INSTALLATION INSTRUCTIONS FOR A REPLACEMENT TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY

MADE IN AUSTRALIA

TOYOTA HILUX All Diesel Models

TR63 – 140 L, SUITS 4WD 3/2005-ON

TR63A – 128 L, SUITS ALL 3/2005-ON

GENERAL NOTES

a) Fitting time is approximately three 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) We recommend inverting a spring bolt during fitment of the tank.

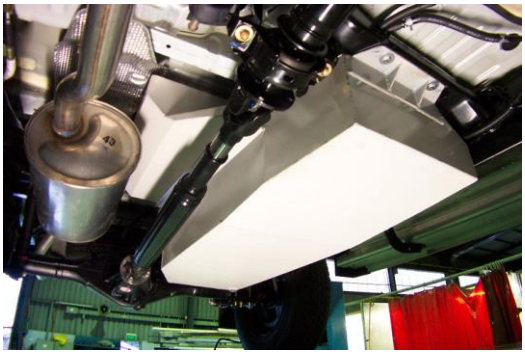
f) LONG RANGER tanks are coated with a high-performance primer. For added protection, a topcoat may be added. If the vehicle has been rustproofed, it is suggested that the tank (and any changes made to the vehicle during fitting) be touched up after installation.

g) The trip meter distance to empty will no longer work as intended by the manufacturer.

h) Some fitments may require the front of tank spaced down 5 or 6mm to clear a Toyota recall retrofit bracket found on cross member on some models.

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





INSTALLATION KIT TR63

QTY DESCRIPTION

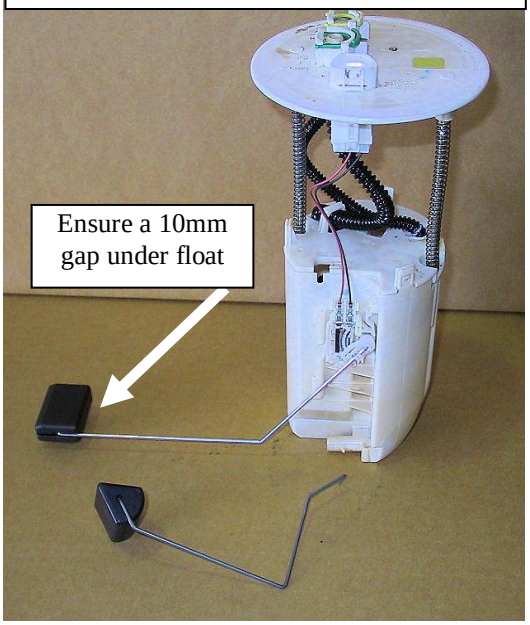
- ❑ 1 LONG RANGER Tank #**TR63** (38 KG)
- ❑ 1 LONG RANGER Tank #**TR63A** (38 KG)
- ❑ 1 Plastic bag 550mm long
- ❑ 1 Clamp ring #T**R63CR**
- ❑ 1 O-Ring #**TR63ORING**
- ❑ 1 Replacement float arm #**FLARTR63**
- ❑ 1 Front mounting bracket #**TR63B1**
- ❑ 1 Ubolt long #FAUBOLTR63L
- ❑ 1 Ubolt short #FAUBOLTR63S
- ❑ 6 Cable tie 5mm x 300mm
- ❑ 2 Bolt M10 x 50mm long
- ❑ 6 Self-locking nuts M10
- ❑ 8 Flat washers 10 x 30 x 2.5mm
- ❑ 1 Bolt M6 x 20
- ❑ 1 Self-locking nuts M6
- ❑ 2 Flat washers M6
- ❑ 8 Screw M5 x 10mm
- ❑ 2 Hose clamp MH4
- ❑ 6 Hose clamp MH6
- ❑ 1 Fuel hose 12mm x 350mm Link Breather
- ❑ 1 Fuel hose 10mm x 250mm (diesel pickup)
- ❑ 1 Fuel hose 6.5mm x 1420mm Rollover Valve
- ❑ 1 Convoluted tubing 10mm x 700mm (electrical harness)
- ❑ 2 Convoluted tubing 10mm x 400mm (fuel lines)
- ❑ 1 Fitting instructions
- ❑ 1 Warranty information sheet and return card
- ❑ 1 LONG RANGER sticker
- ❑ 1 *Factory fitted in top of tank*-Rollover valve (#**VAROLL07**)
- ❑ 1 *Factory fitted in top of tank*-Rollover valve grommet (#**VAROLL08**)

INSTALLATION GUIDE

1. Take a few minutes to read through this installation guide before proceeding.
2. The TR63A has more clearance above the tailshaft and has 15mm more ground clearance than the TR63
3. Check that all items listed in the LONG RANGER kit have been received, and that nothing has been damaged in transit.
4. 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.
5. 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
6. Disconnect filler and breather hoses from tank.

