



INSTALLATION INSTRUCTIONS FOR AN AUXILIARY TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY

LANDROVER DISCOVERY

Suits all diesel D3 & D4 models

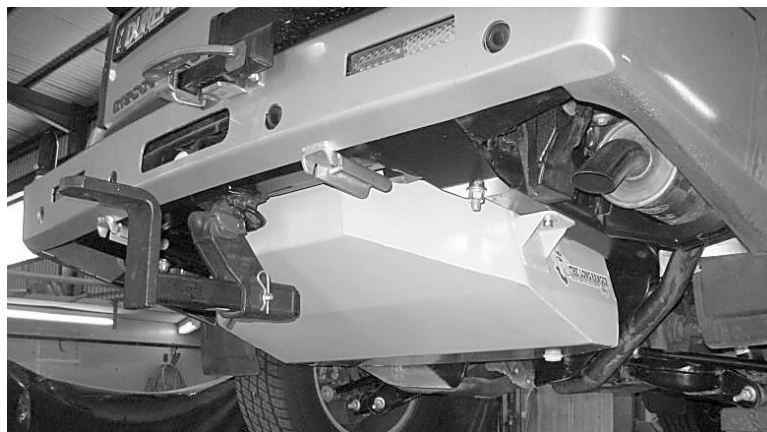
TA62A – 104-LITRE AUXILIARY



GENERAL NOTES

- a) Take a few minutes to read through this installation guide before proceeding.
- b) Fitting time is approximately 5 hours. This LONG RANGER tank locates under the rear of the vehicle. The spare tyre will need to be re-located.
- c) Access to rear luggage area is required to remove spare tyre and winch mechanism.
If the tyre is already on a swing away carrier, with difficulty the winch can be removed without access to the luggage area.
- d) The lowest point of the LONG RANGER tank lies within the standard departure angle and provides slightly better ground clearance than the spare tyre.
- e) A 2 or 4 post vehicle hoist is not essential but will speed the job up significantly.
- f) LONG RANGER tanks are coated with a high-performance anti corrosive primer. For added protection an alkyl enamel top coat 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) Observe *safety precautions* during the installation of the LONG RANGER fuel tank.

Special tools: An electrical drill, sharp 20mm step drill, fuel sealant and an electrical crimping tool.



FITTING KIT TA62A

QTY DESCRIPTION This LONG RANGER installation kit has been checked by

- 1 LONG RANGER TANK (**TA62A**)
- 1 Plastic bag 900mm long
- 1 Dual filler panel, # **TA62FN1**
- 1 Filler Extension, # **TA62FN2**
- 4 M10 x 30 Bolt with tag # **TA62SF03** (tank mounts)
- 4 Z/P plain nuts M10 (tank mounts)
- 4 Spring washers M10 (tank mounts)
- 4 Flat washers M10 x 32 x 2.5
- 2 Self-locking nuts M6
- 2 Bolt M6 x 20 (Pump mounting)
- 3 Flat washers M6
- 1 Flat washers M6 mudguard
- 5 Screws M4 x 8mm (for level sender)
- 2 Brass straight 10mm barb x 1/8-inch BSP
- 2 Hose clamps MH4 (Auxiliary system breather)
- 8 Hose clamps MH6
- 6 Hose clamps HS24
- 1 Rubber grommet # **ELGRCA11-16** (through floor)
- 1 Electrical scotch lock (power source)
- 1 Convoluted tube 7mm x 1000mm long (use on wiring at pump unit)
- 1 Terminal red male bullet connector
- 1 Terminal red female bullet connector
- 2 Terminal red female spade connector
- 1 Switch/Gauge timer module with wiring loom (**ELSWGGA352-6**)
- 1 Switch/Gauge LED 24mm round (**ELSWGATIMER12V01B**)
- 1 Fuel level sender unit, # **ELSETLR2-90TA70**
- 10 Cable ties 200mm
- 10 Cable ties 300mm
- 1 Fuel pump 12-volt (**ELFUPU12V03**)
- 1 Fuel filter in-line type 10mm # **Z153**
- 1 Fuel hose 38mm ID x 100mm (Aux. Filler on tank)
- 2 Fuel hose, 38mm ID x 75mm long (Filler panel)
- 1 Fuel hose 12.5mm ID x 720mm, (Aux. filler breather)
- 2 Fuel hose 10mm ID x 50mm (filter to pump & tank)
- 1 Fuel hose 10mm ID x 900mm (pump to filler panel)
- 1 Fuel hose 6mm ID x 1100mm (Auxiliary system breather)
- 1 Long Ranger auxiliary tank fitting guide

Owners information pack

- 1 Warranty Information Sheet and Return Card
- 1 Long Ranger sticker
- 1 Long Ranger owner operating manual

