INSTALLATION INSTRUCTIONS FOR A REPLACEMENT TANK

THE LONG RANGER

THE BIG TANK FOR A BIG COUNTRY

MADE IN AUSTRALIA

2021 Diesel Isuzu Dmax/Mazda BT-50

TR88L 143lt
TR88S 126lt

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.

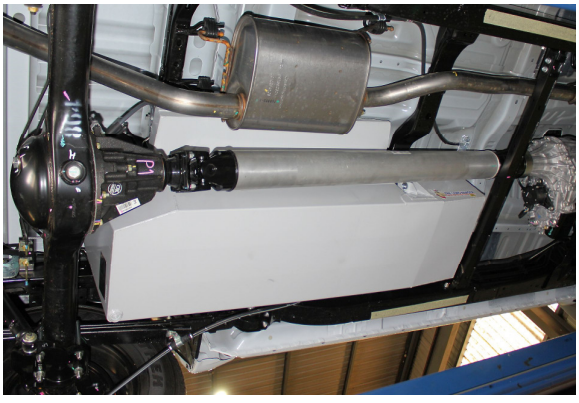
d) Check if the vehicle owner wants to retain the original tank and any associated parts.

e) 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.

f) This installation replaces the standard 76lt with either the #TR74S 126lt (flush with chassis) or the #TR74L 143lt tank (45mm below chassis) improving capacity by 59% or 79% respectively.

g) The trip meter distance to empty (DTE) will no longer work as intended by the manufacturer. It is estimated that 60% or 80% should be added to the DTE to calculate the approximate driving range. We recommend these figures be cautiously interpreted until the user becomes familiar with the larger tank.

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





INSTALLATION KIT TR88

QTY DESCRIPTION

- ❑ 1 LONG RANGER Tank **#TR88L** (44 KG) **#TR88S** (41 KG)
- ❑ 1 Plastic bag 550mm long
- ❑ 1 Rollover valve **#VAROLL07** (*Factory fitted in top of tank).*
- ❑ 1 Rollover valve grommet **#VAROLL08** (*Factory fitted in top of tank).*
- ❑ 1 Clamp ring **#TR57CR**
- ❑ 1 M5/M10 Tag Nut #SF24 (Rear left mount)
- ❑ 1 M8 Tag Bolt #SF08 (Front left mount)
- ❑ 1 M10 Tag Bolt #SF14 (Front right mounting)
- ❑ 1 M10 U Bolt #FAUBOLTTR72 (80Lx67W rear right mounting)
- ❑ 8 Screw M5 x 12mm (clamp ring)
- ❑ 1 Bolt M5 x 20mm (rear left tag nut mounting)
- ❑ 1 Flat washer M5
- ❑ 1 M8 Flat Washer
- ❑ 1 M8 Spring Washer
- ❑ 1 M8 Plain Nut
- ❑ 1 Bolt M10 x 30mm (rear LH mount)
- ❑ 6 Flat washers M10 x 30 x 2.5mm
- ❑ 1 Spring washer M10 (rear LH mount)
- ❑ 3 Self-locking nuts M10 (Ubolt, rear right mounting)
- ❑ 8 Cable tie 5mm x 300mm
- ❑ 1 Fuel Filter #FS-7911 (tank breather)
- ❑ 3 Hose clamp MH4
- ❑ 4 Hose clamp MH6 (fuel pickup)
- ❑ 1 Fuel hose 8mm x 550mm (Engine return hose)
- ❑ 1 Fuel hose 13mm x 550mm (Engine pickup hose)
- ❑ 1 Fuel hose 6.5mm x 900mm (Rollover Valve)
- ❑ 1 Fuel hose 13mm x 280mm (Link Breather)
- ❑ 1 Fitting instructions
- ❑ 1 Warranty information sheet and return card
- ❑ 1 LONG RANGER sticker
- ❑ 1 Owner's manual update sticker

INSTALLATION GUIDE

1. Take a few minutes to read through this installation guide before proceeding.
2. Check that all items listed in the Long Ranger kit have been received, and that nothing has been damaged in transit.
3. 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.
4. 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 email fitting@thelongranger.com.au Our web page also contains an FAQ , so some of your questions may already be answered.
5. Apply the owner's manual update sticker: ….
6. Remove the LH inner guard. Disconnect filler, filler breather from filler neck.