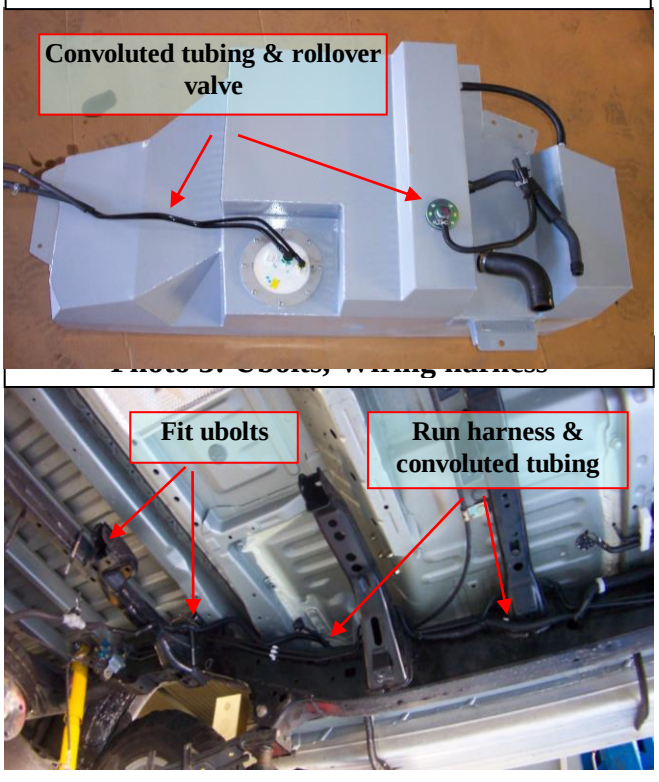
7. Disconnect pickup and return lines from front steel pipes on chassis (press and release). Mark for future re-connection.
8. Drain fuel from tank (observe recognised safety procedures).
9. Disconnect rear end of rear drive shaft from differential, mark for future realignment and swing to one side.
10. Remove stone guard, support tank and remove tank straps.
11. Remove tank, while lowering be sure to disconnect the wiring harness from tank.
12. Remove rear left mount bolted to chassis.
13. ***WARNING:*** *Cleanliness and care in handling the fuel pickup unit is essential. Contamination or rough handling may damage the unit. Clean the top of the unit and surrounds thoroughly and remove from original fuel tank.* ***IMPORTANT:*** *Carefully inspect the intake filter screen for damage or contamination and clean or replace if required (report any fuel contamination observed to the vehicle owner).*
14. **Refer photo 1**: Carefully unclip the float arm and replace with the new longer one supplied. ***Note:*** *Sit pickup unit in flat surface and check float is 10 mm from bottom*.

Photo 1: Fit new float arm



15. **Refer photo 2**: Carefully fit the pickup unit using the new O-ring, with screws and clamp ring supplied. ***NOTE:*** *The unit can only be fitted in one orientation, ensure the float does not foul on internal baffling. Run hoses towards the front RH corner.* ***Note****: ensure they are not blocking the electrical plug*.
16. **Refer photo 2**: Fit supplied convoluted tubing to pickup and return lines to prevent chafing.
17. **Refer photo 2**: Fit system breather hose to rollover valve in top of tank:
    For diesel re-use original system breather hose and check valve. ***Note****: After fitting tank, this can be routed higher up the filler neck to avoid water ingestion during water crossings.*
    For EFI run new 6.5mm hose from valve towards the front with other hoses.
18. **Refer photo 2**: Re-fit filler and breather hoses.
19. Remove plastic clips from under side of front xmember.

