



LONG RANGE AUTOMOTIVE

Installation Instructions for TTDCMY24LHA Toyota Tundra XK70 Petrol Dual Cab 3.5L V6 Hybrid 60L LH Sill Auxiliary Tank

This tank is located on the SILL of the vehicle, if aftermarket sidesteps are fitted, the tank may not be suitable. Contact LRA prior to installation or ordering.

This auxiliary tank fits under the LHS of the vehicle in between the chassis and the Sill. 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 THE 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 the top blank switch in the panel on the RHS of the steering column. Carefully make a 20mm hole in the switch blank for the switch Gauge. **(Refer Pic 1 & 1A)**
2. A 12-volt ignition power source can be found from the fuse panel above the accelerator pedal. Use the fuse holder to pick up the power **(Refer Pic 2)**. Complete the wiring as per diagram and run the twin core sheathed cable under the scuff plates and drill an 8mm hole under the rear scuff plate and use the WG2 grommet to run the cable to above the chassis rail for later connection to the transfer pump and sender unit. **(Refer Pic 3)**
3. Trim the Outrigger Stump from the Chassis and paint. **(Refer Pic 4)**
4. Bolt the front secondary bracket in position with M10 x 30 bolts on straps, M10 x 25mm Washers and Nyloc Nuts **(Refer Pic 5)**
5. Bolt the Centre secondary bracket around the chassis rail with 4 x M8 x 25mm bolts 8 x M8 x 20mm washers and 4 x M8Nyloc nuts. Position the bracket in line with the centre of the body mount. Glue the 50mm rubber to the underside of the bracket. **(Refer Pic 6 & 6A)**



LONG RANGE AUTOMOTIVE

6. Bolt the Rear secondary bracket in place under the front OE body mount nut. Drill 2 x 8.5mm holes and secure with 2 x M8 x 25mm bolts 4 x M8 x 20mm washers and 2 x M8 Nyloc nuts. **(Refer Pic 7)**
7. Remove the LHR wheel and wheel arch cover. Remove the OE filler with vent pipes. Remove the 19mm vent line and vent from the collar of the Filler. Cut the 14mm Fast fill vent and 35mm Filler where indicated. Sand the cut on the fill pipe smooth. **(Refer Pic 8, 8A, 8B)**
8. Fit the transfer pump to the mounting bracket and bolt under the Factory M10 nut on top of the body mount. Connect the pump wiring and prepare the white sender wire for connection.
(Refer Pic 9 & 9A)
9. Screw the Brass fittings into the twin filler as per Drawing **(Refer Twin Filler)** Fit 250mm length of 12mm fuel hose to the P6 ½ x ¼ Elbow on the front face of the twin filler. Connect the main leg of the twin filler to the cut down OE fill pipe with 180mm length of 35mm fuel hose. Connect the vent hose from the front of the Twin filler to the OE 14mm Vent line. **(Refer Pic 10)**
10. Connect the 470mm length of 8mm fuel hose to the P6 5/16 x 1/8 Elbow in the main tank leg of the twin filler to the outlet side of the transfer pump.
11. Assemble the fittings into the tank as per drawing. **(Refer Tank Fittings)** Fit 400mm length of 8mm fuel hose to the P6 5/16 x 1/4 Elbow fuel pick up. Fit 1000mm length of 8mm fuel hose to the P6 5/16 x ¼ Elbow on the LHS rear of the tank. Fit 660mm length of 12mm fuel hose to the front P6 ½ x ¼ Elbow. Fit 1950mm length of 16mm NTP hose to the Elbow on the FLV. **(Refer Tank Drawing)**
12. Begin to jack the tank into position, feeding 16 and 8mm hoses over the chassis rail at the rear and connect the sender unit wire and the 12mm balance line, leaving the earth accessible for connection. Secure the tank with M10 x 30mm bolts washers and Nyloc nuts (Front) Tank Strap with H/D washers and strap reinforcing plate and Nyloc Nuts (Centre) M10 Nyloc Nuts and Washers (Rear)
13. Connect the sender unit earth to the M6 stud from the OE heat shield. **(Refer Pic 11)**
14. Run the 1950mm long 16mm NTP hose from the FLVV to the RHS of vehicle and Tee into the vent line with TS16 Tee piece. Use ½ clamps on the OE plastic line and 5/8



LONG RANGE AUTOMOTIVE

clamp on 16mm line. You will need to carefully warm the OE line to get the Tee in place. Let the line follow the fill pipe path and cable tie into position. **(Refer Pic 12, 12A, 12B)**

15. Connect the 8mm Fuel pick up line to the inlet side of the pump.
16. Connect the 1000mm long 8mm fuel hose vent line to the P6 5/16 x 1/4 elbow on the rear face of the twin filler.
17. Connect the Auxiliary twin filler to the tank with 2 x 35mm hose @ 110mm, Aux Fill pipe and 4 x 1 1/4" hose clamps.
18. Refit the OE 19mm Vent line and cable tie the 1/2 Collar in place to the top of the Twin filler. **(Refer Pic 13)**
19. Neatly cable tie all hoses and fittings. Replace the wheel arch cover. Fill with fuel and check transfer pump operation.