7. Raise vehicle disconnect pickup & return lines at front of tank.
8. Support tank and remove 2 x tank straps.
9. Lower tank approx. 200mm, disconnect the wiring harness from pickup unit and complete tank removal.
10. Clean around pickup unit and remove from original fuel tank. WARNING: Cleanliness and care in handling the fuel pickup unit is essential. Contamination or rough handling may damage the unit.
11. **As Per Photo 2 & 3:** Bend float arm using picture as a template, check the 5mm gap .
12. **Refer to Photo 1**: Carefully fit the pickup unit and O Ring using the new screws and clamp ring supplied. Fit fuel lines to sender unit. ***NOTE:*** *The unit can only be fitted in one orientation with the fuel lines aiming forward, ensure the float does not foul on internal baffling.*
13. **As Per Photo 1 and 4**: Fit new fuel pickup and return hoses. This is done by cutting the hard plastic hose away from the quick disconnect fitting to expose the barb, fit new hose and clamps to sender unit. *Ensure not to damage barbs*.
14. **Refer to Photo 1**: Transfer the filler and fast fill breather to the new tank. *Retain the same orientation*.
15. **Refer to Photo 1**: Fit new hose to rollover valve.
16. **Refer to Photo 1**: Fit one end of the front ½" link breather to main tank body.

