



INSTALLATION INSTRUCTIONS FOR A REPLACEMENT TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY



LANDROVER DEFENDER

TD5 Wagon/LWB Models

TR55 – REPLACEMENT 127 TANK (TD5)

TR55– REPLACEMENT 120 TANK (TD4)

GENERAL NOTES

- a) Take a few minutes to read through this installation guide before proceeding.
- b) Fitting time is approximately two to three hours. No major vehicle modifications are required. This LONG RANGER tank locates under the vehicle behind the rear axle.
- c) Although the LONG RANGER tank maximises capacity and maintains ground clearance, it should be noted that the new tank will sit approximately 45 millimetres lower at the front and approximately 55 mm lower at the rear than the original tank's stone guard. With most popular towbars fitted the rear lower edge of the LONG RANGER tank is usually level with the bottom of the towbar.
- d) The original filler, fuel level sender unit, pick-up unit are used 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) A vehicle hoist is not essential but will speed the job up significantly.
- g) Check that tools, clothing and footwear are clean before working on the interior of the vehicle.
- h) 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.
- i) The LONG RANGER will not fit with O/E towbar part number RAA608. This towbar is manufactured using **PIPE** instead of the usual **RHS** construction.
- j) *Observe safety precautions during the installation of the LONG RANGER fuel tank.*



Special tools : Drilling machine and 15mm long socket for rear tank bolts

INSTALLATION KIT TR55

QTY DESCRIPTION This LONG RANGER installation kit has been checked by _____

- 1 LONG RANGER TANK (TR55)
- 2 Spacer blocks 75mm for sway bar (B52)
- 1 Pump unit clamp ring
- 1 *Steel Tube 57mm OD x 130mm for filler extension
- 1 *Steel Tube 19mm OD x 100mm for filler breather (d/cab only)
- 2 Bolt M8 X 20 with tag attached (SF02)
- 10 Bolts M8 X 25 for B52 spacers
- 8 Self-locking nuts M8
- 18 Flat washers M8
- 2 Bolt M10 X 25
- 4 Flat washers 10 x 30 x 2.5mm
- 2 Self-locking nuts M10
- 6 Screws M5 x 10mm
- 2 *Hose clamps HS10 for filler breather (d/cab only)
- 2 Hose clamps HS36
- 2 Cable ties 200mm
- 1 Installation Guide
- 1 Warranty Information Sheet and Return Card
- 1 LONG RANGER sticker

NOTE: * this component is not required if this TR55 **LONG RANGER** tank is to be installed in conjunction with a TA49 tank.

INSTALLATION GUIDE

1. Check that all items listed in the LONG RANGER kit have been received, and that nothing has been damaged in transit.
2. 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.
3. 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 visit www.thelongranger.com.au
4. Inspect any components to be reused from the original tank for serviceability and replace if found to be defective, eg. EFI pump stainers, fuel hoses, gaskets etc.
5. Drain fuel from tank into a suitable container. **NOTE: Observe recognised safety practices when handling fuel.**
6. Raise vehicle to a safe and convenient working height. (A hoist is not essential but should be used if available).

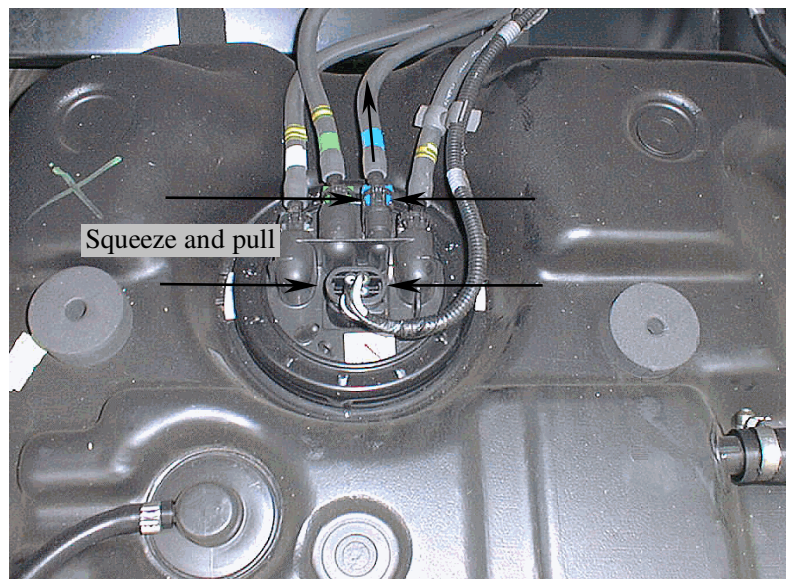
7. If applicable Temporarily disconnect the anti-sway bar from the main chassis rail brackets and lower the bar.
8. Disconnect fuel filler hose from the tank. Note: these hose clamps have a cover on the hex head, which needs to be removed first.
9. Disconnect fast-fill breather from the filler neck.
10. Disconnect 6.4mm rubber breather hose from check valve assembly in left hand rear guard. This is an odd clamp, which is reusable.
11. If necessary, remove any tow bar and/or aftermarket rear bar components that could interfere with tank installation.

