

Brown Davis Automotive Pty. Ltd.

ABN: 72 657 573 544

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Last edited: 1/09/2010

Fuel Tank Parts List and Installation Instructions

TANK P/N: HCRA1

HOLDEN CREWMAN UTE 90ltr AUXILIARY PETROL TANK

| Item | Description | Quantity | Part number | Р | С |
|------|---|----------|-------------|---|---|
| | | | | | |
| 1 | TANK – AUXILIARY | 1 | HCRA1 | | |
| 2 | HOSE – TMP – 6mm | 1.5m | | | |
| 3 | HOSE – TMP – 16mm | 1.5m | | | |
| 4 | HOSE - FUEL AND EMISSION-8mm | 1.0m | | | |
| 5 | HOSE - FILLER - 41mm | 70mm | | | |
| 6 | HOSE - FILLER - 48mm | 70mm | | | |
| 7 | HOSE CLAMP - STAINLESS - 8-16mm | 4 | | | |
| 8 | HOSE CLAMP – STAINLESS - 12-20mm | 4 | | | |
| 9 | HOSE CLAMP - STAINLESS - 40-60mm | 4 | | | |
| 10 | DRAIN PLUG – M14– MAGNETIC (fitted to tank) | 1 | DP-M14 | | |
| 11 | BRASS – ELBOW - ½" x ¾" BSP | 1 | | | |
| 12 | FUEL PICK UP – 5/16 X 1/4 BSP ELBOW | 1 | | | |
| 13 | T-PIECE – STEEL – 3/8 x 1/4 | 1 | TP-3814 | | |
| 14 | T-PIECE – OFFSET STEEL – 5/8 x 5/16 | 1 | TPO-58516 | | |
| 15 | WIRE - SINGLE CORE - 3.0mm - BLUE | 1.5m | | | |
| 16 | WIRE - TWIN CORE - 3.0mm - RED/BLACK | 5.0mm | | | |
| 17 | CRIMP FITTING – SPADE FEMALE 1/4 - BLUE | 7 | | | |
| 18 | CRIMP FITTING - RING 5mm - RED | 5 | | | |
| 19 | SCOTCH LOCK | 1 | | | |
| 20 | SWITCH - ROCKER - ON/OFF RED PILOT | 1 | | | |
| 21 | SET SCREW – HEX – M10 x 30mm – ON WIRE – PLATED 8.8 | 4 | | | |
| 22 | NUT – STANDARD PLATED – M10 | 4 | | | |
| 23 | WASHER - PANEL PLATED - M10 | 4 | | | |
| 24 | WASHER – SHAKEPROOF INTERNAL PLATED – M10 | 4 | | | |
| 25 | FUEL PUMP – ROTARY INLINE | 1 | | | |
| 26 | FUEL GAUGE - CP90 LED DASH UNIT | 1 | | | |
| 27 | SENDER UNIT – VDO – 220-004 (fitted to tank) | 1 | | | |
| 28 | DISCRIMINATOR VALVE | 1 | | | |
| 29 | DISCRIMINATOR VALVE SEAL | 1 | | | |



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| 30 | FUEL FILTER - INLINE - 8mm | 1 | | |
|----|-----------------------------------|---|----------|--|
| 31 | FILLER TUBE | 1 | FT-HCRA1 | |
| 32 | TWIN FILLER | 1 | TF-HCRA1 | |
| 33 | WARRANTY CARD & INFORMATION SHEET | 1 | | |
| 34 | BROWN DAVIS AUTOMOTIVE STICKER | 1 | | |

| Packed by (P): | | | Checked by (C): | | |
|----------------|---|---|--------------------------|--|--|
| Date Packed: | 1 | 1 | | | |



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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 (14 gauge) cold rolled, aluminium coated, steel ensures maximum strength and durability and minimum corrosion susceptibility. 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 assure 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 severe off road use in mind and will not compromise ground clearance, entry, exit or ramp over angles.

