



INSTALLATION INSTRUCTIONS FOR AN AUXILIARY TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY



Nissan Y62

All V8 petrol models

TA88SP – AUXILIARY 80-LITRE TANK
TA88LP – AUXILIARY 152-LITRE TANK

GENERAL NOTES

- Take a few minutes to read through this installation guide before proceeding.
- Fitting time is approximately 5.5 hours for the tank with an experienced tank installer.
- This tank fits behind the rear axle, (the spare wheel needs to be relocated).
- This LONG RANGER tank is filled via a “twin filler”. Fuel is transferred as required to the original tank via an electric fuel transfer pump.
- The lowest point of the LONG RANGER tank is higher than the diff and within the standard departure angle.
- A vehicle hoist is not essential but will speed the job up significantly.
- Check that tools, clothing and footwear are clean before working on the interior of the vehicle.
- LONG RANGER tanks are coated with a high-performance primer/topcoat. For added protection, an additional 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.

Special tools: An electrical crimping tool, metal cutting equipment, drill, fuel sealant and 20mm step drill or hole saw.



INSTALLATION KIT TA88

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

- 1 LONG RANGER TANK (**TA88S or TA88L**)
- 1 TA88FN1 (Dual filler junction)
- 1 TA88FN2 (38mm Filler pipe)
- 1 Fuel pump mount #**TA88PM**
- 1 Front chassis mount for tank #**TA88B1**
- 1 Rear chassis mount for tank #**TA88B2**
- 1 Bolt M10 x 25mm tag bolt #**SF11** (front tank mount to cross member)
- 1 Bolt M8 x 20mm tag bolt #**SF22** (rear tank mount to cross member)
- 6 Bolt M10 x 40 (front and rear tank mounting)
- 6 Flat washers M10
- 7 Spring washer M10
- 1 Plain nuts M10
- 8 Bolt M8 x 30 (mounting brackets to chassis)
- 9 Flat washers M8
- 8 Spring washer M8
- 1 Self-locking nuts M8
- 4 Bolt M6 x 16 (TLR carbon canister mounting)
- 2 Self-locking nuts M6
- 6 Flat washers M6
- 2 Spring washer M6
- 2 Bolts M5 x 20 (pump mounting)
- 2 Flat washers M5
- 5 M4 x 8 screws (sender unit).
- 6 Hose clamps HS24 (Filler)
- 1 Hose clamps HS20 (OEM Filler)
- 2 Hose clamps HS08 (16mm hoses)
- 2 Hose clamps MH6 (12.5mm hoses)
- 10 Hose clamps MH4 (6.6mm and 8mm hoses)
- 2 Brass fittings 1/4 BSP x 8mm straight (for canister)
- 1 Brass fittings 1/4 BSP x 8mm elbow (Auxiliary pickup)
- 1 Electrical Power Take Off (ELPWRQTMICRO2 – Würth # **54411-10**)
- 1 5amp midi fuse (#**52505**)
- 1 Terminal red male bullet connector
- 1 Terminal red female bullet connector
- 2 Terminal red female spade connector
- 1 Terminal red M5 eye
- 10 Cable ties 200mm
- 10 Cable ties 300mm
- 1 Convoluted tube, 7mm x 100mm long
- 1 Switch/Gauge timer module with wiring loom (Either #**TA88SELSWGA402-B** or #**TA88LELSWGA405-E**)
- 1 Switch/Gauge LED 24mm round (**ELSWGATIMER12V01B**)
- 1 Fuel pump 12-volt # **ELFUPU12V05** (#**FP020**)
- 1 Fuel level sender unit, #**ELSETLR2-90TA88S or TA88L** (factory modified)
- 1 Fuel filter in-line 8mm # **Z14**
- 1 Carbon canister TLR #**CC01**
- 1 Fuel filler hose, 38mm ID (#**TA70DFH1**)
- 1 Fuel hose 16mm ID x 300mm (OEM fast fill breather)
- 1 Fuel hose 12.5mm ID x 1000mm (aux fast fill breather)
- 1 Fuel hose 8mm ID x 900 o(aux pickup to filter)
- 1 Fuel hose 8mm ID x 150mm (filter to pump inlet)
- 1 Fuel hose 8mm ID x 450mm (transfer hose, pump outlet to filler)
- 1 Fuel hose, 8mm ID x 400mm long (TLR canister to OEM canister)
- 1 Fuel hose, 6.5mm ID x 1000mm long (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 TA88 owner operating manual

