Titan Fuel Tanks 7030707 Installation Instructions

50 Gallon Mid-Ship Tank for Ram Cab and Chassis

Part number: 7030707

trailfortress.com/titan-fuel-tanks-xxl-replacement-mid-ship-fuel-tank-50-gallon-7030707

Scan for fitment, price and install help

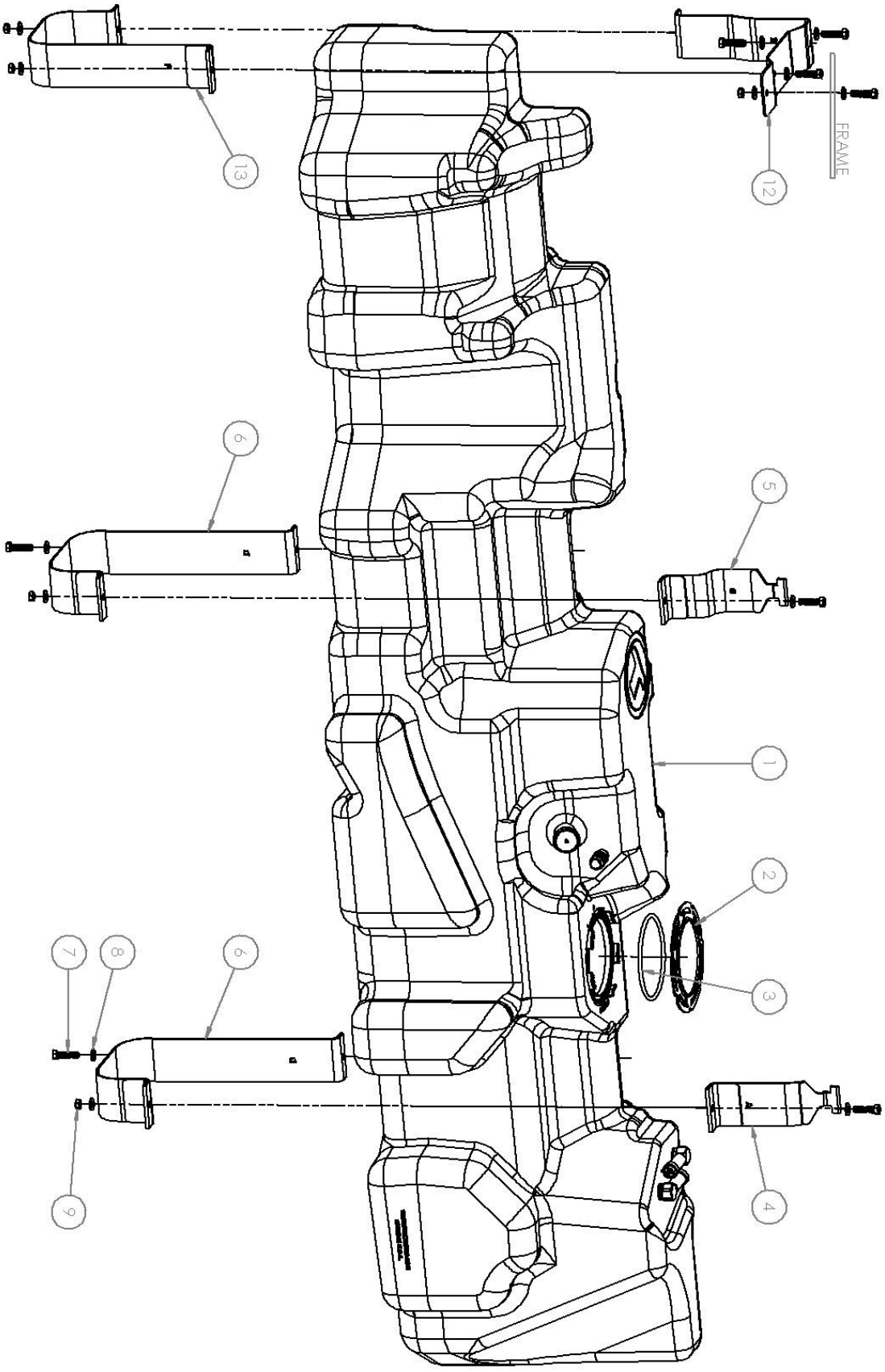
INSTALLATION INSTRUCTIONS



7030707: *50** Gallon (189* liters) Replacement Tank for Ram Cab and Chassis trucks with Cummins diesel engines. This product specifically fits the 120” CA (cab to axle) wheelbase (204.5”) in the 3500, 4500, and 5500 truck sizes.

