

Brown Davis Automotive Pty. Ltd.
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**NISSAN PATROL Y62 – 140lt AUXILIARY TANK
AUXILIARY FUEL TANK PARTS LIST AND FITTING INSTRUCTIONS
PART NUMBER: NPY62A1**

Item #	Description	Quantity	Part No.	P	C
1	TANK—REPLACEMENT	1	NPY62A1	-	-
2	DRAIN PLUG—MAGNETIC—M14 (FITTED TO THE TANK)	1		-	-
3	HOSE – FUEL AND EMISSION - 6mm	300mm			
4	HOSE – FUEL AND EMISSION - 8mm	1.2m			
5	HOSE – TMP – 16mm	650mm			
6	HOSE – FILLER – 35mm	150mm			
7	HOSE CLAMP – STAINLESS – 8-16mm	7			
8	HOSE CLAMP – STAINLESS – 12-22mm	4			
9	HOSE CLAMP – STAINLESS – 16-25mm	4			
10	HOSE CLAMP – STAINLESS – 32-50mm	6			
11	FUEL PICK UP – 5/16" x 1/4" BSP ELBOW *CUT 240mm FROM THREAD*	1			
12	BRASS FITTING-ELBOW- 5/8" x 3/8" BSP	1			
13	BRASS FITTING-TAIL BARB– 1/8" x 5/16" BSP	2			
14	CABLE TIE - 8" BLACK	5			
15	WIRE – TWIN CORE – 3.0mm – BROWN/WHITE—WITH PLUG	3.5m			
16	SENDER UNIT - VDO 220-004	1			
17	FUEL PUMP – POSI-FLO	1			
18	FUEL FILTER – INLINE – 8mm	1			
19	FUEL GUAGE/SWITCH – CP 309GS LED DASH UNIT	1			
20	BUZZER – PEEL – CP 5	1			
21	CRIMP FITTING – SPADE FEMALE 6mm - INSULATED - RED	1			
22	CRIMP FITTING – SPADE FEMALE 4mm - RED	1			
23	CRIMP FITTING - RING 5MM - RED	1			
24	CRIMP FITTING – JOINER 3mm - RED	1			
25	SCOTCH LOCK	1			
26	T-PIECE NYLON BARBED - 16mm	1			
27	Y-PIECE – 16mm X 16mm X 8mm	1			
28	FILLER TUBE - T-PIECE – 1 3/8" x 1 3/8" x 1 3/8" - ANGLED	1	FT-NPY62A1		
29	SET SCREW – PAN HEAD – M4 x 10mm – PLATED 8.8	5			
30	WASHER – SPRING PLATED – M4	5			
31	SET SCREW – HEX – M8 x 30mm – ON WIRE	1			
32	SET SCREW – HEX – M8 x 30mm – PLATED 8.8	2			
33	WASHER – FLAT PLATED – M8	2			

KIT CONTINUES ON NEXT PAGE

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Item #	Description	Quantity	Part No.	P	C
34	WASHER – PANEL PLATED – M8	1			
35	WASHER – SPRING PLATED – M8	3			
36	NUT- PLATED – M8	1			
37	SET SCREW – HEX – M10 x 30mm – PLATED 8.8	6			
38	WASHER – SPRING PLATED – M10	6			
39	WASHER – PANEL PLATED – M10	6			
40	REAR MOUNTING BRACKET	1	MB-NPY62A1-1		
41	FRONT MOUNTING BRACKET	1	MB-NPY62A1-2		
42	WARRANTY CARD & INFORMATION	1			
43	BROWN DAVIS AUTOMOTIVE STICKER	1			