FITTING KIT CONTENTS - TTDCMY24LHA

Brass: ○ 1 x P6 5/16 x 1/8 8mm Elbow ○ 3 x P6 5/16 x 1/4 8mm Elbows ○ 3 x P6 1/2 x 1/4 12mm Elbows ○ 1 x TS16 Norma Plastic Tee	Electrical: ○ 1 x CP470GS Switch Gauge Unit ○ 1 x 3mm Two Core @ 6Mt ○ 1 x Red Insulated Terminal ○ 2 x Blue 6mm Eye Terminals ○ 4 x 3mm Heat Shrink tube @ 30mm ○ 1 x WG2 Grommet ○ 1 x CF7 Conduflex @ 1200mm ○ 1 x CF20 Conduflex @ 120mm
Bolts / Nuts: ○ 6 x M8 x 25mm Bolts ○ 12 x M8 x 20mm Washers ○ 6 x M8 Nylocs ○ 2 x M10 x 30mm Bolts ○ 2 x M10 x 30mm Bolts on Strap ○ 6 x M10 x 25mm Washers ○ 8 x M10 Nylocs ○ 4 x M10 3mm x 27H/D Washers ○ 1 x M6 x 16mm Bolt ○ 1 x M6 Spring Washer ○ 2 x M6 x 10 Washers ○ 1 x M6 Plain Nut ○ 11 x M5 Spring Washers ○ 5 x M5 x 10 Pan Head Screws ○ 6 x M5 x 12 Pan Head Screws	Misc Parts: ○ 1 x Front Secondary Bracket ○ 1 x Rear Secondary Bracket ○ 1 x Centre Mount (2 Piece) ○ 1 x Centre Mount Strap ○ 1 x 40mm Strap Rubber @ 355mm ○ 1 x 3mm Rubber 50mm x 170mm ○ 1 x FLV60-16 ○ 1 x BS-337 O-Ring ○ 1 x 32mm ICV ○ 1 x TF-TTDCMY24LHA Twin Filler ○ 1 x FP-TTDCMY24LHA Fill Pipe ○ 1 x 40 x 45 x 5 Plate with Off Set 10.5mm hole
Hose Clamps: ○ 6 x 1/4 Hose Clamps ○ 6 x 1/2 Hose Clamps ○ 2 x 5/8 Hose clamps ○ 6 x 1 1/4 Hose Clamps	Hose: ○ 1 x 8mm Fuel hose @ 400mm ○ 1 x 8mm Fuel hose @ 470mm ○ 1 x 8mm Fuel hose @1000mm ○ 1 x 12mm Fuel Hose @ 660mm ○ 1 x 12mm Fuel Hose @250mm ○ 2 x 35mm Hose @ 110mm ○ 1 x 35mm Hose @ 180mm ○ 1 x 16mm NTP Hose @ 1950mm
Pumps & Filters: ○ 1 x FEP06SV Fuel Pump & Filter ○ 1 x Tundra Fuel pump mounting bracket	Cable Ties: ○ 12 x 7" Cable ties ○ 10 x 11" Cable ties

