

Brown Davis Automotive Pty. Ltd.
ABN: 72 657 573 544

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JEEP GRAND CHEROKEE - WK2 (2010 to PRESENT) – 70lt AUXILIARY TANK AUXILIARY FUEL TANK PARTS LIST AND FITTING INSTRUCTIONS PART NUMBER: JGCHWK2A1

Item #	Description	Quantity	Part No.	P	C
1	TANK—REPLACEMENT	1	JGCHWK2A1	-	-
2	DRAIN PLUG—MAGNETIC—M14 (FITTED TO THE TANK)	1		-	-
3	HOSE – FUEL AND EMISSION - 8mm	1.5m			
4	HOSE – FUEL AND EMISSION - 16mm	1m			
5	HOSE – FILLER – 32mm	100mm			
6	HOSE – FILLER – 44mm	100mm (x2)			
7	HOSE CLAMP – STAINLESS – 8-16mm	6			
8	HOSE CLAMP – STAINLESS – 12-22mm	6			
9	HOSE CLAMP – STAINLESS – 25-40mm	2			
10	HOSE CLAMP – STAINLESS – 40-60mm	4			
11	FUEL PICK UP – 5/16" x 1/4" BSP ELBOW *CUT 280mm FROM THREAD*	1			
12	BRASS FITTING - TAIL BARB - 5/8" x 1/4" BSP	1			
13	BRASS FITTING - TAIL BARB - 5/16" x 1/8" BSP	2			
14	CABLE TIE - 8" BLACK	5			
15	Y-PIECE – 16mm x 16mm x 8mm	1			
16	FUEL GUAGE/SWITCH – CP 309GS LED DASH UNIT	1			
17	RELAY/BUZZER – PEEL – CP 5	1			
18	WIRE – TWIN CORE – 3.0mm – BROWN/WHITE—WITH PLUG	5m			
19	CRIMP FITTING – SPADE FEMALE 6mm - INSULATED - RED	1			
20	CRIMP FITTING – SPADE FEMALE 4mm - RED	1			
21	CRIMP FITTING - RING 5MM - RED	1			
22	CRIMP FITTING – JOINER 3mm - RED	1			
23	SCOTCH LOCK	1			
24	SENDER UNIT - VDO 220-004—FITTED TO TANK	1			
25	FUEL PUMP – POSI-FLO	1			
26	FUEL FILTER – INLINE – 8mm	1			
27	BRASS FITTING-TAIL BARB– 1/8" x 5/16" BSP	2			
28	SCREW - SELF TAPPER	2			
29	SET SCREW – PAN HEAD – M4 x 10mm – PLATED 8.8	5			
30	WASHER – SPRING PLATED – M4	5			
31	SET SCREW – HEX – M10 x 30mm – PLATED 8.8	2			
32	BOLT – HEX – M10 x 90mm – PLATED 8.8	2			
33	SET SCREW – HEX – M10 x 30mm – ON WIRE	2			

KIT CONTINUES ON NEXT PAGE



LONG RANGE FUEL TANKS
JGCHWK2A1

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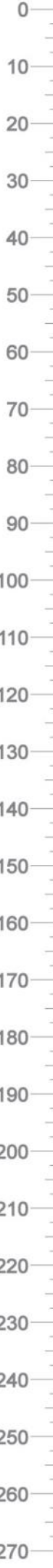
Item #	Description	Quantity	Part No.	P	C
34	WASHER – SHAKE PROOF PLATED – M10	4			
35	WASHER – FLAT PLATED – M10	4			
36	WASHER – PANEL PLATED – M10	2			
37	NUT- PLATED – M10	8			
38	BACK UP PLATE - 50mm x 50mm	2			
39	TWIN FILLER	1	TF-JGCHWK2A1		
40	FILLER TUBE	1	FT-JGCHWK2A1		
41	WARRANTY CARD & INFORMATION	1			
42	BROWN DAVIS AUTOMOTIVE STICKER	1			

	STAFF MEMBERS INITIALS	DATE
KIT PACKED BY		
KIT CHECKED BY		

Brown Davis Automotive Pty. Ltd.

