



Brown Davis Automotive Pty. Ltd.

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MBS07R1

1

Last edited: 19/10/2010

Fuel Tank Part List and Installation Instructions

TANK P/N: MBS07R1

MERCEDES-BENZ SPRINTER 2006on VAN 906 – (518series SWB/MWB)
180ltr REPLACEMENT TANK

Item	Description	Quantity	Part number	P	C
1	TANK – REPLACEMENT	1	MBS07R1		
2	HOSE – TMP - 16mm	700mm			
3	HOSE – FILLER - 44mm	175mm			
4	HOSE – FILLER – 57mm	100mm			
5	HOSE CLAMP – STAINLESS –16-25mm	2			
6	HOSE CLAMP – STAINLESS – 40-60mm	2			
7	HOSE CLAMP – STAINLESS – 50-70mm	2			
8	DRAIN PLUG – MAGNETIC – M14 (fitted to tank)	1	DP-M14		
9	BRASS – ELBOW - 5/8" x 1/4" BSP	1			
10	BRASS – ELBOW - 5/8" x 3/8" BSP	1			
11	SET SCREW – PAN HEAD – M5 x 12mm – PLATED 8.8	6			
12	WASHER – SPRING - M5	6			
13	SET SCREW – HEX – M10 x 30mm – ON WIRE – PLATED 8.8	5			
14	NUT – STANDARD PLATED – M10	10			
15	WASHER – PANEL PLATED – M10	5			
16	WASHER – FLAT PLATED – M10	5			
17	WASHER – SHAKEPROOF INTERNAL PLATED – M10	5			
18	DISCRIMINATOR VALVE	1			
19	DISCRIMINATOR VALVE SEAL	1			
20	FILLER NECK REDUCER – 1 3/4" – 2 1/4"	1	FNR-134-214		
21	RETAINING RING	1	RR-MBS07R1		
22	WARRANTY CARD & INFORMATION SHEET	1			
23	BROWN DAVIS AUTOMOTIVE STICKER	1			

Packed by (P): _____

Checked by (C): _____

Date Packed: ____ / ____ / ____

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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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3

FITTING

- 1 Place Mercedes 518 on hoist. To remove the standard plastic fuel tank open the filler door and remove the black plastic cover over the filler.
- 2 Remove the bolt holding the filler neck to the body.
- 3 Remove the gauge wiring from the sender unit.
- 4 Remove fuel lines from the sender unit.
***Please Note: Do not cut fuel lines or wiring harness. They will be reconnected to the new tank.**
- 5 Support the fuel tank and then undo support straps from the body.
- 6 Remove the tank from the vehicle.
- 7 Remove the front stone guard.
- 8 Holesaw a 1" hole in the body for fast fill breather to fit through. (Refer photo 1)
- 9 Cut the filler neck from the standard tank. (Refer photo 2)
- 10 Drill 12mm hole in the top of the filler and fit the 5/8" x 1/4" fast fill breather and seal with araldite. (Refer to photos 3 & 4)
- 11 Replace the filler back in the van with fast fill hose running through the 1" hole.
- 12 Remove locating lug from ceiling surface of sender unit. (Refer photo 5)
- 13 Fit sender unit to the tank.(Refer photo 6)
- 14 Fit disc valve to expansion box.(Refer photo 7)
- 15 Fit brass fast fill elbow to tank.(Refer photo 8)
- 16 Lift tank into position lining the brackets up with the 3 original strap mountain captive threads. (2 beside the tail shaft and 1 near the filler) (Refer photos 8 & 9 & 10)
- 17 Drill remaining holes in brackets and fit M10 set screw, nuts and washers.(Refer photos 11 & 12)
- 18 Connect plastic filler to tank with rubber hose supplied.(Refer photo 13)
- 19 Reconnect fuel lines and gauge senders.



