



Brown Davis Automotive Pty. Ltd.

ABN: 72 657 573 544

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HCOVGR1

1

Last edited: 1/09/2010

Fuel Tank Part List and Installation Instructions

TANK P/N: HCOVGR1

HOLDEN COMMODORE VG-VS UTILITY
105ltr REPLACEMENT TANK

Item	Description	Quantity	Part number	P	C
1	TANK – REPLACEMENT	1	HCOVGR1		
2	HOSE – TMP - 6mm	1.5m			
3	HOSE – TMP – 12.5mm	2.0m			
4	HOSE CLAMP – STAINLESS – 8-16mm	4			
5	HOSE CLAMP – SATINLESS - 12-20mm	4			
6	DRAIN PLUG – MAGNETIC – M14 (fitted to tank)	1	DP-M14		
7	BRASS – TAIL BARB - 5/8" x 1/4" BSP	1			
8	BRASS – TAIL BARB - 1/4" x 1/4" BSP	1			
9	BRASS - ELBOW - 1/4" x 1/4" BSP	3			
10	BRASS – ELBOW - 1/2" x 1/4" BSP	1			
11	BRASS – PLUG - 1/4" BSP	1			
12	T-PIECE – OFFSET - STEEL - 5/8" x 1/2"	1	TP-5812		
13	SET SCREW – PAN HEAD - M5 x 10mm – PLATED 8.8	5			
14	WASHER – SPRING PLATED - M5	5			
15	SET SCREW – HEX - M6 x 20mm – PLATED 8.8	3			
16	NUT – STANDARD PLATED - M6	3			
17	WASHER – SPRING PLATED – M6	3			
18	DISCRIMINATOR VALVE	1			
19	DISCRIMINATOR VALVE SEAL	1			
20	EXPANSION CONTAINER	1	EC-HCOVGR1		
21	WARRANTY CARD & INFORMATION SHEET	1			
22	BROWN DAVIS AUTOMOTIVE STICKER	1			

Packed by (P): _____

Checked by (C): _____

Date Packed: ____ / ____ / ____

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HCOVGR1

2

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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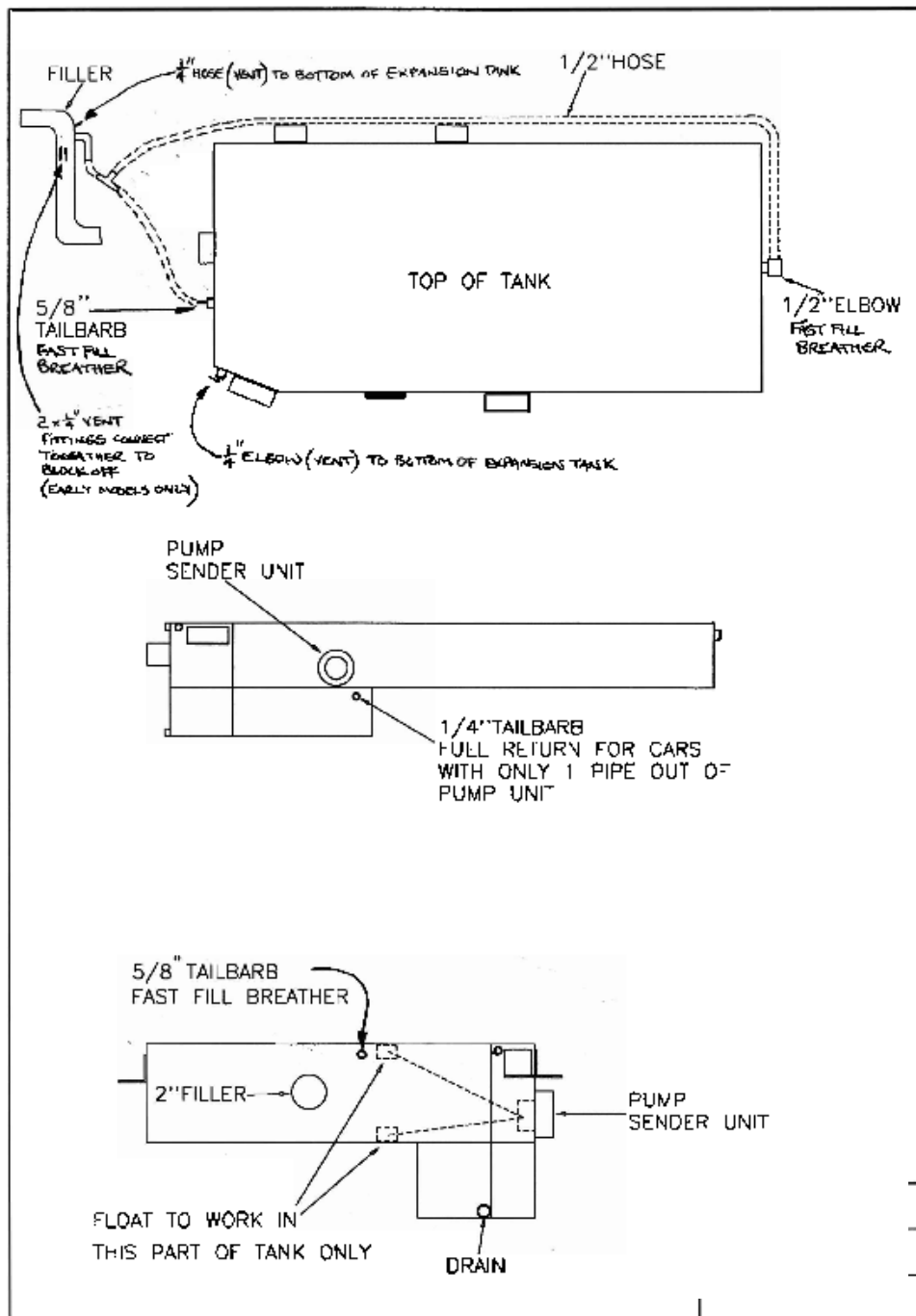
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HCOVGR1