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

IMPORTANT NOTICE: *Before installation, thoroughly inspect the tank interior for ANY foreign debris.*

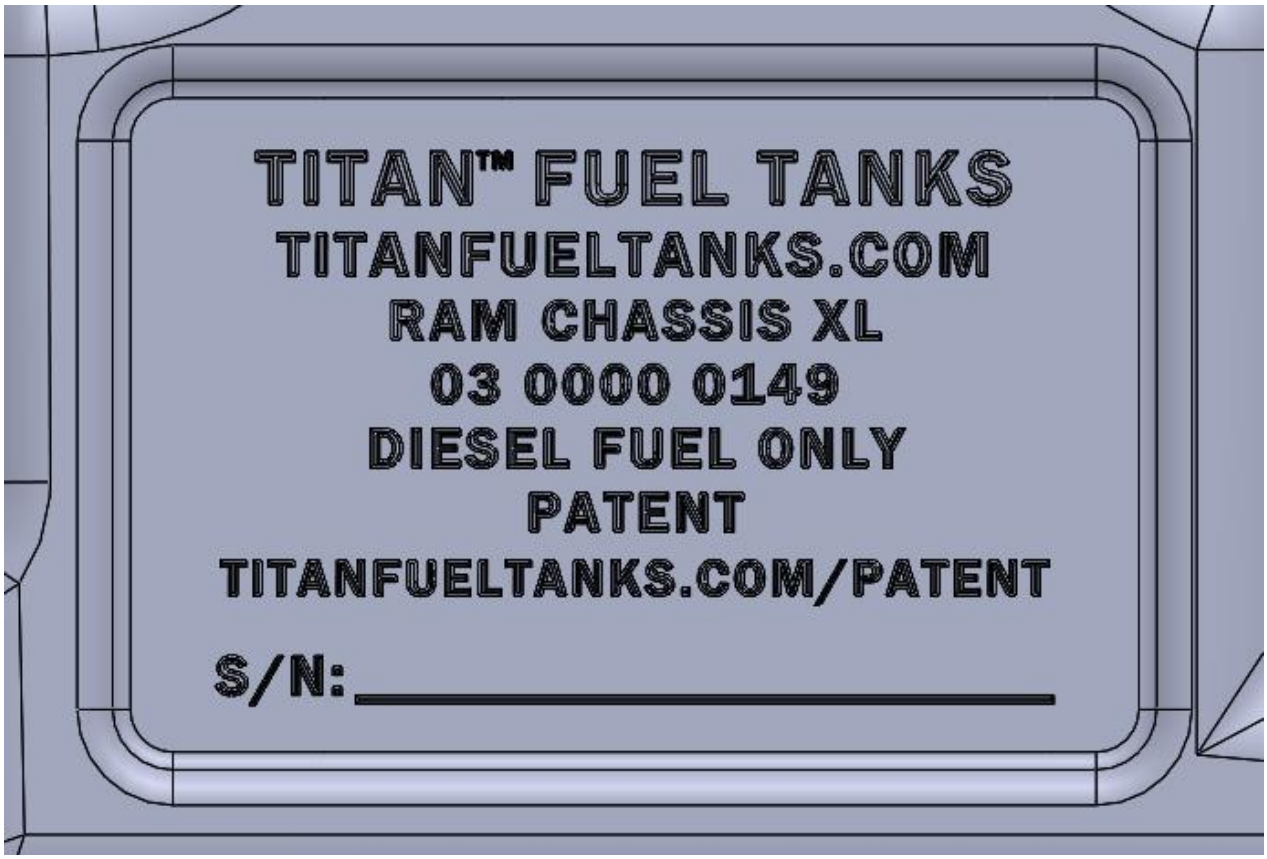

13
12
FRAME
6
5
1
2
3
7
8
6
9
4

7030707 Parts List:

	PN	Desc.	Qty.
1	03 0000 0148	Ram Chassis Universal Tank	1
2	98 0000 0403	Lock Ring	1
3	02 0000 0197	Orange O-Ring	1
4	03 0000 0150	"A" Tab Strap	1
5	03 0000 0152	"C" Tab Strap	1
6	03 0000 0151	"B" Strap	2
7	02 0000 0456	3/8"-16 x 1.5" Hex Bolt	8
8	99 0000 0682	3/8" Washer	13
9	02 0000 0163	3/8"-16 Nylon Locknut	5
12	03 0000 0154	"E" Front Support Bracket for 120" CA	1
13	03 0000 0155	"F" Front Support Strap for 120" CA	1

Generation 6

Tank Body Identification:



Note: The tank body has the above identification on its bottom. Please check to be sure that the tank is properly identified as the one to fit your vehicle. Notice the serial number space. You will need the serial number to register for warranty coverage.

Alternative Configuration Notice:

The following instructions are for a direct replacement application (factory midship being replaced by Titan midship).

For those looking to remove their after-axle tank and only use the Titan Midship, extra components will be needed. Please see pg. 10 for more information.

For those looking to run the Titan midship as an auxiliary tank, an additional Titan kit (PN: 9900057) will be needed. A universal filler neck kit (PN: 9900025) is recommended. Instructions for the auxiliary system will come with the kit. However, these instructions will still be needed to install the midship tank.

I. Remove Original Equipment Tank

Step Description

1 Before ANY INSTALLATION BEGINS INVENTORY ALL ITEMS IN KIT. Do not start Installation until you are 100% certain all Items are accounted for.

2 If a vehicle lift is being used, make sure that the lift you are using can hold the full weight of the truck. Many C&C trucks are upfitted with components that cause them to be too heavy for some commercial lifts. If you do not have a lift capable of lifting the truck, installation can be completed on the ground.