47 Holloway Drive, Bayswater, Victoria, Australia 3153


Ph: +61 (3) 9762 8722 | Fax: +61 (3) 9762 9829 | Email. info@browndavis.com.au | Web. www.browndavis.com.au




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PART NUMBER: JGCHWK2A1 AUXILIARY FUEL TANK PARTS LIST AND FITTING INSTRUCTIONS

<p>WARNING:</p> <p>THIS FUEL TANK IS HEAVY. DO NOT ATTEMPT TO LIFT THIS FUEL TANK WITHOUT APPROPRIATE ASSISTANCE OR SERIOUS INJURY MAY RESULT</p>	
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<p>WARNING:</p> <p>ENSURE A FIRE EXTINGUISHER IS AVAILABLE WHILST WORKING NEAR EXPOSED FUEL</p>	
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- CHECK CONTENTS OF KIT BEFORE COMMENCING FITMENT
- DRAIN VEHICLE FUEL TANK TO LOWEST LEVEL POSSIBLE BEFORE COMMENCING FITMENT
- BEFORE INSTALLATION THE BROWN DAVIS LONG RANGE TANK SHOULD BE WASHED OUT WITH THE SAME FUEL TYPE AS THE VEHICLE IT'S BEING FITTED TO

Any questions or information required in relation to the below instructions please do not hesitate to contact Brown Davis head office or one of our distributors.

Phone: +61 (3) 9762 8722
Email: info@browndavis.com.au

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SETUP FOR AUXILIARY TANK

1. Remove the passenger side wheel to get better access to fuel system.
 - Disconnect the fuel lines.



2. Mark the standard filler.
 - Cut the filler on the lines, then remove the fill side to make room for the new Y Filler supplied leaving the tube running to the standard tank.



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3. Carefully cut the screw thread off the standard filler.
- Connect it to the Y filler supplied by welding or gluing with araldite so the standard jeep cap can be used.



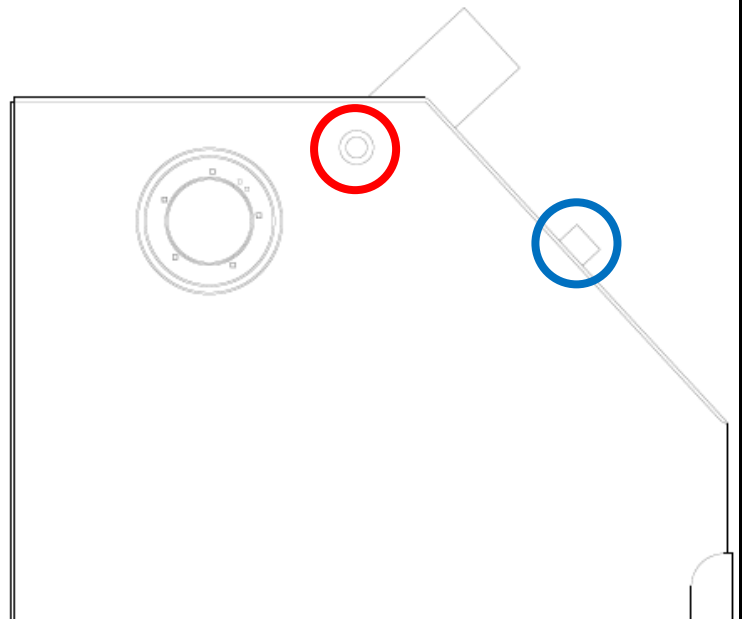
4. Fit the Y filler into place by pushing it through the rubber grommet.
- Using the supplied FILLER HOSE - **mm join the standard filler tube to the Y filler.
 - Join the OFFSET - Y PIECE to the Y Filler so the offset pipe faces towards the Y filler.



5. Install all brass fittings into the new auxiliary fuel tank using Teflon tape, thread sealant or the likes on all threads.

⇒ **FUEL PICK UP – 3/8" x 1/4" BSP ELBOW - Circled in Red**

⇒ **BRASS – TAIL BARB - 1/2" x 1/4" BSP - Circled in Blue**



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6. Locate somewhere on the dash to mount the **FUEL GAUGE/SWITCH – CP 309GS LED DASH UNIT**. **photo is for reference only**

- Drill a 20mm (approx.) to install.



7. Locate 12 volt ignition wire

8. Connect the single red wire from the **RELAY/BUZZER – PEEL – CP 5** to the 12 volt ignition wire using the supplied SCOTCH LOCK or by soldering.



9. Mount the **RELAY/BUZZER – PEEL – CP 5** to a metal surface behind the driver side kick panel or dash.

- NOTE: Most vehicles will have a metal tag with a bolt that can be used (shown in photo) but in some cases the unit will need to be installed with the **SCREW - SELF TAPPER** supplied.
- The eyelet must be touching a metal surface to earth the setup.



