Toyota Tundra Series 46 Gallon Replacement Tank Instructions

Product Information/Install Instructions for

Toyota Tundra 2007-2021

Kit P/N TTUNDRADCR

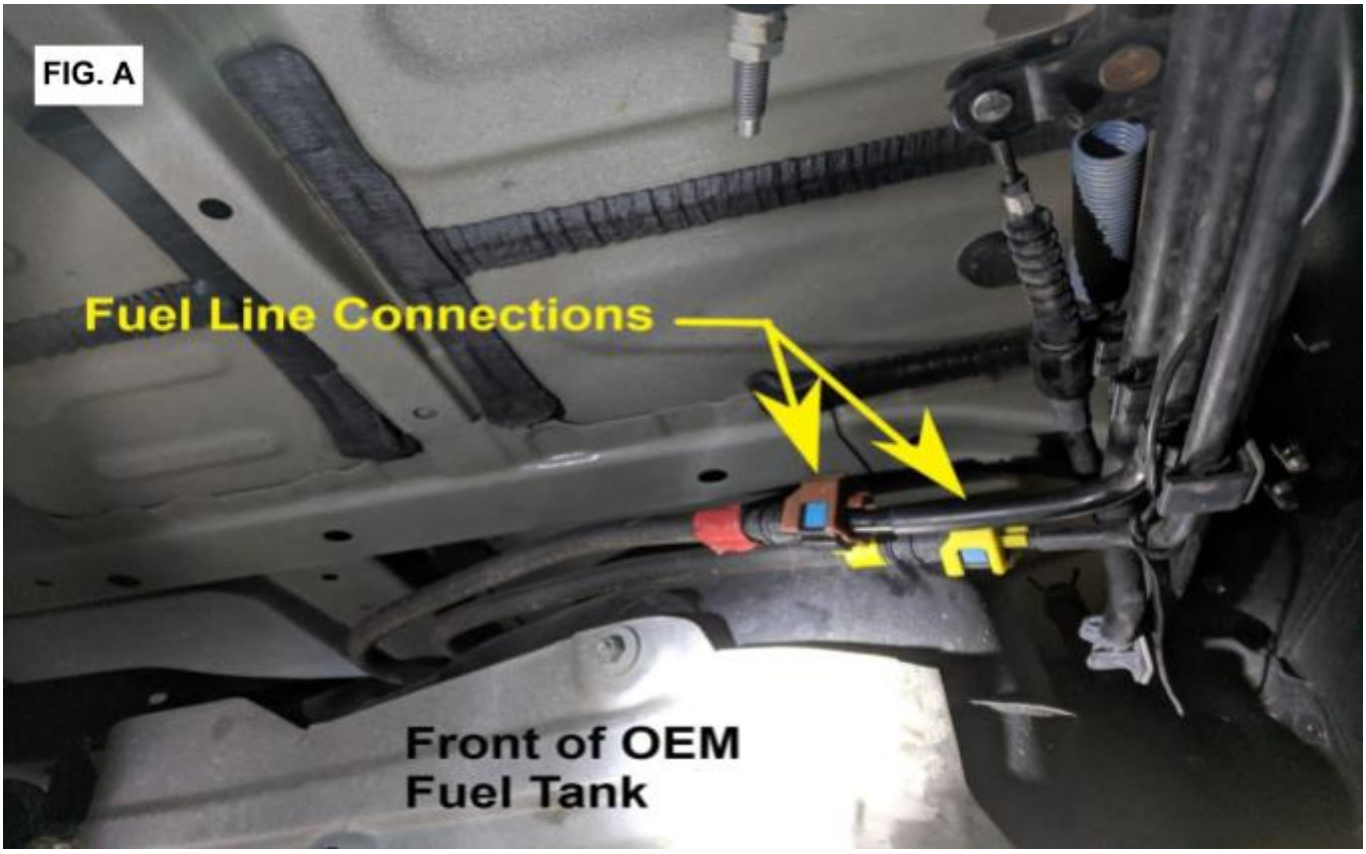




HARDWARE	HOSES & CLAMPS	MISC PARTS
4 x M8 X 25mm Bolt	1 x 6mm Hose @ 32" Long	1 x Roll Over Valve
3 x M10 X 30mm Bolt	1 x 8mm Hose @ 17" Long	1 x Grommet
2 x M10 x 100mm Bolt	1 x 19mm Hose @ 27" Long	1 x BS 337 "O" Ring
8 x M8 x 20mm Washer	1 x 12mm Hose @ 10" Long	1 x BS 357 "O" Ring
6 x M10 x 25mm Washer	2 x Conduflex 13mm @ 12" Long	1 x FLVV Long (Fitted To Tank)
4 x M8 Nyloc Nut	1 x Conduflex 20mm @ 15" Long	1 x Front Secondary Bracket
5 x M10 Nyloc Nut	4 x 1/4" Hose Clamp	1 x Pump Hold Down Ring
12 x M5 x 10 Pan Head Screws	2 x 1/2" Hose Clamp	2 x 3mm 4.75" x 11.22" Rubber
12 x M5 Spring Washers	2 x 1" Hose Clamp	1 x Back Flow Valve (Flaps Reversed)
6 x M5 Washers		1 x Strap Rubber @ 28" Long
		1 x Strap Rubber @ 26" Long
		2 x Straps
BRASS		
1 x P6 5/16" x 1/4" Elbow		
2 x P6 1/2" x 1/4" Elbow		
1 x 3/8" x 3/4" x 1/4" Tee (LRA)		

A. DISCONNECT FILLER HOSES, PICK UP/RETURN LINES

1. Disconnect OEM filler and fast fill vent hoses at the tank and the vent line.
2. Color-code the fuel lines above the connections to match the locking clips, to avoid confusion on re-connection (Figure A).



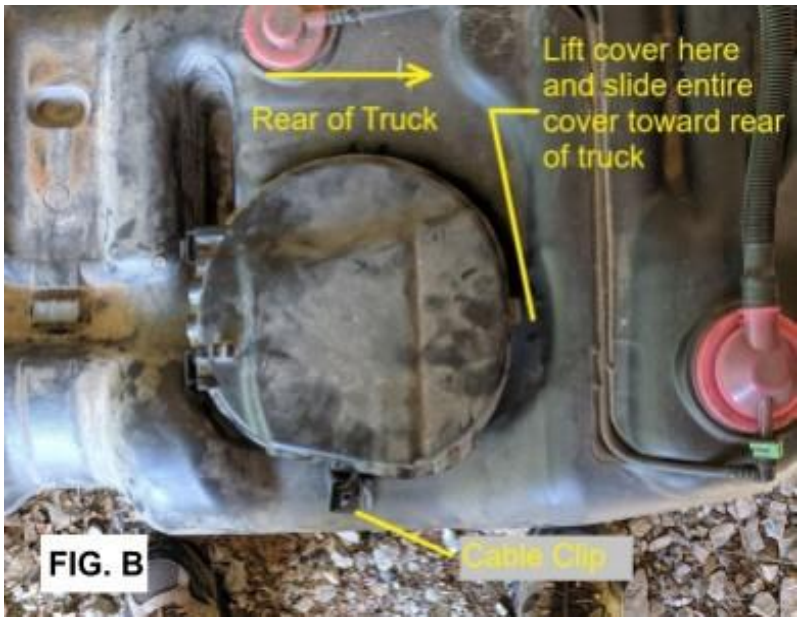
3. Disconnect pick up and return lines at front of left-hand rear wheel arch (**CAUTION: Fuel will be under pressure and will spray**). Make sure to capture any fuel leakage.