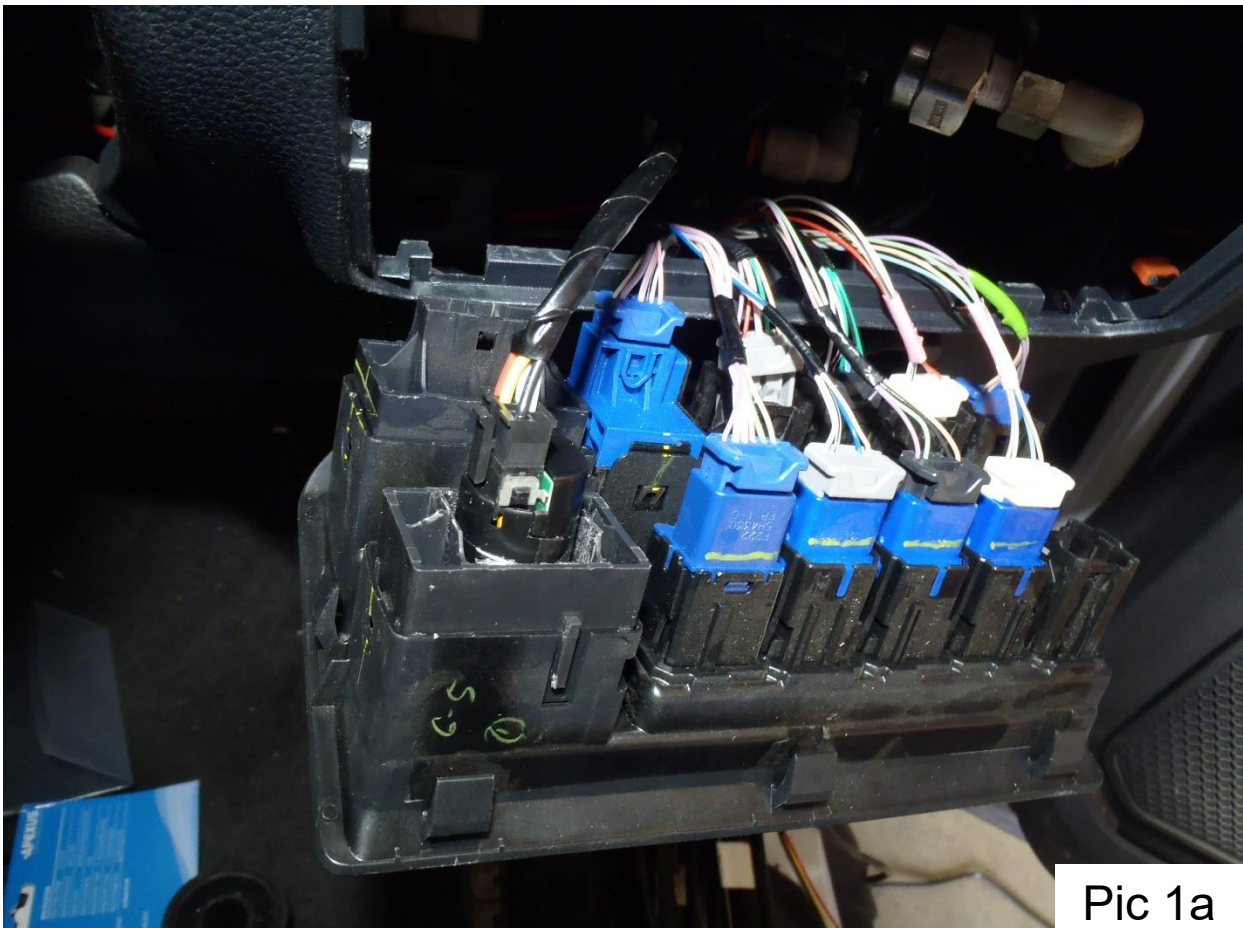


Sender:	20 Pages of Fitting Instructions Consisting of:
○ 1 x 0-90 OHM sender unit with 500mm earth attached	○ 3 x Pages Instructions ○ 2 x Pages Fitting Kit Contents ○ 11 x Pages Reference Pictures (20 Pic's) ○ 1 x Page Twin Filler Fittings Drawing ○ 1 x Page Tank Fittings Drawing ○ 1 x Page CP470GS Wiring Diagram ○ 1 x Page Fuel Gauge Instructions

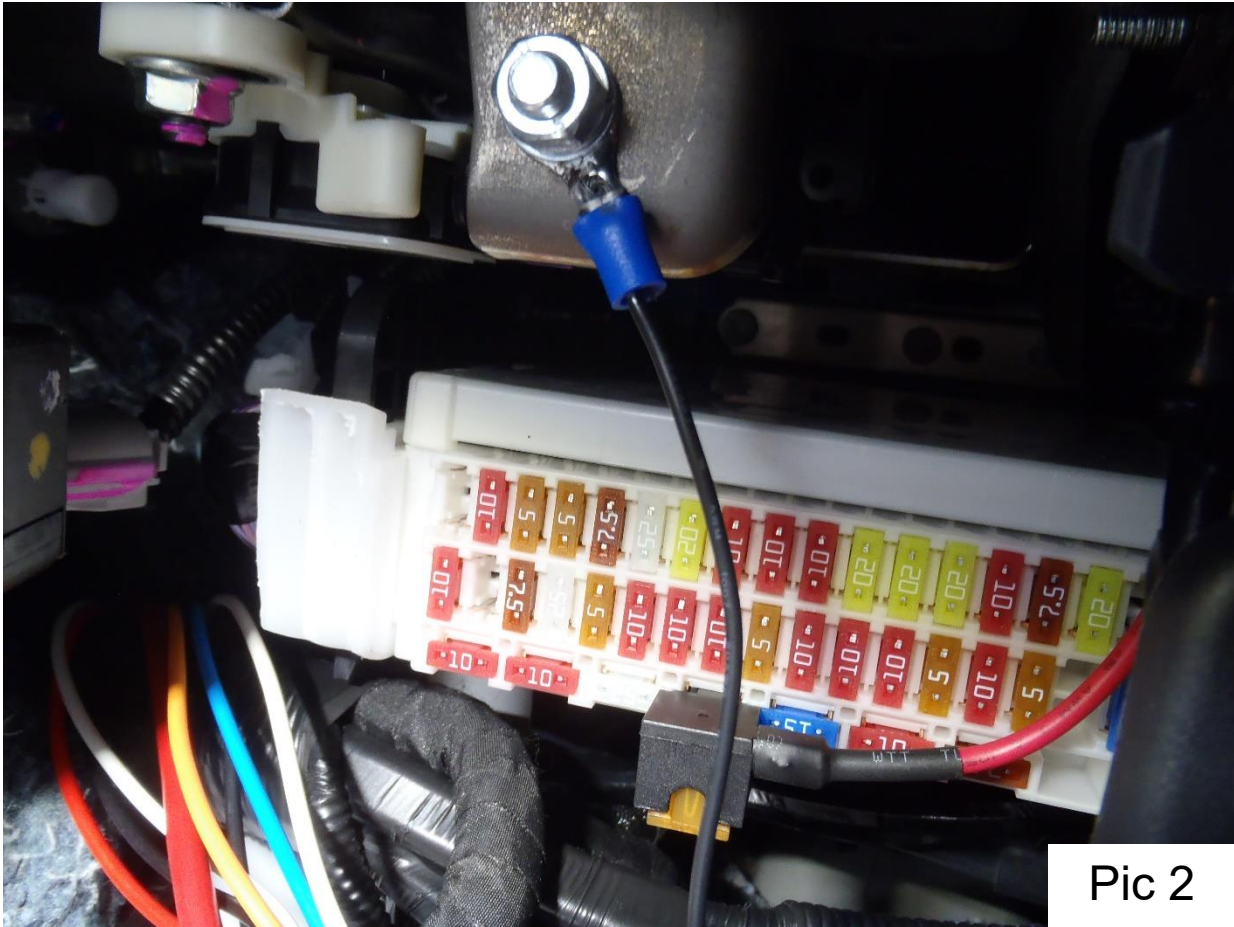
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Checked By _____

