

Brown Davis Automotive Pty. Ltd.

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Last edited: 1/09/2010

Fuel Tank Part List and Installation Instructions

TANK P/N: MT972R3

MITSUBISHI TRITON (2WD) TWIN CAB 1997 on - (EFI V6) REPLACEMENT TANK

Item	Description	Quantity	Part number	Р	С
1	TANK – REPLACEMENT	1	MT972R3		
2	DRAIN PLUG – MAGNETIC – M14 (fitted to tank)	1	DP-M14		
3	BRASS – TAIL BARB - 5/8" x 1/4" BSP	1			
4	BRASS – PLUG - 1/4" BSP	1			
5	SET SCREW - PAN HEAD - M4 x 10mm - PLATED 8.8	12			
6	WASHER - SPRING PLATED - M4	12			
7	WASHER - PANEL PLATED - M10	4			
8	WARRANTY CARD & INFORMATION SHEET	1			
9	BROWN DAVIS AUTOMOTIVE STICKER	1			

Packed by (P):			Checked by (C):
Date Packed:	/	/	



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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 **3 Year Warranty**. 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

- 1 Remove the inner guard cover from the passenger side rear wheel arch, to gain access to the filler and tank hoses. Disconnect the rubber (50mm) fuel filler hose and (16mm) fast fill breather hose from the steel filler neck in the cabin body.
- 2 Remove the muffler at the rear exhaust join and remove also the tailshaft from the vehicle. (Rear flange only and tailshaft held across to the side is usually enough access.)
- Remove the filler cap and drain the remaining fuel out of the standard tank. Disconnect the pump pickup and return flexible fuel hoses and pump wiring, located on top of the standard tank toward the front, from in under the wheel arch where the cover has been removed. The pump high pressure supply hose should be disconnected at the fuel filter. The fuel gauge wiring should be unplugged on the side of the tank and the vent hose disconnected on top of the original tank towards the rear.
- 4 Support the standard tank under the vehicle, unbolting it front and rear and lower tank to the ground and remove from under the vehicle.
- Confirm that the new Brown Davis long range tank is perfectly clean inside before assembly and installation by rinsing out the inside thoroughly, as should always be done with any new component installed into the fuel system of any vehicle. Use 4 to 5 litres of petrol, diesel or methylated spirits for this rinsing process which should be drained and discarded afterwards. Wiping out the inside of the injection pump swirlpot with a clean rag down through the pump entry boss in the top of the tank to confirm absolute cleanliness is not a bad idea, nor is a second rinse.
- Remove the fuel pump assembly from the standard tank and install it into the new long range tank using the original gasket, but with new M4 screws and washers supplied.
- Remove the fuel gauge sender assembly from the standard tank. Modify float arm as shown in **Diagram 2**. Check accuracy of calibration by holding it against the side of the new tank, in line where it fits and make sure float reaches from top to bottom without striking anything inside the tank (eg: baffles, etc). Install it into the new long range tank using the original gasket, but also with new M4 screws and washers supplied.
- Install the 5/8" brass tailbarb into the new replacement long range fuel tank near the filler using teflon tape or the like on the thread. Do not forget to also install the drain plug. (Refer diagram 1)
- 9 Transfer the expansion vent check valve from the top of the standard tank to the new replacement tank. Use the new M4 screws and washers supplied. Before lifting the new tank into position, cut back the outer insulation from the fuel pump/gauge wiring loom about 40mm to allow a greater stretch apart of the wiring for the positioning of the two



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- units in the new tank. The wiring has to stretch further to reach around the square corner of the long range tank.
- Lift the new tank into position, and hold up in place with a jack or similar. Align brackets on new tank to standard bracket positions on chassis front and rear and refit the 4 original nuts with new panel washers supplied.
- 11 Reconnect the high pressure fuel hoses and wiring from the pump, the fuel gauge wiring at the side and the vent hose on top now that the new tank is in position.
- Reconnect the filler and fast fill vent hoses, confirm the drain plug has been sealed into the tank and fill with the fuel (drained in step 3).
- 13 Refit the tail shaft and exhaust system removed in step 2.
- Run the engine and road test the vehicle. Check all hose connections from under the guard and the plastic cover can then be refitted.
- Replace the fuel filter after the first 1000km or 2 to 3 tank fills of the new tank and double check mounting bolts.



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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.