TITAN pt. no.: 03 0000 0120

**Important:** Please read these instructions <u>carefully and completely</u> *before* starting the installation.

## **TITAN Fuel Tanks**

## INSTALLATION INSTRUCTIONS Generation V



### Extended Capacity Replacement Tanks for DODGE Diesel Trucks

**7030210 & 7030210S** For **2010-2012** DODGE truck models RAM 2500 & 3500 : (with pickup bed): Crew Cab, Short Bed (6 ½ ft.)

**7030303 & 7030303S** For **2003-2012** DODGE truck models RAM 2500 & 3500: (with pickup bed): Crew Cab, Long Bed (8 ft.)

#### Required Tools:

- 1 ea. Ratcheting socket driver
- 1 ea. 13 mm socket
- 1 ea. 16 mm socket
- 1 ea. 12 inch long socket driver extension
- 1 ea. 13 mm end wrench
- 1 ea. 9/16 inch socket
- 1 ea. 9/16 end wrench
- 1 ea. 5/8 inch socket
- 1 ea. 5/8 inch end wrench
- 1 ea. Medium flat blade screw driver
- 1 ea. Needle nose pliers
- 1 ea. Torque wrench handle for socket
- 1 ea. Mallet or small hammer DODGE Installation Instructions, TITAN Fuel Tanks pt. no. 03 0000 0120 Page: 1

Recommended Optional Tools:

- 1 ea. Hydraulic transmission jack
- 1 ea. Vehicle hoist
- 1 ea. Impact wrench

- 1 ea. Razor blade or sharp bladed knife
- 1 ea. Hook pick or small ice pick
- 1 ea. ½" Drill Bit (7030210 only)
- 1 ea. Electric or air powered drill (7030210 only)

#### 7030210 Parts List:

1ea. Extra heavy-duty 56 gallon\* cross-linked polyethylene (XLHDPE) fuel tank for DODGE diesel trucks:

Tank Body: Crew Cab, Short Bed 2010-2012

"Super Series" Tank Body Identification: "DODGE CCSB 03 0000 0113"

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

1 ea. Sending Unit Mounting Assembly (already installed on the tank body), consisting of:

	2 ea.	98 0000 0400	Stainless Steel ½ flanges with 3/8" studs (mounted inside tank)	
	1 ea.	98 0000 040		
	8 ea.	02 0000 016		
	1 ea.	02 0000 010	6 "O" Ring sending unit gasket (primary "O" ring gasket)	
	1 ea.	02 0000 018	3 Top sending unit flange	
	8 ea.	02 0000 016	3 3/8" nylon locking nuts	
1 ea.	99 010	02 0000	Rollover Vent, Fill-Stop Valve with 1.5" hose and vent cap.	
1 ea.	02 000	00 0112	Hose Barb Elbow installed in front insert of tank.	
	03 0000 0121		$\frac{3}{4}$ " x 14" Vent Line Hose, to be installed on hose barb of 02 0000 0112 above. This will be shortened to fit the individual application as part of the installation.	
4 ea.	99 0000 0113		Universal Strap Shims (Packaged in plastic bag).	
2 ea.	99 0000 0103		Rubber Strap Bushing, Extruded ( <i>NOT included</i> when TITAN Custom Shield is included as with 7030303 <u>S</u> ).	
1 ea.	03 010	0000 0000	DODGE "SS" 2010 Crew Cab, Short Bed Strap SET	
1 ea.	03 01 <i>°</i>	10 0000	DODGE 2010 Crew Cab, Short Bed Front Support KIT	

### 7030210S Parts List:

Same as above, except "2 ea. 99 0000 0103" is deleted AND the following is added:

1 ea. 03 0107 0000

TITAN DODGE Custom Shield for DODGE CCSB (7030210)



### 7030303 Parts List:

1ea. Extra heavy-duty 60 gallon\* cross-linked polyethylene (XLHDPE) fuel tank for DODGE diesel trucks:

Tank Body:Crew Cab, Long Bed 2003-2012"Super Series"Tank Body Identification:"03 0000 0114"



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

1 ea. Sending Unit Mounting Assembly (already installed on the tank body), consisting of:

	1 ea. 8 ea.	98 0000 040 98 0000 040 02 0000 016 02 0000 010	<ul> <li>(mounted inside tank)</li> <li>Flat flange gasket (mounted inside tank)</li> <li>3/8" flat retainers</li> </ul>
			gasket)
		02 0000 018	1 5 5
	8 ea.	02 0000 016	3 3/8" nylon locking nuts
1 ea.	99 01	02 0000	Rollover Vent, Fill-Stop Valve with 1.5" hose and vent cap.
1 ea.	02 00	00 0112	Hose Barb Elbow installed in front insert of tank.
1 ea.	03 0000 0121		<sup>3</sup> / <sub>4</sub> " x 14" Vent Line Hose, to be installed on hose barb of 02 0000 0112 above. This will be shortened to fit the individual application as part of the installation.
4 ea.	99 0000 0113		Universal Strap Shims (Packaged in plastic bag).
2 ea.	99 00	00 0103	Rubber Strap Bushing, Extruded ( <i>NOT included</i> when TITAN Custom Shield is included as with 7030303 <u>S</u> ).
1 ea.	03 01	08 0000	DODGE "SS" 2003 Crew Cab, Long Bed Strap SET

### 7030303<u>S</u> Parts List:

Same as above, except "2 ea. 99 0000 0103" is deleted AND the following is added:

1 ea.	03 0106 0000	TITAN DODGE Custom Shield for DODGE CCLB
		(7030303)
1 ea.	01 0000 0118	Quick Tie for Shield



**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 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 pump or siphon.
- 3 Remove OEM tank plastic shield or shell (if applicable) from vehicle. Some vehicles may require the removal of the left rear fender liner and even the wheel to facilitate access to the tank fill and vent hoses (See Fig. 1).



(Fig. 1) Some vehicles may require the removal of the fender liner and perhaps the left rear wheel so as to facilitate access to the tank fill and vent hoses.

- 4 Support the OEM tank.
- 5 Disconnect the fill hose from the OEM tank's king nipple.
- 6 Loosen and remove OEM tank straps by undoing the bolts on straps at inside of

tank and the outside of the frame, and lower tank a few inches.

- 7 Disconnect vent line hose line coming from fill spout to tank. Disconnect at fill spout tubing end.
- 8 Disconnect fuel gauge electrical connection from sending unit.
- 9 Disconnect fuel and return lines from the sending.
- 10 Remove the OEM tank from the vehicle.

**Note:** Concerning the installation of some 7030210 and 7030210S products: Factory skid plate which is located under transfer case may, in some cases, interfere with the installation of the TITAN tank. In those cases it may be necessary to permanently remove all or part of the factory skid plate to allow installation of the new TITAN tank.

# **II. Prepare Vehicle and Replacement Tank**

### Step Description

11 Loosen the OEM hold-down ring on the sending unit by turning it counter-Clockwise (See Fig. 2). Before removing the sending unit, notice where the sending unit fuel line nipples and the electrical fitting are pointing or "clocked", they will need to be installed the same way, at the same angle in the replacement tank. Remove the sending unit from the OEM tank. Do NOT reuse factory "O" ring seal.



(Fig. 2) Loosen the hold-down ring on the OEM tank by turning counter-clockwise. Note where the connections on your vehicle's sending unit are "clocked" and install so they are located in the same position in the new tank.



(Fig. 3) Place the sending unit into the TITAN tank, install the top flange, and tighten the nylon lock nuts to 20 ft. Ibs using a "star" pattern using a torque wrench.

12 The new TITAN fuel tank comes with the sending unit mounting hardware assembled. Remove the 3/8" nylon lock nuts from the studs holding the top flange. Remove the top flange. You will see the "O" ring gasket in place under the flange. Leave the "O" ring gasket, studs, and retainers assembled as

they are

- 13 CHECK THE ½ FLANGES INSIDE THE TANK TO BE SURE THEY ARE SEATED FLAT AND <u>NOT</u> OVERLAPPING and have not shifted in shipment. Make sure the flat gasket is in place between the ½ flanges and the top inside surface of the tank.
- 14 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.
- 15 After placing the sending unit into the tank on top of the "O" ring gasket, rotate it (carefully so as not to displace the "O" ring) so the fuel fittings and electrical connections are positioned (or "clocked") at the *same* angle as in the OEM tank.
- 16 Place the top flange on the studs, on top of the sending unit, so as to hold it down securely.
- 17 Use the 3/8" nylock nuts to tighten down the top flange. **Tighten to 20 foot pounds (ft. lbs) of torque using a torque wrench.** Be sure to tighten in a "star" pattern, starting with the four studs adjacent to where the ½ flanges meet so as to prevent the flanges from overlapping, and to ensure all nuts are equally tightened and the "O" ring gasket is properly seated. Carefully "snug" the nuts equally before tightening to specification. After initially tightening to 20 foot pounds (ft. lbs.), it is a good practice to check the torque again after 15 minutes or so (See Fig. 3).