TTDCMY24LHA Reference Photos



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TTDCMY24LHA Reference Photos



TTDCMY24LHA Reference Photos



Pic 6

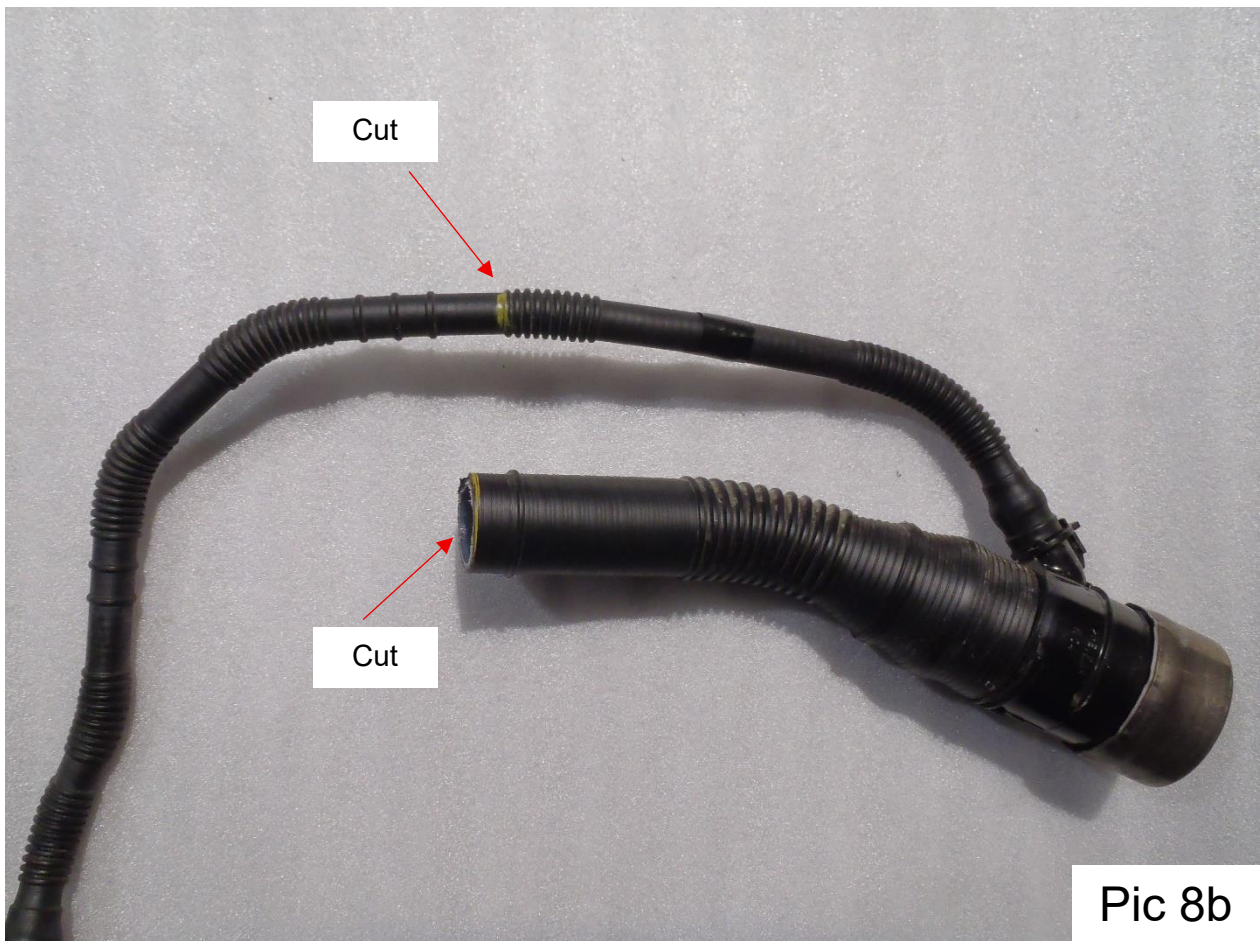