INSTALLATION GUIDE

1. Verify the correct tank for your model has been ordered.
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. **IMPORTANT:** *The Nissan is fitted with SRS Air Bags. Exercise EXTREME CARE when working on the electrical system*
5. **Refer to photo 1:** Locate a suitable position for the switch and drill 20mm hole.
Note: We recommend consultation with the vehicle's owner if there is any doubt about the placing of the switch. Please ensure there is clearance behind the panel before drilling, Dash layout can vary in different counties and can change without notice so current picture may not represent what you have
6. Remove panel below steering column and mount timer module under dash in suitable location (black box).
7. **As per wiring diagram and photo 1:** Connect earth to earth stud under dash. Connect red power wire to and ignition source, We have supplied a power take off unit to use in fuse box. Confirm it is a 12-volt ignition power source.
Note: leave all trim panels off till finished of job.
8. Neatly fasten all wiring under dash to prevent chafing. Protect wiring where necessary with sheathing.
9. Run harness though rubber grommet on RHS firewall and continue cable along chassis rail and over rear diff cross member.
10. Remove spare tyre from under the vehicle.
11. Raise vehicle to a convenient height and remove the rear LHS wheel and inner guards, both metal and fabric.
12. Remove the filler neck assembly, *Note will need to cut lower hose clamp.*
13. Remove spare wheel winch and associated keepers.
14. **Refer to photo 2 and diagram:** Mount the front and rear mounting brackets to chassis with M8x 30 bolts, flat and spring washer supplied.
Note: The front bracket has the spacer.
15. **As per photo 3 & plumbing diagram:** Mount

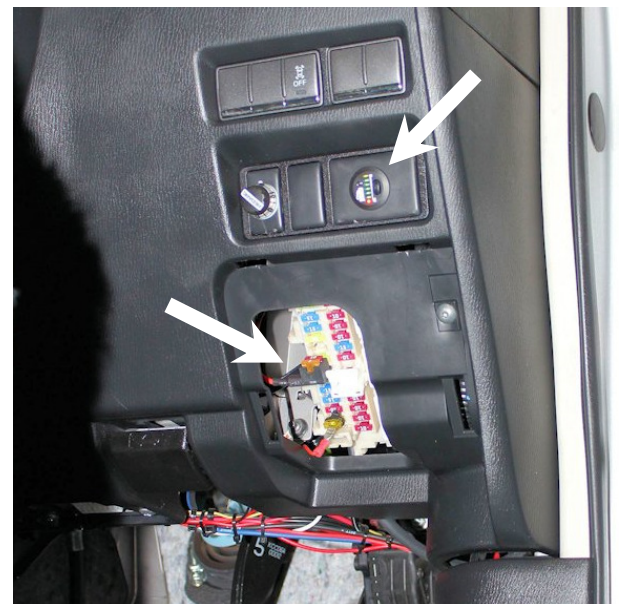


Photo 1: Switch location and fuse

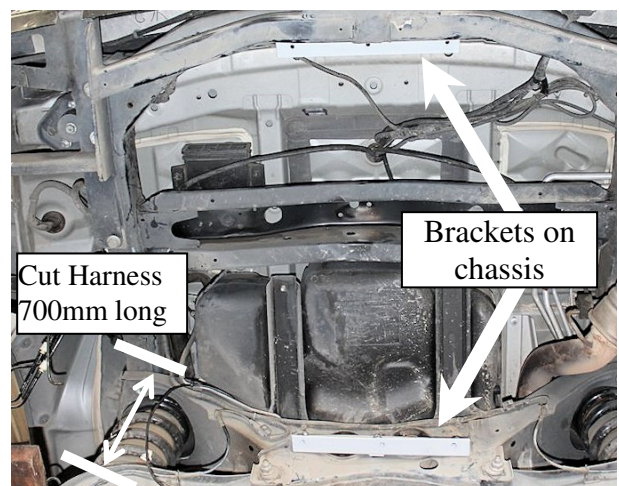


Photo 2: Brackets and wiring

the carbon canister to tank with M6 fasteners supplied and fit 2 brass ¼ bsp x 8mm straights to canister, note the air flow direction through canister is not important.

