



INSTALLATION INSTRUCTIONS FOR A REPLACEMENT TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY



Ford Ranger Next Gen Diesel

TR96L -160lt, sits at the same height as the OEM bash plate
Fits 2022 ON models with 80lt OEM capacity tank
Compatible with TW22SS water tank

GENERAL NOTES

- a) Fitting time is approximately 2.5 hours. No major vehicle modifications are required. This LONG RANGER tank locates under the vehicle in place of the standard tank.
- b) A hoist is not essential but will speed the job up significantly.
- c) 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.
- d) Check if the vehicle owner wants to retain the original tank and any associated parts.
- e) 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.
- f) 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. *Note: Ford may be able to change the DTE trip meter. Note: Ford may be able to change the DTE trip meter if you advise them the new tank capacity at the next service*

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



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INSTALLATION KIT TR96L**QTY DESCRIPTION**

- 1 LONG RANGER Tank #**TR96L** (??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, 8mm OD x 25mm Long (Pickup unit)
- 1 **TR96B1** (front tank mounting)
- 1 **TR96B2** (front tank mounting)
- 1 **TR96B3** (front tank mounting)
- 1 **FAUBOLTR96A** (Rear RH tank mounting)
- 1 **FAUBOLTR96B** (Front LH tank mounting)
- 1 Plastic joiner quick connect #**PLJOQC1616B** (Fast Fill breather)
- 1 O ring 3.53 x 69.85 #**BS232N70**
- 6 Screws M4 x 8mm (OEM rollover valve cradle)
- 8 Screws M5 x 12mm (Pickup unit)
- 2 Bolt M6 x 20 (electrical plug mounting)
- 2 M6 x 17 Flat washers (electrical plug mounting)
- 2 M6 nyloc nuts
- 4 Bolt M8 x 25mm long (chassis bracket mount)
- 4 M8 nyloc nuts
- 8 Flat washers M8 x 24 x 2.5mm (chassis bracket)
- 2 Bolt M10 x 25mm long (front drivers side mount)
- 6 M10 nyloc Nut (front drivers side mount/U-bolts)
- 2 Flat washers M10 x 19 (Front LH tank mounting)
- 6 Flat washers M10 x 30 x 2.5mm (Tank mounting)
- 5 Cable tie 5mm x 200mm
- 4 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 500mm (breather rollover valve)
- 1 Fuel hose 8mm x 50mm (Blanking hose on pickup unit)
- 1 Fuel hose 8mm x 1850mm (Return hose)
- 1 Fuel hose 10mm x 280mm (Link breather)
- 1 Fuel hose 10mm x 1780mm (Fuel pickup)
- 1 Fuel hose 16mm x 50mm (Blanking hose on pickup unit)
- 1 Fuel hose 16mm x 400mm (FF valve to QC Fitting)
- 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. If fitting a long ranger water tank we recommend this be done after the fuel tank, if water tank already fitted it will need to be temporarily removed to gain access to fuel line connection on chassis rail.
6. Disconnect tail shaft from diff and move to one side. Keep bolts as these will be reused to fit the tail shaft at the end of the installation process
7. Remove tank protection plate if fitted from underside of tank
8. **As per photo 1&2:** Disconnect two fuel lines located at the front of the tank and electrical module at rear of tank
9. Support tank and remove tank mounting straps