Pic 6a

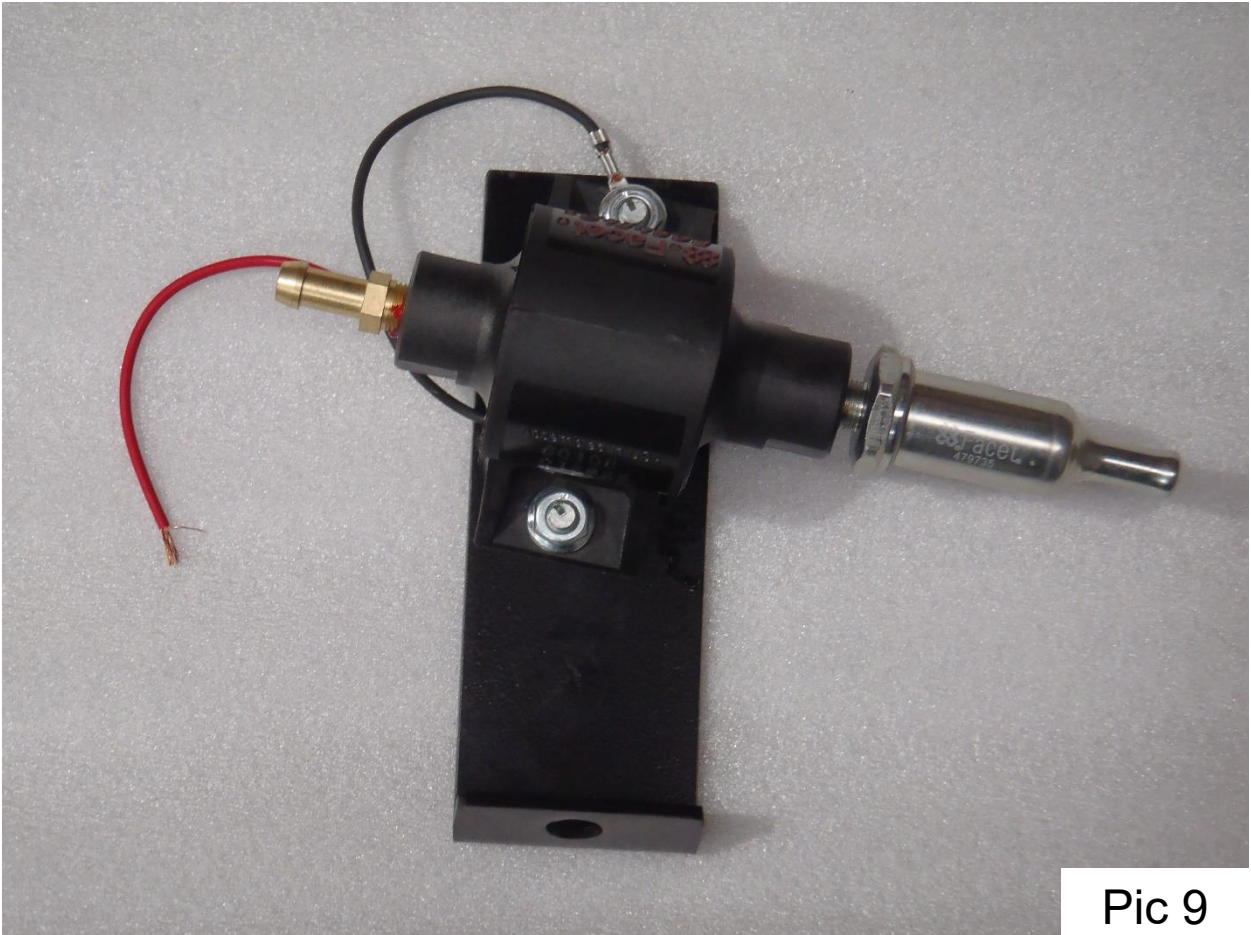
TTDCMY24LHA Reference Photos



TTDCMY24LHA Reference Photos



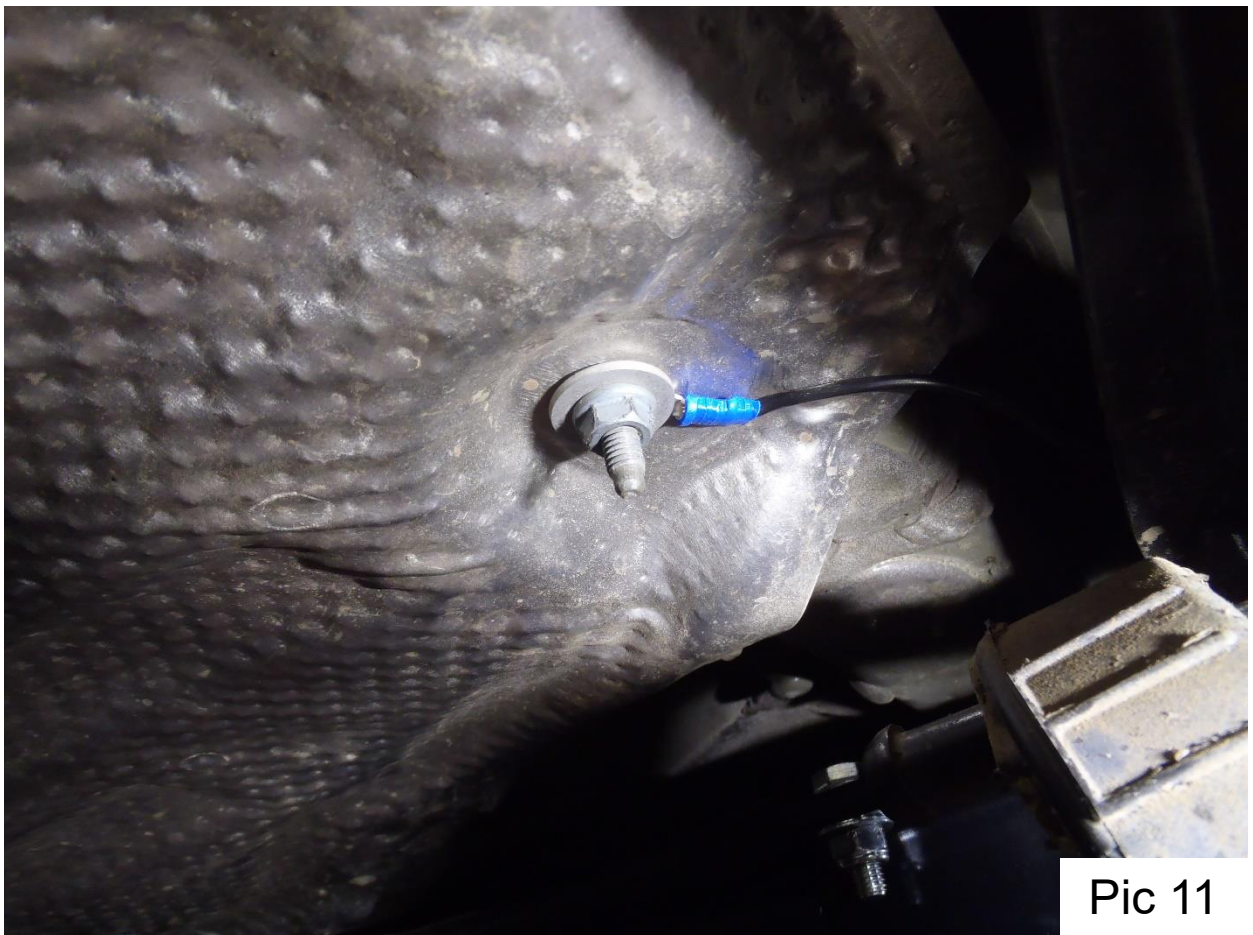
TTDCMY24LHA Reference Photos



TTDCMY24LHA Reference Photos