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 or email any comments about tank fitting to fitting@thelongranger.com.au
4. Remove the spare tyre and winch assembly.
5. Remove right rear wheel (support suspension if doing job on ground or 4 post hoist).
6. Remove mudflap (self tappers).
7. Remove inner guard and rear section of flare for access to filler assembly (self tappers & push clips). Note: some inner guards need an electrical fitting disconnected while removing.
8. **As per Photo 1:** Remove the filler neck assembly from the upper section of the inner guard and rotate around towards axle housing.
9. **Refer to photo1:** Measure 165mm from flange and cut filler neck off. Cut filler breather off at end of steel pipe. **Note:** lay pipes with filler end facing ground so the swarf will fall out rather than go back into tank, De-burr and clean filings out.
10. Underneath the vehicle, remove the spare wheel hoist.
11. Fit the two straight brass barbs to pump outlets using suitable fuel sealant.
12. **As per photo 2:** Mount transfer pump to front of tank. Note: Mount pump with flow direction towards RHS and fit earth to pump bolt.
13. Attach the 10.0mm x 900.0mm hose to the outlet of the fuel pump and pass over chassis rail

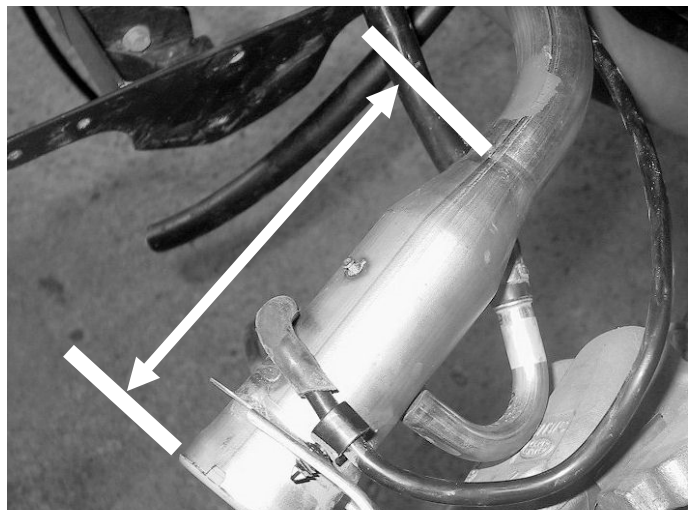


Photo 1: Cut filler neck at 165mm

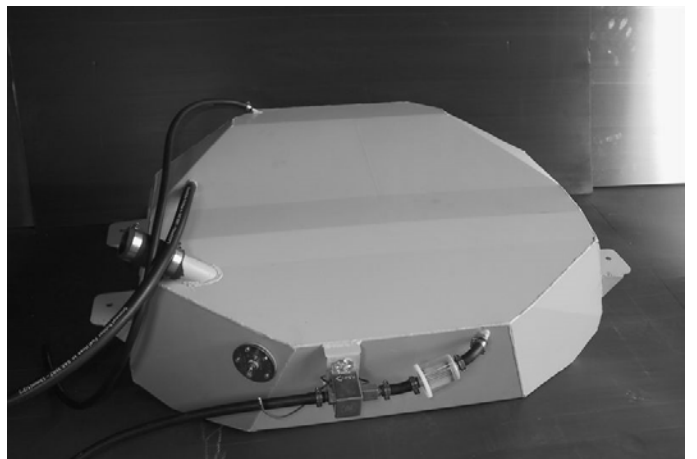


Photo 2: Pump mounting

14. Attach the fuel filter to the inlet of the pump using the 10.0 x 40.0mm hose and MH6 clamps, attach the 10.0mm x 40.0mm hose to the outlet of the filter.

15. Although the sender has been modified at the factory, we recommend you familiarise yourself with it's operation by holding it on the side of the tank. Move the float arm from full to empty and ensure it does not foul on the top or bottom of tank. Using a multimeter check the ohms reading of the sender, it should be 2 ohms on empty and 90 ohms on full.

16. Fit the sender unit to tank with M4 screws and gasket supplied.

17. Fit the 38 x 100 hose to tank with clamp supplied.

18. Fit the fast fill and system breather to tank.

19. Lift the tank into position, passing the hoses up over chassis rail. And support tank. *Note: the system breather on the rear of the tank must go over the cross-member so as not to be squashed.*

20. Check for clearance all around, ensure even gap on either side of chassis, ensure hoses not squashed between chassis, check for clearance on top crossmember. Drill holes and fit nuts, large washers and spring washers with tag bolts. Fasten all tank mounting bolts.

21. **As per photo 3:** Bolt dual filler panel in place.