Note: It is important with this next step not to lower or drop the tank to much as the plastic hose connections will snap off at the pump. These can only be replaced with genuine parts and will add considerable time and cost to the job.

12. Remove the steel skid plate and partially lower the tank approximately 200mm. Retain the front bolts.

13. Unplug wiring harness from the pickup/sender unit.

14. Refer to photograph: disconnect the four fuel pipes at the fuel pump. Mark them so they can be correctly identified during reassembly.



15. Completely remove the tank.

16. Remove and discard the upper tank-retaining strap.

17. Clean around and carefully remove the pump/sender unit from the tank by unscrewing the metal retaining nut anti-clockwise. Remove and retain the rubber ring seal. *Note: The TD4 has a different pickup unit with only 2 fuel lines.*

18. Carefully fit the pump/sender unit into the new tank using the pump unit clamp ring and m5 screws supplied. Use the locating tab for orientation, the fuel lines will be facing the front of the tank.

19. Remove the fast-fill breather hose from the original tank and secure to the new tank.

20. Remove the 6.5mm breather hose from the original tank and secure to the small outlet at the rear left corner of the new tank.
21. Lift the **LONG RANGER** tank up between the chassis rails and support approximately 200mm from the floor. Pass the two breather lines up between the chassis and floor on their respective sides. Connect the electrical plug and fuel lines to the fuel pump.
22. While keeping an eye on the fuel lines and electrical harness lift the tank into position and check for clearance all round and any **squashed hoses or electrical wiring**.
23. Fit the original bolts at the front, while at the rear drill two 3/8 clearance holes and fit the 3/8 x 1-inch UNC bolts, nuts and washers. For extra support at the front drill two 5/16 clearance holes through the remaining holes and fit the bolts with tags. After fastening with nyloc nuts trim any excess off the tags.
24. Reconnect the 6.4mm breather hose to the check valve assembly in left-hand rear guard, this will need to be shortened. As the clips on the valve assembly don't seem to work once disturbed it is a good idea to cable tie it in place to avoid falling on the exhaust.
25. Use the HS36 clamps and 57 dia. X 130 long tube to extend and reconnect the filler hose.
NOTE: If the LONG RANGER TA49 auxiliary tank is being installed in conjunction with this replacement LONG RANGER tank, DO NOT CUT; refer now to the separate TA49 fitting instructions for fitment of the T piece instead of the extension tube.
IMPORTANT: It is absolutely essential that the tow bar/tie-down eye bolt is inserted through the right-hand chassis rail **before** installing the TA49 auxiliary tank.
26. Reconnect the fast-fill breather to the filler neck and secure with the original clamp.
Note: ensure there are no kinked, squashed or low points in the line, which may cause slow filling.
27. Transfer the fuel removed earlier to the new LONG RANGER tank. Check for plumbing leaks. **Note:** information from user feedback suggest that when running the vehicle for the first time after the fuel system has been worked on, an audible noise from the fuel pump of a diesel can sometimes be heard. This appears to have no effect on the performance and will disappear after a short period. This can happen after the fitment of a fuel tank or simply changing the fuel filter.
28. Test run the vehicle to ensure pickup and return lines are correctly connected. Check for plumbing leaks. If you have problems starting the vehicle check the correct flow in the fuel lines with that marked on top of the filter.
29. Reinstall any tow bar or rear bar components removed earlier. **Note:** some towbars may need a small amount of non structural material removed from the top corner of the flat brackets to allow it to fit up between tank and chassis.

- 30.If applicable re-fit the vehicle's anti-sway bar, using original bolts, nuts, washers and the additional spacers with 5/16 bolts. The spacers are designed to move the sway bar down in a vertical manner as opposed to moving it down/forward.
- 31.Check that all bolts and hose clamp are tensioned correctly.
- 32.We suggest that the tank be filled with a test load of fuel, test drive vehicle and inspect all fittings for leaks (not included in the quoted price).
- 33.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 low warning light (some models) when activated will also measure a proportionally larger quantity of fuel. It is suggested that the gauge readings be cautiously interpreted until familiar with the new readings.
- c) 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.
- d) The vehicle manufacturer selected springs without accounting for a bigger fuel tank. Several suspension modification options are available.
- e) 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 kilometres, 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.