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10. Connect the plugs from the **FUEL GUAGE/SWITCH – CP 309GS LED DASH UNIT** to the **RELAY/BUZZER – PEEL – CP 5**.

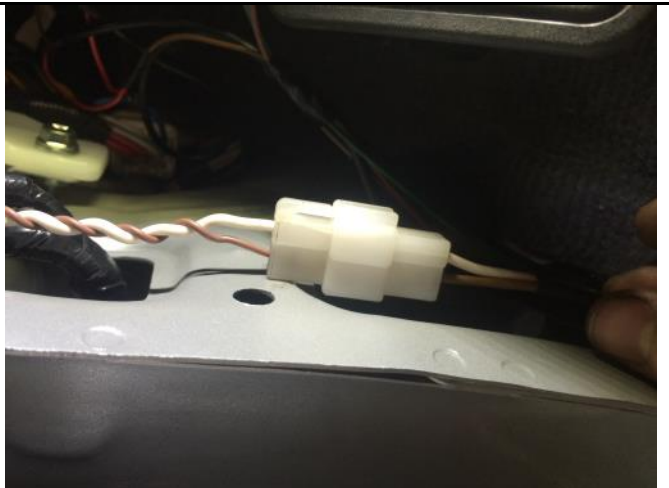


11. Mount the **FUEL PUMP – POSI-FLO** in a suitable location close to the tank. Brown Davis suggests fitting it to the stud on the auxiliary tank bracket.
- Connect the black wire to the chassis or tank bracket to earth the pump.



12. Run the **WIRE – TWIN CORE – 3.0mm – BROWN/WHITE—WITH PLUG** from the dash to the tank location, ensuring the wire is safe. Feed the wire through an existing loom or grommet.
- The end with the plug should be in the vehicles cab at the dash.
 - Brown Davis recommends to follow existing wiring where possible or other wise, follow fuel lines or air conditioning lines.

13. Connect the white plugs from both the **RELAY/BUZZER – PEEL – CP 5** and the **WIRE – TWIN CORE – 3.0mm – BROWN/WHITE—WITH PLUG**.



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14. Using a lifting device, lift the tank into position.
- Mark the vehicle body where the fast fill breather needs to travel through.
 - Lower the tank.
 - Using a hole saw, cut a hole big enough for the fast fill to travel through.
 - Seal with silicon.





15. Fit the HOSE - FUEL AND EMISSION - 8mm to the FUEL PICKUP fitted to the tank in step 5.

16. Start to jack the tank back into position.

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<p>17. Connect the CRIMP FITTING – JOINER 3mm - RED to the red wire on the FUEL PUMP – POSI-FLO.</p> <ul style="list-style-type: none"> Join the white wire to the opposite end of the CRIMP FITTING – JOINER 3mm - RED. NOTE: The white wire should be trimmed first to avoid excess wire. Keep off cut wire for later step. 	
<p>18. Attach the CRIMP FITTING – SPADE FEMALE 6mm - INSULATED - RED to the brown wire so it can be plugged to the center plug on the SENDER UNIT - VDO 220-004 (circled in photo) that is fitted to the tank.</p> <ul style="list-style-type: none"> NOTE: The brown wire should be trimmed first to avoid excess wire. 	
<p>19. The sender unit must also be earthed.</p> <ul style="list-style-type: none"> Using the white off cut wire connect the CRIMP FITTING - RING 5MM - RED to one end and the CRIMP FITTING – SPADE FEMALE 4mm - RED to the other. Plug the CRIMP FITTING – SPADE FEMALE 4mm - RED to the SENDER UNIT - VDO 220-004 (circled in photo). Connect the CRIMP FITTING - RING 5MM - RED to the chassis. 	
<p>20. Connect the white plugs from both the RELAY/BUZZER – PEEL – CP 5 and the WIRE – TWIN CORE – 3.0mm – BROWN/WHITE—WITH PLUG together.</p>	
<p>21. Connect the remainder of the hose attached to the fuel filter (connected in step **) to the pick up on the auxiliary fuel tank.</p>	

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22. With tank in position drill through the holes in the rear brackets into the chassis rail.

- Feed the supplied bolts on wire through the holes in the chassis rail.
- Double nut the bolts.



23. Drill through the holes in the front bracket into the chassis rail.

- Feed the supplied bolts on wire through the holes in the chassis rail.
 - Double nut the bolts.
- * NOTE: the pump shown in photo is different to the one supplied now.



