



**Installation Instructions for: MPNMRA81L  
MITSUBISHI NM-NS PAJERO 81LT AUX  
TANK TO SUIT 7 SEATER MODEL WITH NO  
REAR AIR CONDITIONING**

This auxiliary fuel tank fits up under the rear of the vehicle, it has a capacity of 81lt. the standard filler is replaced with a new twin filler neck.

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 an **ORANGE** light will be ON, indicating the transfer pump is on operation. A series of lights will also indicate fuel level. ALL **GREEN** lights on showing FULL, one **RED** flashing light showing EMPTY. (DO NOT OPERATE TRANSFER PUMP WITH NO FUEL IN AUXILIARY TANK OR PUMP FAILURE WILL OCCUR).

1. Locate square recess in the lower dash panel to the left of the steering column. This is an ideal location for mounting switch/gauge, install switch/gauge. Run wiring loom from switch/gauge to fuse box area, remove front and rear R/H scuff plates, also remove R/H front kick panel. Remove rear seat and black inspection hatch cover grommet inside cavity under inspection hatch. The twin core wire will now be accessible from above the rear of the OEM fuel tank. Connect wires as shown in the wiring diagram, refit all trim previously removed.
2. Remove R/H rear inner wheel arch cover to reveal OEM fuel pipe. Remove fill pipe assembly from vehicle and cut as shown in the diagram. File and smooth and install 80mm length of 35mm hose to filler pipe and refit assembly to vehicle. Enlarge 3 small mounting holes in filler recess to 8mm. install brass fittings to new twin filler neck, 5/16 x 1/4 Elbow goes into the socket in fill pipe and points in the same direction as the pipe. One 5/8 x 1/4 Elbow goes in the socket on angled face of twin filler, this fitting will be the auxiliary tank fast fill vent. The other 5/8 x 1/4 Elbow goes in the socket adjacent to the shorter fill pipe, this fitting is the OEM tank fast fill vent. The remaining socket is the 1/4 x 1/4 Elbow and this fitting will be connected to the auxiliary tank vent. Install 400mm length of 16mm NTP hose to top rear fast fill port on filler, this hose will be connected to OEM tank fast fill tube. Secure new twin filler in place using OEM screws and rubber gasket.

3. Remove plastic surrounds from round rear seat retaining lugs. Remove both rear most bolts holding retaining lugs and replace with M10 x 50mm fine thread bolts provided. These bolts become the anchor points for the front secondary bracket under the vehicle. Install front secondary bracket and secure with fine thread Nyloc nuts, also install rear secondary brackets to mounting points on chassis.
  
4. Install the 5/16 x 1/4 Elbow into the pick-up socket on the top of the tank adjacent to the sender unit, ensure the correct socket is selected. (The pick-up socket has a 12mm steel tube welded inside the tank this can be checked by using a probe.) Point the fitting to the RHS of the vehicle then install length of 8mm fuel hose to this fitting. Next install 5/8 x 1/4 Elbow to the remaining socket adjacent to the sender unit and point the fitting to the RHS also. Install 540mm length of NTP hose to this fitting. The 2 remaining sockets on the raised section of the tank also have 5/8 x 1/4 Elbows fitted to them, the elbow fitting on the front face of the tank should point to the left and be horizontal, the fitting on the right face should be pointing upwards at the 1 o'clock position. Connect the previously installed 16mm hose to the horizontally orientated fitting, the remaining fitting will have the fast fill hose connected to it which will in turn be connected to the twin filler.  
Install 1/4 x 1/8 Straight fitting into the socket on the expansion chamber. Check the OHM reading of the gauge sender with sender installed in tank. Readings should be 0.5-1.5 OHMS at empty & 88-92 OHMS at full. (To check full reading invert tank.)
  
5. Mount fuel pump in a well-protected position. Lift tank almost into position and connect pick up hose to fuel pump, then lift tank into final position and secure. (NOTE: Bracket welded to front of the tank should fit up behind front secondary bracket.) Install remaining hoses and wiring, install remaining steel fill pipe and fast fill hose. Vent hose from new tank is to be connected to 1/4 x 1/4 Elbow fitting on twin filler. Rim plastic cover from inside wheel arch to fit around new filler pipe, refit cover, 6mm bolt welded to base of new twin filler is to be used as a mounting point for this cover.

