

## INSTALLATION INSTRUCTIONS FOR A REPLACEMENT TANK



# THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY



## LANDCRUISER

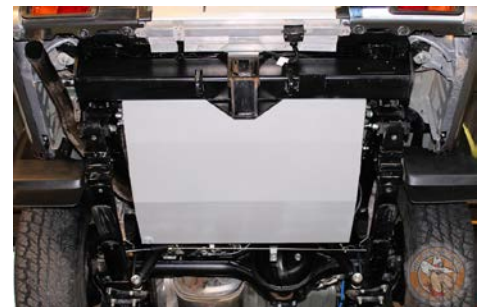
76 SERIES DIESEL WAGON 8/2012 ON  
79 SERIES DIESEL DUAL CAB 12/2012 ON  
79 SERIES DIESEL SINGLE CAB 11/2016 ON

## **TR58WDC – REPLACEMENT 180-LITRE TANK**

Note: Only fits models with a single OEM 130lt std tank, will not fit models with twin or single 90lt OEM tank.

### **GENERAL NOTES**

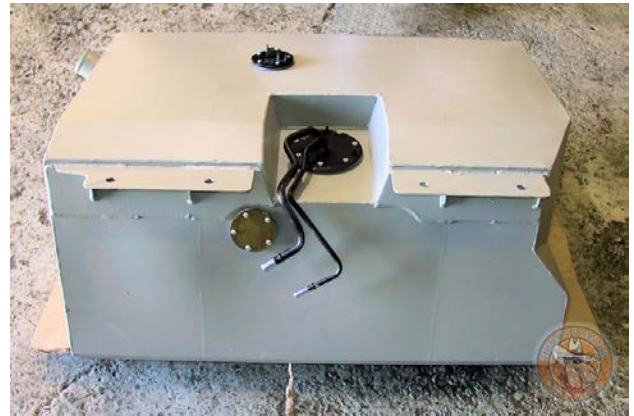
- a) Take a few minutes to read through this installation guide before proceeding.
- b) Fitting time is approximately three hours. No major vehicle modifications are required. This LONG RANGER tank locates under the vehicle behind the rear axle, in place of the standard tank.
- c) The original filler, 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 pickup units.
- 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 rust proofed, 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) *Observe safety precautions during the installation of the LONG RANGER fuel tank.*



## **INSTALLATION KIT - TR58WDC**

**QTY DESCRIPTION** This LONG RANGER installation kit has been checked by \_\_\_\_\_

- 1 LONG RANGER TANK #TR58WDC
- 1 RHS Mounting bracket #TR58WB2
- 1 LHS Mounting bracket #TR58WB3
- 1 FLOAT ARM FLARTR58WDC
- 1 FLOAT ARM FLARTR58WDC2017
- 2 U-bolt M10 #FAUBOLTA61 (rear mounting)
- 1 Blanking plate for Toyota gauge flange #TOYBLPL
- 1 Sender unit gasket (Toyota)
- 6 Self-locking nuts M10
- 12 Flat washers, M10 x 30
- 4 Spring washer M10
- 2 Bolt M10 x 40 (rear mounts)
- 4 Bolt M10 x 1.25 x 25 (front mounts, fine thread)
- 5 Screws M4 x 10mm for blanking plate
- 2 Cable ties, 200mm
- 1 Cable retaining clip (#ACX1313 plastic stick on)
- 1 Installation Instructions
- 1 Warranty Information Sheet and Return Card
- 1 LONG RANGER sticker