	STAFF MEMBERS INITIALS	DATE
KIT PACKED BY		
KIT CHECKED BY		



FT-NPY62A1-1- REFER TO ITEM 24
FILLER TUBE - T-PIECE – 1 3/8" x 1 3/8" x 1 3/8" - ANGLED



MB-NPY62A1-1- REFER TO ITEM 36
FRONT MOUNTING BRACKET



MB-NPY62A1-1- REFER TO ITEM 37
REAR MOUNTING BRACKET

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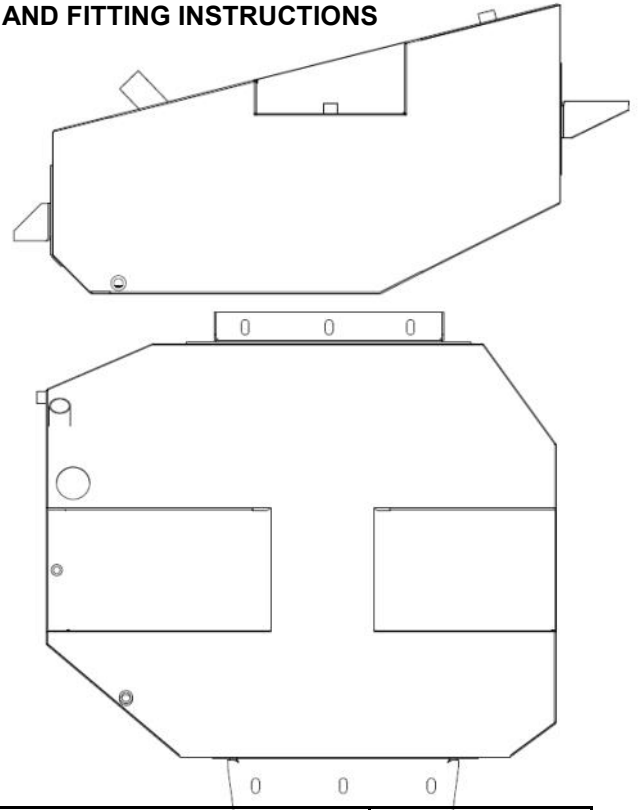
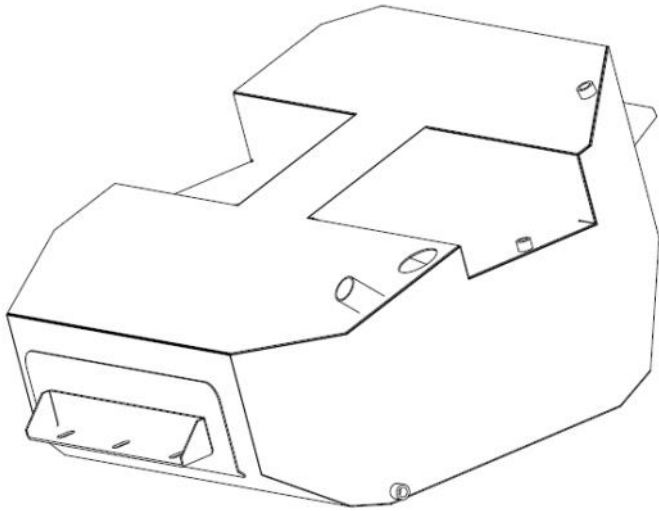
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PART NUMBER: NPY62A1 AUXILIARY FUEL TANK PARTS LIST AND FITTING INSTRUCTIONS



WARNING:

THIS FUEL TANK IS HEAVY. DO NOT ATTEMPT TO LIFT THIS FUEL TANK WITHOUT APPROPRIATE ASSISTANCE OR SERIOUS INJURY MAY RESULT



WARNING:

ENSURE A FIRE EXTINGUISHER IS AVAILABLE WHILST WORKING NEAR EXPOSED FUEL



- 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 spare wheel and wheel winding mechanism.
 - Remove the two spare wheel supports **circled in red**, at the front and rear of the spare wheel cavity.



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2. Fit the Front and rear mounting brackets using the captives from the wheel support brackets.
 - The front mounting brackets reuses 2 of the standard bolts, use the supplied M8 bolts with spring and flat washers for the centre holes.
 - Use the bolt on wire for the hole on the left hand side of the car.
 - Reuse all the standard bolts on the rear mounting bracket.



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3. Remove plastic guard above the exhaust.
- Remove the 2 brackets between the chassis and the bumper.