Pic 10



Pic 11

TTDCMY24LHA Reference Photos

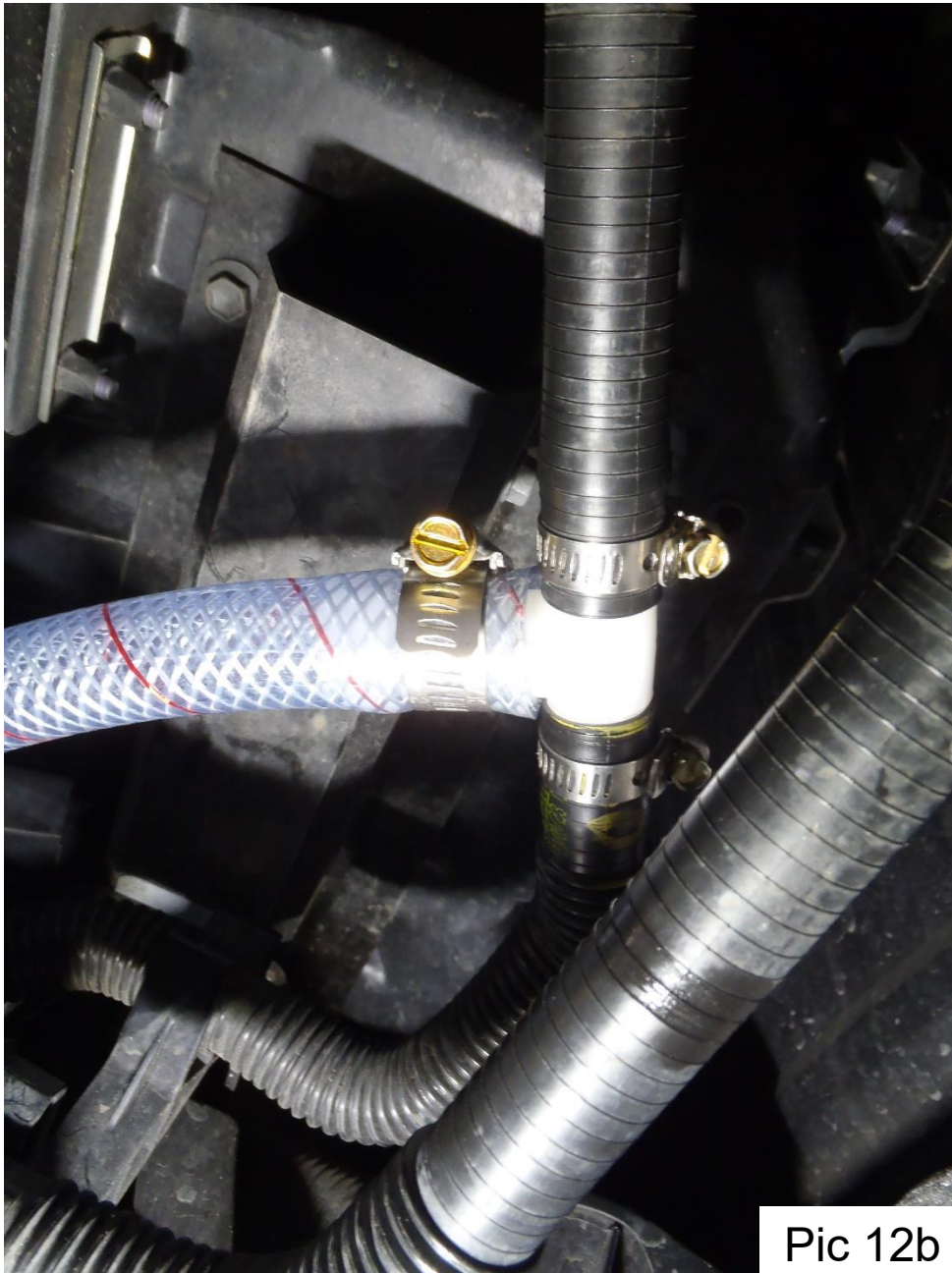


Pic 12



Pic 12a

TTDCMY24LHA Reference Photos

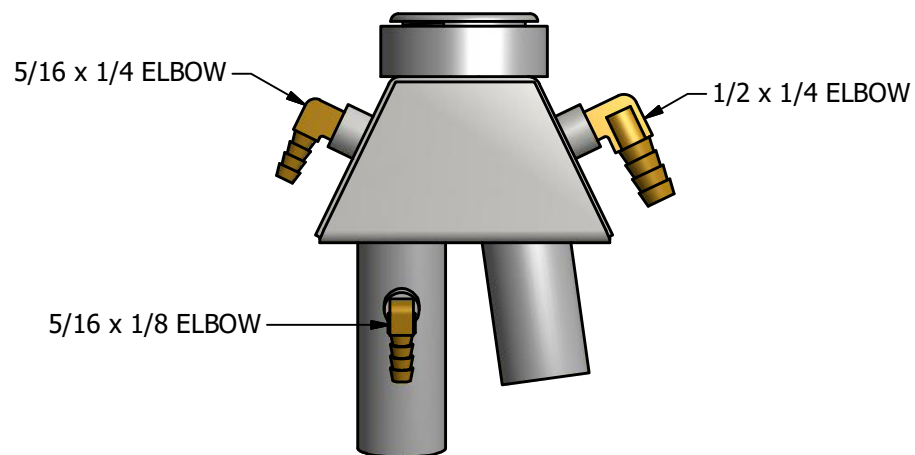