B. REMOVE THE OEM FUEL TANK

1. Place jack under the OEM fuel tank. Raise the jack until it just supports the tank.
2. Remove the tank support straps from the supported tank using a 14mm socket for the bolts on the frame rail side. The strap is secured on the driveshaft side by a pin. Keep all OEM hardware as it will be used to install the new tank.
3. Lower tank approximately 6 inches and slide toward the drive shaft, allowing access to the top of the sending unit.

REMOVE THE OEM FUEL TANK *(continued)*

1. Flex Fuel vehicles have a plastic cover over the fuel gauge sending unit that will have to be removed to access the top of the sending unit. It can be removed per the photo (Figure B):



2. Disconnect the electrical connector from the top of the sending unit by depressing the tab on the top of the connector.
3. Flex Fuel vehicles have three fuel lines on the top of the fuel gauge sending unit. Disconnect the blue and red lines from the top of the sending unit by sliding the yellow locking tab back to the open position.
4. Once the locking tabs are open, remove the blue and red fuel lines from the top of the fuel gauge sending unit. The black line can remain attached to the top of the sending unit since it was already removed from the steel line it connects to on the vehicle frame.
5. Cut or remove the wire harness clip on the top of the tank on the driver's side of the OEM tank.
6. Finish lowering the tank, insuring nothing snags on the way down.

