



INSTALLATION INSTRUCTIONS FOR A REPLACEMENT TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY



Ford F150 3.5lt Petrol

TR94 -203lt, generally sits at the same height as the OEM bash plate

Fits 2020 ON models with 130lt OEM capacity tank

Note: It may fit others but at the time of design we only had the one vehicle to go by

GENERAL NOTES

- a) **Before proceeding check the vehicle you have is an F150 with manufacturing build dates as indicated above**, while there have been many variations of F150 bought into Australia and they may very well be compatible we can't guarantee fitment to models not listed
- b) Fitting time is approximately 4 hours. No major vehicle modifications are required. This LONG RANGER tank locates under the vehicle in place of the standard tank
- c) A hoist is not essential but will speed the job up significantly
- d) The original filler, fuel level sender unit, pick-up unit, are reused in this installation. Extreme care and cleanliness is recommended when handling fuel level sender and submerged fuel pump units. Inspect any components that are to be reused from the original tank installation for serviceability and replace any item found to be defective
- e) Check if the vehicle owner wants to retain the original tank and any associated parts
- f) LONG RANGER tanks are coated with a high-performance primer. For added protection, a topcoat may be added. If the vehicle has been rustproofed, it is suggested that the tank (and any changes made to the vehicle during fitting) be touched up after installation
- g) The trip meter distance to empty will no longer work as intended by the manufacturer, it is expected you could double the DTE reading with the new larger tank fitted

Observe safety precautions during the installation of the LONG RANGER fuel tank



The Big Tank For A Big Country

INSTALLATION KIT TR94

QTY DESCRIPTION

- ☐ 1 LONG RANGER Tank #TR94 (??KG)
- ☐ 1 Plastic bag 900mm long ??
- ☐ 1 Rollover valve #VAROLL07 (Factory fitted in top of tank).
- ☐ 1 Rollover valve grommet #VAROLL08 (Factory fitted in top of tank).
- ☐ 1 Clamp ring #R83CR (pickup unit)
- ☐ 1 Rollover valve mount #TR94RVP (OEM rollover valve)
- ☐ 1 Blanking rod, aluminium, 16mm OD x 25mm Long (Pickup unit)
- ☐ 1 Blanking rod, aluminium, 10mm OD x 25mm Long (Pickup unit)
- ☐ 1 Plastic Quick connect joiner #PLJOQC1010B
- ☐ 1 FAUBOLTR94A (front tank mounting)
- ☐ 2 FAUBOLTR94B (rear tank mounting)
- ☐ 2 SF07 M10 nut with tag (front tank mounting onto chassis)
- ☐ 1 O ring 3.53 x 69.85 #BS232N70
- ☐ 1 Carbon canister TLR #CC01
- ☐ 2 Bolt M10 x 40mm long (tank mounts)
- ☐ 10 M10 nyloc nuts
- ☐ 8 Flat washers 10 x 30 x 2.5mm (Tank mounts)
- ☐ 6 Screws M4 x 10mm (OEM rollover valve cradle)
- ☐ 11 Screws M5 x 12mm (Pickup unit and canister mounting)
- ☐ 3 M5 Flat washers (canister mounting)
- ☐ 3 M5 Spring washers (canister mounting)
- ☐ 5 Cable tie 5mm x 200mm
- ☐ 2 Brass fittings 1/4 BSP x 16mm elbow (for new canister)
- ☐ 2 Hose clamp MH4 (6.5mm & 8mm hose)
- ☐ 6 Hose clamp MH6 (10mm & 13mm hose)
- ☐ 8 Hose clamp HS8 (16mm hose)
- ☐ 1 Fuel hose 6mm x 550mm (rollover valve)
- ☐ 1 Fuel hose 10mm x 50mm (Blanking hose on pickup unit)
- ☐ 1 Fuel hose 10mm x 380mm (Link breather)
- ☐ 1 Fuel hose 8mm x 400mm (side wall of pickup unit to pipe on filler neck above chassis rail)
- ☐ 1 EFI Fuel hose 10mm x 1700mm (EFI Fuel pickup)
- ☐ 1 Fuel hose 16mm x 50mm (Blanking hose on pickup unit)
- ☐ 1 Fuel hose 16mm x 200mm (Rollover valve mount to OEM electrical sensor)
- ☐ 1 Fuel hose 16mm x 380mm (Fast fill breather, OEM canister to TLR canister)
- ☐ 1 Fuel hose 16mm x 1150mm (Rollover valve to TLR canister)
- ☐ 1 Fitting instructions
- ☐ 1 Warranty information sheet and return card
- ☐ 1 LONG RANGER sticker