<u>AUXILIARY TANKS</u> Are designed to be installed in addition to the original factory fuel tank, with its own fuel gauge. An electrical changeover system simultaneously changes the source of fuel from the original (main) tank to the auxiliary tank (or vice versa), the vehicles fuel gauge is simultaneously changed over to indicate the level in the tank from which hte fuel is being drawn.

FITTING

- 1 Check to confirm that the Brown Davis tank is perfectly clean inside before assembly and installation, by rinsing out with petrol, as should always be done with any new component installed into the fuel system of any vehicle. Fit the plastic filter onto the pick up tube of the auxiliary fuel tank gauge sender unit supplied and install it into the auxiliary tank using M4 screws supplied.
- Install brass fittings to the tank using Teflon tape or Anaerobic Thread Sealant to seal the threads.
 Install discriminator valve with grommet supplied.
- Fit auxiliary fuel tank to vehicle using hardware supplied. Bolt to chassis both sides. (4 points)
- Fit & wire up rotary fuel transfer pump in appropriate location on chassis & install switch in a convenient location in cabin.
- 5 Fit FT-HCRA1 (filler tube) & connect to fuel tank using rubber joining hose.



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- Fit TF-HCRA1 (Twin Filler Neck) in place of original & connect to FT-HCRA1 using rubber joining hose.
 Connect original tank to TF-HCRA1 with original rubber joining hose.
- 7 Fit fast fill & transfer hoses to filler neck. ½" tube = fast fill & 3/8" tube = fuel transfer.
- 8 Fit tee fitting (for hose to discriminator valve) into fast fill pipe of auxiliary tank, no further than 60mm from filler neck connection.
- 9 Check your work. Fill tank & check for leaks. Make sure that the transfer pump turns on & off (switch down should be on). Ensure that you can see fuel transferring into the main tank when switch is on. Ensure that the auxiliary tank fuel gauge operates correctly.



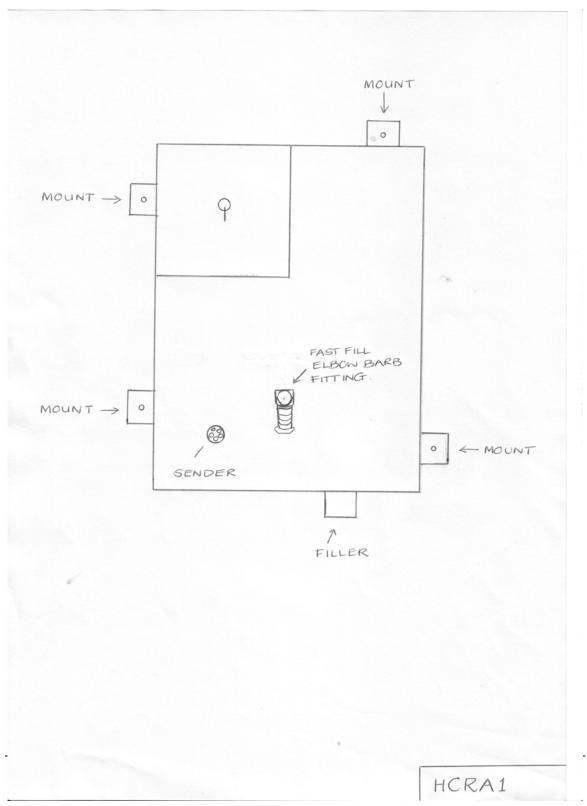
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OPERATION INFORMATION

The operation of your new Brown Davis Automotive gas conversion fuel tank is little different from the original main tank, however very similar.

Filling the tank may be via a dual filler neck in the factory fuel fill position, or may be a remote filler at another location as identified to you upon installation. Simply fill the auxiliary petrol tank exactly as with a standard tank via the appropriate filler type.

The fuel gauge is separate to the main tank, however will read as with a standard gauge indicating empty/full and the progression in between. It should read with the same degree of accuracy as with a standard tank other than the difference in capacity to the standard tank.

The low fuel light for the main tank will still function as normal.

Maintenance and service of your new Brown Davis Automotive auxiliary 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.