

## **Brown Davis Automotive Pty. Ltd.**

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HYILR1 1

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# **Fuel Tank Part List and Installation Instructions**

TANK P/N: HYILR1

#### HYUNDAI I-LOAD VAN 150ltr REPLACEMENT TANK

Item	Description	Quantity	Part number	Р	С
1	TANK - REPLACEMENT	1	HYILR1		
2	HOSE – TMP - 6mm	1m			
3	HOSE – TMP - 16mm	0.6m			
4	HOSE - FUEL AND EMISSION - 8mm	0.6m (x2)			
5	HOSE CLAMP – STAINLESS - 8-16mm	6			
6	HOSE CLAMP – STAINLESS - 16-25mm	2			
7	HOSE CLAMP – STAINLESS - 40-60mm	1			
8	DRAIN PLUG – MAGNETIC – M14 (fitted to tank)	1	DP-M14		
9	BRASS – ELBOW - 5/8" x 3/8" BSP	1			
10	SET SCREW - HEX - M10 X 30mm - ON WIRE - PLATED 8.8	1			
11	WASHER - PANEL PLATED - M10	1			
12	WASHER - SHAKEPROOF INTERNAL - M10	1			
13	NUT – STANDARD PLATED – M10	2			
14	SET SCREW - PAN HEAD - M5 x 12mm - PLATED 8.8	6			
15	WASHER - SPRING PLATED - M5	6			
16	DESCRIMINATOR VALVE	1			
17	DESCRIMINATOR VALVE SEAL	1			
18	O-RING – 4 ¾ x 5 1/8 x 3 (BS7351)	1			
19	RETAINING RING	1	RR-MBS07R1		
20	WARRANTY CARD & INFORMATION SHEET	1			
21	BROWN DAVIS AUTOMOTIVE STICKER	1			

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HYILR1 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 INFORAMTION REQUIRED IN RELATION THE BELOW INSTRUCTIONS PLEASE DO NOT HESTITE 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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HYILR1 3

## Installation

1. The standard tank needs to be removed from the vehicle. Start by ensuring that the fuel level in this particular tank is low prior to beginning. Undo the tank mounts and support the tank with a suitable stand. The tank needs to be lowered slightly to gain access to the fuel pick up and return lines. Also undo the fuel filler connection to the tank along with the breather and fast fill lines. Be sure to retain the factory bolts for fitment of the Brown Davis tank.

Note: There is an access hatch in the floor which may/may not be accessible due to custom fit outs and the like, but this allows for easy and immediate access to the fuel pick ups/gauge sender unit before the tank is unbolted to make the process easier.

With the tank remove, the moulded fuel lines from the chassis rail to the tank need to be replaced with the supplied 8mm fuel hose. Carefully remove the plastic fast clips from the end of the moulded lines using a blade, and fit these to the fuel line and re-connect to the chassis lines.





- 2. With the tank removed, the fuel gauge sender unit needs to be removed from the tank to be installed into the new Brown Davis tank. Unscrew the fuel sender retaining ring from the OEM tank (the retaining ring rubber seal on the OEM item are no longer required). Install the sender unit/fuel pump assembly into the Brown Davis tank using the supplied o-ring, and retain in place with the supplied metal gauge sender retaining ring and M5 screws. Orientate the sender as shown below with the pick up and return pipes facing the front of the vehicle.
  - \*\*Prior to fitting out the Brown Davis tank, ensure that the tank is thoroughly rinsed out with petrol or suitable cleaning fluid\*\*



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HYILR1 4





3. Also supplied are a brass fitting, discriminator valve and hose. Start by installing the brass fitting (using a thread tape or sealant), and connecting the 16mm hose to this fitting. Install the discriminator valve and seal by firmly pressing it into position on the tank fitting. Connect the 6mm hose to the outlet of the valve.









4. Lift the Brown Davis tank up onto a suitable support/stand and prepare the tank to be raised into position. At a suitable height and with access to the



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HYILR1 5

hose connections on the sender assembly, re-connect the hoses before the tank can be raised up fully.



5. With the sender unit fully connected, align the mounting brackets with the factory holes and raise the tank to meet the mounting position. Using the factory bolts removed from the standard tank, re-install all bolts.









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HYILR1 6

6. One of the mounting brackets requires a hole to be drilled with a 10.5mm drill bit, and also a hole in the chassis rail may need to be drilled out to a larger size (model dependent). Once drilled, feed the supplied M10 set screw on wire through the side of the rail (several access holes) and protrude the thread down through the bracket and fasten with supplied washers and nuts.



- 7. With the tank in position, firmly fasten all mounting bolts and check for any interference with any nearby components.
- 8. Re-connect the filler hose and fast fill/breather lines to the filler assembly and ensure hose clamps are firm.



9. In order to check for potential leaks in the installation, only fill the tank up to a maximum of half a tank and test drive the vehicle for a short period, before re-inspecting the entire installation looking for any leaks at the hose connections on both the tank and filler. Again, check mounting bolts are firmly fastened prior to completion.



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HYILR1 7

## **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.