Photo 2: Hose layout



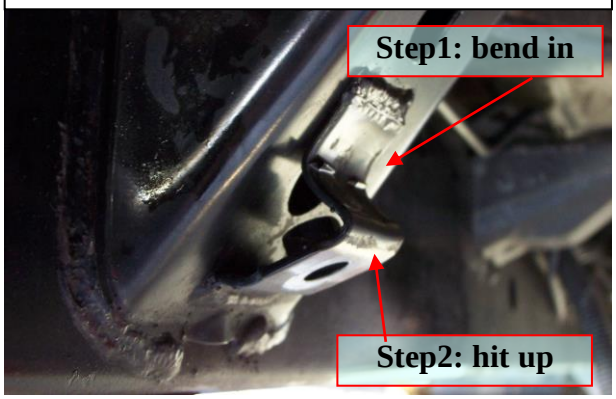
20. ABS models only: Unbolt the clip from above the diff for electrical harness from centre of rear xmember.

21. **Refer photo 3**: Hang the two ubolts of the xmember.

22. **Refer photo 3**: Pass the wire harness up over the original front tank support mount and fasten along chassis rail using convoluted tubing over bare sections of. Note: leave enough of the plug free for connection to tank.

23. Refer photo 4: Bend LH front strap mount up, (check clearance on tank after lifting into position).

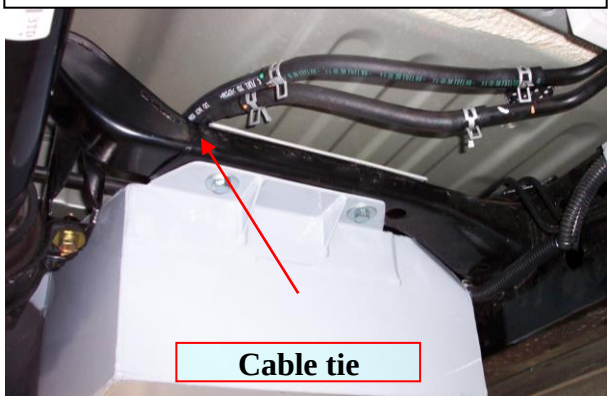
Photo 4: Bend mounting



24. We recommend turning the front spring bolt around for future replacement of bushes without removal of the tank.

25. Lift the Long Ranger tank into position, this is best done by lifting the rear up over the diff then lift the front up, loosely fit an original bolt to rear LH mount/captive nut and both ubolts on rear cross member.
Note: If the original bolt is not fitted to the LH mount, the tank will eventually move over and hit the tail shaft.
Note: ensure the harness and hoses are not squashed. Align filler hose during the process.

Photo 5: Front mounting & hoses



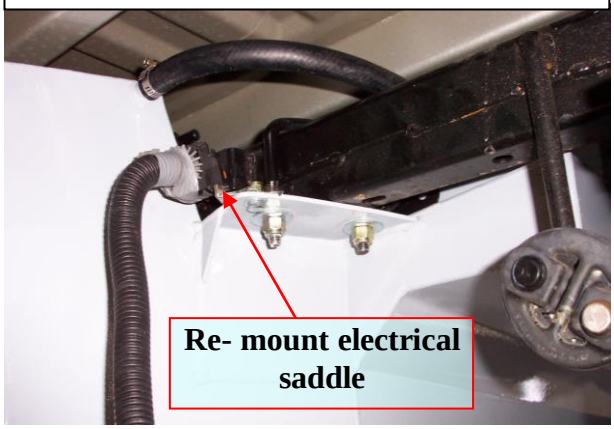
26. Tank should be parallel and approx. 20mm from chassis.

27. Loosely fit the two front bolts with the R63B1 bracket on top of the chassis and check for clearance all round. You will need to drill a clearance hole up through the cross member.

28. Tighten all tank bolts.

29. Refit drive shaft, tighten all bolts.

Photo 6: Ubolts, Wiring harness



30. Refer photo 5: Re-connect all hoses to steel lines. Fasten pickup and return hoses to cross member with cable tie. Note: *Diesels will need the new slightly longer pickup hose (non EFI)*

31. Refer photo 6: Fasten electrical harness saddle to rear RH side tank mounting bracket with M6 bolt supplied.

32. Connect the wiring to the pickup unit, Note: listen for the click to ensure plug fitting correctly.

33. Re-fit filler and breather. *IMPORTANT: Ensure there are no low points in the fast-fill breather where fuel can lie. Liquid trapped in breather hoses may cause slow filling*.

34. Fit 350mm long link breather to rear right corner of tank fittings.
35. Check that all bolts and hose clamps are tensioned correctly.
36. Transfer the fuel removed earlier to the new LONG RANGER tank.
37. 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).
38. 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*.
c) The **trip computer** with distance (range) to empty will no longer accurately show the distance left to travel. The computer still thinks the tank only has 76lt 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 range will be approximately twice the distance shown.
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 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.