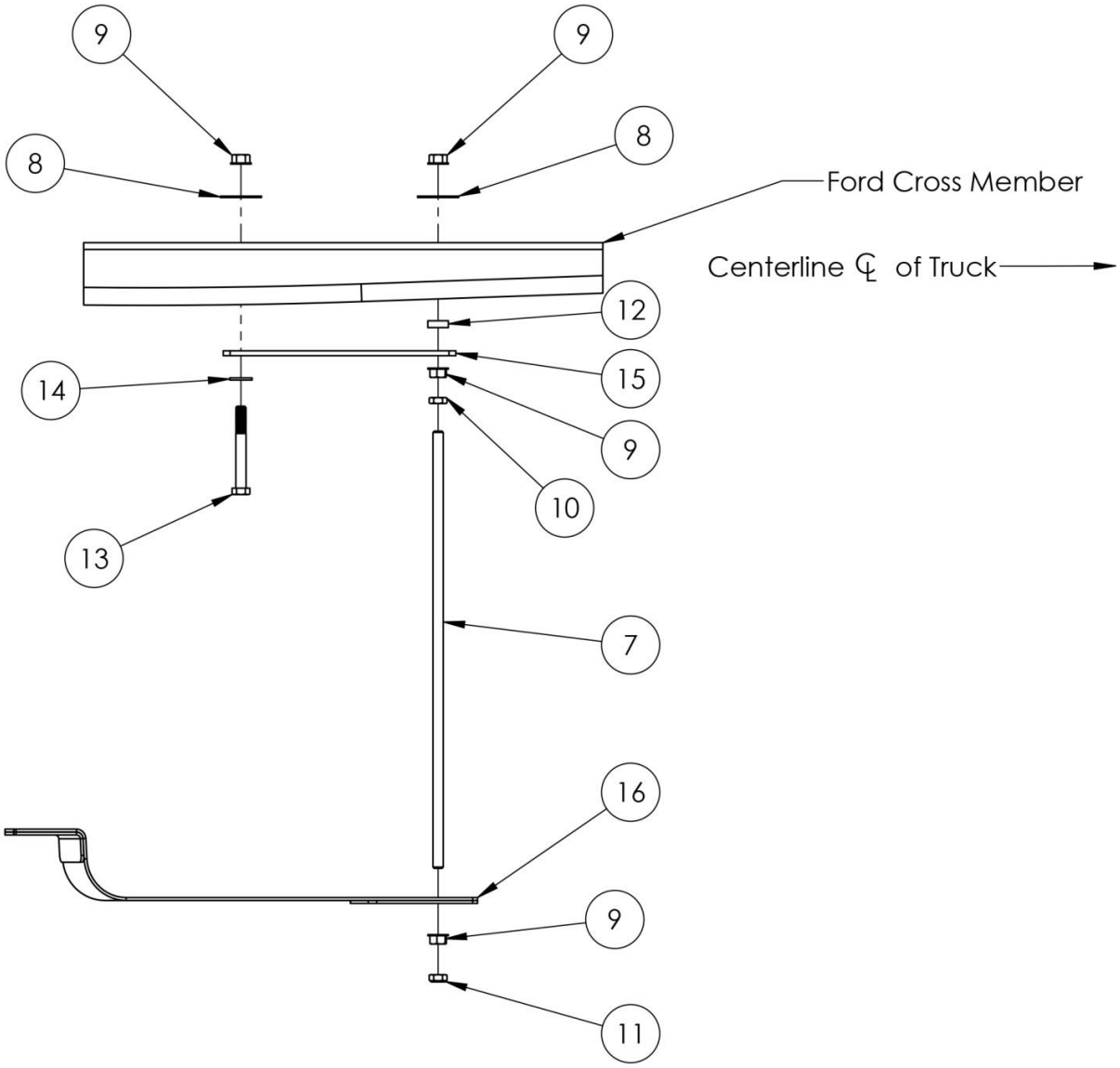
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## III. Install Replacement Tank in Vehicle

| Step | Description |
|---|---|
| 27 | Support the TITAN tank and lift it nearly into place leaving enough space to be able to reach up and plug the fuel gauge electrical connection onto the sending unit. Guide the threaded rod of the Front Support Assembly into the front mounting hole on the tank body as you lift it. |
| 28 | After plugging in the electrical connection on the sending unit, lift the tank all the way into place. Reuse the rear strap from the OEM tank as the rear strap on the TITAN tank. Two new straps are included with the TITAN tank for the other strap positions. Install the straps finger tight. |
| 29 | On the bottom of the Front Support Assembly, install the Front Support Plate with the Flange Nuts and Lock Nuts holding it in place (See Fig 18). The outboard end of the Front Support Plate bolts to the available hole in the vehicle's frame. Torque to 15 lb.-ft. The Front Support Assembly should appear as it does in Fig. 18. |
| 30 | Now tighten the straps to the vehicle manufacturer's specifications. |
| 31 | Reconnect the electrical connection on the bottom of the water separator. |
| 32 | Reconnect the fuel line connections which were on the front of the OEM tank. |
| 33 | Reconnect the fill hose and vent line to the vehicle's fill spout. |
| 34 | Move the fuel fill spout back into place and replace and tighten the bolts holding it. |
| 35 | Replace the rubber seal that fits around the fuel fill spout and DEF fill tube. |
| 36 | Make sure ALL mounting hardware, clamps, bolts, etc. are properly installed and TIGHT. Double check it. |
| **37** | **IMPORTANT! Lower vehicle, fill tank with diesel fuel to the first nozzle "click-off" and check for leaks.** |



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(Fig. 17) Exploded view of Front Support Assembly showing all the parts. Tighten all nuts to 15 lb.-ft. View is from the rear of the vehicle looking forward.



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(Fig. 18) Front Support Assembly properly installed.

**Go to TITAN's website to view video installation instructions and tips.**

* All capacities are approximate

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

**You will find your tank's serial number located on the bottom of the tank.**

**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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