INSTALLATION GUIDE



**DANGER - WHILE WORKING WITH FLAMABLE LIQUID
AVOID FLAMES, SMOKING AND GRINDING SPARKS WITH FUEL PRESENT
BE PREPARED WITH SUITABLE FIRE FIGHTING EQUIPMENT ON HAND**



1. Take a few minutes to read through this installation guide before proceeding
2. Check that all items listed in the Long Ranger kit have been received, and that nothing has been damaged in transit
3. Although the Long Ranger tank has been cleaned and sealed at the factory, it is recommended that its interior be vacuumed again as an added precaution against blocked filters and/or fuel pump damage
4. If parts are missing or damaged, if foreign matter is found in the tank, or if any problems arise during installation, contact the factory office without delay for advice phone (02) 4953 3288, fax (02) 4953 1916 or email fitting@thelongranger.com.au Our web page also contains an FAQ , so some of your questions may already be answered
5. Disconnect tail shaft from diff, and move to one side
6. Disconnect filler
7. Remove tank protection plate if fitted, support tank and remove tank mounting straps and lower tank approximately 100mm and disconnect three electrical fittings.
8. Disconnect all fittings on pickup unit, fast fill breather ,system breather hose and electrical connection and completely remove tank
9. Disconnect plumbing from sender unit and remove from tank, disconnect internal hose fitting during removal
10. As per photo 1 & 2: Remove roll over valve from underside of pickup unit and install to new cradle and mount in LongRanger tank with New O ring and M4 x 10 screws supplied



Photo 1: Remove OEM rollover valve

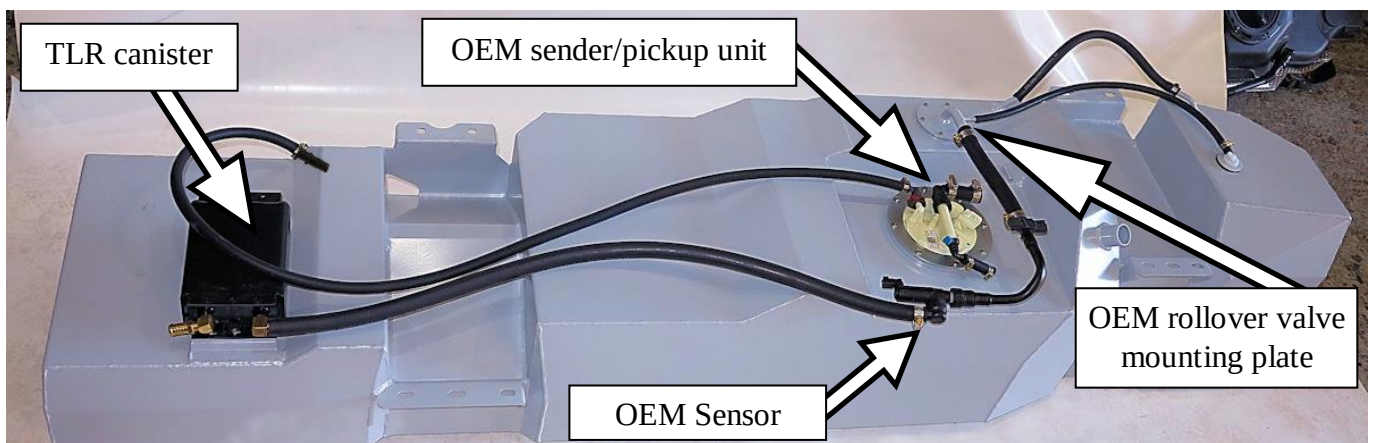


Photo 2: Tank preparation

11. As per photo 2: Fit OEM pickup/sender unit to LongRanger tank with OEM “O” ring and new TR83CR clamp ring and M5 x 12 screws
12. As per plumbing drawing: Fit 6mm x 550mm breather hose to plastic roll over valve with MH4 clamp, leave other end hanging
13. As per plumbing drawing and photo 2: Strip red quick release fittings from OE hard pickup line and fit to 10mm x 1700mm EFI hose with TLR Quick connect joiner to other end with MH6 hose clamps. Connect hose with red fitting to OE sender pick up
14. As per plumbing diagram: Cut small plastic line from steel tube at filler neck and fit 8mm x 400mm hose to steel pipe with MH4 and leave other end hanging
15. As per plumbing diagram: Fit 10mm x 380mm link breather hose to barb at top rear of TLR tank with MH6 hose clamps and leave hanging
16. As per plumbing drawing and photo 2: Using M5 x 12 screws, flat and spring washers, mount TLR canister to tank and fit brass elbows with suitable sealant, ensure correct orientation
17. As per plumbing diagram: Fit 16 x 200 rubber hose from valve mount to electrical sensor
18. As per photo 3: Sit two U-bolts over rear cross member in approximate position for either side of tank mounting
19. As per photo 3: Unclip orange cable and conduit from top of left front cross member and sit left hand front U-bolt in place
20. Remove OEM rubber filler hose from steel filler neck and remove bolt holding steel filler, mark the TDC for correct orientation when refitting