3 Drain all the fuel from the original equipment tank using a TITAN Fuel Caddy or siphon.

4 Disconnect the fill neck and the vent line from the fill spout mounted to the vehicle.

5 Support the original equipment tank to prepare for removal. We recommend using a transmission jack if using a vehicle lift or a floor jack if installing on the ground.

Note: The bottom of the OEM tank is rounded, not flat. It is extremely easy to tip this tank onto its side, so make sure the tank is completely stable while being removed from the vehicle.



Side profiles of the OEM tank

6 Check to see if the fuel lines and electrical harness connection to the sending unit are accessible. If they are, disconnect them before removing the straps.

7 Loosen the OEM tank straps by undoing the bolts on the driveshaft side. The straps are attached on the outboard side by tabs that hook into the crossmembers. Remove the straps and set them aside; they will not be reused.

8 If the fuel lines and electrical connection were not accessible, then lower the tank slightly to gain better access. Be very careful of how much tension is applied to fuel lines and fittings.

9 After all connections to the sending unit are detached, finish lowering the tank the rest of the way.

II. Prepare Vehicle and Replacement Tank

Step Description

10 Loosen the OEM lock ring on the sending unit by turning it counterclockwise. Remove the sending unit from the OEM tank.

Note: Once again, the bottom of this tank is not flat. Make sure it will not tip over while the sending unit is being removed.



Sample image of removing an OEM lock ring

11 The TITAN tank comes with a new O-ring to seal the sending unit. Make sure the orange O-ring is placed securely into the O-ring groove around the sending unit opening.

12 Place the sending unit into the TITAN tank. Be sure to turn the sending unit so that the tab lines up with the “tab location” marks on the tank.



