



LONG RANGE AUTOMOTIVE

Installation Instructions for TH150RA-Tray Toyota Hilux 150 Series Tray Back ONLY 120L Auxiliary Tank

This auxiliary tank fits under the rear of the vehicle and takes the place of the spare wheel. Fuel is transferred via an electric pump that will pump fuel from the auxiliary tank into the OEM tank. A combination switch/gauge will be located into a suitable position in the dash. When the switch is in operation a **YELLOW** light will be ON, indicating the transfer pump is in operation. A series of lights will also indicate fuel level. All **GREEN** lights on showing FULL, one **RED** light showing EMPTY.

**(DO NOT OPERATE TRANSFER PUMP WITH NO FUEL IN AUXILIARY TANK OR
PUMP FAILURE WILL OCCUR).**

1. Select a suitable location in the dash to mount the switch/gauge unit. We suggest loading it into one of the available switch blanks. The 12-volt ignition source can be found under the dash Black wire with yellow trace near the fuse block. The fuel transfer pump can be mounted to the underside of the tray
1. Place the two cross members in position and drill out remaining holes. Bolt bars in place with M10 x 30 Bolts with straps attached. (You will need to trim some of the heat shield away on the RHS between the spare wheel cross member and the new front mounting bar.)
2. Screw the two P3 1/2 x 1/4 straight fittings into the RHS of the tank. Screw the P3 5/16 x 1/4 into the front of the tank, this becomes the fuel pick up. Screw the P3 1/4 x 1/8 into the expansion box on top of the tank and connect 1300mm length of the 6mm hose to it. Screw the P3 1/2 x 1/4 Straight into the LHS of the tank next to the filler neck.
3. Lift the tank into position and secure with M10 x 30 bolt washers and Nyloc nuts (Don't forget to connect the sender unit wire.)
4. Use the 400mm length of 12mm hose to loop the two fittings on the RHS of the tank, this is the air balance hose. Connect the fuel pick up to the filter, pump and into the 16mm x 8mm Tee placed in the fast fill vent line of the main tank. Connect the 1300mm length of 6mm hose from the expansion box to the P12 6mm Tee fitted to the vent line of the original tank.
5. Screw the P6 1/2 x 3/8 elbow into the filler neck and mount to the tray with the filler neck mounting plate (modify to suit your tray). Connect fill and fast fill hoses to the auxiliary tank.
6. Neatly cable tie all hoses and wiring. Check over all hoses and connectors. Replace wheel arch cover. Fill with fuel and check gauge and transfer pump operation.