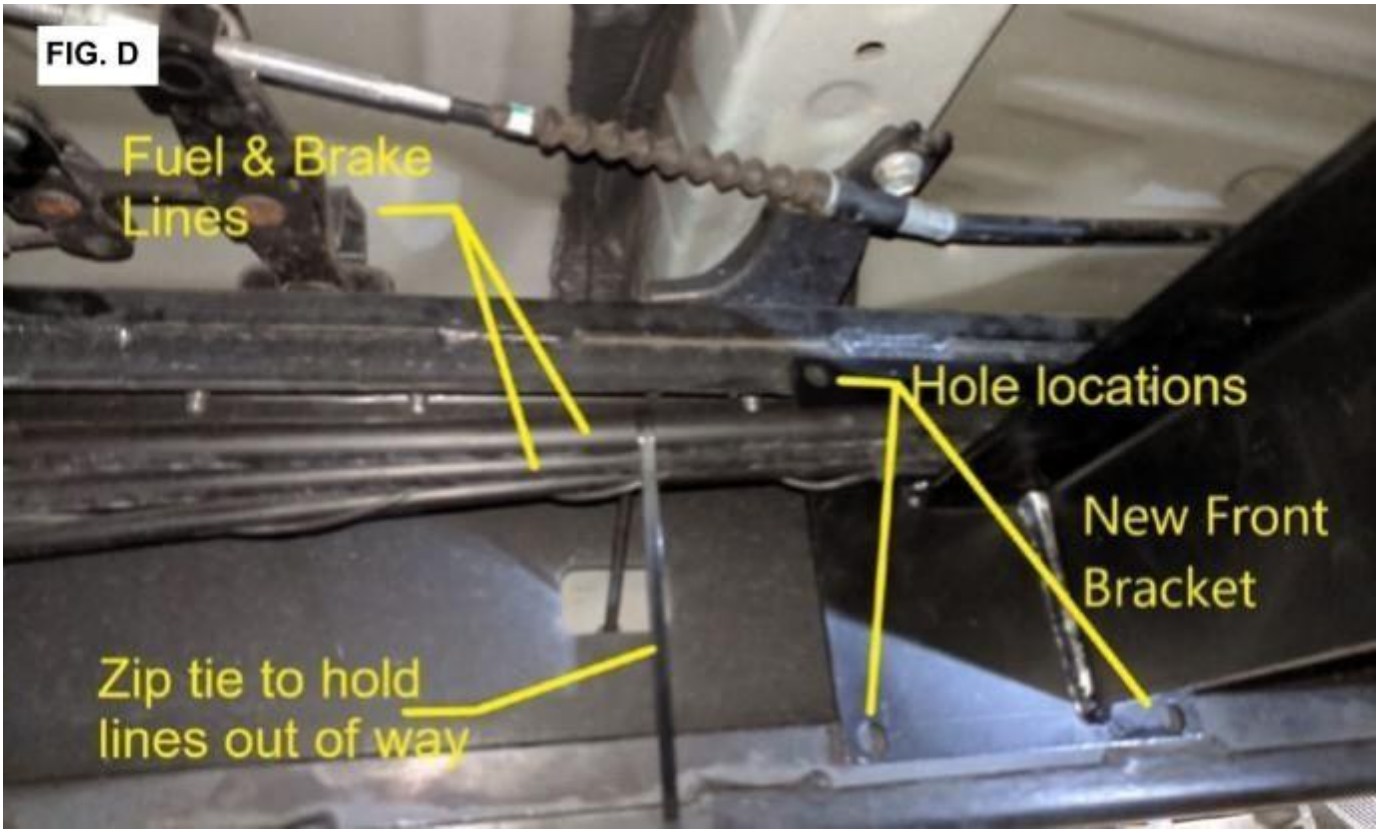
A. CREATE NEW TANK MOUNTING POINT

1. New front mount will be located on the left-hand chassis rail just behind where the exhaust crosses over between two slotted holes.



CREATE NEW TANK MOUNTING POINT *(continued)*

1. Loosen the three brackets holding the fuel and brake lines and tie the lines down out of the way with a zip tie (Figure D).



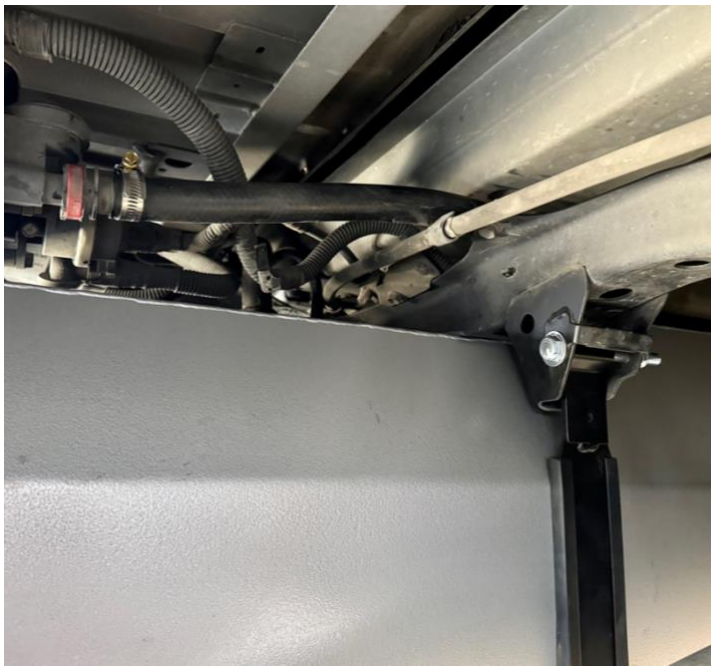
2. Use the round hole in the rail for bracket location (see Figure E).