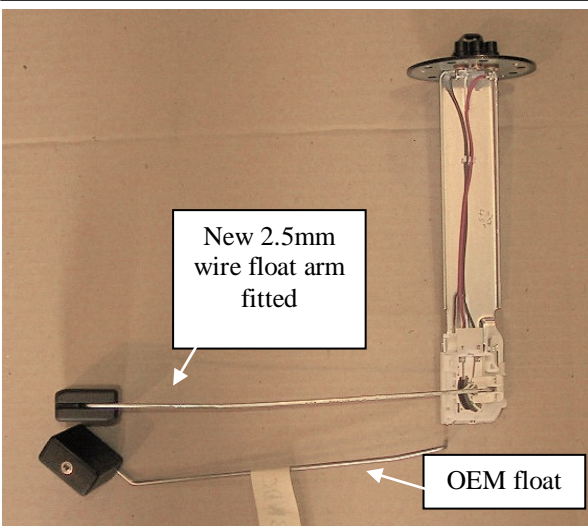
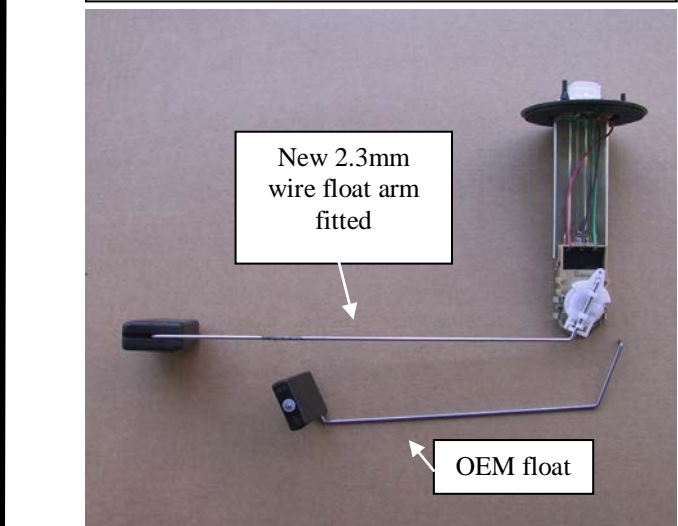
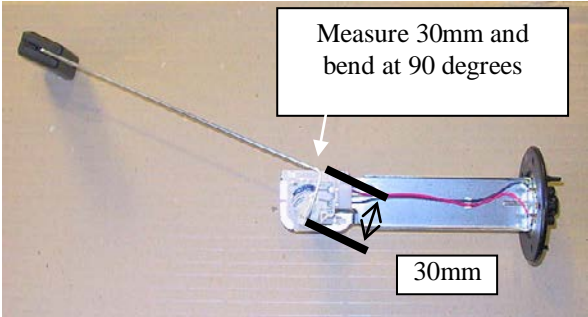
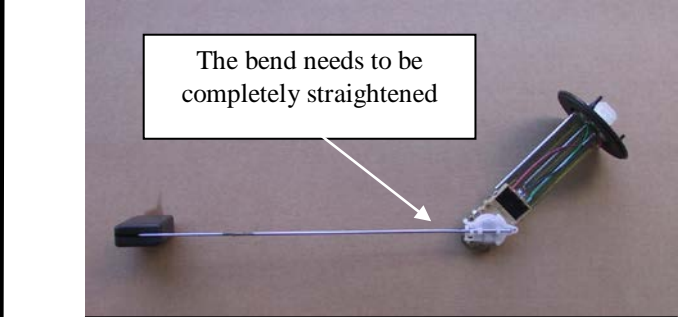
## **INSTALLATION GUIDE**

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/damaged, if foreign matter is found in the tank, or if any problems arise during installation, contact the factory without delay for advice. Phone (02) 4953 3288, fax (02) 4953 1916 or email fitting@thelongranger.com.au. Some questions may already be answered on our webpages FAQ.
4. On dual cab check for rear crossmember compatibility. The tank will sit at the same height as the standard tank mounts, if your tray crossmember does not have clearance on the mounts it will need to be modified or the tray mounts packed up to suit.
5. On a wagon: remove plastic inner guard to access filler neck.
6. Disconnect filler and breather from steel filler neck.
7. Raise vehicle disconnect the fuel supply and return lines at front of tank.
8. Remove the original equipment sub tank and all associated mountings *NOTE: disconnect electrical plug on top of tank as you are lowering.*
9. Remove (unbolt) all upper tank mounting brackets from vehicle. *Note: On a wagon the plastic trim from on top of the rear bumper bar needs to be removed to access all the mounting bolts.* To remove the top mounts lift the front up as high as possible and rotate the rear of the bracket towards the center of the vehicle, once it touches the bulge in the center a light knock with a hammer will help.
10. Inspect any components to be reused from the original tank for serviceability and replace if found to be defective, eg: pickup strainers, fuel hoses, gaskets etc.
11. Clean area around fuel level sender unit and pickup unit, remove from tank.

12. **Refer to Photo 1:** Choose the correct new longer float arm for your model. Unclip the existing float arm and fit new longer arm to the sender unit **as per photo 2**. Place in top hole, check float clearance on baffles through large hole, install with original screws.

*NOTE: For Post November 2016 models, before unclipping the wire, take note as to which hole it is in, in our experience the middle hole is used. Also, be careful to reassemble the float arm so it operates within the range and bottoms out on the full and empty stop.*

*NOTE: The front hole can be used as an alternative if the tank is being fitted to a dual cab with the spare wheel mounted under the tray, this will save the wiring from damage, but the electrical harness will need extending. Refer to photo 3 for float arm modification*

Pre 10/2016 models	Post 11/2016 models
 <p data-bbox="129 869 719 943">Photo 1a: Float arm selection</p>	 <p data-bbox="805 869 1485 943">Photo 1b: Float arm selection</p>
 <p data-bbox="129 1467 719 1534">Photo 2a: Fit new float arm</p>	 <p data-bbox="805 1467 1485 1534">Photo 2b: Fit new float arm</p>
Front mounting mod	Front mounting mod
 <p data-bbox="129 1960 719 2027">Photo 3a: Alternative sender modification</p>	 <p data-bbox="805 1960 1485 2027">Photo 3a: Alternative sender modification</p>