4. Remove the passenger side rear wheel guard to access the filler assembly.
- Remove the standard rubber filler tube.
 - Cut the rubber filler tube *use red lines in photo as reference* to insert the **T-PIECE – 1 3/8" x 1 3/8" x 1 3/8" - ANGLED**.
 - Secure the **T-PIECE – 1 3/8" x 1 3/8" x 1 3/8" - ANGLED** using hose clamps provided.



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5. Once **T-PIECE – 1 3/8" x 1 3/8" x 1 3/8" - ANGLED** is fitted to the rubber filler tube, refit it to the car.
- Insure that the angled piece is aiming towards the rear of the car.
 - This must be done before the tank is fitted.



6. Locate the fast fill breather tube, (5/8" hose running from the filler assembly to the standard tank *circled in red*).
- Cut the rubber to install the **T-PIECE NYLON BARBED - 16mm.**
 - Use hose clamps to secure it in place.
 - Using hose clamps connect the **HOSE – TMP – 16mm** supplied, to the T-PIECE.
 - Feed the hose over the cross-member.



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7. Locate the hose joiner above the diff in the fast fill breather *shown in photo's*.
 - Remove the joiner and fit **T-PIECE – OFFSET – 16mm X 16mm X 8mm** in it's place.
 - Connect the supplied **HOSE – FUEL AND EMISSION - 8mm** to the T-PIECE then feed it towards the left hand side of the car, cable tying where appropriate to insure line is safe and secure.



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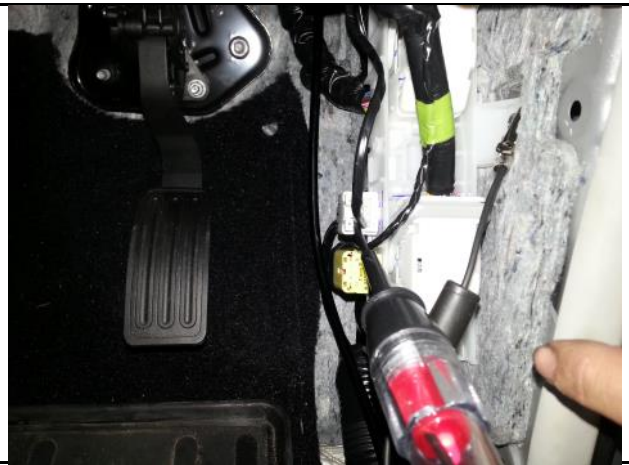
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8. Run the **WIRE – TWIN CORE – 3.0mm – BROWN/WHITE—WITH PLUG** from the dash to the tank location, ensuring the wire is safe. Feed the wire through an existing loom or grommet.

- 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.

9. Locate the 12 volt ignition wire.

- Photo shows a point that can be used, **for reference only**.





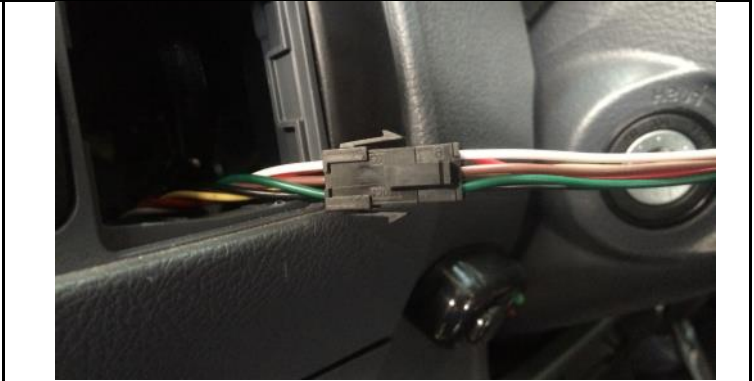
10. Fit the **FUEL GUAGE/SWITCH – CP 309GS LED DASH UNIT** to the dash.

- Brown Davis suggests installing in where circled in red.