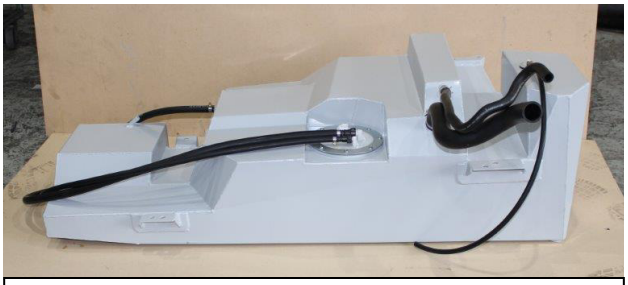


Photo 1: Tank Preparation

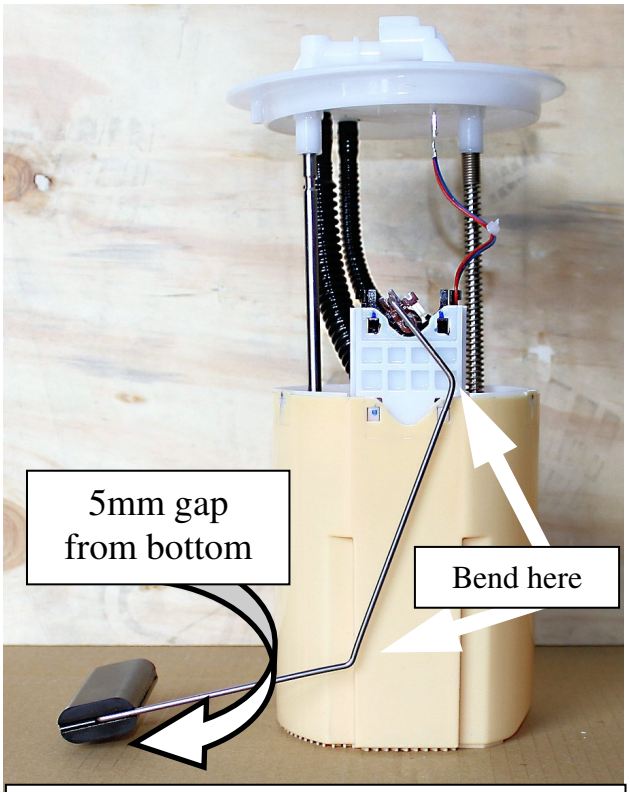


Photo 2: Bend float arm

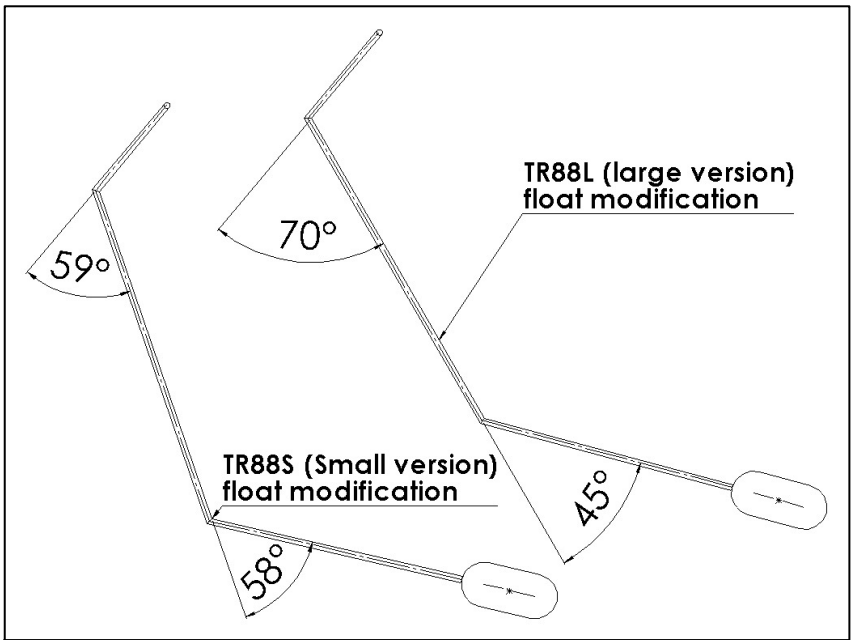


Photo 3: Bend float arm

17. **As per photo 5**: Insert SF24 M5/ M10 tag bolt into oval hole at rear LHS mount. Temporarily fit the M10 bolt first, then fit the M5 bolt and washer to secure in place, now remove the M10 bolt ready for future step.

18. **As per photo 6 & 7:** Bend M8 tag bolt SF08 and insert into front left hand side mount, go over chassis into cross member and into front hole.
19. **As per photo 8**: Insert SF14 M10 tag bolt into rectangle hole on front RHS mount and rotate 90deg clockwise, leave in place ready for future step.
20. **As per photo 8**: Sit U Bolt in place over cross member for rear RHS mount.