Neatly cable tie all hoses and wires away from and moving parts or heat sources. Refit and trim previously removed. Fill tank with fuel and check all hoses and fittings for leaks.

NOTE 1: QUALITY SEALER SHOULD BE USED ON ALL FITTINGS. E.G. PERMATEX 3J



## FITTING KIT CONTENTS MPNMRA81L

<p><b>Brass:</b></p> <ul style="list-style-type: none"> <li>○ 1 x P6 1/4 x 1/4 Elbow</li> <li>○ 2 x P6 5/16 x 1/4 Elbow</li> <li>○ 5 x P6 5/8 x 1/4 Elbow</li> <li>○ 1 x P3 1/4 x 1/8 Straight</li> </ul>	<p><b>Electrical:</b></p> <ul style="list-style-type: none"> <li>○ 1 x LRA-PG210 Switch/Gauge</li> <li>○ 1 x 3mm two core wire @ 5m</li> <li>○ 1 x 4mm Single Core Blue @ 300mm</li> <li>○ 1 x 5 AMP Fuse</li> <li>○ 1 x Fuse Holder</li> <li>○ 2 x Fuse Holder Terminals</li> <li>○ 3 x 6mm Blue Eye Terminals</li> <li>○ 1 x Red Insulated Terminal</li> <li>○ 4 x 3mm heat shrink @ 25mm</li> </ul>
<p><b>Bolts / Nuts:</b></p> <ul style="list-style-type: none"> <li>○ 3 x M10 x 30 bolts</li> <li>○ 8 x M10 x 25mm Flat washers</li> <li>○ 4 x M10 Nyloc nuts</li> <li>○ 1 x M6 Flat washer</li> <li>○ 1 x M6 Nut</li> <li>○ 2 x M10 x 40 Fine Thread Set Screws</li> <li>○ 2 x M10 Fine Nyloc nuts</li> <li>○ 2 x M10 x 20 Washers</li> <li>○ 1 x M12 x 30 Fine Thread Bolt</li> <li>○ 1 x M12 Spring washer</li> <li>○ 1 x M12 Flat washer</li> </ul>	<p><b>Misc Parts:</b></p> <ul style="list-style-type: none"> <li>○ 2 x 50x3x400 rubber strips glued to tank 50mm out from center cut out</li> <li>○ 1 x Steel fill pipe part #FPMNAUX81L</li> <li>○ 1 x Twin Filler Petrol/Diesel</li> <li>○ 2 x Secondary Brackets</li> <li>○ 1 x Secondary Bracket with M10 x 30 Bolt welded in</li> </ul>
<p><b>Hose Clamps:</b></p> <ul style="list-style-type: none"> <li>○ 8 x 1/4 Hose clamp</li> <li>○ 6 x 5/8 hose clamp</li> <li>○ 2 x 1 1/4 hose clamp</li> <li>○ 4 x 1 1/2 hose clamp</li> </ul>	<p><b>Hose:</b></p> <ul style="list-style-type: none"> <li>○ 1 x 8mm hose @ 1700mm</li> <li>○ 1 x 35mm fuel hose @ 80mm</li> <li>○ 2 x 38mm hose @ 80mm</li> <li>○ 1 x 6mm CMP hose @ 700mm</li> <li>○ 1 x 16mm NTP hose @ 400mm</li> <li>○ 1 x 16mm NTP hose @ 540mm</li> <li>○ 1 x 16mm NTP hose @ 700mm</li> </ul>
<p><b>Pumps &amp; Filters:</b></p> <ul style="list-style-type: none"> <li>○ 1 x Fuel pump &amp; Filter</li> <li>○ 1 x Fuel Pump Mounting Plate</li> </ul>	<p><b>Cable Ties:</b></p> <ul style="list-style-type: none"> <li>○ 5 x 7" Cable ties</li> <li>○ 5 x 11" Cable ties</li> </ul>