CREATE NEW TANK MOUNTING POINT *(continued)*

1. Bolt bracket in place with M10 x 30mm bolt washer and Nyloc nut.
2. Unclip the 2 top lines just in front of bracket, move down temporarily, while you drill 4 holes 8.5mm diameter, using the bracket holes as a template.
3. Re-clip the two lines lowered for drilling. Drill out the two inboard strap pin mounts to 10.5mm (see Figure F).



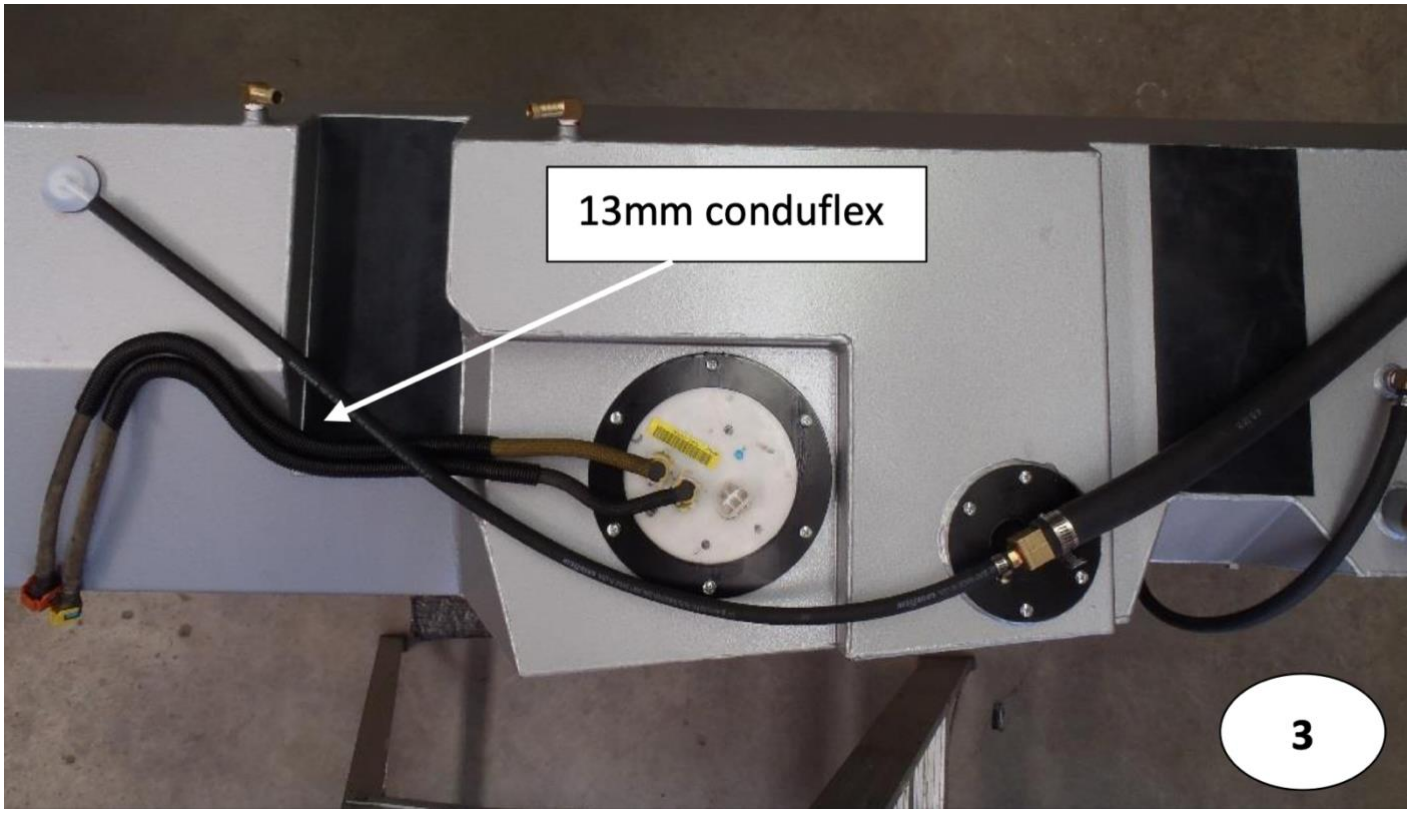






A. PLACE MAGNET IN TANK/FIT OEM FUEL PUMP/GAUGE TO NEW TANK

1. Place magnet supplied in the Installation Kit inside new tank, as close as possible to fuel pick up or fuel entry to swirl pot.
2. Fit OEM fuel pump and fuel gauge sending assembly to tank.
3. Using BS 357 O-ring hold down ring and M5 x 10mm pan head screws with spring and flat washers, use slot in flange to locate the rotation of pump.