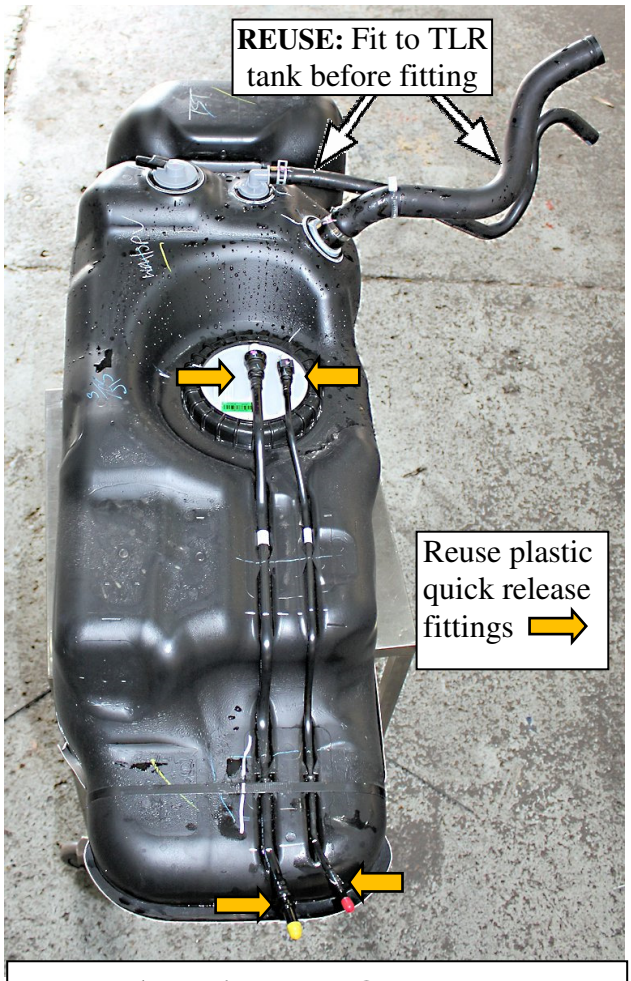


Photo 4: Reuse OEM parts

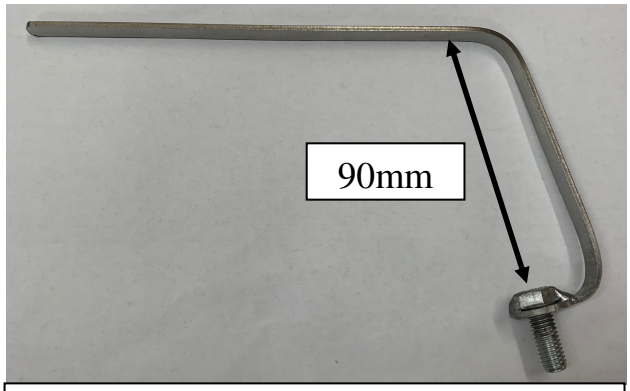


Photo 6: Bend tag bolt

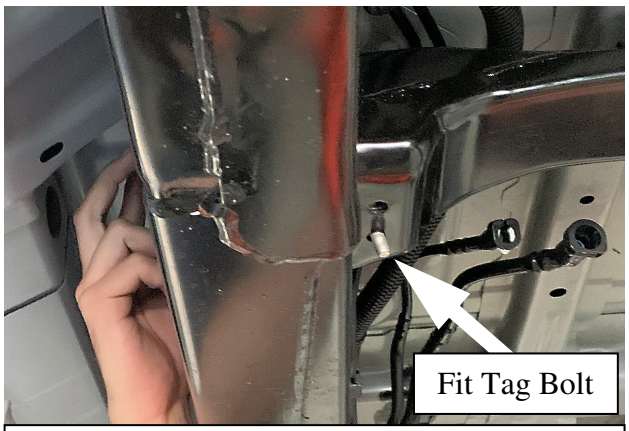


Photo 7: Fit tag bolt

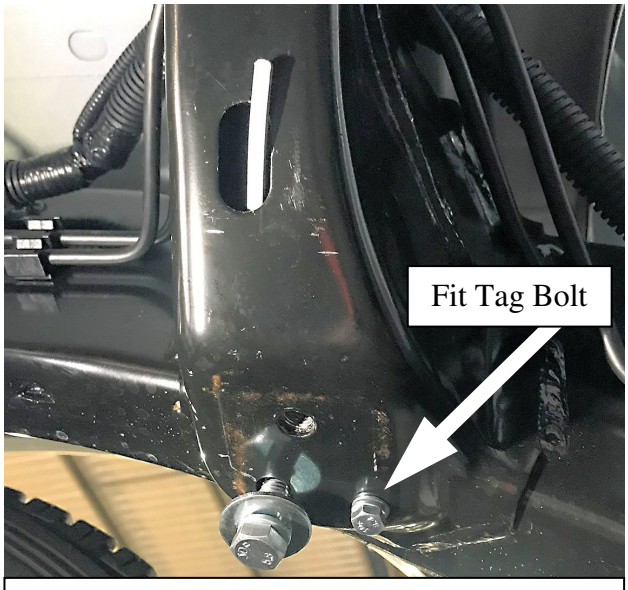


Photo 5: Fit Tag Bolt

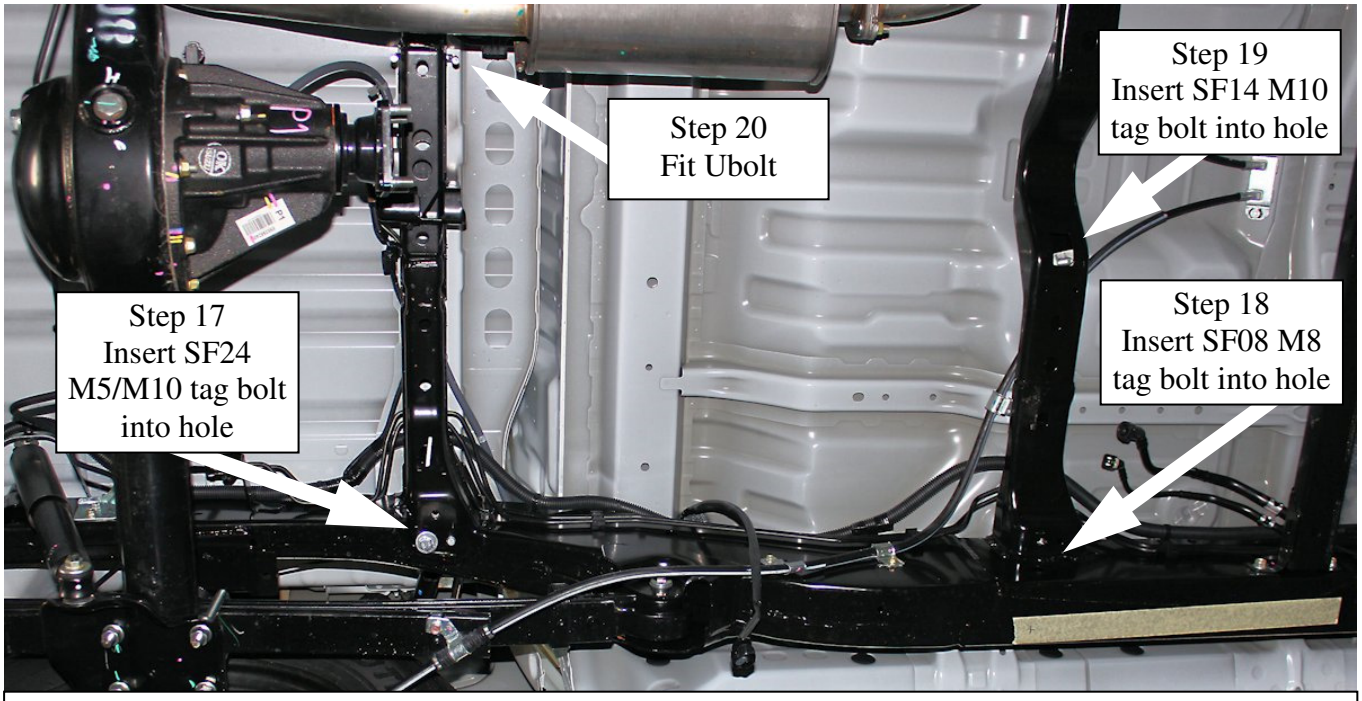


Photo 8: Preparing tank space

21. Remove the tail shaft.
22. Lift the Long Ranger tank into position, while doing this connect the pickup unit's wiring and plumbing, feed filler and breathers up through inner guard over chassis, then feed two fuel lines over front cross member. Support tank in place and loosely fit original bolts in LHS mounts with new M10 washers then loosely fit U-bolt with M10 x 30 washers and nyloc nuts to rear RHS then M10 nyloc and washer for front RHS mount, fit supplied M10 bolt flat and spring washer to LH rear mount, lastly fit supplied M8 nut, flat and spring washer to LH front mount
23. Tighten all tank mounting bolts, check for clearance all around, check that brake lines, electrical harness and hoses will not chafe on tank.