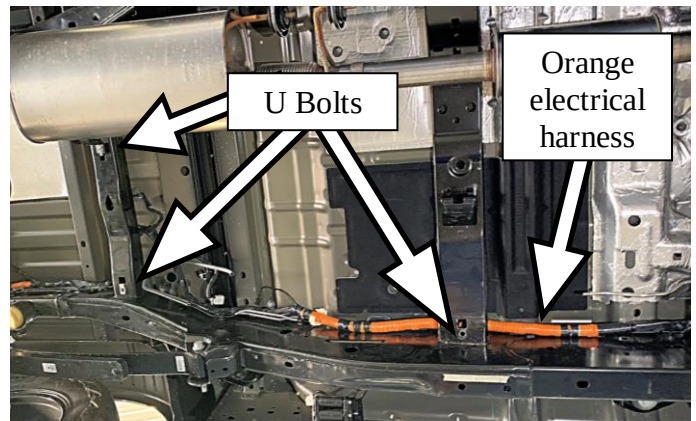


Photo 3: Tank area preparation

WARNING: THIS FUEL TANK IS HEAVY. USE APPROPRIATE ASSISTANCE OR SERIOUS INJURY MAY RESULT

21. Lift tank and hold into position about 300mm down from final location
22. Re-connect all electrical fittings
23. Place the two top rear hoses over cross member
24. Fit OEM filler neck to the Longranger tank
25. As per plumbing diagram: Place fuel pick-up and canister breather hoses over front cross member and cable tie to left hand chassis rail, connect to canister and pick up front fitting
26. While lifting tank into place connect rubber filler hose to steel filler neck and fit two OE bolts into front and rear left mounts. *Note: Check hoses and electrical cables are not squashed or pinched between tank and chassis or body work*
27. Drill two M10 clearance holes through right hand front mount and secure with two tag nuts and bolts

28. Fit washers and nyloc nuts to all U-bolts
29. Fit lower bolt back into filler neck
30. As per plumbing diagram: Connect 10mm link hose and 6mm roll over valve hoses from rear section of tank.
31. Refit tail shaft

Explain to the owner the operation of the LONG RANGER TANK

- a) The LONG RANGER tank will fill in a similar fashion to the tank it replaces, but the operator has the option of carrying a substantially larger quantity of fuel.
- b) Due to the different shape of the LONG RANGER tank, the gauge will measure a larger quantity of fuel and will remain on *FULL* for a longer distance before slowly moving to *EMPTY*. The top half of the new tank is bigger than the bottom half.
- c) The **trip computer** with distance (driving range) to empty will no longer accurately show the distance left to travel. The computer still thinks the tank only has the OEM capacity and will not give a larger range reading with the new tank installed. It is suggested that the readings be cautiously interpreted along with the gauge until familiar with the new readings. As a rough guide the DTE will be approximately 55% greater with this new 203lt tank installed.
- d) The quoted capacity of the LONG RANGER tank was determined by a bench test. The actual operating capacity may vary slightly from vehicle to vehicle.
- e) The vehicle manufacturer selected springs without accounting for a bigger fuel tank. Several suspension modification options are available.
- f) The LONG RANGER tank is a premium quality accessory that will provide many years of satisfactory service provided that the Care and Maintenance items listed below are taken care of each time the vehicle is serviced.

Hand these instructions, together with the Warranty Registration card and warranty information, to the owner. Neatly apply the LONG RANGER sticker to the rear bumper or window.

CARE AND MAINTENANCE

1. After the first 1,000 kilometers, clean or replace the fuel filter, check that there is no rubbing or chafing of the tank, fuel hoses or associated components.
2. At each of the vehicle manufacturer's recommended services, check all fastenings for the correct tension, that rust preventative has been correctly applied where applicable, release the tank drain plug and confirm that there is no water present, and replace the fuel filter according to manufacturer's recommendations.