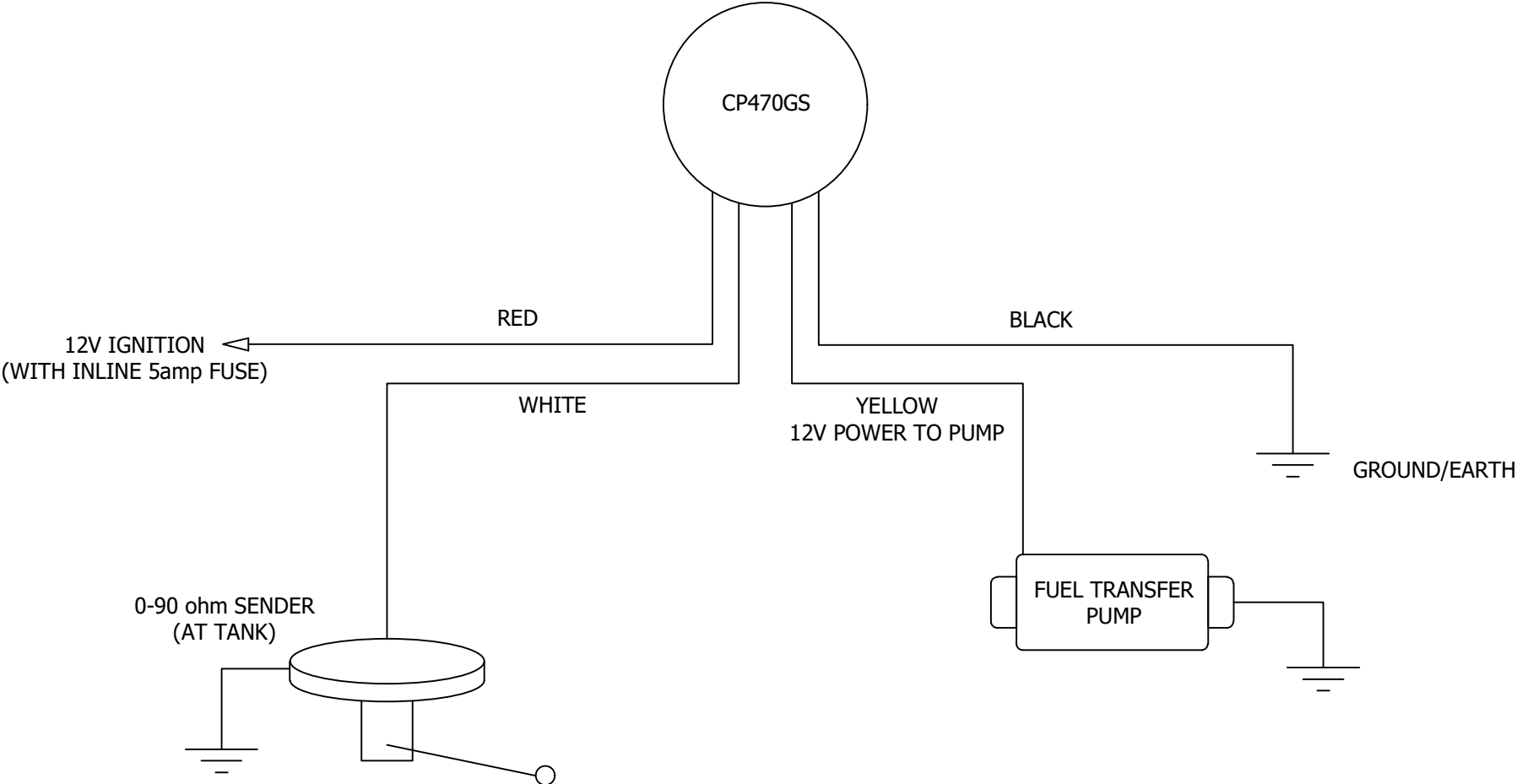
FITTING KIT CONTENTS TH150RA-TRAY

Brass:	Electrical:
○ 1 x P14 6m Tee ○ 3 x P3 1/2 x 1/4 12mm Straights ○ 1 x P3 1/4 x 1/8 6mm Straight ○ 1 x P3 5/16 x 1/4 Straight ○ 16 x 8 Tees ○ 1 x P6 1/2 x 3/8 Elbow	○ 1 x CP470GS Switch Gauge Unit ○ 1 x 3mm Two Core @ 6Mt ○ 2 x Red Eye Terminals ○ 3 x 3mm Shrink Tube @ 30mm
Bolts / Nuts:	Misc Parts:
○ 3 x M5 x 12mm Pan Heads ○ 3 x M5 Nuts ○ 3 x M5 Washers ○ 2 x M6 x 20 Bolts ○ 2 x M6 Nylocs ○ 2 x M6 Washers ○ 4 x M10 x 30mm Bolts ○ 14 x M10 x 25mm Washers ○ 14 x M10 Nyloc Nuts ○ 10 x M10 Plain Nuts ○ 4 x M10 x 30mm Washers ○ 2 x Tek Screws	○ 1 x Straight Filler Neck #FNSTRAIGHT ○ 1 x Filler Neck Mount Plate #FNMP ○ 1 x Front Mount Bar ○ 1 x Rear Mount Bar ○ 1 x Locking Cap ○ 2 x M10 x 30mm Bolt with 200mm Strap ○ 2 x M10 x 30mm Bolt with 150mm Strap ○ 6 x M10 x 30mm Bolt with 100mm Strap
Hose Clamps:	Hose:
○ 2 x 1 1/2 Hose Clamps ○ 2 x 5/8 Hose Clamps ○ 4 x 1/2 Hose Clamps ○ 8 x 1/4 Hose Clamps	○ 1 x 6mm Fuel Hose @ 1300mm ○ 1 x 8mm Fuel Hose @ 1000mm ○ 1 x 12mm Fuel Hose @ 600mm ○ 1 x 12mm Fuel Hose @ 400mm ○ 1 x 44mm Fuel Hose @ 400mm
Pumps & Filters:	Cable Ties:
○ 1 x Fuel Pump & Filter ○ 1 x Fuel Pump Mounting Plate	○ 12 x 7" Cable Ties ○ 3 x 11" Cable Ties
Sender:	6 Pages of Fitting Instructions Consisting of:
○ 1 x 0-90 OHM Sender Unit C/W 700mm Earth Installed With: 5 x M5 x 10 Pan Head 5 x M5 Spring Washers	○ 2 x Pages Fitting Instructions ○ 2 x Page Fitting Kit Contents ○ 1 x Page CP470GS Wiring Diagram ○ 1 x Page CP470GS Operation Instructions

Kit Packed By _____

Checked By _____

MODEL No. CP470GS
LONG RANGE AUTOMOTIVE AUXILIARY FUEL TANK PUMP CONTROLLER WIRING DIAGRAM



CP470GS		WIRING DIAGRAM		
PROGRAM NUMBERS		EDITION	2	19/05/2026
			DRAWN BY - J.D	
			APPROVED -	

THIS DRAWING REMAINS THE PROPERTY OF
LONG RANGE AUTOMOTIVE AND IS NOT TO BE DUPLICATED
WITHOUT PERMISSION



LONG RANGE AUTOMOTIVE

The auxiliary tank that is fitted to this vehicle operates via a fuel transfer pump with an automatic switch off when the **auxiliary** tank is empty.

The CP470GS operates as follows:

- The **YELLOW** and subsequent **GREEN** light's display the contents of the Auxiliary Tank.
- One **RED** Light showing **EMPTY**
- All **GREEN** shows **FULL**
- When the switch is turned **ON** and **ROUND YELLOW** light is displayed this indicates that fuel is being transferred from the **AUXILIARY TANK** into the **MAIN TANK**.
- Fuel is transferred at around 2 litres per minute.
- Fuel will be transferred from the auxiliary tank into the main tank until the auxiliary gauge shows a **RED** light at which point, the buzzer sounds. The pump will shut off along with the buzzer when the switch is turned off.

Good To Know:

- Pump LED indicates when the transfer pump is active
- You can manually turn the pump off by pressing the button if required
- The switch will sound an audible beep when the **auxiliary tank** is empty
- Pump is fitted externally to allow easy access if required
- Pump has a filter included

LRA Australia Pty Ltd
23 INDUSTRY COURT, LILYDALE VIC 3140
Ph: 03 9739 5667
ABN: 84 691 699 751

4WD REPLACEMENT & AUXILIARY TANKS · MODIFIED FUEL TANKS · FUEL TANK REPAIRS