16. **As per photo 3 & plumbing diagram:** Fit brass ¼ bsp x 8mm elbow to front of tank and fit 8mm x 900 hose with MH4 clamp supplied, *Note direction of barb is vertical.*

17. **As per photo 3 & plumbing diagram:** Remove 8mm OEM canister vent line from EOM canister and fit to new longranger canister inlet.

18. **As per photo 3 & plumbing diagram:** Fit new 8mm x 400 canister link hose to new longranger canister outlet.

19. **As per photo 3 & plumbing diagram:** Fit new 12.5mm x 1000 hose to longranger fast fill breather.

20. **As per photo 3 & plumbing diagram:** Fit new 8mm x 900 hose to longranger fast fill breather.

21. **As per wiring diagram and photo 2 & 5:** Terminate the wiring for sender unit. Trim harness to 700mm from last cable tie and strip back sheathing 600. Cut the white and brown wires 300mm from cable tie to suit sender unit and fit two spade terminals.

22. Install the fuse, test the sender with a multimeter, it should read 2-90 ohms, temporarily connect the sender, set sender to full and ensure all green lights illuminate when ignition is turned on, you can also move the float arm and watch the gauge go down after waiting a minute or cycle the power from “Off” to “On” to get an instant reading after moving sender to new position. If the gauge is not working at this point resolve any wiring issue before proceeding.

23. **As per photo 3:** Fit sender unit to tank with screws and gasket supplied. This has been set-up in our factory and when held on side of tank should be just off the bottom when on empty. This will only fit in one position which should have the float will aiming to the rear of tank, verify this will avoid baffles and internal pipes etc. .

24. Lift tank into position, passing hoses over chassis rail and secure with supplied M10 fasteners, bolts, flat and spring washers.

25. **As per photo 4:** Cut template out from back page, mark and drill M6 holes and mount new dual filler in place. *Note: Ensure printed scale is correct.*

