



INSTRUCTION TO SERVICE

ITS: 5603

SECTION:	219 Engine and Transmission
WRITTEN BY:	Mike Pearson
SUBJECT:	Remove and Replace DEF Tank Filler Neck and Cap

ITS5603

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PROCEDURE:

1. Turn the main battery disconnect switch to the "OFF" position.
2. Open the curb side fuse box access door and locate the DEF tank cap and fuse box cover.
3. Remove the screw holding the DEF tank cap lanyard to fuse box. Remove and discard the lanyard and existing DEF cap. Re-install existing fuse box screw. See Figure 1.
4. Remove existing filler neck and o-ring from DEF tank and clean area with clean water and a clean lint free cloth to remove any traces of crystallized DEF fluid. Using a clean lint free cloth cover the open port on the DEF tank until Step 6.

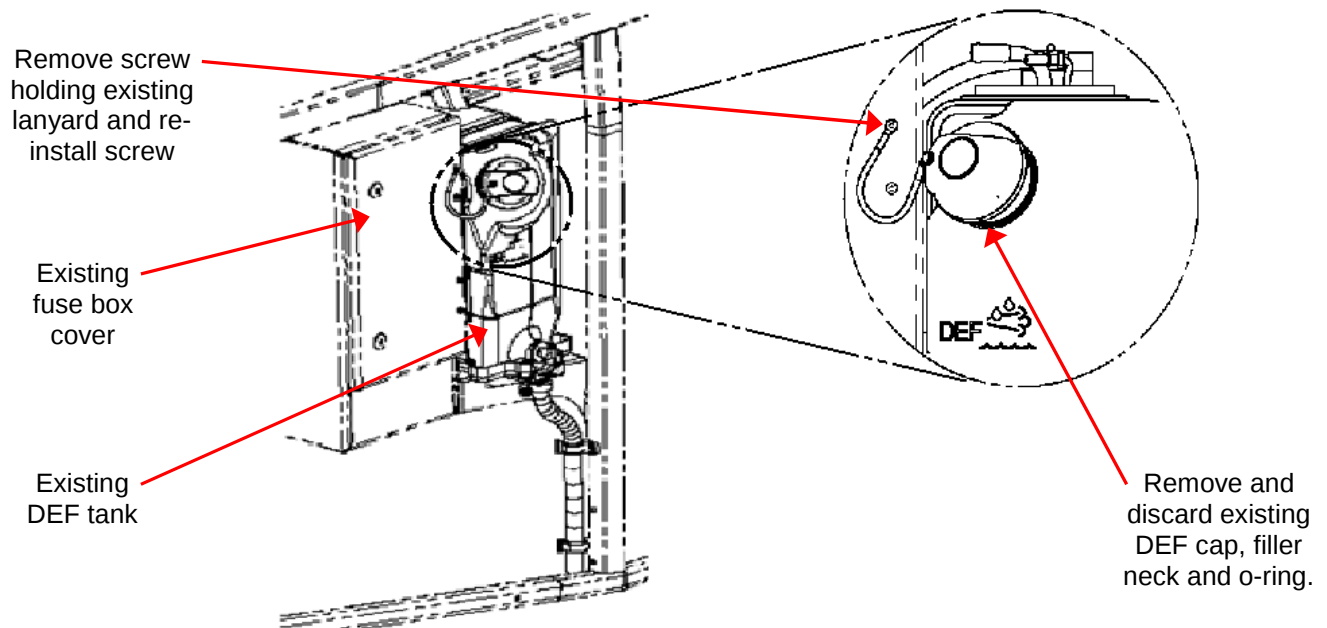


Figure 1: DEF Cap and Filler Neck Location

5. Lightly lube the o-ring p/n 540465 using clean engine or transmission oil and install on the Stainless Steel adapter p/n 533718. See Figure 2.



Figure 2: Adapter and O-ring Preparation

6. Apply Gasoila sealant to the screw threads (qty 4) in preparation for next step.
7. Install the adapter and lubricated o-ring from Step 5 onto the DEF tank opening of existing DEF tank as shown in Figure 3. Care is to be taken to insure that the o-ring seats evenly into the stainless steel recess on the tank. It will be necessary to apply constant pressure on the adapter to prevent it from backing off while rotating it to line up the mounting holes. While still applying pressure on the adapter loosely install the mounting screws. Torque the screws to 10-12 in*lbs in the order shown in Figure 3.

