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Last edited: 1/09/2010

Fuel Tank Part List and Installation Instructions

TANK P/N: MPLR6

MITSUBISHI PAJERO LWB (NJ-NL) (PETROL & DIESEL) 145ltr REPLACEMENT TANK

ltem	Description	Quantity	Part number	Р	С
1	TANK – REPLACEMENT	1	MPLR6		
2	HOSE – TMP – 6mm	1.0m			
3	BRAS – ELBOW – 5/8" x ¼" - BSP	1			
4	BRASS – TAIL BARB – ¼" x ¼" BSP	1			
5	BRASS – PLUG – ¼" BSP	1			
6	DRAIN PLUG – MAGNETIC – M14 (fitted to tank)	1	DP-M14		
7	T-PIECE - NYLON BARBED - 1/4"	1			
8	SET SCREW – PAN HEAD – M4 x 10mm – PLATED 8.8	9			
9	WASHER – SPRING PLATED – M4	9			
10	DISC MAGNET (fitted in swirl pot)	1			
11	WARRANTY CARD & INFORMATION SHEET	1			
12	BROWN DAVIS AUTOMOTIVE STICKER	1			

Date Packed: ____ / ____ / ____

Packed by (**P**): _____ Checked by (**C**): _____



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All Brown Davis Automotive fuel tank kits are manufactured to Australian Standards and the Australian Design Rules where applicable and carry a full **<u>3 Year Warranty</u>**. Construction in 2.0 mm cold rolled, aluminium coated steel ensures maximum strength and durability and minimum corrosion susceptibility. More than 30 years of testing within the field has shown that this gauge of steel is sufficiently impact resistant that an additional tank guard is not necessary (most standard tank guards are thinner than 1.5 mm).

All tanks are M.I.G. (Metal Inert Gas) welded to ensure the strongest possible seams and are baffled to prevent fuel surge. They are then pressure tested using two different techniques to eliminate the possibility of leaks. Drain plugs are fitted horizontally to prevent them being damaged if the tank is scraped over rocks and are magnetic to collect any metallic dirt that may enter your fuel system.

In all cases, Brown Davis Automotive fuel tanks are designed with general off road use in mind and are designed not to compromise ground clearance, entry, exit or ramp over angles.

Please remember it is the driver's responsibility to operate their vehicle in a sensible manner in 4WD conditions, Brown Davis Automotive cannot be held responsible for the abuse of your vehicle and subsequent possible fuel tank damage.

REPLACEMENT TANKS This tank is a replacement for the standard tank and fits in the same location. The standard filler is retained as is the fuel gauge sender unit which still works in the same manner except it takes longer to reach empty. Rearrangement of the exhaust system **IS NOT** necessary with this fitment.

ANY QUESTIONS OR INFORAMTION REQUIRED IN RELATION THE BELOW INSTRUCTIONS PLEASE DO NOT HESTITE TO CONTACT BROWN DAVIS HEAD OFFICE OR ONE OF OUR DISTRIBUTORS.

PLEASE ENSURE ALL CONNECTIONS AND MOUNTINGS ARE CHECKED A SECOND TIME AFTER FINISHING YOUR INSTALLATION TO CONFIRM THERE ARE NO LEAKS AND THAT ALL BOLTS ARE TIGHT. ALWAYS ROAD TEST THE VEHICLE AND MAKE SURE THERE IS COMPLETE SUSPENSION TRAVEL CLEARANCE.

BROWN DAVIS CAN TAKE NO RESPONSIBILITY FOR AFTER MARKET SUSPENSION SYSTEMS INTERFERING WITH THE TANK, IF FITTED.