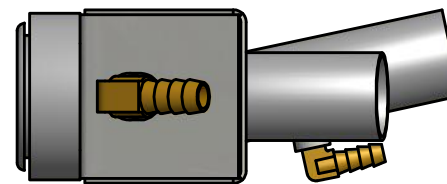
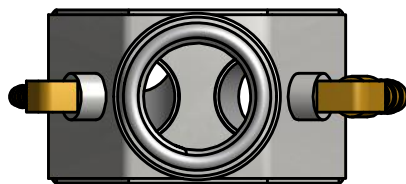


Pic 12b

TTDCMY24LHA Reference Photos

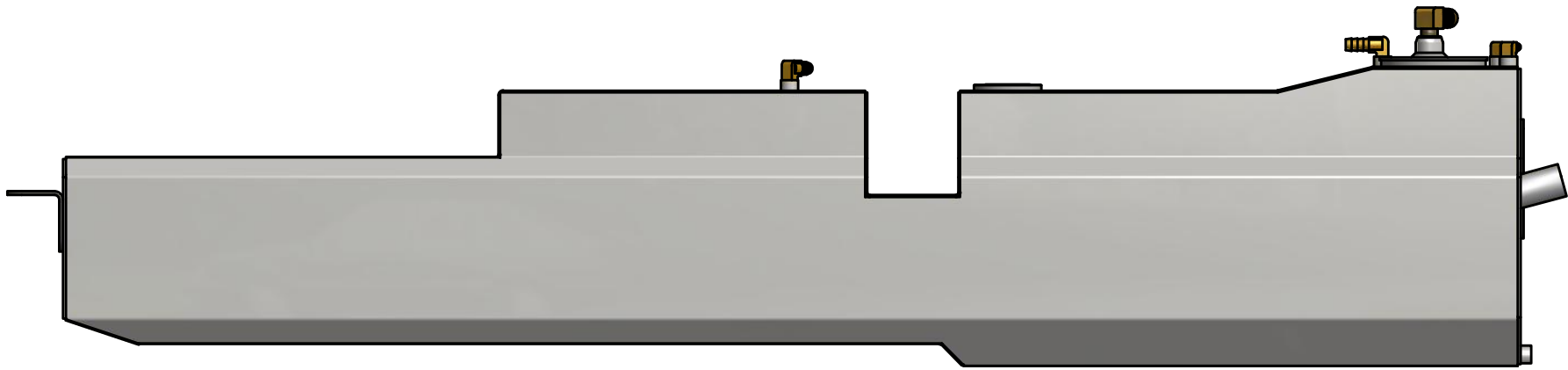
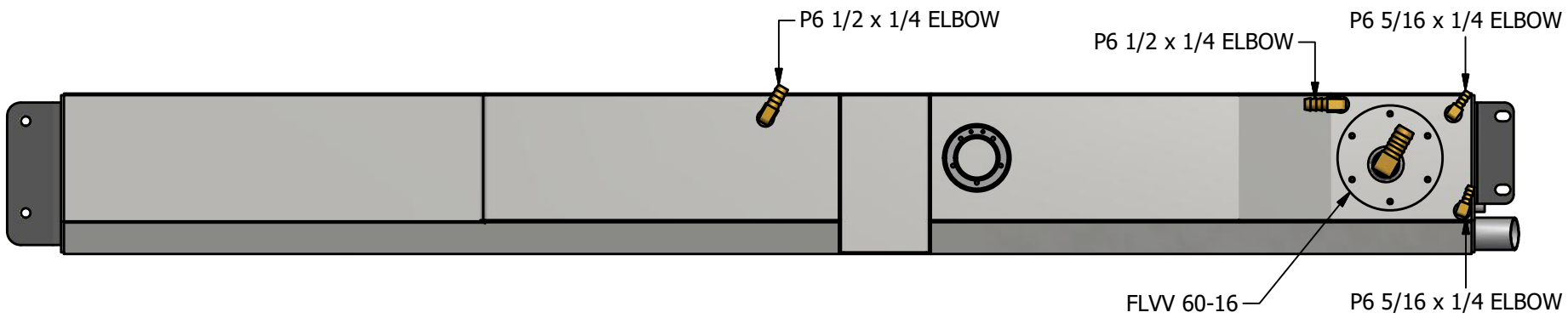


