



## Installation Instructions for LDR2 Landrover Discovery Series 2 150lt Replacement Tank

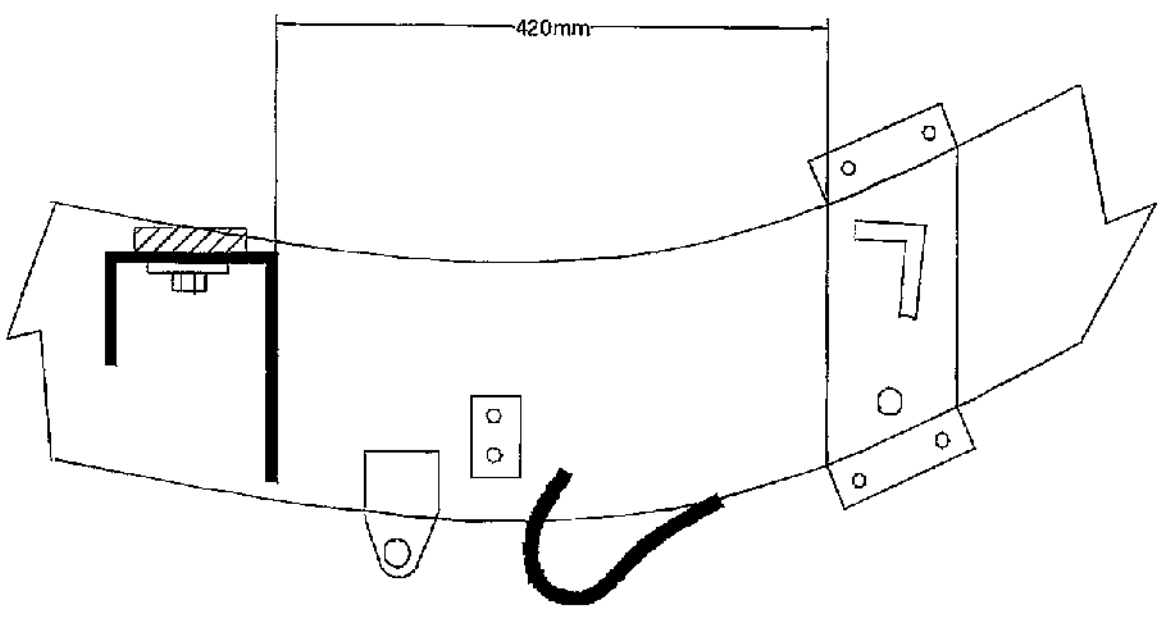
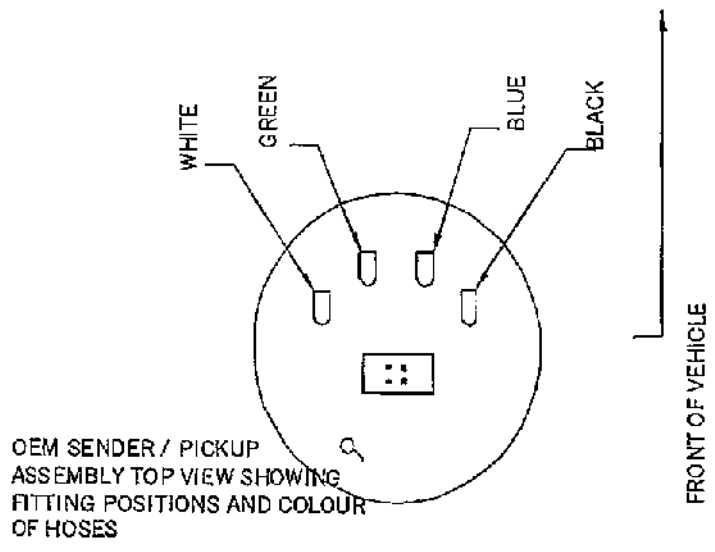
\*This 2 part tank system consists of main tank fitting between chassis rails replacing the original tank which houses the fuel pump and gauge sender assembly. The second part of the system is a 1/4 panel tank that provides the extra capacity. It fills via a spill over method and is connected via filler hose, air balance hose and a fuel transfer hose at the base of both tanks.

1. Lift floor mats in rear of vehicle over fuel tank (note for ease of lifting floor covering, cutting mat carefully at the corners at the rear of vehicle may be required - use own discretion). Disconnect fuel lines and wiring plug from sender/pump assembly, remove assembly from tank being careful not to spill fuel inside vehicle and siphon out any fuel from fuel tank into temporary storage containers.
2. Remove tow bar, disconnect fill hose and fast fill hose, disconnect vent hose from filler assembly, remove OEM fuel tank and associated mounting brackets and straps, disconnect earth lead from floor pan and cut stud back flush with floor. Reconnect earth lead to body seam near filler assembly using M6 x 16 bolt and washer. Mark position for front 1/4 panel tank bracket chassis as per diagram. Then slip C section of bracket over chassis rail with small gusset pointing to ground and bracket flanges flush with the outside of chassis face. Bolt outrigger section of bracket on using 4 x M8 x 20 bolts, Nyloc nuts and washers provided then drill 10mm hole through chassis and fit M10 x 100 bolt and washers. Fit rear 1/4 panel bracket to very end of chassis using M8 x 20 bolts and Nyloc nuts.
3. Remove OEM fast fill hose from tank, shorten by 145mm and refit to filler assembly. OEM vent hose coupling will need to be refitted, cut plastic hose from coupling and refit coupling to filler assembly. Later main tank vent will reconnect via rubber hose supplied to this point.
4. Carefully remove float arm from sender assembly extend lower section of float arm by 65mm using 2.5mm rod supplied, rod is 85mm long to allow for 10mm overlap. Be sure to extend lower section of float arm to allow float arm to reach to full in tank and not affect the empty then refit float arm to sender. Locating tag on top of pump