4. Fit the 13mm Conduflex over the pick-up and return lines (see Figure H).



A. INSTALL VALVES AND FITTINGS TO TANK

1. Fit the grommet and roll over valve (a little soapy water on the grommet may ease install) and point it towards the pump assembly.
2. Connect the 32-inch length of 6mm fuel hose to the FLVV (the Fill Limit Vent Valve, or FLVV (aka Attwood Valve) is designed to maximize fuel tank capacity and facilitate automatic nozzle shutoff). ***Do not connect to roll over as yet because the line has to pass over front cross member after the tank is in position.***

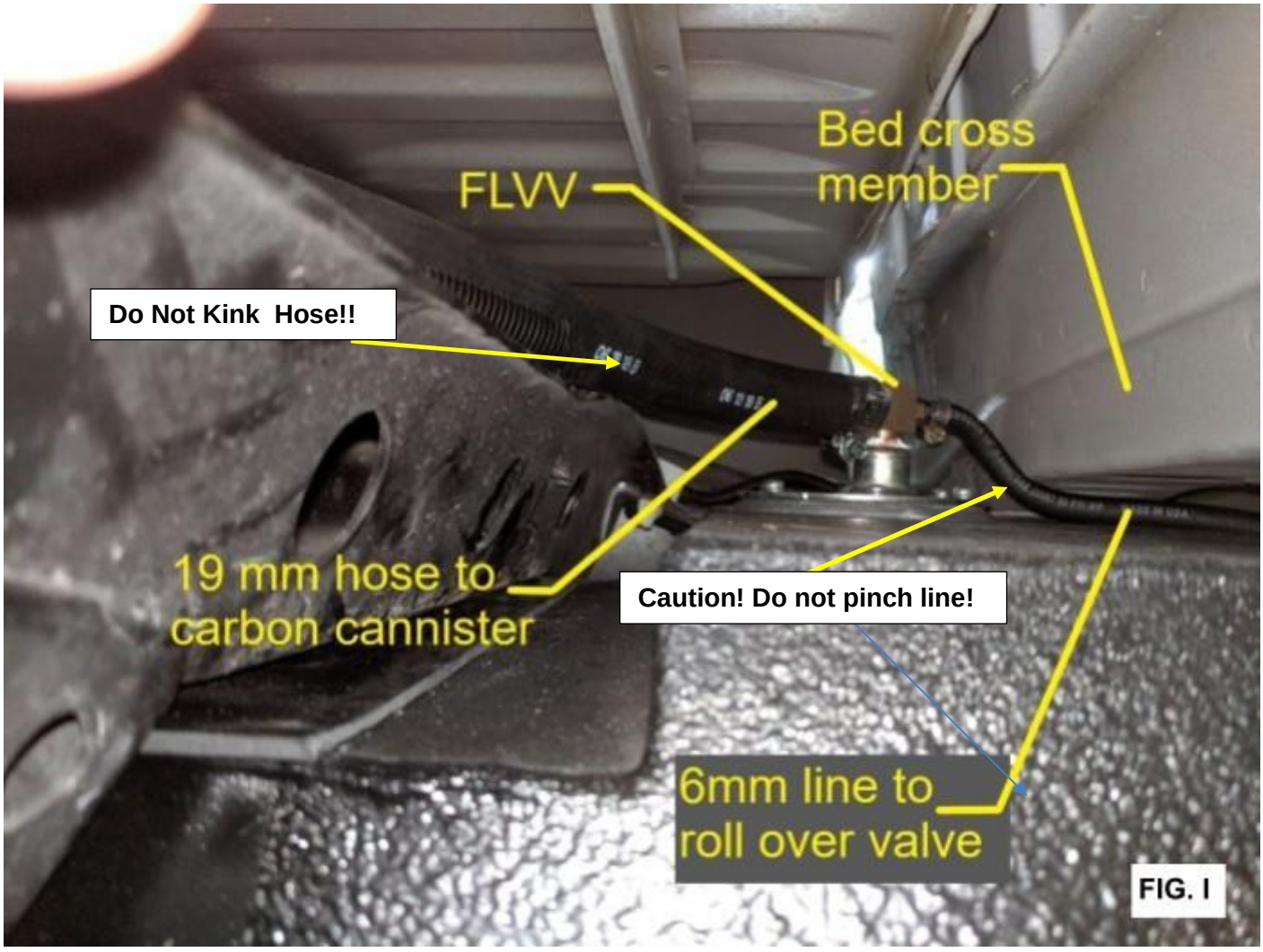


FIG. I

3. Fit the 27-inch length of 19mm hose to the FLVV. Screw the P6 5/16” x 1/4” elbow into tank near filler. Point slightly towards front side of filler.
4. Connect the 17-inch length of 8mm hose to elbow.

