

Installation Instructions for FPYRRR Ford Ranger Raptor PY Next Gen V6 Petrol <u>135L Replacement Tank</u>

- 1. Disconnect the fuel line and the electrical plug at the front of the tank, also unclip from the shield. Disconnect the canister vent and purge lines in the middle of the tank and the vent line at the rear of the tank. Disconnect the fill hose. Remove the 3 tank shield screws, unbolt the tank, and remove it. Unbolt the crossmember and put it to one side for now.
- Remove the steel section of the fuel filler and replace it with the new one supplied. Secure it into position with one bolt. Modify the canister vent line, cut at the marked position (Refer Pic 1) and fit 250mm of the 16mm hose with hose clamp. (Note: You can cut in position (Refer Pic 2 & 2A) or you can remove from the vehicle. The joiner is under the left hand wheel cover)
- 3. Cut the canister load line at the pressure control sensor and connect 400mm of 16mm hose and secure the hose with clamp (Refer Pic 3).
- 4. Cut the plastic canister purge line at the join on the crossmember (Refer Pic 4). Fit 1200mm length 10mm hose to the steel line, remove the quick connect fitting from the plastic line and clamp to the other end of the 1200mm length of 10mm hose.
- 5. Remove the charcoal canister from the OE tank and fit it to the new mounting bracket using 3 x M6 x 16 bolts. Using the large holes in the front of the bracket as a locator, use 3 TEK screws to secure the front of the bracket. Secure the rear of the bracket with 2 short straps, fit one under the heat shield, bolt and TEK screw other end to the bracket, 2 TEK screws are required the LH side strap. Connect the canister vent line (Refer Pic 5).

- 6. Fit the pump assembly to the new tank using the new BS357 O-ring, hold down ring and secure with 6 x M6 cap screws. Blank off the canister lines using 2 quick connect blank off caps. Remove the quick connect from the rigid plastic line at the front of the tank (not the filter connector) and fit to 1000mm length of 10mm EFI hose and use EFI clamps. Also fit the new 90° quick connect to the pump end of the hose and connect to the pump. Fit the roll over valve to the tank and point it to the rear, fit 700mm of 6mm hose to the valve. Remove the tee from the rear of the tank and fit to the FLVV frame using 65mm of 6mm hose. Fit the brass fittings to the tank and fit 250mm of 8mm hose to the front fitting only (Refer Pic 6).
- 7. Extend the wiring to the canister and pressure sensor using 2 and 3 core wire. Solder joints and shrink tube connections and connect to the pump.
- 8. While jacking the tank into position, feed fuel line over the crossmember. The wiring loom stays below the crossmember. Feed the roll over valve, balance lines and canister purge lines over the rear crossmember. Connect wiring and front fuel line join. Jack the tank fully home and bolt in place using the OE bolts with Loctite.
- 9. Connect the rollover valve line to the tee piece and reconnect other quick connect to the OE line. Refit the canister control line to the canister and connect other end of the FLVV using 5/8" hose clamp. Cut 20mm from the short end of the rubber filler hose and connect to the tank filler. Connect wiring to the canister and pressure sensor. Neatly cable tie all hoses and wiring, secure the diff breather using OE cup to the new canister bracket. Fill with fuel and check for leaks.

10.Refit the crossmember.



	Updated 10/10/2024 - TL
Brass:	Electrical:
 1 x P3 5/16 x 1/4 Straight 	o 3mm Two Core Wire @ 400mm
○ 1 x P6 5/16 x 1/4 Elbow	o 2mm Three Core Wire @ 400mm
	 10 x 3mm Shrink Tube@ 30mm
Bolts / Nuts:	Misc Parts:
o 6 x M5 x 8 Cap Screws	o 1 x FV11 Roll Over Valve
o 6 x M5 x 10 Cap Screws	o 1 x LRA-FTG-2 Grommet
o 6 x TEK Screws	 1 x Intermediate Fill Pipe
o 3 x M6 x 16 Bolts	 1 x Canister Bracket
 3 x M6 Nyloc Nuts 	 2 x Support Straps
 3 x M6 x 19 Washers 	o 1 x ICV
o 12 x M5 Washers	○ 1 x FLVV 60-16-06
	 1 x 16mm Blank Quick Connect
	 1 x 8mm Blank Quick Connect
	o 1 x 3/8 Quick Connect Elbow (Part #S-001-06-06-90)
	o 1 x BS357 O-Ring
	o 1 x BS337 O-Ring
	 FPYRRR Hold Down Ring
Hose Clamps:	Cable Ties:
o 4 x 1/4 Hose Clamps	o 4 x 7" Cable Ties
o 4 x 5/8 Hose Clamps	o 4 x 11" Cable Ties
o 2 x EFI Hose Clamps	
 4 x 3/8 EFI Hose Clamps 	
Hose:	7 Pages of Fitting Instructions Consisting of:
o 1 x 6mm Hose @ 65mm	 2 x Pages Fitting Instructions
○ 1 x 6mm Hose @ 700mm	 1 x Page Fitting Kit Contents
o 1 x 8mm Hose @ 215mm	 4 x Pages Instruction Photos
o 1 x 10mm Hose @ 1200mm	
○ 1 x 10mm EFI Hose @ 1000mm	
○ 1 x 16mm Hose @ 400mm	
o 1 x 16mm Hose @ 250mm	
o 1 x 16mm Conduflex @ 1150mm	
o 1 x 16mm Conduflex @ 950mm	

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