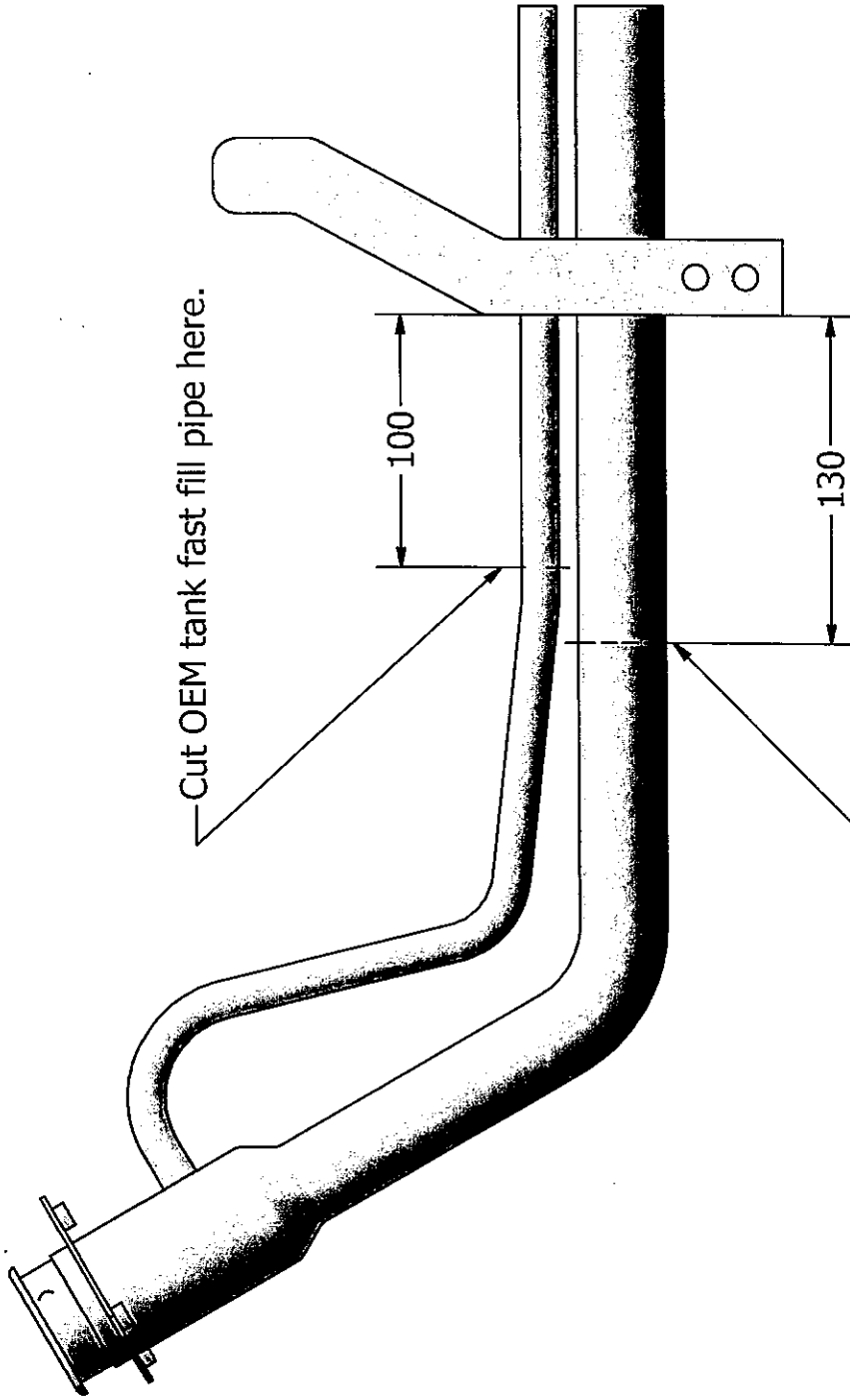
<b>Sender:</b>	<b>6 Pages of Fitting Instructions Consisting of:</b>
<ul style="list-style-type: none"><li>○ 1 x 90 OHM Sender unit with 700mm earth, installed using:<ul style="list-style-type: none"><li>- 5 x M5 x 10mm pan Head Screws</li><li>- 5 x M5 Spring Washers</li></ul></li></ul>	<ul style="list-style-type: none"><li>○ 2 x Fitting Instructions</li><li>○ 2 x Fitting kit contents</li><li>○ 1 x Install Diagram #INMPNMRA01</li><li>○ 1 x Wiring diagram #WDSGPG210</li></ul>