INSTALL VALVES AND FITTINGS TO TANK *(continued)*

1. Fit the 2-P6 1/2” x 1/4” elbows to drive shaft side of tank. Point slightly upwards (see Figure J). The 10-inch length of 12mm fuel hose will be connected between these elbows after installation, to provide cross-venting between the tops of the two sections of the tank.

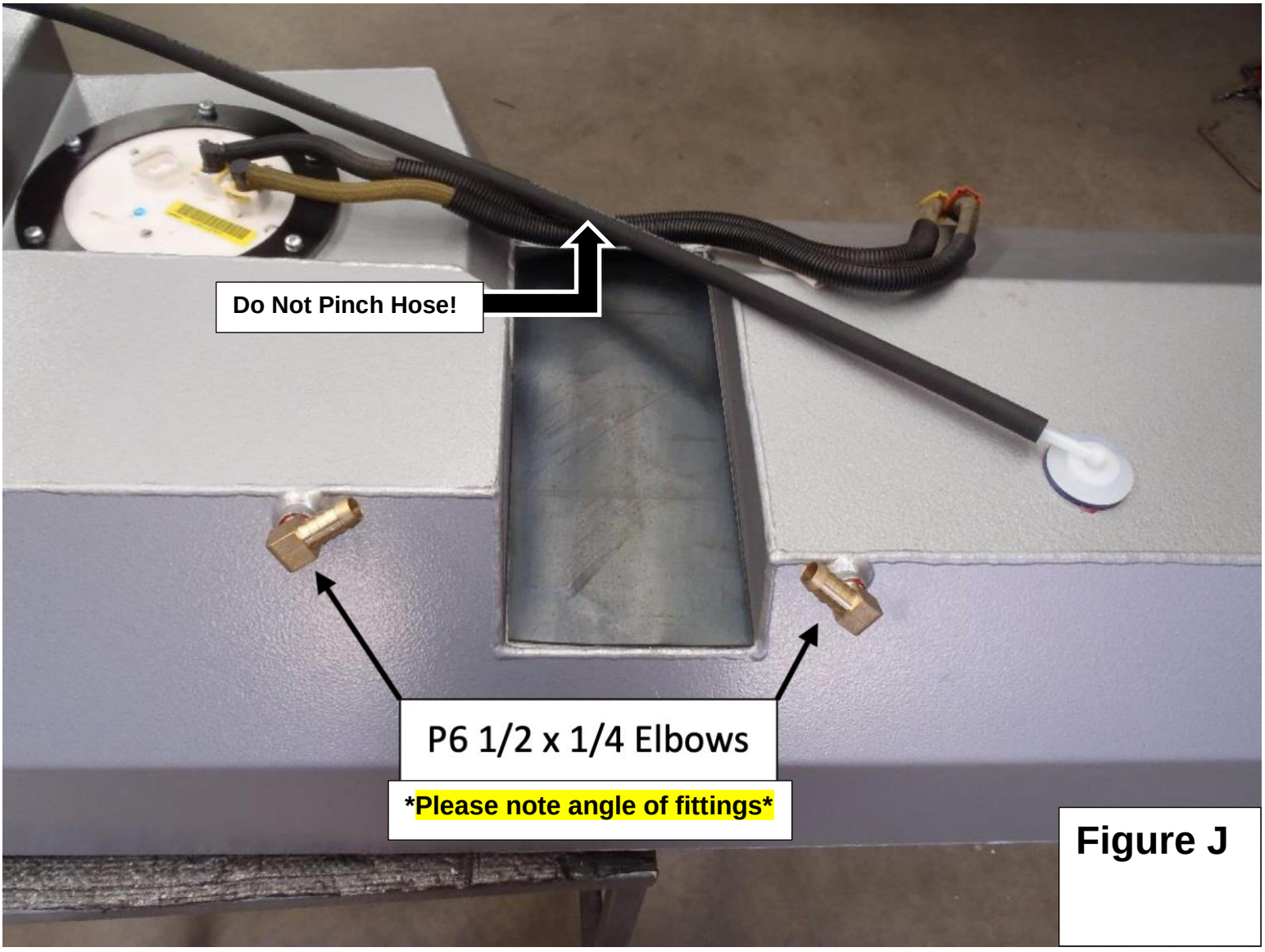
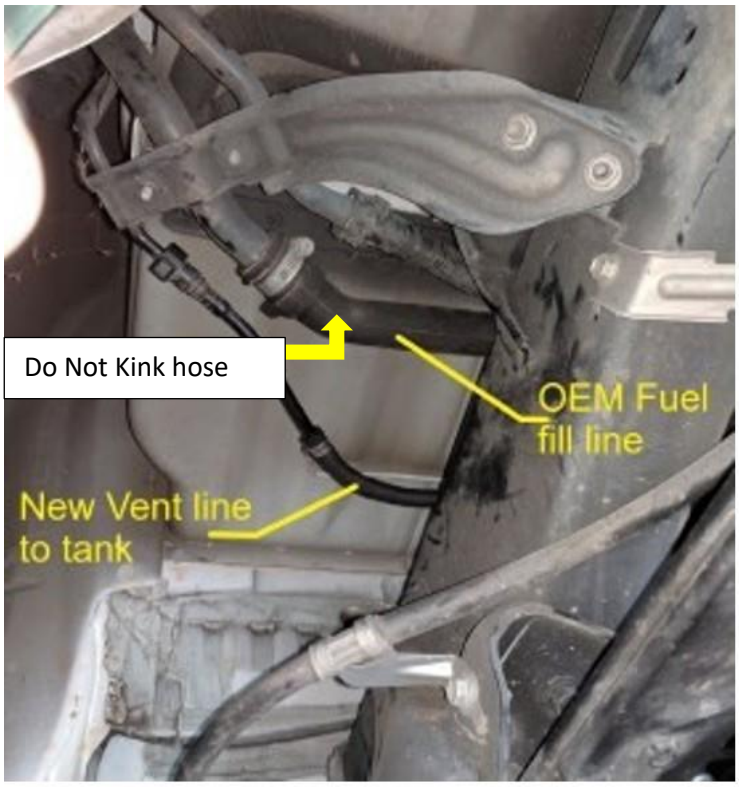