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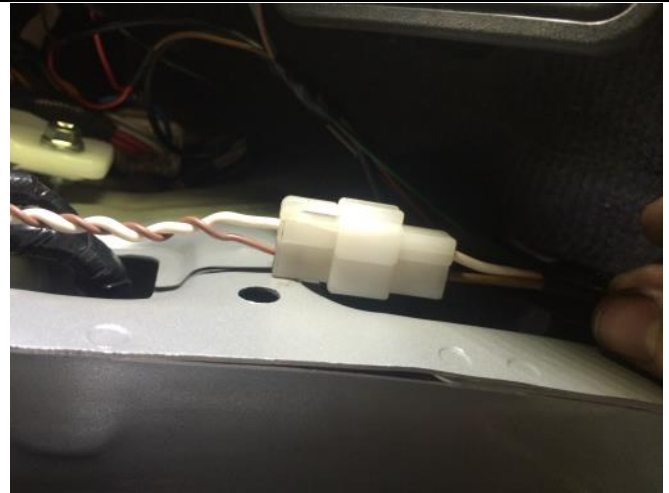
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<p>11. Locate 12 volt ignition wire</p> <p>12. Connect the single red wire from the BUZZER – PEEL – CP 5 to the 12 volt ignition wire using the supplied SCOTCH LOCK or by soldering.</p>	
<p>13. Stick the BUZZER – PEEL – CP 5 behind the driver side kick panel or dash.</p> <ul style="list-style-type: none">• Earth the ring (circled in photo) by fastening it to a metal surface.	
<p>14. Connect the plugs from the FUEL GUAGE/SWITCH – CP 309GS LED DASH UNIT to the BUZZER – PEEL – CP 5.</p>	

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



16. Connect the **CRIMP FITTING – JOINER 3mm - RED** to the red wire on the **FUEL PUMP – POSI-FLO.**
- 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.

17. Once the tank is in place, 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.
- NOTE: The brown wire should be trimmed first to avoid excess wire.

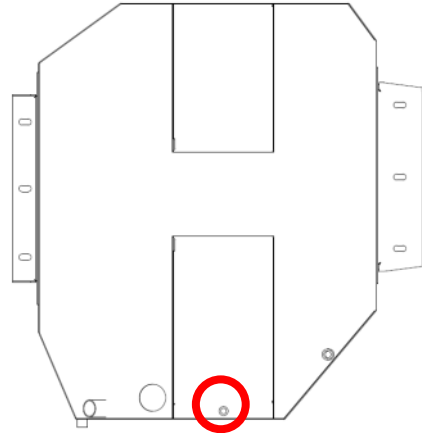


18. Once the tank is in place, the sender unit must also be earthed.
- Using the white off cut wire connect the **CRIMP FITTING - RING 5MM - RED** to one end and the **CRIMP FITTING – SPADE FEMALE 4mm - RED** to the other.
 - Plug the **CRIMP FITTING – SPADE FEMALE 4mm - RED** to the **SENDER UNIT - VDO 220-004** (circled in photo).
 - Connect the **CRIMP FITTING - RING 5MM - RED** to the chassis.



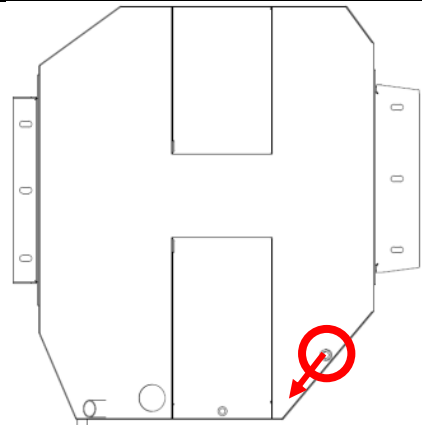
SETUP FOR AUXILIARY TANK

19. Screw in the **FUEL PICK UP – 5/16" x 1/4" BSP ELBOW** using teflon tape, thread sealant or the likes into the socket circled.



20. Screw in the **BRASS FITTING-ELBOW- 5/8" x 3/8" BSP** using teflon tape, thread sealant or the likes into the socket circled.

- Have the elbow pointing in the directing of the arrow.



21. Using the **HOSE – FUEL AND EMISSION - 8mm** and hose clamps connect the **FUEL FILTER – INLINE – 8mm** and the **FUEL PUMP – ROTARY INLINE** *as shown in photo*.