13. Fit pickup unit with original screws and gaskets. **Note:** Bend pipes closer to tank on front face, be careful not to kink, check pipe clearance on diff after tank fitment.
14. After confirming fitment of sender and pickup units fit blanking plate with gasket and screws to remaining hole in tank.
15. **As per photo 4:** This step is only required for wagon models fitted with a Kaymar rear bar. Cut the **TR58WB2** and **TR58WB3** brackets just below the chassis support tab as indicated by the dotted line. Weld this to the Kaymar mounting bracket, ensuring the two holes line up. Touch up welding with paint. **NOTE:** left and right hand side brackets are different as seen in photo 5.
16. **As per photo 6:** Fit the two rear brackets to chassis. *Note the distance from the spring hanger, leave U bolts loose and slide bracket back along chassis under tank mount once fitted.* **Note:** Remove bolt from electrical saddle on RHS to allow fitment of bracket.
17. Lift the LONG RANGER tank into position connecting electrical harness in the process, the filler will be on the right. Support tank in place with stand and loosely fit the four new M10 fine thread bolts, spring and flat washers to front mount.
18. Check that the tank lies evenly between chassis rails and check for clearance all round, check electrical harness is not squashed between tank and vehicle body on wagon models.
19. Fit bolts, washers and nylocs to rear and fasten all mounting bolts.
20. Connect tank into vehicle fuel delivery system. **NOTE:** Check moving suspension components will not foul on lines.
21. Connect original filler to new tank using original hose clamps, trimming hose by 30mm.
22. Fit fast-fill breather hose and secure with original spring clamps. Hose will need to be trimmed by approx. 30mm in length to eliminate any low sections where fuel may lie. **Note:** Fuel trapped in breather hose will cause slow filling problems during filling.
23. Fit hose and check valve to small fitting on side of tank behind filler, run along filler neck and have **aiming up** so water does not fill end cap, cable tie in place.
24. Re-fit plastic inner guard on wagon models.
25. **As per photo 7:** On dual cab models secure sender unit harness on top of tank with stick on clip supplied.

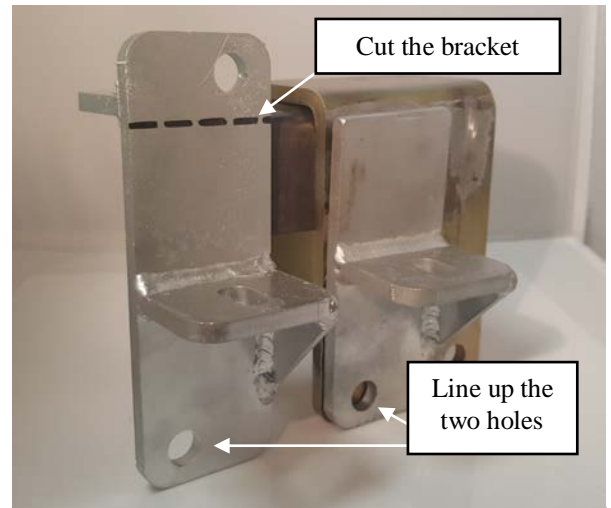


Photo 4: Bracket modifications



Photo 5: RHS vs LHS Mounting Brackets

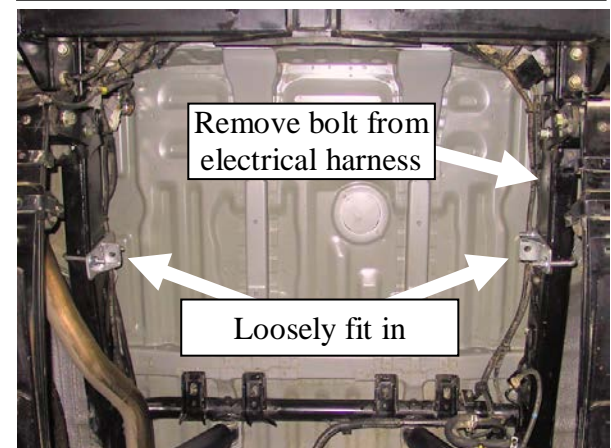


Photo 6: Rear mounts

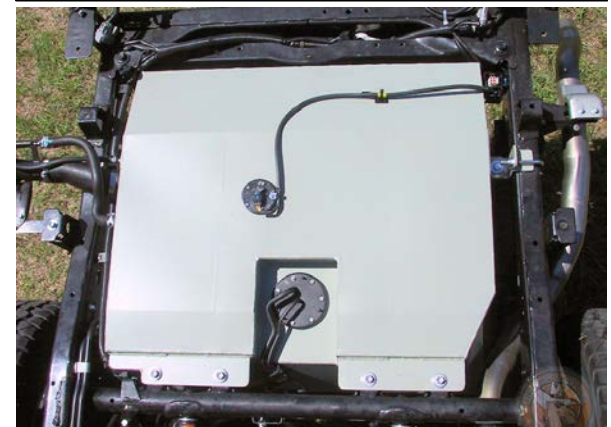


Photo 7: Electrical clip

## **FINAL CHECKS**

26. Check that all bolts and hose clamps are tensioned correctly.
27. Check that adequate clearance exists all round the tank.
28. Ensure that all fuel hoses and electrical wiring will not chafe on nearby components and moving suspension.
29. Transfer the fuel to the new LONG RANGER tank.
30. 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). Inspect sender operation during filling.
31. 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 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, release the tank drain plug and confirm that there is no water present, and replace the fuel filter according to manufacturer's recommendations.