

Installation Instructions for RRALR <u>Range Rover Carby/EFI</u> <u>45L Auxiliary Sill Tanks - Pair</u>

These sill tanks fit underneath the left and right hand sills of the vehicle. They each have their own filler neck and can be filled from both the left and right hand rear wheel arches respectively. The system operates via a fuel transfer System where by the fuel is pumped from either tank back to the main tank via an electric fuel transfer pump. Each sill tank has its own fuel level sender. Connected to one new dash fuel gauge. The way the system is wired the new dash fuel gauge will always show the level of the right hand tank. By turning on the fuel transfer pump you are able to pump from the right hand tank into the main tank. By turning on the second switch this has two purposes: **1**. It shows the fuel level of the left hand sill tank on the new dash gauge. **2**. It allows the pump to transfer fuel from the left hand sill tank into the main tank.

- 1. Carry out electrical wiring as per wiring diagram. Running sheathed cable to the rear of the vehicle for the connection of both left and right hand fuel tank sender units, solenoid valve and fuel transfer pump.
- 2. Check the underside of the floor pan above the sill tank location for any screws or bolts that protrude through and would foul or rub on the top of the tank. Bend the vertical metal flange flat out of the way. Be careful with the pipes in this area.
- 3. Remove the lower gearbox crossmember bolt and fit front inner tank mounting bracket. Measure 480mm to the rear from this bolt and drill hole at the same height as the gearbox crossmember bolt. Fit the rear inner tank mounting bracket.
- 4. Fit fuel sender unit to tank. 6mm hose barb fitting into top of the filler neck. 12mm hose barb straight fitting into the socket in the underside of the filler neck. 8mm hose barb elbow into fuel pick up and plug into fitting next to fuel pick up. 12mm hose barb elbow goes in the socket at the top of the tank pointing towards the rear.
- 5. Lift tank into position (don't forget to connect the sender unit wire and earth). Secure tank to front and rear inner brackets. Leaving a minimum of 5mm clearance at the front of the tank to the sill edge of the body. Level tank left to right and secure front and rear of tank to chassis out riggers with 50 x 50mm angle brackets.

- 6. Fit the solenoid and fuel transfer pump into place and complete wiring and connection of all hoses and fittings. Mount filler necks using M6 bolts and nuts provided then connect fast fill hoses. Tee two 6mm vent lines from the top of the filler necks together and tee them into the vent line that runs from the rear tank to the emission canister.
- 7. Fill tanks with fuel and check operation of fuel sender units on the new switch/ gauge. Check operation of the fuel transfer pump from both the left and right hand tanks.



FITTING KIT CONTENTS RRALR

Brass:		Electr	rical:
0	2 x P6 5/16 x 1/4 (8mm Hose Barb	0	1 x Change Over Relay
	Elbow)	0	1 x On/Off Switch
0	2 x P6 1/4 x 1/4 (6mm Hose Barb	0	8 x Red Insulated Terminals
	Elbow)	0	3 x Red Plain Terminals
0	2 x P6 1/2 x 1/4 (12mm Hose Barb	0	5 x Red Earth Eye
	Elbow)	0	1 x 8mm Blue Earth Eye
0	2 x P3 1/2 x 1/4 (12mm Hose Barb	0	1 x 10 AMP Fuse and Holder
	Straight)	0	1 x 3mm Five Core Wire @ 5000mm
0	2 x P14 x 1/4 (6mm Hose Barb	0	1 x LRA-PG2210 Switch/Gauge
	Tee)		
0	1 x 16mm x 8mm Reducing Tee		
0	2 x 1/4 BSP Plug		
Bolts / Nuts:		Misc Parts:	
0	4 x M6 x 16 Bolts	0	8 x secondary mounting bracket
0	4 x M6 Nuts	0	1 x 3 port solenoid valve with
0	4 x M6 Flat Washers	0	8mm hose barbs
0	2 x M8 x 100 Bolts	0	2 x left & right filler necks #FN4490XIN
0	2 x 5/16 x 1 1/4" Washers	0	2 x SC91 Fuel caps to suit above filler necks
0	12 x M8 x 25mm Bolts		
0	14 x M8 Nyloc Nuts		
0	14 x 5/16 x 3/4 Washers		
0	10 x M5 x 10m Pan Head Screws		
Hose (Clamps:	Cable	Ties:
0	10 x 1/4 hose Clamps	0	10 x 7" Cable Ties
0	4 x 1/2 Hose Clamps	0	5 x 11" Cable Ties
0	2 x 5/8 Hose Clamps		
0	4 x 1 1/2 Hose Clamps		
Sende	Sender:		os & Filters:
0	2 x 0-90 OHM Fuel Sender Units	0	1 x Fuel Pump
	(VDO 220-004) - Set Up In Tanks,	0	2 x Z14K Filters
	With 600mm Earth Lead		

Hose:	5 Pages of Fitting Instructions Consisting of:
○ 1 x 6mm CMP Hose @ 2500mm	 2 x Pages Fitting Instructions
○ 1 x 8mm Fuel Hose @ 4000mm	 2 x Pages Fitting Kit Contents
○ 2 x 1/2" Fuel Hose @ 400mm	 1 x Page WDLDAS01
o 2 x 44mm Hose @ 180mm	

Kit Packed By_____

Checked By _____