24. Fit front ½" link breather.
25. Refit tailshaft.
26. Connect filler and filler breather to fill neck. *<u>IMPORTANT:</u> Ensure there are no low points in the fast-fill breather where fuel can lie. Liquid trapped in breather hoses may cause slow filling*.
27. **As per photo 4**: Run system breather up along filler neck and fit filter to end of hose with outlet aiming down while securing with cable ties to filler neck.
28. Check that all bolts and hose clamps are tensioned correctly.
29. Refit inner guard.

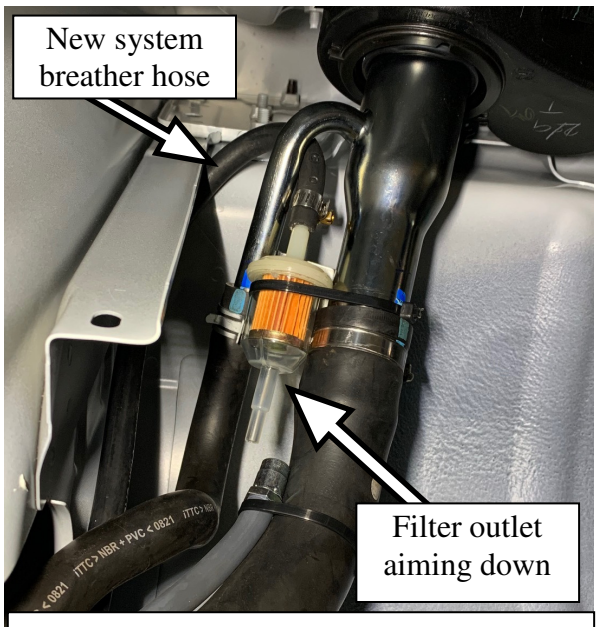


Photo 8: System breather

30. Transfer the fuel removed earlier to the new Long Ranger tank.
31. 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).
32. 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*. The top half of the new tank is bigger than the bottom half.

c) The trip computer with distance to empty (driving range) 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 DTE will be approximately 81% greater with a 143lt tank fitted and approximately 61% greater with a 126lt tank installed.