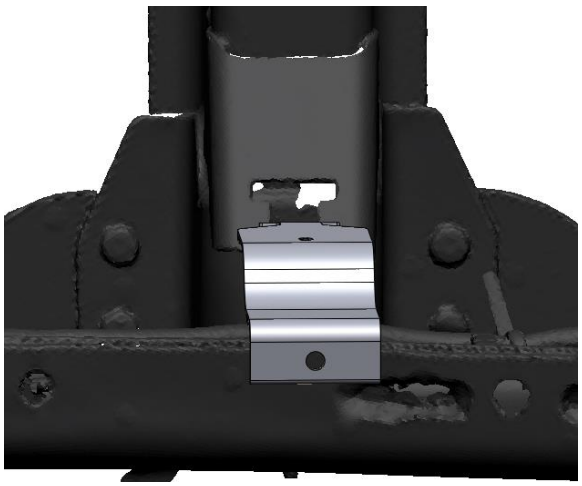
Sample image of sending unit aligned with marking on tank.

13 Use the new lock ring to secure the sending unit into the tank. Do not use the OE lock ring; it is not compatible with the Titan tank. Tighten it clockwise as far as it will go.

14 Note the orientation of the fill hose and vent hose, then move them from the OEM tank to the Titan tank. Install in the same orientation as factory and tighten securely.

15 Remove the original tank strap brackets from the truck. They will not be reused.

16 The two tab straps (A and C) are easier to install before the tank body is lifted into the vehicle. The A tab straps mount into the tab slot in the crossmember just forward of the rear axle. The C tab strap mounts into the next crossmember forward.

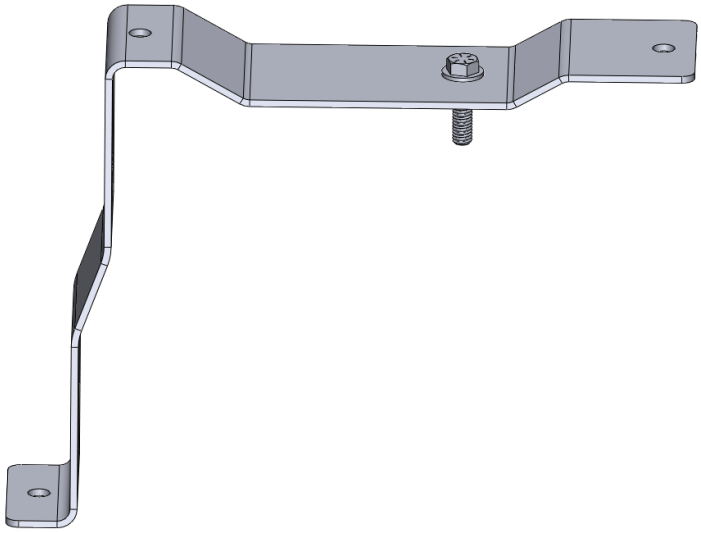


Installed C Tab Strap for Front Strap.



Installed A Tab Strap for Rear Strap.

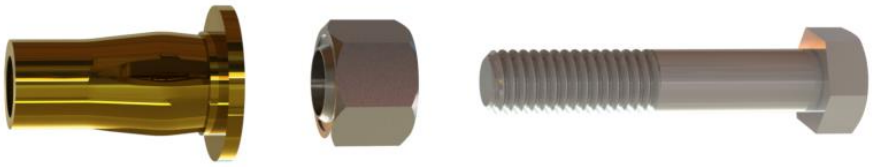
17 Take a 3/8”-16 x 1.5” bolt and a 3/8” washer and insert them into the hole in the middle of the top of the bracket.



E Strap with bolt and washer in place

18 The E bracket bolts into the crossmember behind the cab. There are two holes pre-drilled in the crossmember. The hole next to the drive shaft carrier bearing has a pre-installed threaded insert. The hole next to the frame is an open hole. If the top of the frame rail is accessible, insert a bolt with a washer down through the hole in the crossmember.

