



Brown Davis Automotive Pty. Ltd.

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HJLR1

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Last edited: 1/09/2010

Fuel Tank Part List and Installation Instructions

TANK P/N: HJLR1

HOLDEN JACKAROO (1986-1991) – CARBY / DIESEL
130ltr REPLACEMENT TANK

Item	Description	Quantity	Part number	P	C
1	TANK – REPLACEMENT	1	HJLR1		
2	HOSE – TMP - 6mm	0.4m			
3	HOSE – FILLER - 51mm	0.17m			
4	HOSE CLAMP – STAINLESS - 40-60mm	2			
5	FUEL PICK UP - 3/8" x 1/4" BSP ELBOW	1			
6	BRASS – TAIL BARB - 1/4" x 1/4" BSP	1			
7	BRASS – TAIL BARB - 5/8" x 1/4" BSP	1			
8	BRASS – ELBOW – 5/16"x 1/4" BSP	1			
9	BRASS – PLUG - 1/4" BSP	1			
10	DRAIN PLUG – MAGNETIC – M14 (fitted to tank)	1	DP-M14		
11	SET SCREW – HEX – M10 x 30mm – ON WIRE – PLATED 8.8	6			
12	NUT – STANDARD PLATED – M10	12			
13	WASHER – SHAKEPROOF INTERNAL PLATED – M10	6			
14	FILLER NECK REDUCER – 1 7/8" - 2"	80mm	FNR-178-200		
15	WARRANTY CARD & INFORMATION SHEET	1			
16	BROWN DAVIS AUTOMOTIVE STICKER	1			

Packed by (P): _____

Checked by (C): _____

Date Packed: ____ / ____ / ____

PH: +61 (3) 9762 8722 FAX: +61 (3) 9762 9829
47 Holloway Drive, Bayswater, Victoria, Australia 3153

info@browndavis.com.au www.browndavis.com.au



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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 INFORMATION REQUIRED IN RELATION THE BELOW INSTRUCTIONS PLEASE DO NOT HESITATE 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 INTERACTING WITH THE TANK, IF FITTED.



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FITTING

- 1 Place vehicle on hoist (or similar) and raise to convenient working height.
- 2 Disconnect the filler neck and associated hoses. Drain and unbolt the standard tank then carefully lower it, until you can access the fuel gauge wiring and unplug it. Then lower tank to the ground.
- 3 Cut the standard fuel tank support brackets from the chassis rails on each side of the tank location. These need to be trimmed off flush with the bottom face of the rail, this allows fitment of the new larger replacement tank.
- 4 Confirm that the 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, kerosene or methylated spirits for this rinsing process which should be drained and discarded afterwards, and to confirm absolute cleanliness it is not a bad idea for a second rinse. Remove the fuel gauge sender unit from the standard tank. Position unit in new tank and check to ensure the accuracy of the fuel gauge (The float should stop about 2mm off the top and bottom of the tank and also ensure that it does not foul on the sides), Fix unit into tank reusing original screws.
- 5 Install all brass fittings into the new replacement long range fuel tank using teflon tape or the like on all threads. **(Refer diagram 1)**
- 6 Fit new longer pickup and return hoses from kit to the respective brass fittings on the top of the new tank, before lifting it into position. Fit the new 50mm filler hose and hose clamp supplied and also transfer the fast fill breather hose to the new long range tank. Cut 6mm vent hose, coming down from filler area, under the driver's side rear between the side of the vehicle and the chassis rail. Remove (cut) steel "T" piece out of the lines attached to the top of the standard tank. Attach cut off section of this hose - discriminator valve end (small plastic valve) to the 1/4" fitting on the side of the expansion box on top of the new fuel tank. Join these two vent hoses with "T" piece when new tank is lifted into place. Remove wiring harness steel clip at the drivers side rear corner, inside the chassis rail, tuck loom up and discard the clip.
- 7 Lift new tank up into position supporting it on a jack or similar. Drill two holes each side, up through the chassis rail and one in each back corner, through corner brackets of the chassis. Lower in new screws on positioning wires and fit washers and double nuts (supplied).
- 8 Tighten bolts, check clearances, and reconnect all hoses and wiring. Fit also new filler neck joining tube and clamp (supplied).
- 9 Return vehicle to ground level and remove from hoist (or similar).
- 10 Confirm the drain plug has been sealed into the tank and fill with the fuel drained in step 2. Replace the fuel filter under the bonnet after the first 1000km or 2 to 3 tank fills of the new tank and double check



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mounting bolts. On some diesel vehicles it is necessary to bleed the fuel system after such a tank installation (refer manufacturers handbook).



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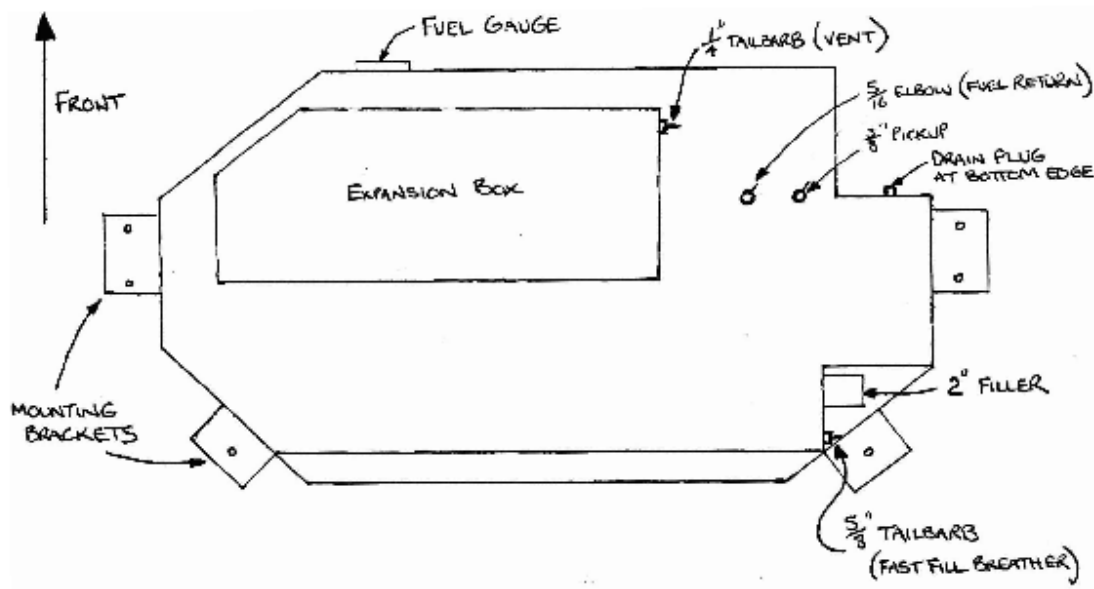
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47 Holloway Drive, Bayswater Vic
Phone (03) 9762 8722 Fax (03) 9762 9829

DIAGRAM 1





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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.