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

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

**NOTE:**

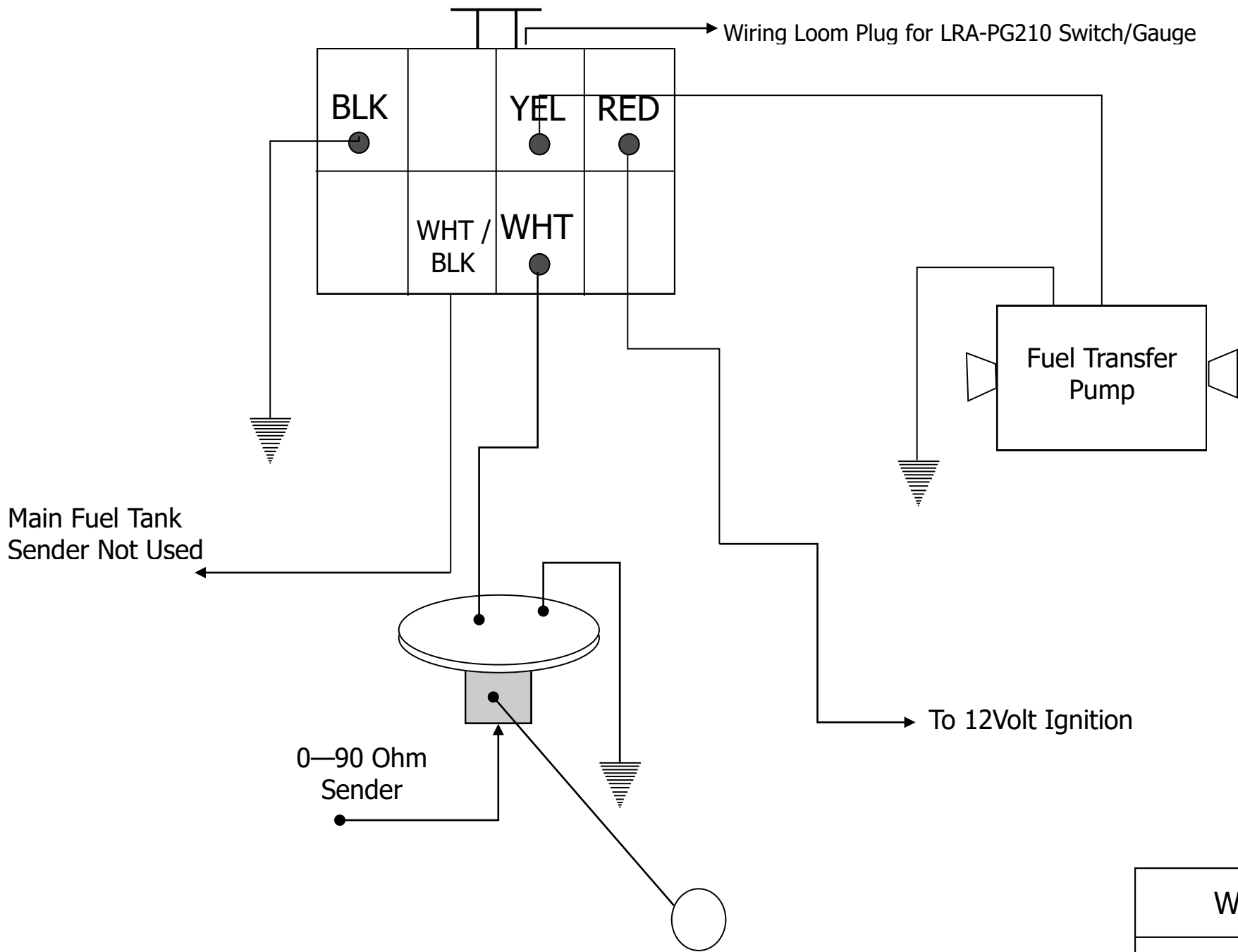
Cutting positions for OEM tank fill pipe and fast fill pipe located in right hand rear wheel arch.



MPNMRA81L Installation-1

Mitsubishi Pajero 81ltr rear auxiliary  
OEM filler modifications.

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



WDSGPG210