



ABN: 72 657 573 544

Copyright Brown Davis Automotive Pty. Ltd. This document contains confidential and  
Technical information the property of Brown Davis Automotive Pty. Ltd.

THIA1

1

### **Fuel Tank Parts List & Installation Instructions**

TANK P/N: **THIA1**

TOYOTA HIACE AUXILIARY TANK  
SUPER LONG WHEEL BASE

Item	Description	Quantity	Part number	P	C
1	TANK – REPLACEMENT	1	THIA1	-	-
2	HOSE – TMP – 6mm	2.7m			
3	HOSE – TMP – 16mm	1.0M			
4	HOSE – FUEL AND EMISSION - 8mm	3.0m			
5	HOSE – FUEL AND EMISSION - 12mm	2.0m			
6	HOSE – FILLER– 38mm	100mm (x2)			
7	HOSE CLAMP – STAINLESS – 12 - 22	6			
8	HOSE CLAMP – STAINLESS - 8-16mm	10			
9	HOSE CLAMP – STAINLESS - 32-50mm	4			
10	HOSE CLAMP – NORMA – 12	2			
11	FUEL PICK UP – 5/16" x 1/4" BSP ELBOW	1			
12	BRASS – ELBOW – 5/8" x 1/4" BSP	1			
13	BRASS – ELBOW – 1/2" x 1/4" BSP	1			
14	5/8 X 5/16 - Y PIECE	1			
15	5/8 X 1/2 - T PIECE	1			
16	DRAIN PLUG – MAGNETIC – M14 (fitted to tank)	1	DP-M14	-	-
17	SET SCREW – HEX – M10 x 30mm – PLATED 8.8	1			
18	SET SCREW – HEX – M10 x 30mm – ON WIRE – PLATED 8.8	4			
19	NUT – STANDARD PLATED – M10	10			
20	WASHER – PANEL PLATED – M10	5			
21	WASHER – SHAKE PROOF INTERNAL PLATED – M10	5			
22	WASHER – FLAT PLATED – M10	5			
23	FUEL FILTER – INLINE – 8mm	1			
24	DISCRIMINATOR VALVE	1			
25	DISCRIMINATOR VALVE SEAL	1			
26	FUEL GAUGE - CP90 LED DASH UNIT	1			
27	SWITCH – ROCKER – ON/OFF LED LIGHT	1			
28	WIRE – TWIN CORE – 3.0mm – RED/BLACK	4.0m			
29	CRIMP FITTING – SPADE FEMALE 1/4" - RED	10			
30	CRIMP FITTING – RING 5mm – RED	3			
31	CRIMP FITTING – SPADE FEMALE PIGGYBACK 1/4" - RED	2			
32	SCOTCH LOCK	1			

KIT CONTINUES ON NEXT PAGE.....

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

[info@browndavis.com.au](mailto:info@browndavis.com.au) [www.browndavis.com.au](http://www.browndavis.com.au)



ABN: 72 657 573 544

Copyright Brown Davis Automotive Pty. Ltd. This document contains confidential and  
Technical information the property of Brown Davis Automotive Pty. Ltd.

THIA1

2

33	SENDER UNIT – VDO 220–004 (fitted to tank)	1			
34	FUEL FILLER & CAP	1			
35	FILLER TUBE	1	FT-THICCA1		
36	FUEL PUMP – ROTARY INLINE	1			
37	WARRANTY CARD & INFORMATION SHEET	1			
38	BROWN DAVIS AUTOMOTIVE STICKER	1			

Packed by (P): \_\_\_\_\_

Checked by (C): \_\_\_\_\_

Date Packed: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Last Edited: 28/04/14 P:\INSTRUCTAUXILIARY\Word files\THIA1.doc

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.

**AUXILIARY TANKS** 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 the fuel is being drawn.

## **FITTING**

A hole needs to be cut to fit the 'Fuel Filler with Cap'.

Firstly on the outside of the vehicle measure and mark 100mm right from the driver's side sliding door and 280mm down from the bottom rib on the panel. Refer to photos below.



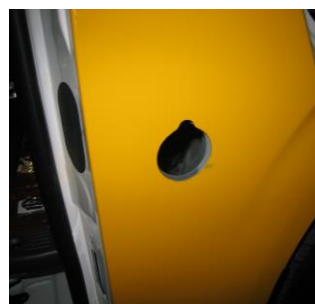
On the inside of the vehicle measure and mark 480mm vertically from the bottom sill and slightly right of centre. Ensure the measurement that is marked is not outside the indentation on the panel as indicated in the photo below.



The inside hole can now be cut. Drill a 95mm hole around the hole centre.



The outside hole needs to be cut. Using a 57mm diameter hole saw cut a hole around the hole centre. Use a dye grinder to notch the hole at the top, as indicated by the photos below, so the fuel filler can be inserted easily.





ABN: 72 657 573 544

*Copyright Brown Davis Automotive Pty. Ltd. This document contains confidential and  
Technical information the property of Brown Davis Automotive Pty. Ltd.*

THIA1

5

### **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.**