22. Fit filler extension pipe to auxiliary tank with 38mm x 75 hose and clamps.

23. Fit the auxiliary system breather and fast fill breather hoses with clamps.

24. Fit the original fast fill breather to twin filler panel.

25. Connect the original filler neck to the twin filler panel using 38mm x 75 hose and clamps. *Note: ensure inner guard still fits.*

26. Fasten all clamps on twin filler panel.

27. Neatly run the two remaining system breather lines up along side filler necks and cable tie in place.

28. Check that tools, clothing and footwear are clean - following steps are inside the vehicle.

29. Remove RHS kick panel, door sill trim from both doors and rear quarter trim to gain access to inner guard around jack.

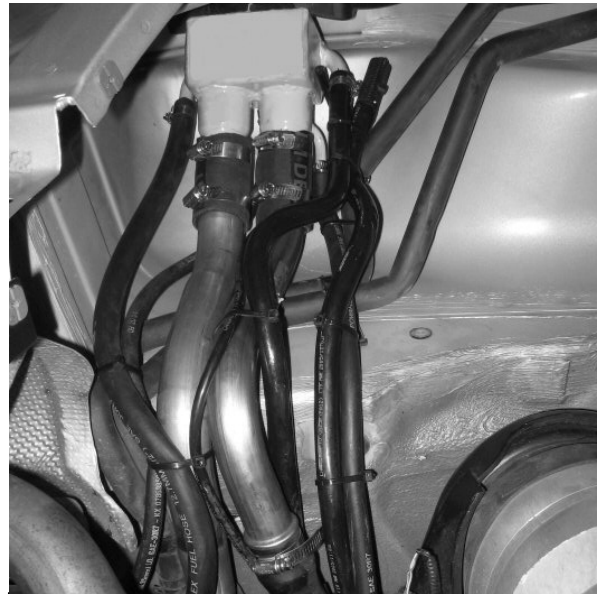


Photo 3: Twin filler panel install



Photo 4: Switch location, 2008 model

30. **As per photo 4:** Locate a suitable position for the switch as suggested, we recommend consultation with the vehicle's owner if there is any doubt about the switch placement. We have provided a template on the back page for the position we suggest (23mm over from the vent control for a 2008 model). **NOTE:** *On a D4 the dash is soft spongy rubber like material. We have successfully drilled into this with a sharp step drill. There was no damage to the cover material. We recommend drilling a slightly smaller hole and file out to size with care.*

31. **As per photo 5:** Plug the switch into loom from timer module, remove the fuse from holder and plug main loom into module. Mount timer under dash in suitable location (black box).

32. **As per wiring diagram:** Connect earth and power wires under dash. Connect the red power wire from the timer module to a 12v ignition power source, (A better alternative to the provided scotch lock would be to solder these connections). Connect earth to bolt in behind kick panel *Note: leave all trim panels off till finishing of job.*

33. **As per photo 6:** Run wiring along door sills, and through floor grommet in rear quarter panel near jack.

34. Neatly fasten all wiring to prevent chafing or contact with moving parts, seal any holes in body work to prevent dust.

35. Connect the wiring to the fuel level sender and fuel pump. Protect wiring harness where necessary with sheathing and cable tie in place.

36. Test the operation of the pump and sender unit. The gauge should be on empty (red LED). The pump should be audible when turned on, the amber pump LED with illuminate and should be flashing with an empty tank.

37. **As per Photo 6:** modify the cap by grinding or filing away the bottom "U" of the rectangle section on the cap.