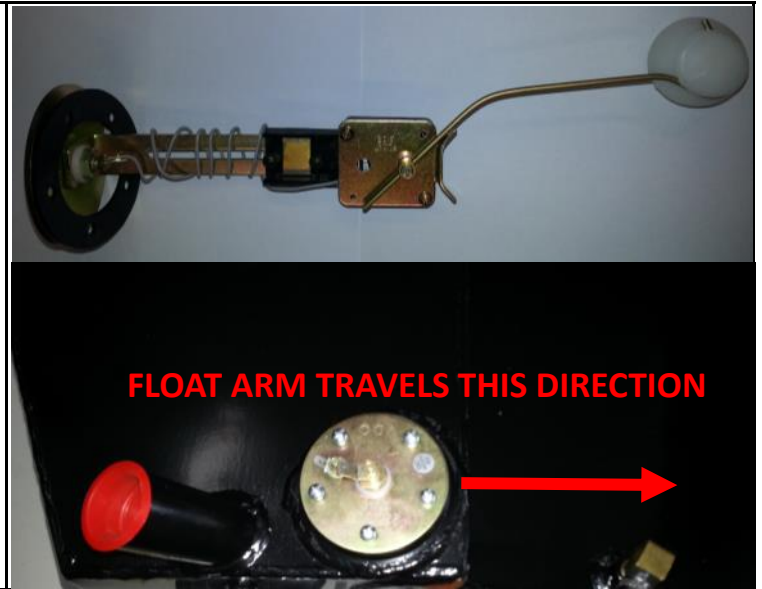
- Mount the setup onto the bolt attached to the side of the tank *as shown in photo*.
- Then connect the hose off the filter to the **FUEL PICK UP – 5/16" x 1/4" BSP ELBOW** (fitted in step 19).
- Connect the black wire to the tank to earth the pump.



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22. Adjust the **SENDER UNIT - VDO 220-004** using the VDO diagram provided *see next page*.
- Use the 5x M4 Screws and Spring washers to fit the sender unit to the tank,.
 - Insure that the sender unit's float arm travels in the direction of arrow shown in photo. Check that the float arm does not get obstructed through its rotation up.