Pic 13



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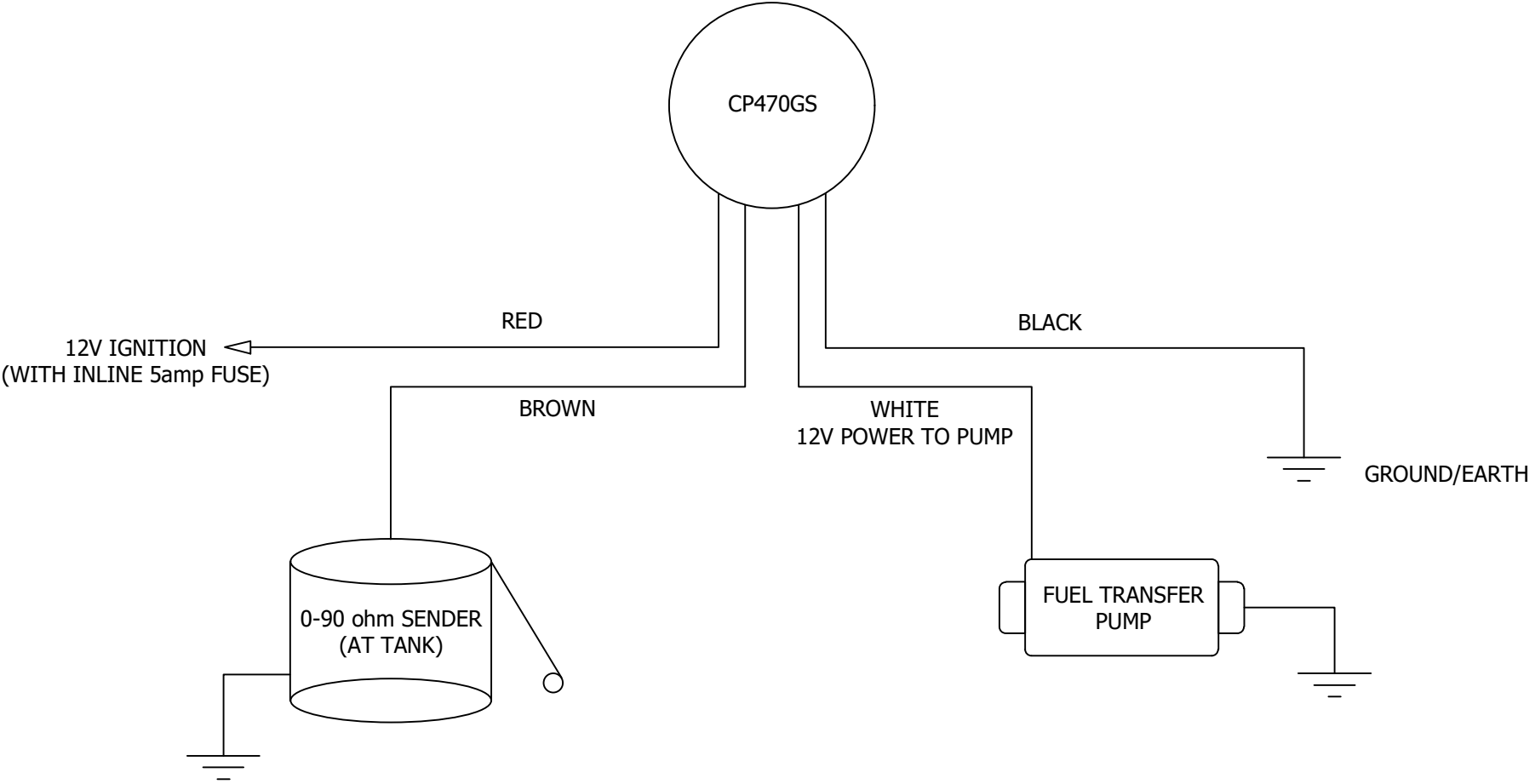
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- fjfiln2.CNC	1.5mm MS		
		APPROVED -	
TOYOTA TUNDRA DUAL CAB LHS AUXILIARY FUEL TANK TWIN FILLER ASSEMBLY			



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TTDCMY24LHA		TANK FITTINGS		
PROGRAM NUMBERS		EDITION	1	21/01/2026
			DRAWN BY - J.D	
			APPROVED -	
TOYOTA TUNDRA DUAL CAB LHS AUXILIARY FUEL TANK				

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



CP470GS		WIRING DIAGRAM		
PROGRAM NUMBERS		EDITION	1	27/04/2026
			DRAWN BY - J.D	
			APPROVED -	

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What to do when fuel is transferred from the auxiliary tank to the main tank, the main fuel gauge does not always update to reflect the increased fuel level.

Scenario 1: Vehicle stopped, ignition in Accessories

1. Stop the vehicle.
2. Turn the ignition to **Accessories**.
3. Open the fuel flap.
4. Wait for the display to show **"Ready to Refuel."**
5. Refuel the vehicle.
6. The fuel gauge updates correctly as the fuel level increases.

Scenario 2: Vehicle running

1. Start the vehicle.
2. Open the fuel flap.
3. Wait for the display to show **"Ready to Refuel."**
4. Refuel the vehicle.
5. The fuel gauge updates correctly as the fuel level increases.

Scenario 3: Truck stopped using the fuel button

1. Stop the truck.
2. Press the **Fuel** button.
3. The fuel flap opens.
4. Wait for the display to show **"Ready to Refuel."**
5. Refuel the vehicle.
6. The fuel gauge updates correctly as the fuel level increases.

Observations

- If the display reaches the **"Ready to Refuel"** state, the fuel gauge appears to update correctly during refuelling.
- If the vehicle is driven with the fuel flap open, the dashboard displays a **"Fuel Flap is open"** warning approximately once every minute.