Figure J

2. Glue the two rubbers 11-1/4” x 4-3/4” to top of tank where the straps are located.

A. LIFT TANK INTO POSITION

1. **Safely** lift tank into position feeding 6mm hose over front cross member and 19mm hose over rear cross member.
2. Stop before tank is completely in place and connect pump assembly wiring, pick up and return lines and roll over valve. Be sure not to crush the fuel lines from the fuel pump between the tank and frame when raising the tank.
3. Attach the two remaining hoses to the filler neck.



FUEL FILL & VENT LINE AT CONNECTION TO FUEL FILL DOOR



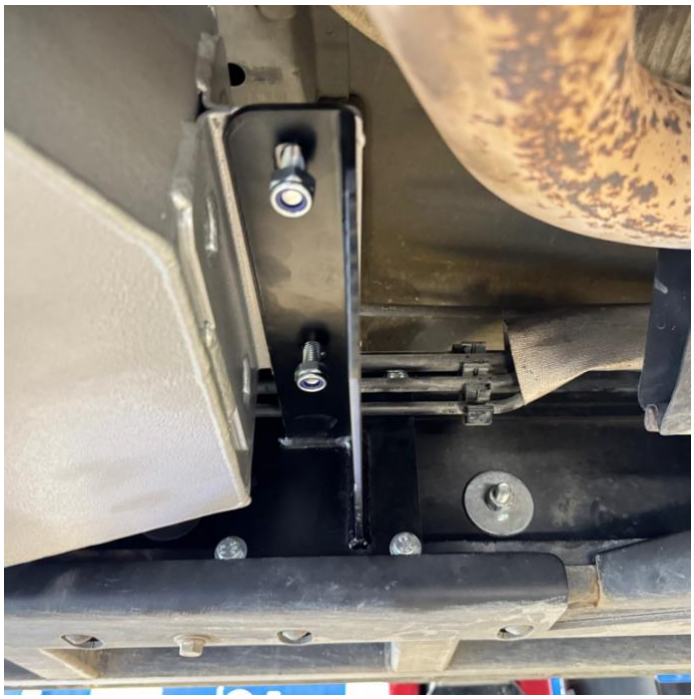
FUEL FILL & VENT LINE AT TANK

CAUTION!
It can be easy to pinch or kink hoses during these steps, please be cautious and ensure lines are all run properly