24. Safely run the hose fitted to the FUEL PICKUP (in step 15) to the POSI-FLO FUEL PUMP (fitted in step 11). Ensure the FUEL FILTER is fitted to the suction side of the pump.

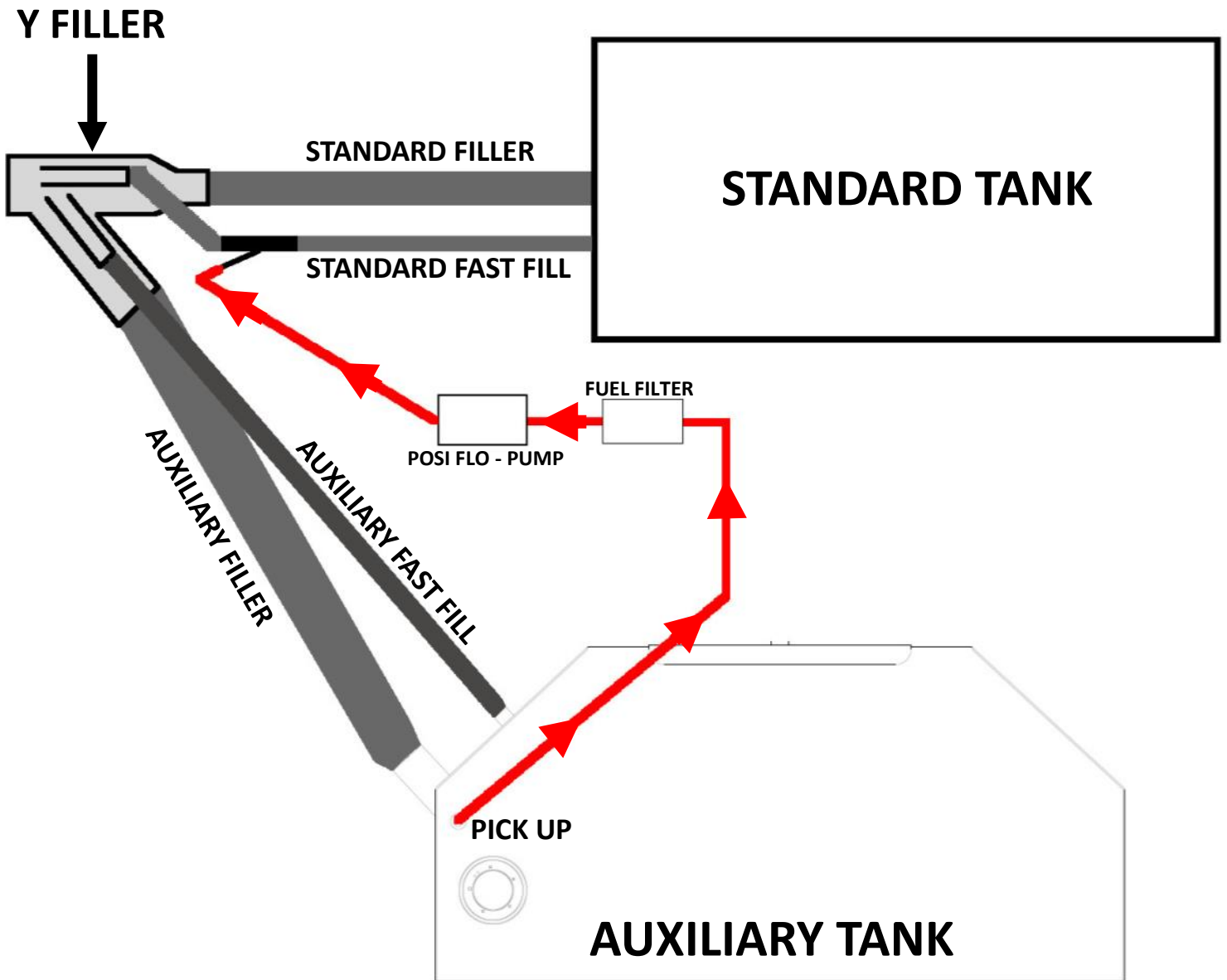
- Connect the hose to the off set pipe on the Y-piece fitted in step 4.
- ⇒ See fuel system diagram.



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FUEL SYSTEM DIAGRAM



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25. Using the supplied HOSE - FILLER - 45mm connect the supplied FILLER TUBE from the auxiliary tank to the Y-FILLER



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26. Double check all fuel line clamps and security of fuel lines and wiring. Road test and check for rattlers & squeaks.

