



INSTALLATION INSTRUCTIONS FOR A REPLACEMENT TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY

LANDCRUISER 75/78 SERIES

(Troop Carrier with O/E sub tank)

TR58 – DIESEL REPLACEMENT 180-LITRE SUB-TANK



GENERAL NOTES

- a) Take a few minutes to read through this installation guide before proceeding.
- b) Fitting time is approximately three hours. No major vehicle modifications are required. This LONG RANGER tank locates under the vehicle behind the rear axle, in place of the standard sub tank.
- c) The original filler, fuel level sender unit and 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.
- d) Check if the vehicle owner wants to retain the original tank and any associated parts.
- e) A vehicle hoist is not essential but will speed the job up significantly.
- f) Check that tools, clothing and footwear are clean before working on the interior of the vehicle.
- g) 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.
- h) The LONG RANGER is designed to fit with most towbars and in most cases they are best fitted after or during the tank installation.
- i) **IMPORTANT:** If the LandCruiser is fitted with SRS Air Bags exercise **EXTREME CARE** when working on the electrical system.
- j) Observe *safety precautions* during the installation of the LONG RANGER fuel tank.
- k) **Special tools :** An electrical crimping tool and Silver soldering equipment or similar are required.



INSTALLATION KIT - TR58

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

- 1 LONG RANGER TANK (TR58)
- 2 Doubler plates (B66)
- 2 U-bolts, M10 (troopy)
- 2 Bolts, M12 x 50 long
- 2 Self locking nuts, M12
- 4 Flat washers M12
- 4 Self-locking nuts M10
- 4 Flat washers, M10 x 30 x 2.5
- 1 T piece 6mm plastic
- 6 Hose Clamps MH6 for 12.5mm ID hose
- 6 Hose Clamps MH4 for 6.5mm ID hose
- 1 Sheathed wire three-core 4mm x 2 m (sender)
- 6 Terminal red male bullet connector
- 6 Terminal red female bullet connector
- 1 Cable tie, 300mm
- 6 Cable ties, 150mm
- 2 Fuel hose, 12.5mm ID x 550mm long for link breathers
- 1 Fuel hose, 12.5mm ID x 550mm long for fuel pickup
- 1 Fuel hose, 8mm ID x 550mm long for fuel return
- 1 Fuel hose, 6.5mm ID x 100mm long for system breather
- 1 Installation Instructions
- 1 Warranty Information Sheet and Return Card
- 1 LONG RANGER sticker

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. Remove plastic inner guard to access filler neck.
5. Remove the original equipment sub tank.
6. Remove (unbolt) all strap-mounting brackets from vehicle.
7. Remove or trim any bolts etc. protruding into tank area by more than approximately 8 mm.
8. Lengthen sender unit wire harness. Cut harness between plugs, run new 3 core wire around RHS chassis to centre of vehicle above diff and leave for future connection.
9. Clean area around fuel level sender unit. Remove sender and gasket from original tank and transfer to the center hole in the front face of the LONG RANGER tank using M4 screws supplied in kit. **Note:** Carefully bend the float arm to reach near the bottom of the tank. Check that the gauge will read

accurately when the tank is near empty. **Hint:** place ear on tank and listen for float hitting on bottom of tank.

10. Inspect any components to be reused from the original tank for serviceability and replace if found to be defective, eg. EFI pump strainers, fuel hoses, gaskets etc.
11. Remove pickup unit from O/E tank and fit to flange at front right corner of new tank, ensure the strainer sits at the bottom of the tank inside the dam. Fit new hoses to unit, ensure to use worm drive hose clamps supplied. These pipes may need to be bent at a later stage to ensure they don't fowl on chassis.
12. Change spring shackle hangers around for easy servicing after tank installation.
13. Lift the LONG RANGER tank into position with the filler at the right and to the front. Support with U-bolts, washers and nuts at the front.
14. Check that the tank lies evenly between chassis rails and check for clearance all round. *Check pickup and return line at front corner, it may be necessary to remove tank and bend fuel lines. Do not shorten supplied fuel lines as they will need to be looped around in order to fit without kinking hoses.*
15. Drill 1/2-inch clearance holes through rear chassis using rear bracket as a guide. Clean and apply rustproofing. Secure tank using doubler plate on top of chassis.
16. Fit link breathers connecting front and rear tank sections (both sides of the tank).
17. Connect original filler to new tank, trim as required
18. Fit fast-fill breather and secure with hose clamp. Hose may need to be trimmed for length to eliminate any low sections where fuel may lie. *Note: Fuel trapped in breather hose will cause problems when filling tank.*
19. Connect tank into vehicle fuel delivery and emission control system using hoses and hose clamps supplied. Fit plastic ¼ T piece into system breather adjacent to ¼ system breather on new tank and connect using hose and clamps supplied. Some hoses may need to be trimmed to suit.
20. Complete wiring of fuel level sender unit.

FINAL CHECKS

21. Check that all bolts and hose clamps are tensioned correctly.
22. Check that adequate clearance exists all round the tank.
23. Ensure that all fuel hoses and electrical wiring will not chafe on nearby components and moving suspension.
24. Transfer the fuel removed previously to the new LONG RANGER tank.
25. We suggest that the tank be filled with a test load of fuel, test drive vehicle and inspect all fittings for leaks (fuel not included in the quoted price).
26. Clean and 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.

1. 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.
2. 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.
3. 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.
4. The vehicle manufacturer selected springs without accounting for a bigger fuel tank. Several suspension modification options are available.
5. 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, release the tank drain plug and confirm that there is no water present, and replace the fuel filter according to manufacturer's recommendations.