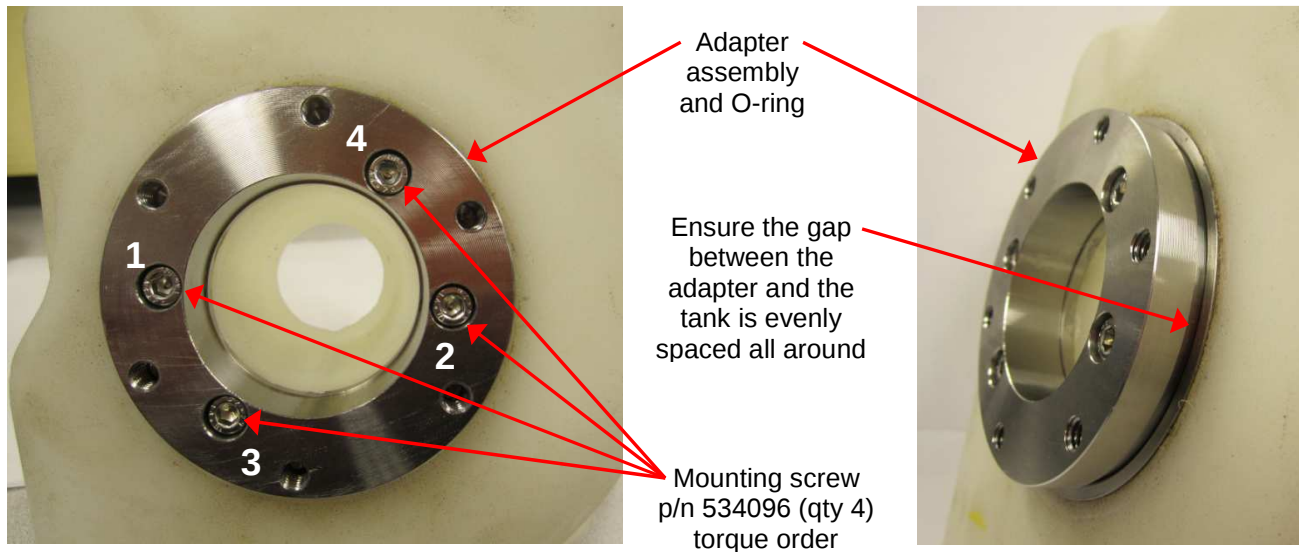


Figure 3: Adapter Assembly and O-ring Mounting Screw Torque Order

8. **Discard the screws supplied with Adapter Assembly p/n 535189.** Install new filler neck and supplied gasket using new screws p/n 549023. Mark on the filler neck should be installed toward top. Install using 5 of the 6 new screws, torque the screws to 40 in*lbs in alternating order. Leave out the screw for attaching cap Lanyard as shown in Figure 4.

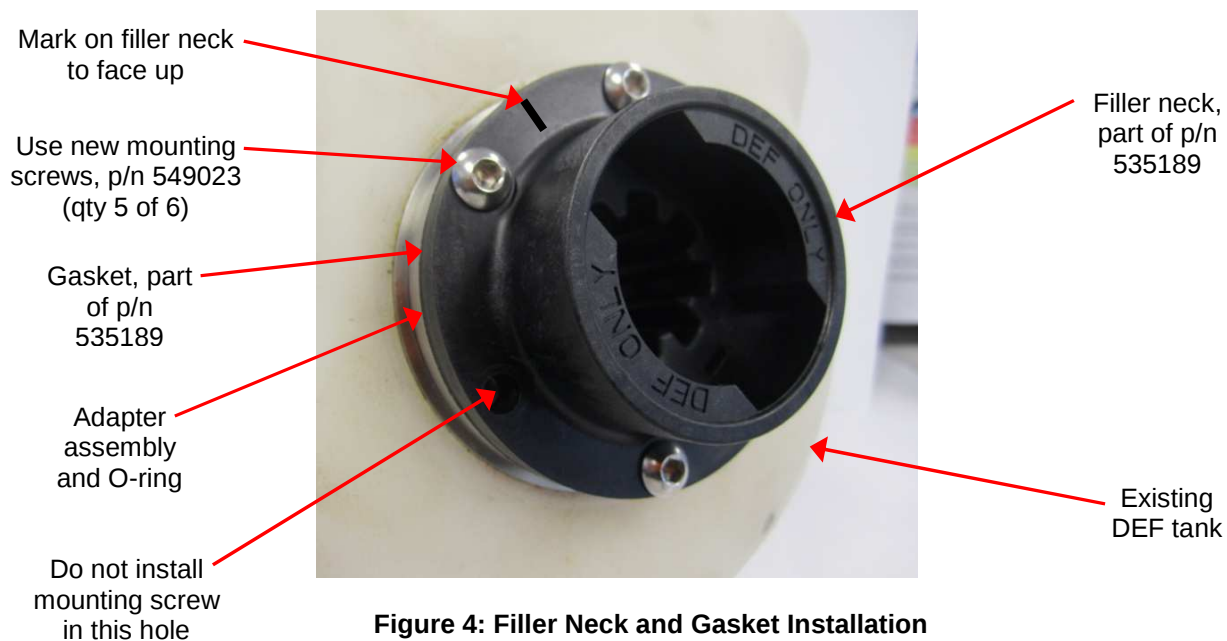


Figure 4: Filler Neck and Gasket Installation

9. Attach the lanyard to the filler neck using the remaining screw from Step 7, torque the screw to 40 in*lbs. Install the DEF cap p/n 535455, See Figure 5.