38. Visually check the job over and detail the area involved in the work before returning the vehicle to its owner.

39. Place the owner's information pack on the passenger's seat

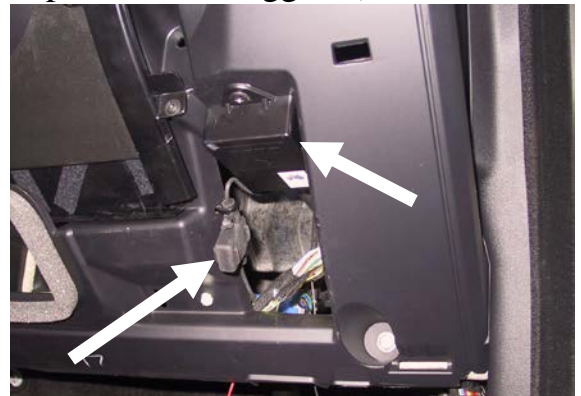


Photo 5: Timer module and Fuse

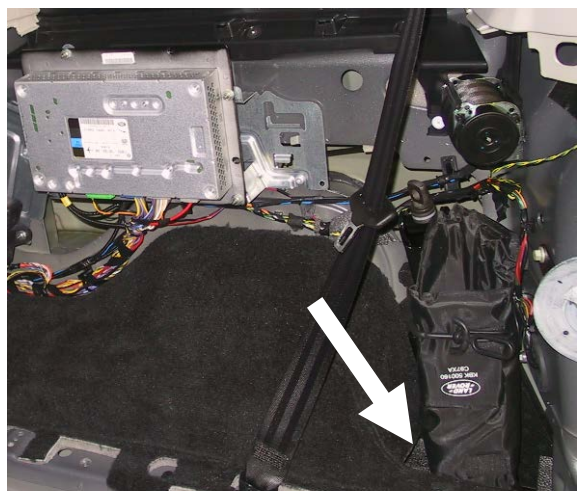
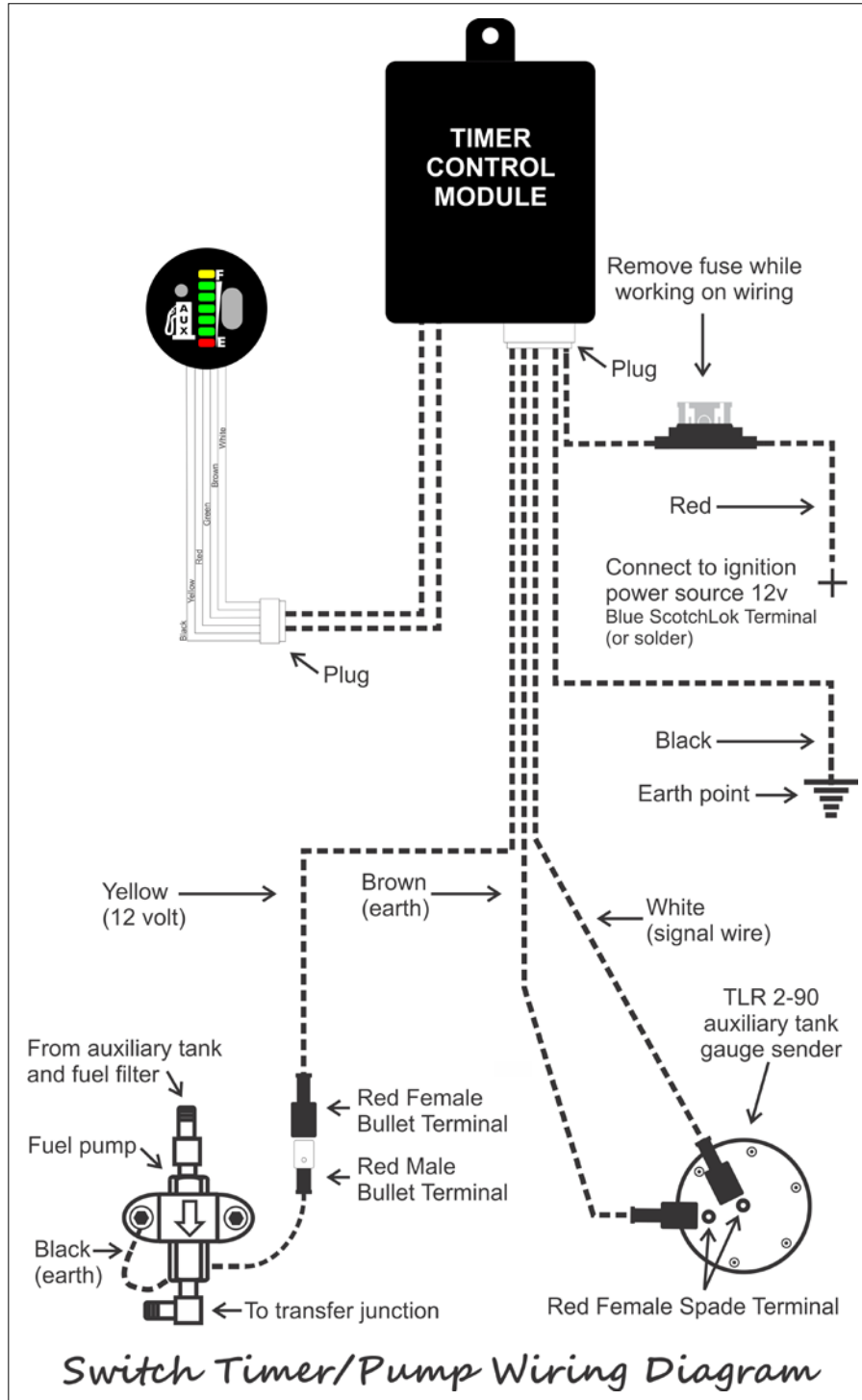


Photo 6: Wiring through floor



Photo 7: Fuel cap mods

REFERENCE DRAWING



Switch drilling template (2008 model)

Cut out to mark position