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FITTING (fitting time is approximately 3 hours)

- 1. Install all brass fittings and magnetic drain plug into the replacement **Brown Davis Automotive long range fuel tank** using teflon tape or the like on all threads (**Refer Diagram 1**). Although your Brown Davis Automotive long range tank has been cleaned and sealed at the factory, it is essential that a final rinse and inspection is carried out to ensure that the new fuel tank is impeccably clean before fitting to your vehicle. Note: there is a magnetic disc fitted into the bottom of the swirl pot, after your last rinse remove and clean this magnet before replacing it carefully back into the tank in the exact same position. (4 or 5 litres of petrol, kerosene or mentholated spirits for this rinsing process works well and should be drained and discarded afterwards.
- 2. Remove the filler neck protective cover plate from under the left hand side rear wheel arch and disconnect the filler and fast fill breather hoses from the filler neck. Do not remove these hoses at their tank end at this stage. Also disconnect the 6mm vent hose from the white plastic vent check valve clipped to the cover plate, leaving the hose still attached to the tank.
- 3. Lift up the carpet in the back, and remove the inspection plate to allow access to the fuel pick-up/pump assembly and fuel gauge sender, both sets of wiring and the pick-up and return hose connections. Unplug the wiring and disconnect the fuel pick up and return hoses.
- 4. Remove the tank guard, drain all the fuel from the tank and unbolt and remove the original tank with the filler, fast fill and vent hoses still attached.
- 5. After removing the fuel gauge sender and the pick-up/pump assembly from the original tank, refit them both into the new **Brown Davis Automotive long range tank** using the original gaskets and the 9 machine screws and spring washers supplied in the fitting kit.
 - 6. Do not use the black 6.0mm hose running from the vent fitting(s) on the old tank. Use the new 6mm hose supplied in the fitting kit to connect to the brass vent fitting on the end of the expansion box on top of the new long range tank (**Refer diagram 1**). This hose will be used to reconnect to the vent valve under the wheel arch later.
 - 7. Transfer the filler and fast fill hoses to the new long range tank. (Refer Diagram 1)
 - 8. Lift the **Brown Davis Automotive long range tank** into position, feeding the filler hoses over the left hand side chassis rail and making sure not to jam any of the pick-up, return or vent hoses up on top of the tank. Secure the tank up into position using the original bolts.
 - 9. Connect all hoses to their original positions. Remember to reconnect the wiring to the gauge sender and pump (if applicable) using the floor inspection plate opening. Refit the cover plate over the filler area under the



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left hand side rear wheel-arch. WARNING: Incorrect connection of the fuel hoses in the Petrol EFI pump models could cause damage to the pump.

- 10. Confirm the drain plug has been sealed into the tank and fill with the fuel drained in step 3. Replace the fuel filter under the bonnet after the first 1000km or 2 to 3 tank fills of the new tank and double check mounting bolts and clamps. On some diesel vehicles it is necessary to bleed the fuel system after such a tank installation (refer manufacturers handbook). Confirm the fuel gauge is reading and replace the fuel cap.
- 11. Road test the vehicle. Note the owners information sheet attached.



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OPERATION INFORMATION

The operation of your new Brown Davis Automotive long range fuel tank is little different from the original tank.

Simply fill the long range/auxiliary tank exactly as with a standard tank. (It just takes more fuel to fill, and a dual filler will be used for filling auxiliary tanks).

The fuel gauge on the vehicles dash will read as with the standard tank. It should read with the same degree of accuracy as it did with the standard tank other than staying on full for most of the new increase in capacity. For about 20% more than the standard tank held the gauge will now read in proportion from full down to empty. Auxiliary tanks come with a separate tank gauge to show separate fuel level to main tank.

The low fuel light will still function as normal with it coming "on" at about 20% more fuel volume left to go than it used to, to warn you of low fuel.

Remember your new long range tank(s) are carrying a lot more fuel than standard. Remain aware of how much fuel has been used during the initial period of the gauge remaining on full for future reference in estimating fuel usage and consumption.

Maintenance and service of your new Brown Davis Automotive long range fuel tank other than the recommended 1000km check and filter change should be in align with the normal vehicle Manufactures service schedule and guidelines. Remember the long range tank has a magnetic drain plug that the standard tank did not. With the fuel level low the drain plug can be removed and cleaned to remove any metal fragments introduced from the filler bowser scraping on the filler tube when filling or particles and rust flakes from jerry cans used on long trips. This facility is supplied to protect the in-tank fuel pumps fitted to most modern vehicle fuel tanks.

Finally make sure the warranty card is filled out completely and returned to Brown Davis Automotive and that the warranty information is read and understood. If there are any queries about this or any of the above information please contact us at Brown Davis at the attached address or phone and fax numbers for assistance. 5