19 If the bolt hole is not accessible from the top, install a 3/8”-16 plusnut.
Using a ½” drill bit, enlarge the hole in the bottom of the crossmember slightly. (To prevent the drill from binding on the edge of the hole, run a sharp drill at high speed and try to drill the hole as slowly as possible.)
The hardware kit includes a plusnut, a plusnut hex tool, and a partially threaded 2” bolt. Slide the hex tool onto the bolt so that the flat side of the tool is touching the head of the bolt (see image below.) Thread the plusnut finger tight onto the bolt so that the retaining ring on the hex tool holds the head of the plusnut. Insert the plusnut completely into the enlarged hole. If necessary, tap the plusnut into place with a hammer. Thread the bolt into the plusnut, which will collapse the back flanges and lock it into place.
Note: The plusnut will initially spin freely, then stop due to friction. Overtightening the plusnut will cause it to start spinning again.

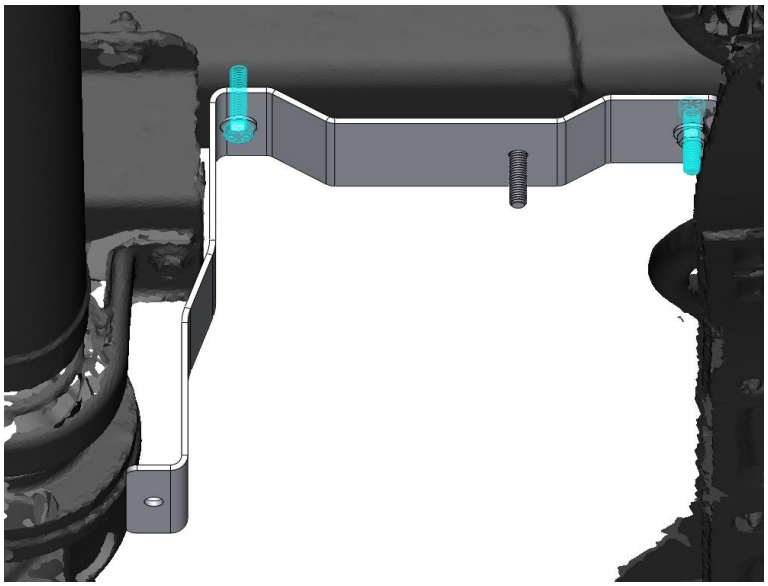


Plusnut, hex tool, and 2” bolt



Back view of installed Plusnut

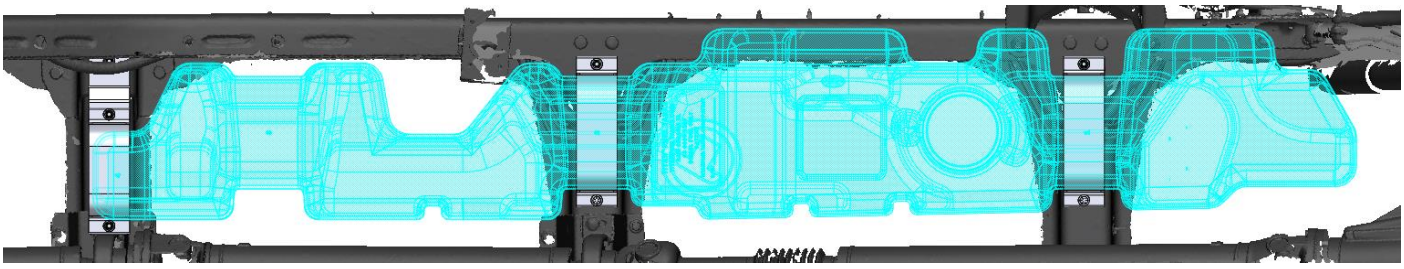
20 Install the E bracket. Use a washer and a 3/8”-16 bolt to attach the left side of the bracket. If the top of the crossmember was accessible, use a washer and a lock nut to install the bracket on the right side. If a plusnut was installed, use a washer and a 3/8”-16 bolt on the right side.



