



Brown Davis Automotive Pty. Ltd.

ABN: 72 657 573 544

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FBAR3

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Last edited: 31/07/2014

Fuel Tank Kit List and Installation Instructions

TANK P/N: FBAR3

FORD BA/BF CHASSIS 09/2007 on UTILITY / CAB
132ltr REPLACEMENT TANK

| Item | Description | Quantity | Part number | P | C |
|------|---|----------|-------------|---|---|
| 1 | TANK – REPLACEMENT | 1 | FBAR3 | | |
| 2 | HOSE – TMP - 6mm | 2.4m | | | |
| 3 | HOSE – TMP – 12.5mm | 0.8m | | | |
| 4 | HOSE – FUEL AND EMISSION – 16mm | 0.4m | | | |
| 5 | HOSE CLAMP – STAINLESS - 8-16mm | 6 | | | |
| 6 | HOSE CLAMP – STAINLESS - 12-20mm | 2 | | | |
| 7 | HOSE CLAMP – STAINLESS - 16-27mm | 2 | | | |
| 8 | BRASS – PLUG - 1/4" BSP | 1 | | | |
| 9 | BRASS – ELBOW - 1/4" x 1/4" BSP | 2 | | | |
| 10 | BRASS – ELBOW - 1/2" x 1/4" BSP | 2 | | | |
| 11 | BRASS – ELBOW - 5/8" x 1/4" BSP | 1 | | | |
| 12 | BRASS – TAIL BARB - 1/2" x 1/4" BSP | 1 | | | |
| 13 | DRAIN PLUG – MAGNETIC – M14 (fitted to tank) | 1 | DP-M14 | | |
| 14 | SET SCREW – PAN HEAD – M5 x 12mm – PLATED 8.8 | 8 | | | |
| 15 | WASHER – SPRING – M5 - PLATED | 8 | | | |
| 16 | SET SCREW – HEX – M6 x 15mm – PLATED 8.8 | 7 | | | |
| 17 | NUT – NYLOC PLATED – M6 | 7 | | | |
| 18 | WASHER – SPRING PLATED – M6 | 7 | | | |
| 19 | WASHER – FLAT PLATED – M6 | 13 | | | |
| 20 | SET SCREW – HEX – M10 x 30mm – PLATED 8.8 | 4 | | | |
| 21 | BOLT – HEX – M10 x 40mm – PLATED 8.8 | 2 | | | |
| 22 | BOLT – HEX – M10 x 45mm – ON WIRE – PLATED 8.8 | 2 | | | |
| 23 | NUT – STANDARD PLATED – M10 | 10 | | | |
| 24 | NUT – NYLOC PLATED – M10 | 2 | | | |
| 25 | WASHER – FLAT PLATED – M10 | 4 | | | |
| 26 | WASHER – PANEL PLATED – M10 | 8 | | | |
| 27 | WASHER – SHAKEPROOF INTERNAL PLATED – M10 | 6 | | | |
| 28 | RETAINING RING | 1 | RR-GMSR3 | | |
| 29 | CROSSMEMBER | 1 | CM-FAUR1 | | |
| 30 | TANK BRACKET - CARBON CANISTER MOUNTING BRACKET | 1 | TB-FBAR1 | | |
| 31 | WARRANTY CARD & INFORMATION SHEET | 1 | | | |
| 32 | BROWN DAVIS AUTOMOTIVE STICKER | 1 | | | |

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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 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 Raise the rear of the vehicle and support the chassis so that the rear suspension is completely relaxed. Remove the tailshaft and intermediate muffler assembly. Disconnect the hand brake cables at adjustment bracket and place these together with the cable support bracket to one side.
- 2 Remove the fuel cap and disconnect all lines, and looms, and remove the tank.



- 3 Remove both the fuel tank mounting straps and rear mounting bracket from the chassis.
- 4 To prepare the tank for installation, thoroughly rinse with a petroleum based cleaning agent i.e. Kerosene. Once the tank has been cleaned and rinsed, remove the standard fuel pump / sender unit from the factory tank. Fit the sender unit top the Brown Davis tank, and retain using the supplied gauge sender unit ring and bolts. Ensure float arm travel is adequate to give accurate reading (can be done alongside the tank), and check for free movement of the sender unit float arm inside the tank.
- 5 Fit all brass fittings to the new tank in final preparation for fitment.

NOTE: In later model vehicles the sender unit has built in roll over valve (circled in the photo below), if this is the case the BSP socket next to the sender flange on the new Brown Davis replacement tank needs to be blocked off with the supplied **BRASS – PLUG - 1/4" BSP** fitting.

If the standard sender unit does not have this fitting, then the supplied **BRASS – ELBOW - 1/4" x 1/4" BSP** should be fitted.



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- 6 Carefully remove the carbon canister and mounting bracket from original fuel tank. Mount and secure canister bracket to the supplied bracket. Cut off the canister vent elbow leaving a MINIMUM 1 cm boss. Tap 1/4" BSP thread into plastic and fit 1/4 "x 1/2" elbow barb using sealant and ensuring correct orientation.



- 7 Fit the carbon canister/bracket to the front left of the tub wall, by drilling through the tube, and fastening with supplied bolts.



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- 8 Fit the supplied cross member in position as shown in images below. Note that these holes are there from factory. Ensure that the cross member is level before tightening.





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- 9 Before fitment of the tank can continue, undo the hand brake cable from the mounting bracket with the exhaust.
- 10 it the Brown Davis replacement tank into position over the hand brake cable, ensuring there is adequate clearance in all places before drilling the cross member for forward mounting of the tank. Use the supplied M10 bolts with positioning wire to secure the tank to.



- 11 Re-connect the fuel lines to the factory fittings, and where possibly, using the factory fuel line fittings.



- 12 Resecure hand brake cables by modifying the standard mount with the exhaust. See image below for directions.

Note: Ensure that the handbrake cables clear both the exhaust and fuel tank sufficiently.





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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.