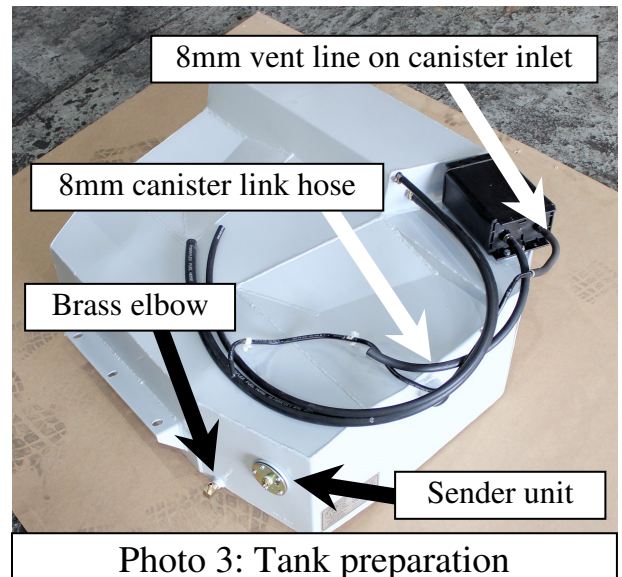


Photo 3: Tank preparation

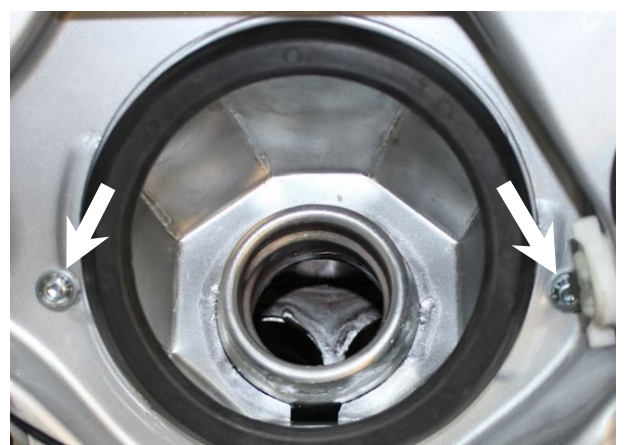


Photo 4: Fitting components to tank

26. **As per photo 5:** Cut filler neck as marked, deburr all sharp edges and fit to vehicle.
27. **As per photo 6:** Using the TA70DFH1 and steel filler pipe cut the rubber hose in suitable places to join both tank fillers to the new twin filler panel using HS 24 clamps supplied.
28. **NOTE:** *To ensure trouble-free performance when re-fuelling, the following principles must be applied with respect to fuel hoses. Ensure that there are no kinks, and no pinched or drooping sections. Ensure the filler and breather hoses have a steady and consistent gradient throughout their full length, with no low points where fuel could lie and hinder airflow during filling. Ensure there is adequate clearance between all hoses and moving vehicle components. Do not over tighten cable ties and squash hose*
29. **As per photo 6:** Fit pump using small bracket supplied and bolt to bracket on inner guard using M5 bolts supplied with outlet towards front of tank, connect earth to one of the bolts with eye terminal supplied. *Note: fuel flow will be aiming up.*
30. Connect wiring to pump and sender unit, install fuse and test pump works.
31. **As per photo 6 & plumbing diagram:** Connect all remaining hoses to filler assy.
32. **As per photo 6 & plumbing diagram:** Fit filter and hoses to pump and filler neck with MH4 clamps.
33. Cable tie all in place including plumbing and wiring and area over.
34. Refit inner guard wheel.
35. Fit switch into hole, replace all trim and tidy area from fingerprints and off cuts of wire.
36. Place the owner's information pack on the passenger's seat.