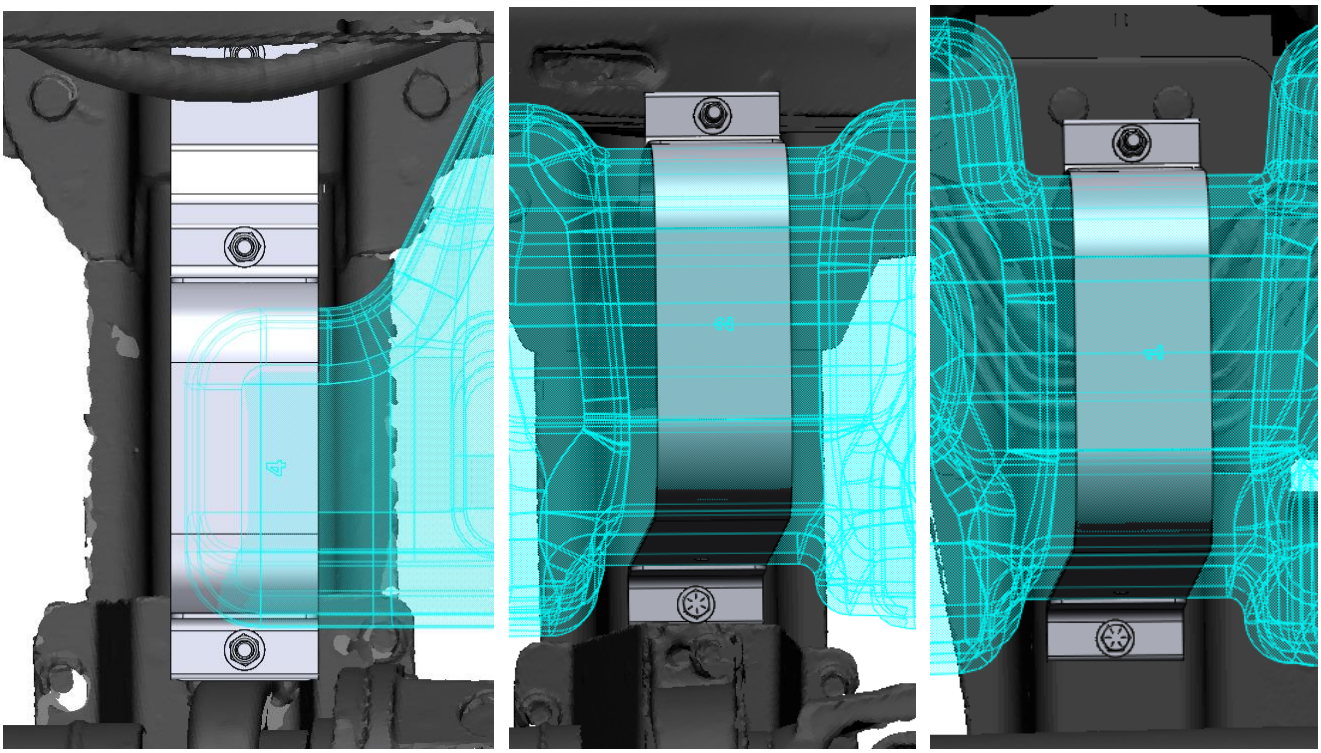
Installed E Bracket for Front Support. If using a plusnut for installation, the bolt on the right will extend up into the crossmember instead of pointing down.

III. Install Replacement Tank in Vehicle

Step	Description
21	Support the TITAN tank and lift it most of the way into place. Leave enough space to be able to attach the electrical connection and the fuel lines. It may be helpful to begin by lifting the tank at a slight angle to get the fill and vent hoses started through the hole in the frame.
22	Re-attach all fuel line and electrical connections, then finish lifting the tank into place.
23	Loosely install the B strap and the F front support strap into the crossmembers with the A and C tab straps. Using the provided bolts, washers, and nuts, attach the B straps to the A and C tab straps. (See diagrams below.) Tighten all bolts to manufacturer's specifications.
24	The F strap mounts to the E strap in two locations. Both locations use the same hardware setup as the previous setup: a bolt, two washers, and a lock nut.