# III. Install Replacement Tank in Vehicle

#### Step Description

- 18 If the optional TITAN Shield was ordered with the tank, place it under the tank. For 7030303 tanks only, using the Quick Tie provided, securely fasten the front of the shield to the front section of the tank (See Fig. 6 below ).
- Place tank (and shield if included) on a transmission jack. Lift the tank partway into the vehicle and reattach the fuel and return lines, and the electrical connection to the sending unit. Finish lifting the tank into the vehicle and connect the fill and vent line hoses from the fill spout to the tank. The TITAN tank is equipped with a <sup>3</sup>/<sub>4</sub>" vent line hose attached to the elbow which screws into the top of the tank. This hose runs from the tank to the vehicle's fill spout vent. Be sure to trim this <sup>3</sup>/<sub>4</sub>" vent line hose that comes with the tank to the proper length for the vehicle. Make sure the vent line hose angles downward from the fill spout to the tank and that there are no "sags" (or kinks) in the line or it will not vent properly. Clamp tightly using OEM clamps on both ends.
- 20 If optional TITAN Shield is NOT to be installed, you will need to install the rubber bushings now on both straps. Place the bushings so they are centered in the

bottom of the straps with the bushing's channel side toward the strap. Press the bushings securely into place (See Fig. 4).



(Fig. 4) If optional TITAN Shield is not to be installed, install rubber bushings (pn 99 0000 0103) on both straps with the channel side toward the strap.



(Fig. 5) On 7030210 (Crew Cab, Short Bed) tanks only, bolt the Front Support to the nearest cab mount (as shown above), then use a  $\frac{1}{2}$ " drill bit to drill through the support hole and through the vehicle's frame. Bolt the support to the frame using the bolt and hardware provided.

21 Attach the inboard sides of the straps and be sure to thread two zinc plated shims onto each strap bolt (See Fig. 7). Tighten the bolt and strap against the shims. If the strap does not hold the tank tightly enough, remove one shim at a time until it is tight. Tap straps with a mallet, if needed, to form them against the bottom of the tank.



(Fig. 6) On 7030303 tanks only, if the optional Custom Shield is installed be sure to use the included Quick Tie to hold the shield securely to the front section of the tank as shown here. Trim any excess Quick Tie



(Fig. 7) Tighten the bolt and bracket against the shims. If the strap does not hold the tank tightly enough, remove one shim at a time until it is tight.

DODGE Installation Instructions, TITAN Fuel Tanks pt. no. 03 0000 0120 Page: 8

Rev. 04/17/2014

- 22 On 2010 Crew Cab, Short Bed (7030210) vehicles only, install the "03 0110 0000 DODGE 2010 Crew Cab, Short Bed Front Support KIT" under the front of the tank. Remove the bolt from the front cab mount and thread the support onto it. Tighten the bolt to manufacturer's specification. Then drill through the support's hole and through the vehicle's frame with a ½" drill bit. Bolt the support solidly with the bolt and hardware provided in the kit (See Fig. 5).
- 23 Make sure ALL mounting hardware, clamps, bolts, etc. are properly installed and TIGHT. Double check it.
- 24 Lower vehicle, <u>fill tank completely with diesel fuel and thoroughly check for</u> <u>leaks.</u>





7030303

7030210

(Fig. 8) Installation complete!

\* 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 <u>www.titanfueltanks.com</u>

You will find your tank's serial number located approximately ½ way up the driver's side located towards the rear of the tank; adjacent to the sending unit.

## 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



TITAN Fuel Tanks P.O. Box 2225 Idaho Falls, ID 83403 USA Telephone (208) 522-1325, FAX (208) 529-2162 www.titanfueltanks.com TITAN Fuel Tanks are PROUDLY MADE IN THE USA Revised 4.17.14 ©2014 Supertanks, LLC

DODGE Installation Instructions, TITAN Fuel Tanks pt. no. 03 0000 0120 Page: 10

Rev. 04/17/2014