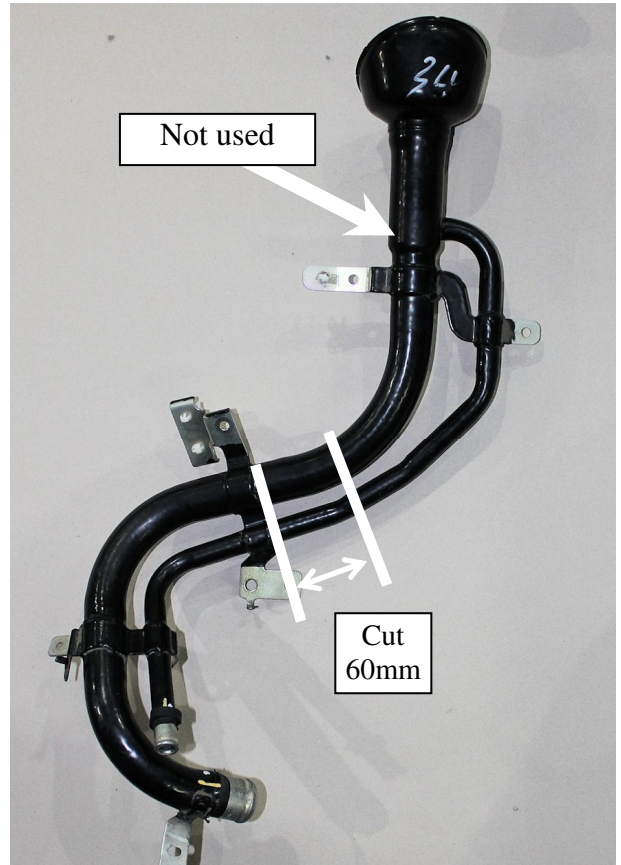


Photo 5: Cut OEM filler neck

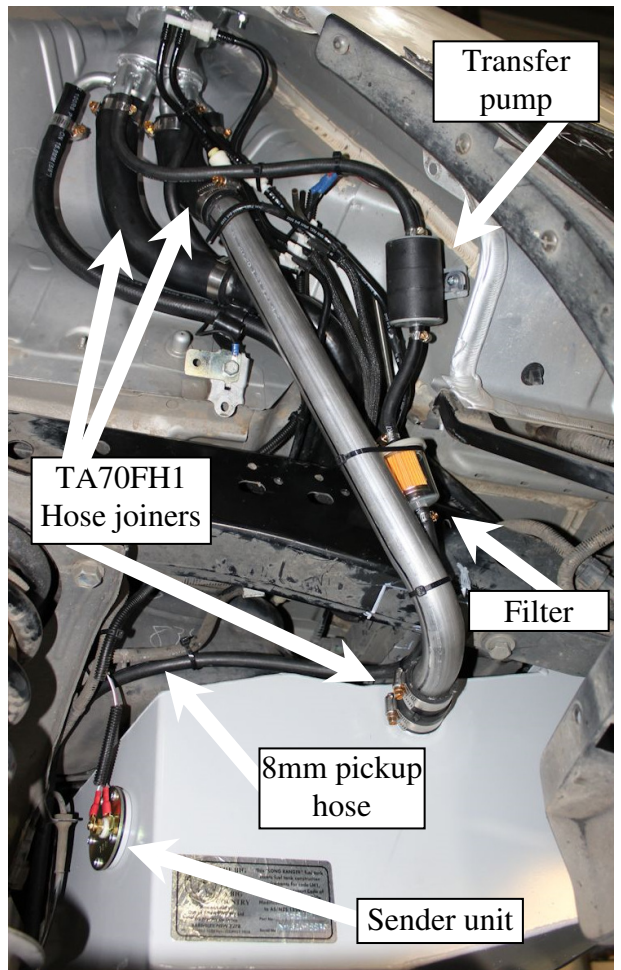
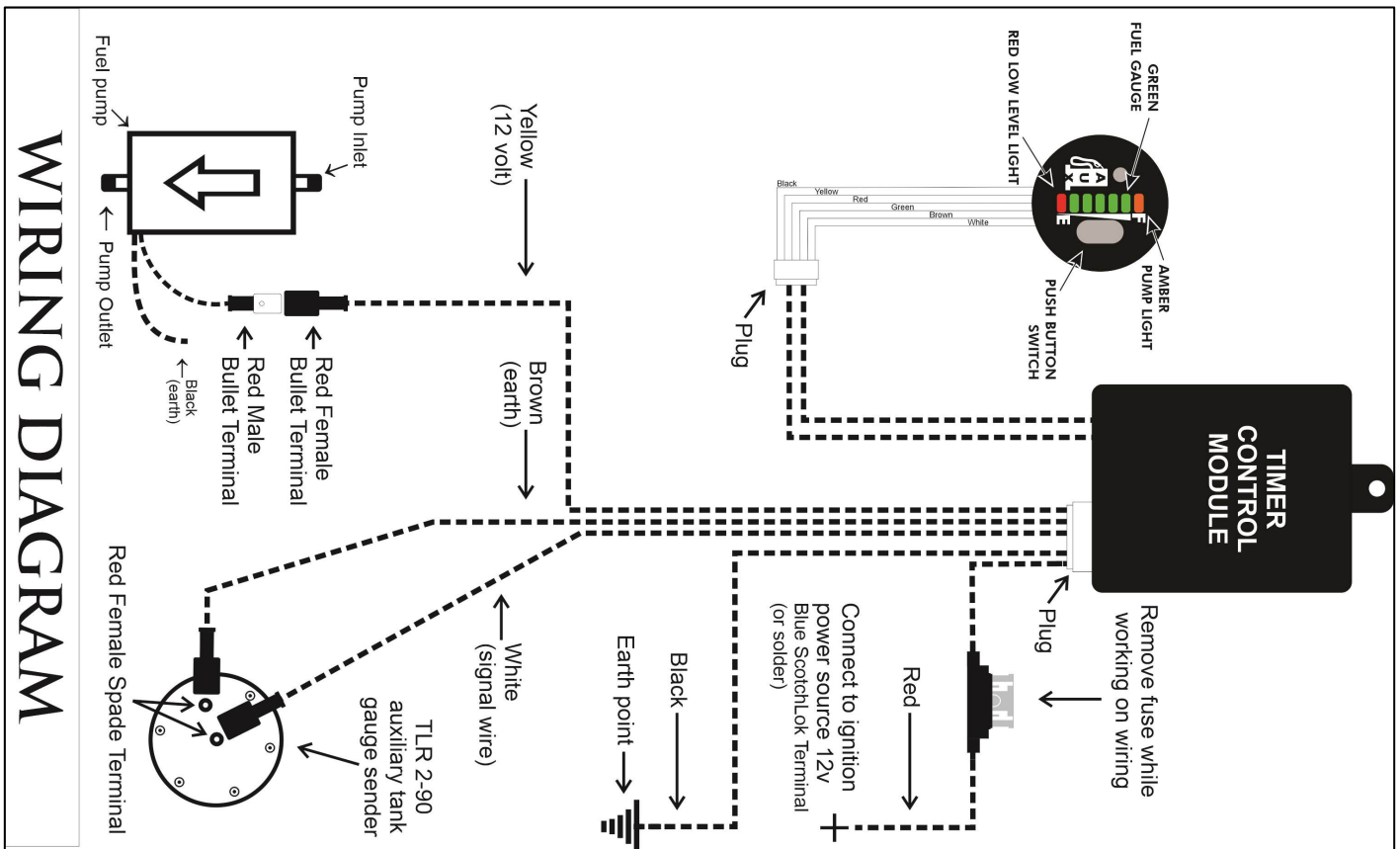