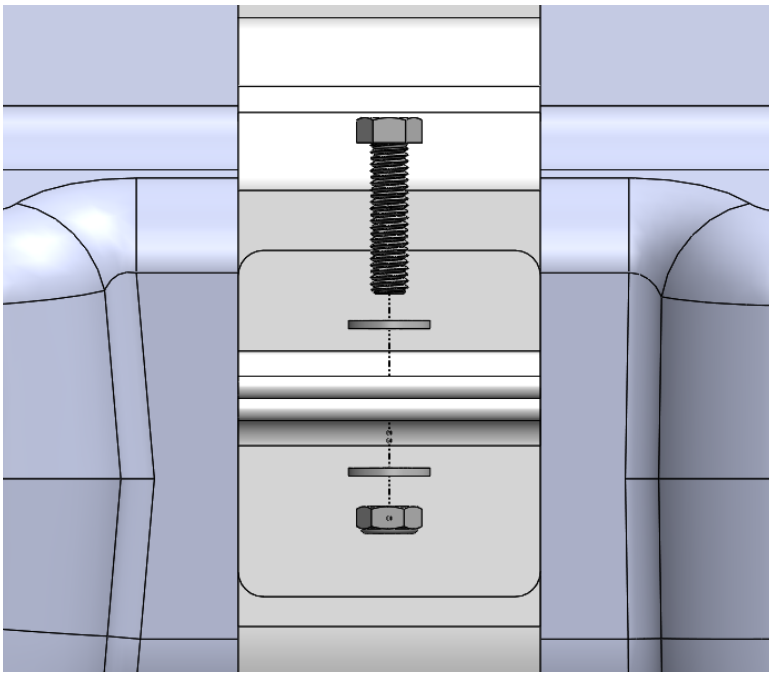


Overall view of the installed tank (seen from beneath.)



Front Support: E and F | Front Strap: C and B | Rear Strap: A and B

Installed straps (seen from beneath.)
The driveshaft is towards the bottom of these images, outboard towards the top.



Exploded view of hardware to mount two straps.

Use this hardware to connect straps A to B, C to B, and E to F (x2).

25 Reconnect the fill hose and vent line to the vehicle's fill spout.

26 Make sure ALL mounting hardware, clamps, bolts, etc. are properly installed and TIGHT.

27 **IMPORTANT!** Lower vehicle, fill tank to the first nozzle "click-off" with diesel fuel and check for leaks.

Alternate Configuration:

Aft-Axle only to Midship only conversion

While deleting the aft-axle tank is a common enough practice, we have found that Ram prefers to work with registered upfitters or dealers for parts such as fuel lines. **We highly recommend** working with a registered upfitter in your area with experience doing these modifications.

- We recommend replacing your existing fuel lines with lines designed for the Ram midship tank. While fuel line modifications are possible, DO NOT modify your fuel lines without a thorough understanding of the process.

- The aft-axle sending unit is tall enough to work with our midship tank, but the float arm points the wrong direction. This requires the sender to be clocked at a different angle and requires the orientation tab to be modified. Please be aware that these sending units are made from a brittle plastic that cracks easily.

- Rather than trying to rearrange or adjust the electrical harness, we recommend extending the wires in the electrical connection.

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

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 on the bottom of the tank.

Write your tank's Serial Number here:_____

A product must be registered within sixty (60) days of receipt for the warranty to be valid. Other conditions may apply. Consult TITAN's full warranty for details.

*All capacities are approximate.

Warranty is void if product is improperly installed.

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

TITAN Fuel Tanks™
P.O. Box 2225
Idaho Falls, ID 83403 USA
Telephone (208) 522-1325, FAX (208) 529-2162
www.titanfueltanks.com

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

TITAN Fuel Tanks are PROUDLY MADE IN THE USA!

©2024 Supertanks, LLC. All rights reserved.