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4



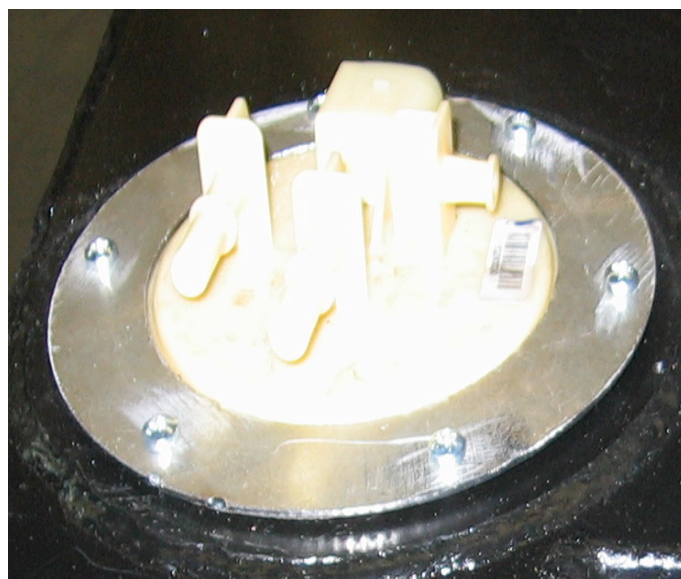
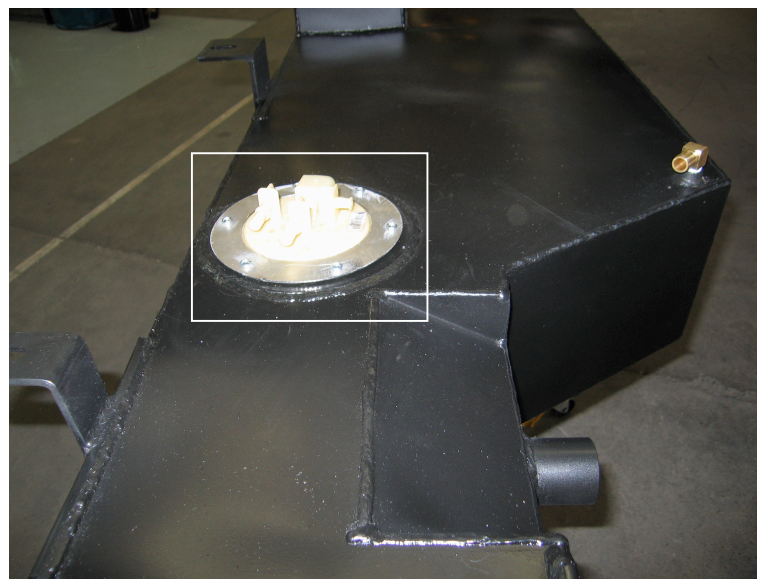
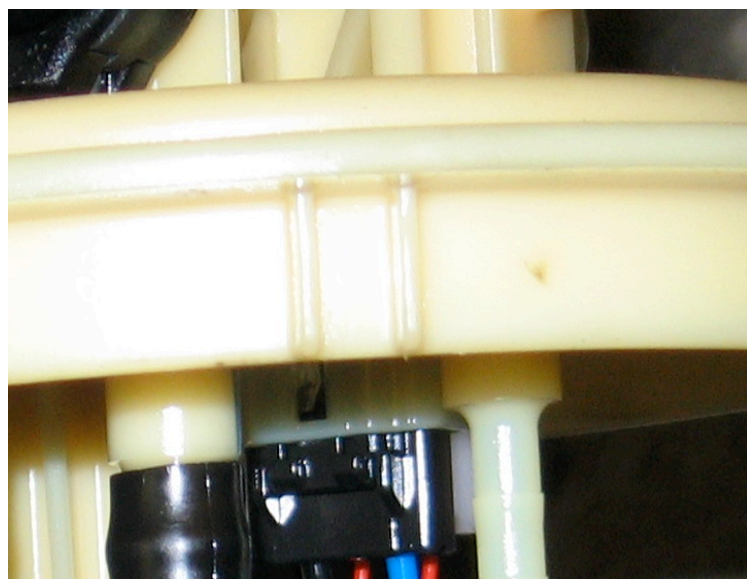
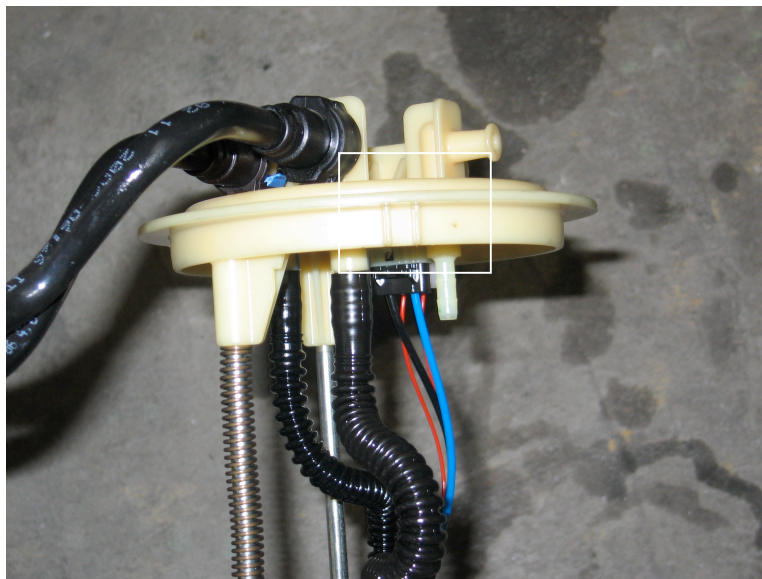