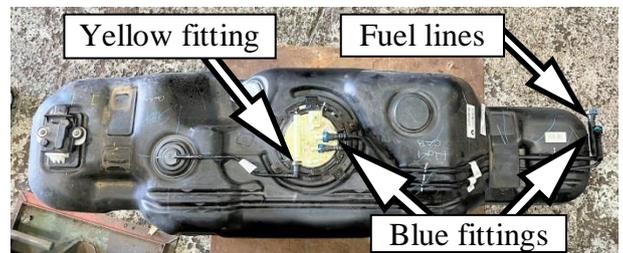


Photo 1: OEM tank preparation



Photo 2: OEM tank preparation

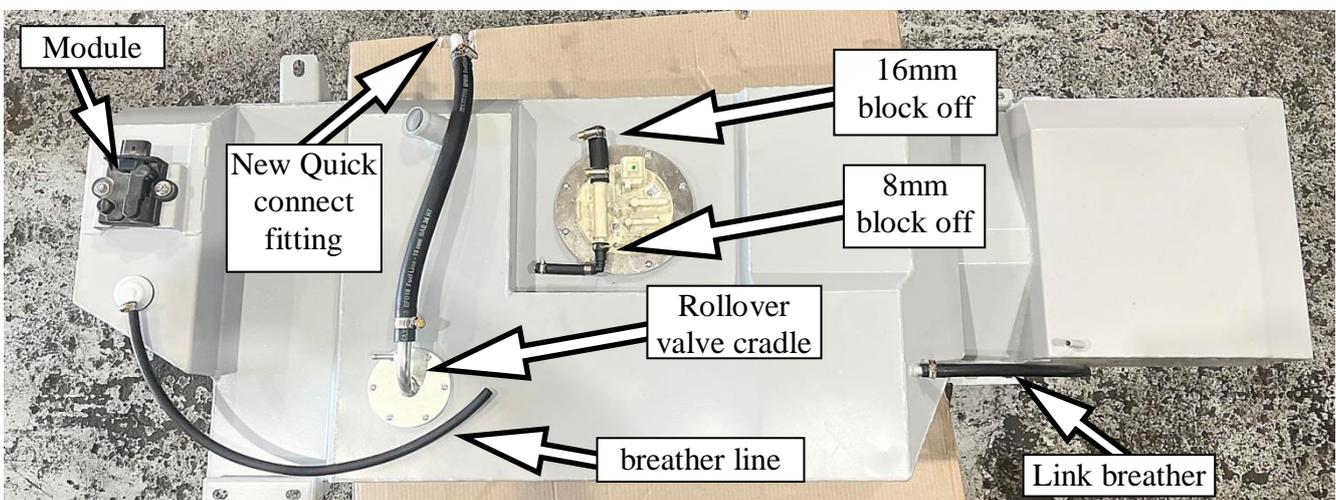


Photo 3: New tank preparation

and lower tank approximately 100mm

10. Disconnect filler from tank

11. **As per photo 2:** Lower tank a further 100mm and remove steel guard from top of sender unit

12. Disconnect the fast fill quick release fitting and electrical harness from tank

13. Remove tank from under vehicle

14. Disconnect all remaining pipes from sender unit and remove from tank

15. **As per photo 3, 4 & 5:** Remove roll over valve from underside of sender unit and install to new cradle, #TR94RVP, and mount in LongRanger tank, *note the orientation*

16. **As per photo 3:** Fit OEM pickup/sender unit to LongRanger tank with OEM "O" ring and new R83CR supplied clamp ring and 8 off

M5 x 12 screws. *NOTE: Note the orientation*

17. **As per photo 6 & 7:** FIT TLR 3 Piece bracket, TR96B1/2/3 set to OEM right hand front tank mount with supplied M8 fixings

18. **As per photo 3:** Fit 16mm x 25mm blanking rod to 16mm x 50mm blanking hose using HS8 hose clamps and fit to pickup unit

19. **As per photo 1 & 3:** Strip yellow plastic quick release 90deg fitting from breather line on top of OEM tank Fit 8mm x 25mm