3

FITTING (fitting time is approximately 3 hours)

- 1 Remove the front driver side ute back side cover panel in tray area. Remove the floor section at the front in the tray area. Remove the filler cap, disconnect the rubber (50mm) fuel filler hose and (16mm) fast fill breather hose from the steel filler neck in the body and drain/syphon the remaining fuel out of the standard fuel tank (The standard tank does not have a drain plug).
- 2 Remove the standard fuel tank by unbolting. Unplug the wiring loom (USE EXTREME CAUTION - DO NOT FLEX/DAMAGE THE TERMINAL ON THE GAUGE SENDER - IT IS VERY FRAGILE AND PRONE TO LEAKING) and disconnect the fuel hoses. In earlier models which have the plastic expansion container clamped to the side of filler neck, remove it and the two 6mm hose fittings in the neck (that the old plastic bottle connected to), and are to be connected together. This will block them off, in preparation for fitment of the new larger expansion tank (these fittings were deleted in later models). Remove the purge hose from the other 6mm fitting on the filler neck; this hose is to be connected to the new discriminator valve fitted into the top of the new expansion tank.
- 3 Confirm that the Brown Davis long range fuel 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 or methylated spirits for this rinsing process which should be drained and discarded afterwards.
- 4 Remove the fuel gauge/pump assembly from the standard fuel tank and install it into the new long range fuel tank using the original screws and gasket. Take care to adjust the float arm as per Diagram 1. Also check position of the pump assembly to confirm it touches the bottom of the tank.
- 5 Install all brass fittings into the new replacement long range fuel tank using teflon tape or the like on all threads. Do not forget the drain plug not shown. (Refer Diagram 1)
- 6 Transfer the filler hose and fast fill breather hose from the standard tank to the new long range fuel tank. Run an additional 1/2" fast fill breather hose across from the passenger side of the new fuel tank and tee this into the other fast fill breather (using the 5/8"x1/2" offset "T" supplied) as close to the top of the filler neck as possible. This hose should not droop lower than the top of the fuel tank.
- 7 Lift the new tank up into the back of the vehicle and lower it into position. Remember to reconnect the wiring to the fuel gauge sender unit and also both fuel hoses. WARNING: Incorrect refitting of hoses to the pump/sender can damage pump unit. Using the standard bolts mount the new tank.
- 8 Fit new discriminator valve and its seal into the top of the new expansion tank. Also fit the two 1/4" elbows in to the bottom of this new tank. Lift the expansion tank into place inside the 1/4 panel just forward of and next to the filler neck. Position it centrally, then drill the 3x 1/4" holes and bolt up using bolts, nuts and washers supplied. As mentioned in step 2, connect the purge hose to the discriminator valve. Run a hose from one of the 1/4" elbows to the 6mm fitting on the filler neck (refer Diagram 1). Run a second hose from the other 1/4" elbow down to the 1/4" elbow fitted into the front corner of the new tank (refer Diagram 1).
- 9 Refit the front driver side ute back side cover panel in tray area.
- 10 Confirm the drain plug has been sealed into the tank and fill with the fuel drained in step 1. Refit the floor section at the front in the tray area. Replace the fuel filter under the bonnet after the first 1000km or 2 to 3 tank fills of the new tank.





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HCOVGR1

5

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.