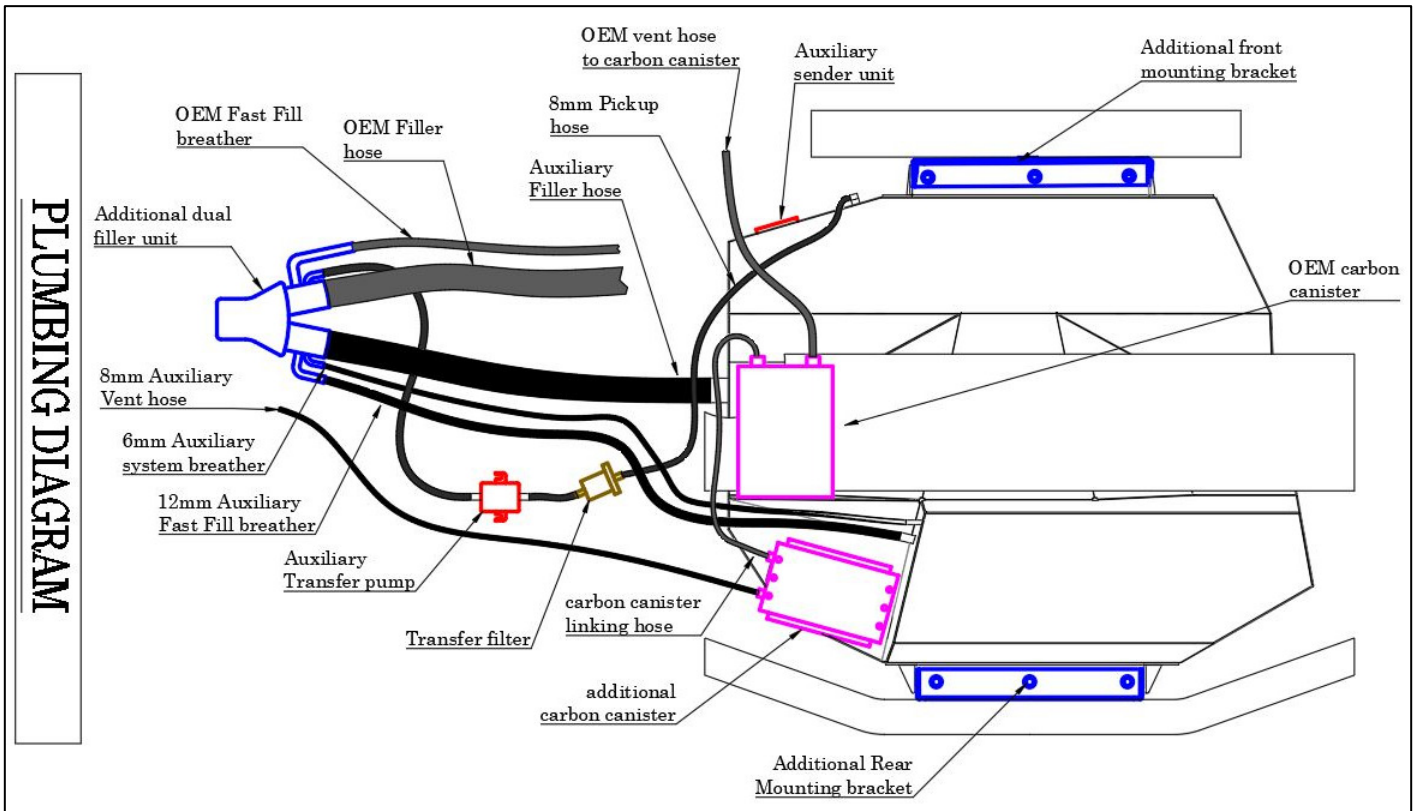
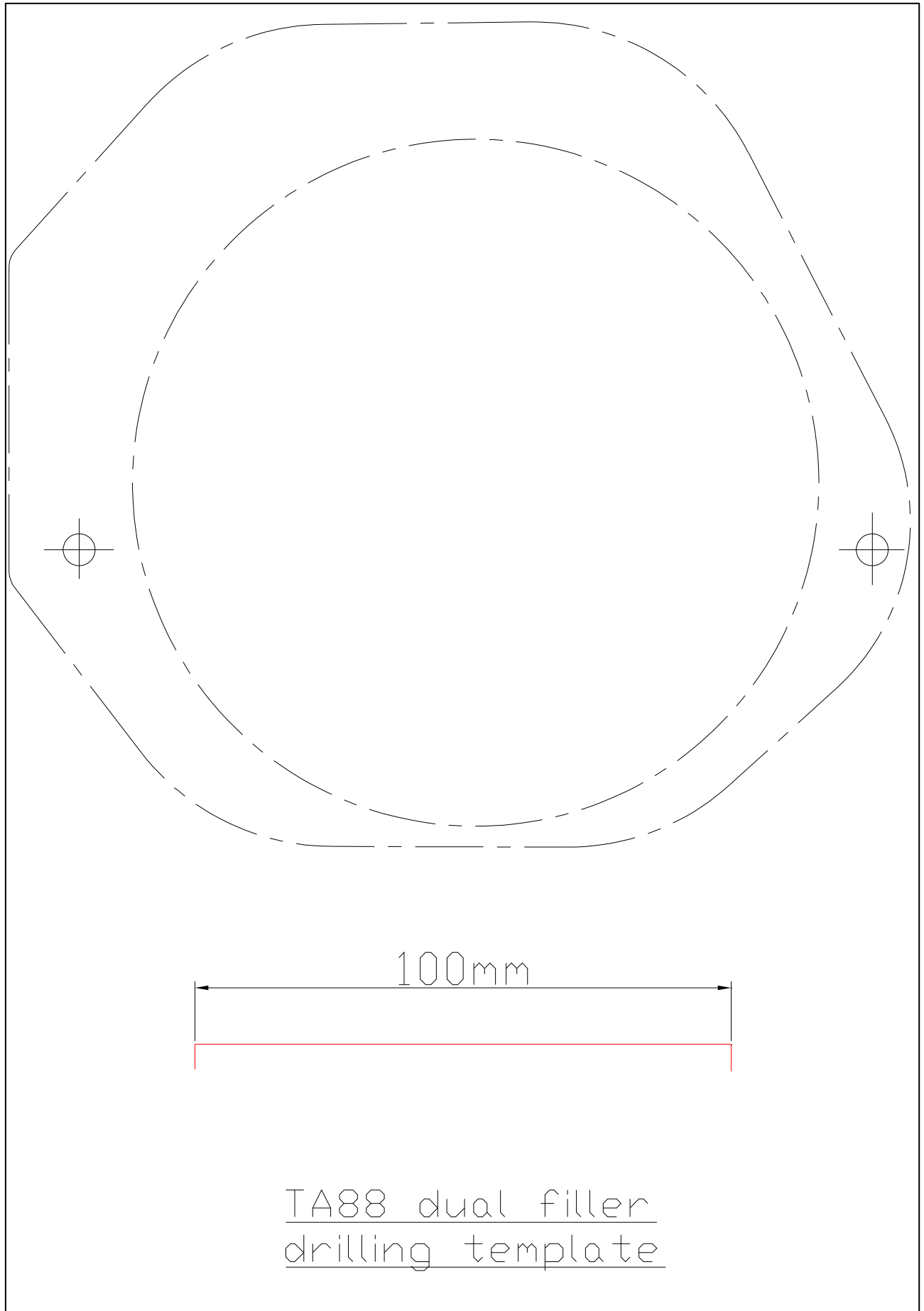


Photo 6: Filler and Plumbing

37. 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).

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





TA88 dual filler
drilling template