assembly near seal surface needs to be removed and filed smooth, discard OEM pump assembly seal. Fit pump/sender assembly to tank using O-ring supplied as seal and lock down in place using locking ring and M5 cap screws and washers. Ensure base of pump sits correctly into locator in base of tank.

5. Fit P3 1/2 x 1/4 straight barb to socket near fast fill barb, check float arm travel in tank to ensure float doesn't foul on anything, fit rollover valve supplied to vent hole in top of tank. Using rubber grommet, fit 8mm fuel hose to rollover valve and fit main tank to vehicle and tighten all mounting bolts. Fit shortened OEM fast fill hose to main tank, fit 340mm length of 1/2" breather hose to brass fitting on main tank and fit 220mm length of fill hose to tank. Tighten all hose clamps. These cannot be accessed later when 1/4 panel tank is fitted.
6. Refit tow bar, remove right hand rear wheel, and bend dog ear metal section of mud flap forward and back on to itself to gain access to work area. Lift 1/4 panel tank into position and fit nyloc nuts to rear mounts while tank is still loose on rear mounts. Connect fill hose from main tank to 1/4 panel tank. Connect 1/2 vent hose to 1/4 panel tank. Remaining fill hose can now be connected. Lift front of 1/4 panel tank up to mounting bracket. Square tank up and drill holes in bracket. 1/4 panel tank mounts can now be tightened up and filler hose clamps tightened. Bend mud flap back to its original position and refit wheel.
7. Fuel transfer hose can now be fitted by installing remaining 1/2" x 1/4 straight barb fittings and 1/2" hose fitted to sockets opposing each other in both tanks. Fit transfer hose shield to gusset previously mentioned.
8. Reconnect fuel hoses and wires to pump assembly. Refit interior trim. Fill with fuel and check for leaks.

NOTE: Quality sealer should be used on all fittings e.g. permatex 3J



INLDS2R01
DISCOVERY SERIES 2
150 Lt REP TANK



## FITTING KIT CONTENTS LDR2

Bolts / Nuts	Misc Parts
<ul style="list-style-type: none"> <li>○ 1 x M10 x 100 Bolt</li> <li>○ 1 x M10 Nyloc Nut</li> <li>○ 2 x 3/8 x 1 1/4 Flat Washers</li> <li>○ 8 x M8 x 20 Bolts</li> <li>○ 10 x M8 Nyloc Nuts</li> <li>○ 12 x 5/16 x 3/4 Flat Washers</li> <li>○ 6 x 5/16 x 1 Flat Washer</li> <li>○ 3 x M6 x 16 Bolts</li> <li>○ 2 x M6 Nyloc Nuts</li> <li>○ 5 x M6 Flat Washers</li> <li>○ 6 x M5 x 8 Cap Screws</li> <li>○ 6 x M5 Flat Washers</li> </ul>	<ul style="list-style-type: none"> <li>○ 1 x Discovery Rollover Valve c/w Grommet &amp; Sleeve</li> <li>○ 1 x Secondary Bracket (Front 2 Piece)</li> <li>○ 1 x Secondary Bracket Rear c/w M8 x 25 Bolts Welded On</li> <li>○ 1 x Transfer Hose Shield</li> <li>○ 1 x Pump Hold Down Ring</li> <li>○ 1 x 2.5mm Rod 85mm Long (To Extend Float Arm)</li> <li>○ 1 x BS7349 O'ring</li> </ul>
Hose Clamps	Brass
<ul style="list-style-type: none"> <li>○ 4 x 2" Hose Clamps</li> <li>○ 2 x 5/8" Hose Clamps</li> <li>○ 4 x 1/2" Hose Clamps</li> <li>○ 2 x 1/4" Hose Clamps</li> </ul>	<ul style="list-style-type: none"> <li>○ 3 x P3 1/2 x 1/4 Straight</li> <li>○ 1 x P6 1/2 x 1/4 Elbow</li> </ul>
Hose	Instructions
<ul style="list-style-type: none"> <li>○ 1 x 50mm Hose @120mm Long – (Neck to 1/4 Panel Tank)</li> <li>○ 1 x 50mm Hose @200mm Long – (Main Tank to 1/4 Panel Tank)</li> <li>○ 1 x 1/2" Hose @340mm Long (Top Air Balance)</li> <li>○ 1 x 1/2" Hose @85 Long (Fuel Transfer)</li> <li>○ 1 x 8mm Fuel Hose @950mm Long (Vent Hose)</li> </ul>	<ul style="list-style-type: none"> <li>○ 2 x Pages Fitting Instructions</li> <li>○ 1 x Page Fitting Kit Contents</li> <li>○ 1 x Diagram # INLDS2R</li> </ul>

Kit Packed By \_\_\_\_\_

Kit Checked By \_\_\_\_\_