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.

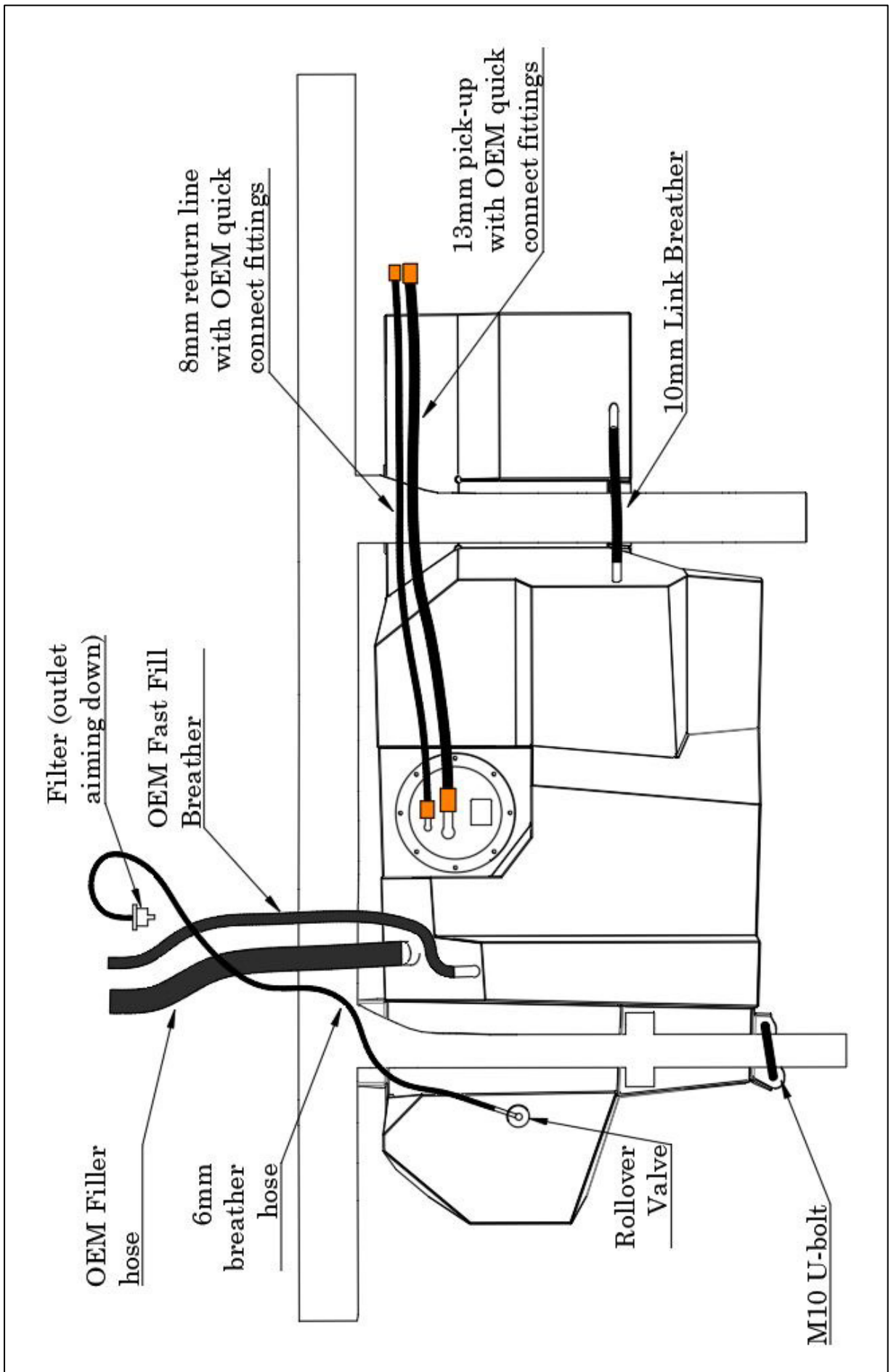
f) The LONG RANGER tank is a premium quality accessory that will provide many years of satisfactory service provided that the Care and Maintenance items listed below are taken care of each time the vehicle is serviced.

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 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, 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.



Plumbing Diagram