Photo 4: Remove OEM rollover valve



Photo 5: Refit OEM rollover valve

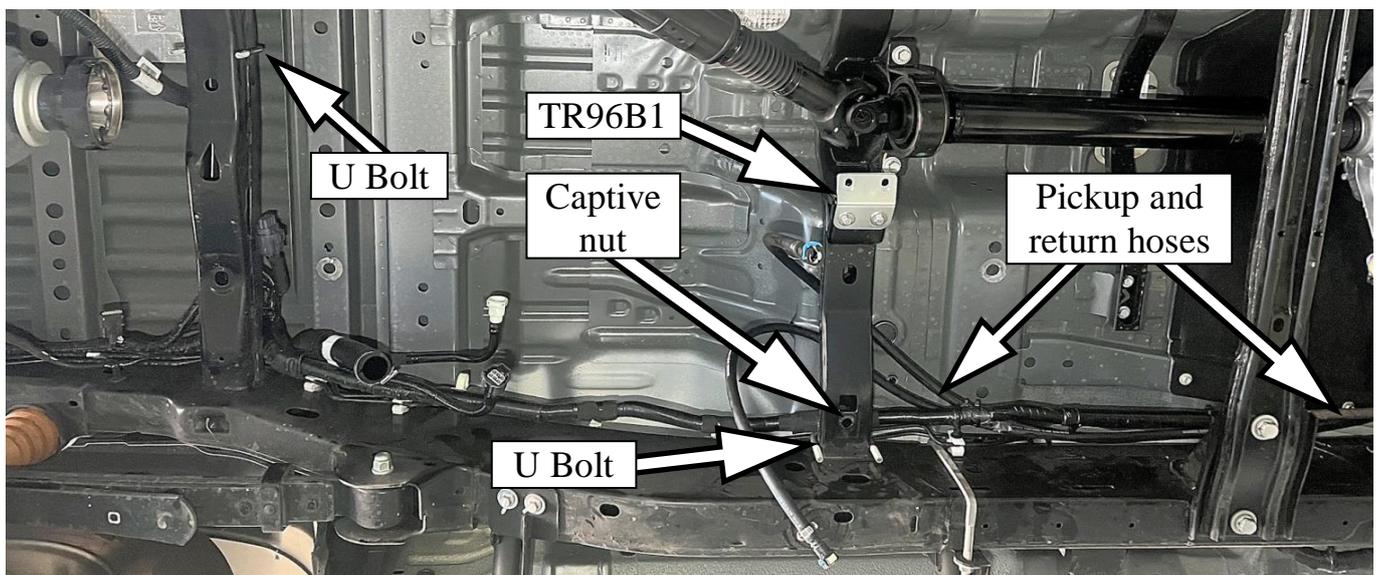


Photo 6: Tank area preparation

blanking rod to 8mm x 50mm blanking hose using MH4 hose clamp. Fit this hose to the 90 degree quick connect and fit to pickup unit

20. **As per photo 3:** Fit 6mm x 500mm breather hose to steel roll over valve with MH4 clamp, leave other end hanging

21. Remove 2 x hard fuel lines from left hand chassis rail, first hard line is connected at the red clip fitting besides transmission case and second is on top of the fuel filter

22. Strip the red quick release fittings from OEM hard pickup line at fuel filter and one blue quick release fitting from hard plastic line at sender unit and fit to new 10mm x 1780mm pickup hose with clamps supplied

23. **As per photo 1:** Strip the red 90deg quick release fittings from OEM hard pickup line near fuel filter and one blue quick release fitting from hard plastic line at sender unit and fit to new 8mm x 1850mm return hose with clamps supplied



Photo 7: TR96B1 fitment

24. **As per photo 6:** Connect new pickup and return lines at fuel filter location with red quick release fittings and secure along chassis rail with cable ties, pass over cross member.

25. **As per photo 3:** Fit 16mm x 400mm hose to FLVV cradle and fit supplied quick release fitting adapter to other end, secure with clamps supplied

26. **As per photo 2 & 3:** Remove module from OEM tank and mount on top rear of new tank with M6 fasteners

27. **As per photo 6:** Remove and discard OEM left front tank mount captive nut (Speed nut)

28. **As per photo 6:** Fit FAUBOLTR96A and B over cross member in the approximate location of the tank

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

29. Raise tank to within 300mm of floor pan and connect plumbing and electrical plug to the tank. *Note: Pass 6mm breather hose over cross member and clamp to rollover valve fitting on top of rear of tank*

30. Raise tank to within 100mm of floor pan and connect OEM filler hose to the tank

31. Lift tank into final position, check for clearance all round and secure with supplied fasteners

32. Refit tail shaft. *Note: Clean lock tight off bolts and reapply, failure to do so may result in bolts breaking within tail shaft. Note: Use the industry standard star pattern for flange bolts progressively torque to 110nm* Check that all bolts and hose clamps are tensioned correctly.

33. Transfer the fuel removed earlier to the new Long Ranger tank.

34. We suggest that the tank is filled with a test load of fuel, test drive vehicle and inspect all fittings for leaks (not included in the quoted price).
35. Visually check the job over, make sure all bolts and clamps are fastened correctly, ensure all fuel hoses and electrical wiring will not chafe on nearby components and moving suspension, detail the area involved in the work before returning the vehicle to its owner.

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 double the distance shown with this new 160lt 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.