B. FASTEN TANK TO VEHICLE

1. Feed front mount on top of new front bracket and move tank into place.





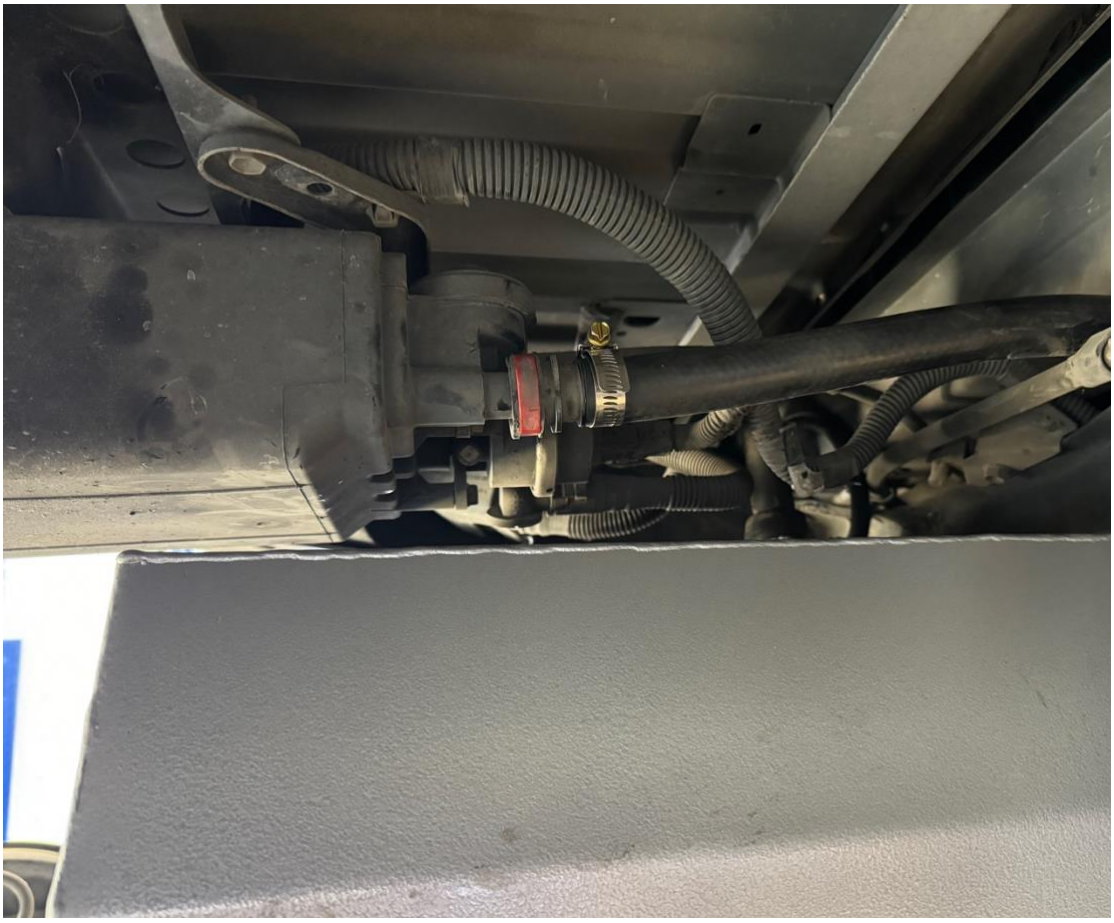
2. Fit new straps with M10 x 100mm bolts and Nyloc nuts on drive shaft side of tank and OEM bolts on chassis side.
3. Secure front mount with M10 x 30mm bolts, washers and Nyloc nuts.





C. FINISH INSTALLATION

1. Remove 19mm connector from OEM tank and refit to the EE canister.
2. Connect 19mm hose to the connector using 1'' clamp. Fit 20mm Conduflex over cross member edge to protect this hose. Connect filler hose to tank using OEM clamp.
3. Remove 8mm connector from OEM tank and fit to new 8mm line and connect in wheel arch.
4. Fit the 10-inch length of 12mm fuel hose between the two elbows installed in Step IV.B.5, page 13 after tank installation and secure with clamps.
5. Check all clearances and neatly cable tie all hoses and wiring.
6. Reconnect vehicle battery.
7. Fill tank with fuel, check for leaks. **DO NOT OVERFILL OR "TOP OFF" TANK WHEN FILLING, DAMAGE TO YOUR EMISSION SYSTEM MAY RESULT.**





A. Are all hose clamps tight and secure?

B. Are all nuts and bolts secured?

C. Are mounting brackets and straps secure?

D. Are Fuel Gauge Sending Unit bolts secured?

E. Are all fuel lines secure with no kinks?

F. Does tank interfere with, or rub on, other vehicle components?

G. Is tank calibration accurate?

☐ **Congratulations! You have completed the install!**