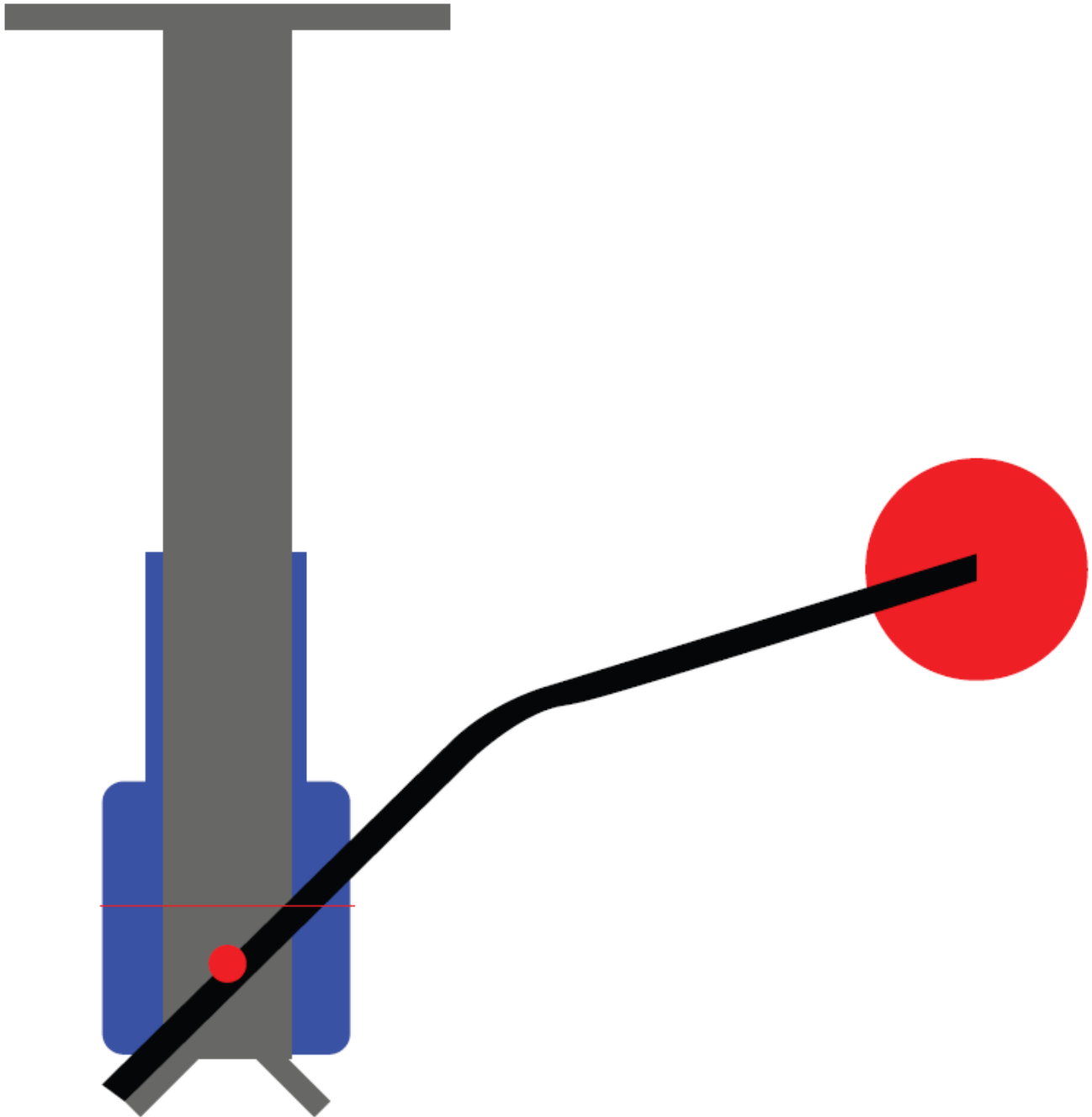
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SENDER UNIT - VDO 220-004 DIAGRAM

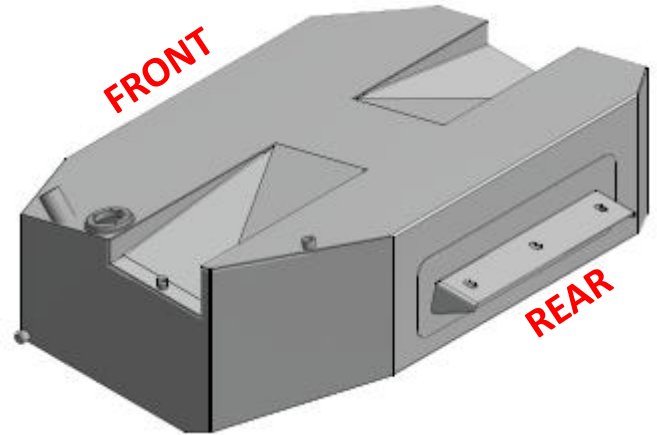
Sit sender on diagram below. Use diagram as template for adjustment.

FLOAT
SIDE



INSTALLATION OF AUXILIARY TANK

23. Using a lifting device, jack the tank into place.



24. Before the tank is in final position, connect the **HOSE – TMP – 16mm** (fitted in **step 6**) to the **BRASS FITTING-ELBOW- 5/8" x 3/8" BSP** (fitted in **step 20**)

- Connect the **HOSE – FUEL AND EMISSION - 8mm** (fitted in **step 7**) to the **FUEL PICK UP – 5/16" x 1/4" BSP ELBOW** (fitted in **step 19**).
- Fit the **HOSE – FILLER – 35mm** to the **T-PIECE – 1 3/8" x 1 3/8" x 1 3/8" - ANGLED** (fitted in step 5).
- Complete step 17 & 18

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25. Line the front and rear brackets on the tank to the mounting brackets.
- Using the supplied M10 bolts, Panel and Spring Washers, secure the tank in place.



26. Double check all fuel line clamps and security of fuel lines. Fill tank and double check all fuel system for leaks. Road test and check for rattlers & squeaks.