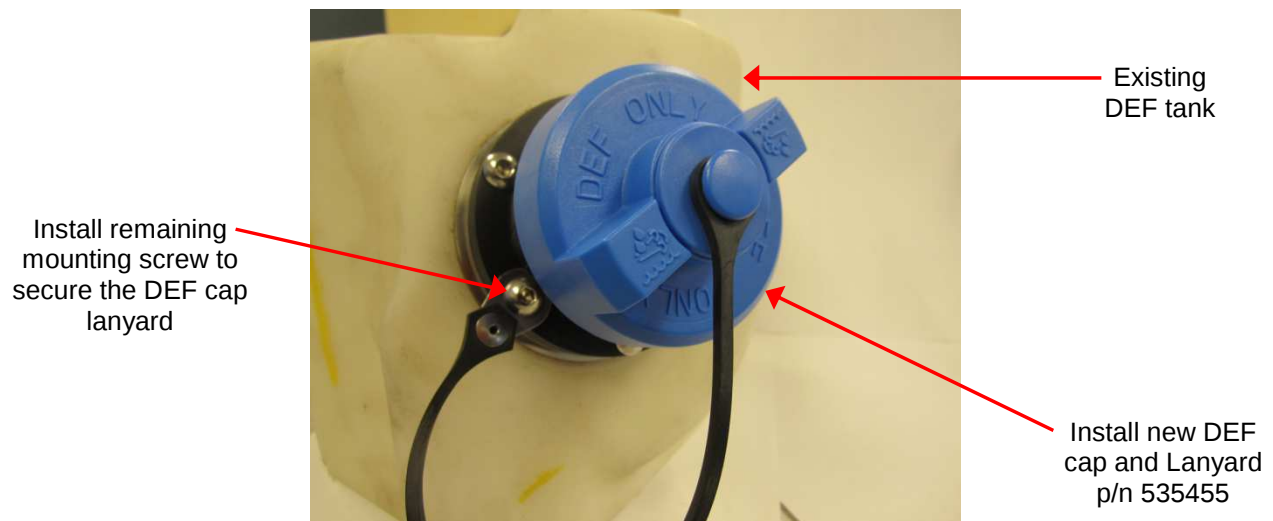


Figure 5: DEF Cap and Lanyard Installation

10. Ensure surfaces are clean and clear of all dirt and foreign materials prior to application of new Fill Decal p/n 545997 to maximize adhesion to surface. See Figure 6 for installation location.

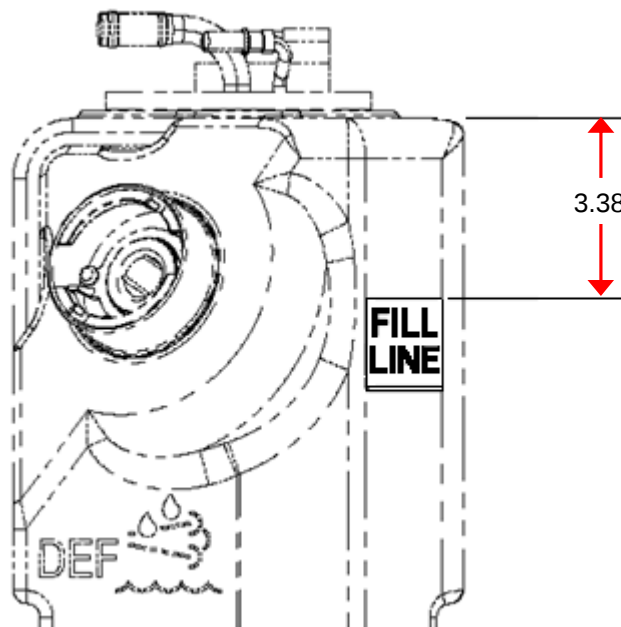


Figure 6: DEF Tank Fill Line Decal Installation

11. Close the curb side fuse box access door.
12. Turn the main battery disconnect switch to the "ON" position.



LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Remove and Replace DEF Tank Filler Neck and Cap	1	0.5	0.5

PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	535455	Cap-DEF Tank Shaw Fill Neck	1	EA	
2	535189	Adapter-DEF Tank Shaw Fill Neck	1	EA	
3	534096	Screw-Socket Head M5 x 0.8 x 14 Lg	4	EA	
4	533718	Adapter-DEF Tank Shaw Fill Neck	1	EA	
5	540465	O-Ring-Viton	1	EA	
6	420074	Sealant-Gasoila DEF	.01	EA	
7	545997	Plate-Fill Line DEF	1	EA	
8	549023	Screw-Socket 1/4-20 x 9/16 Lg SST	6	EA	