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5





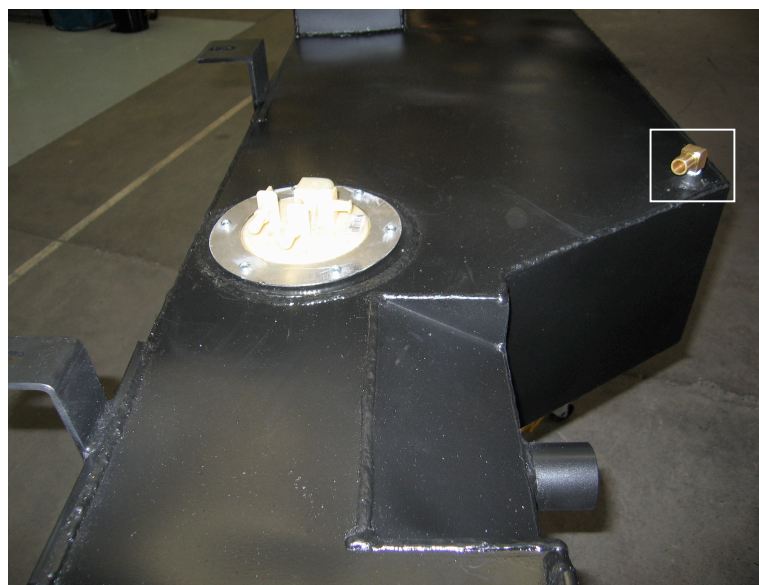
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6



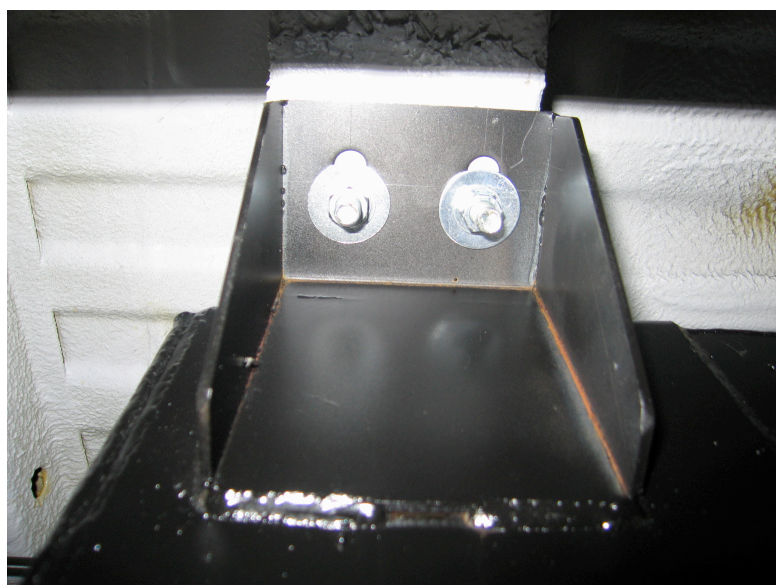
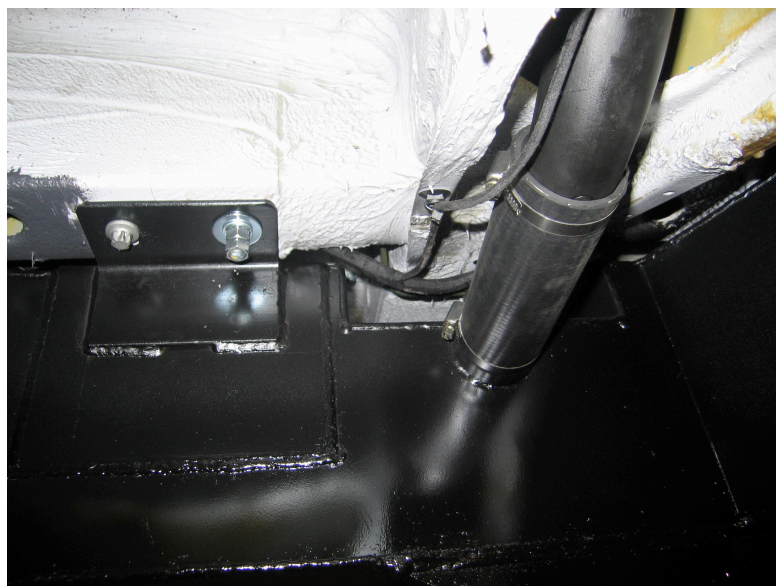


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7





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8





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9

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.