

Float Control

Installation manual



Fig. 1 The display with the annoying yellow sign is due to a defective foil sensor.

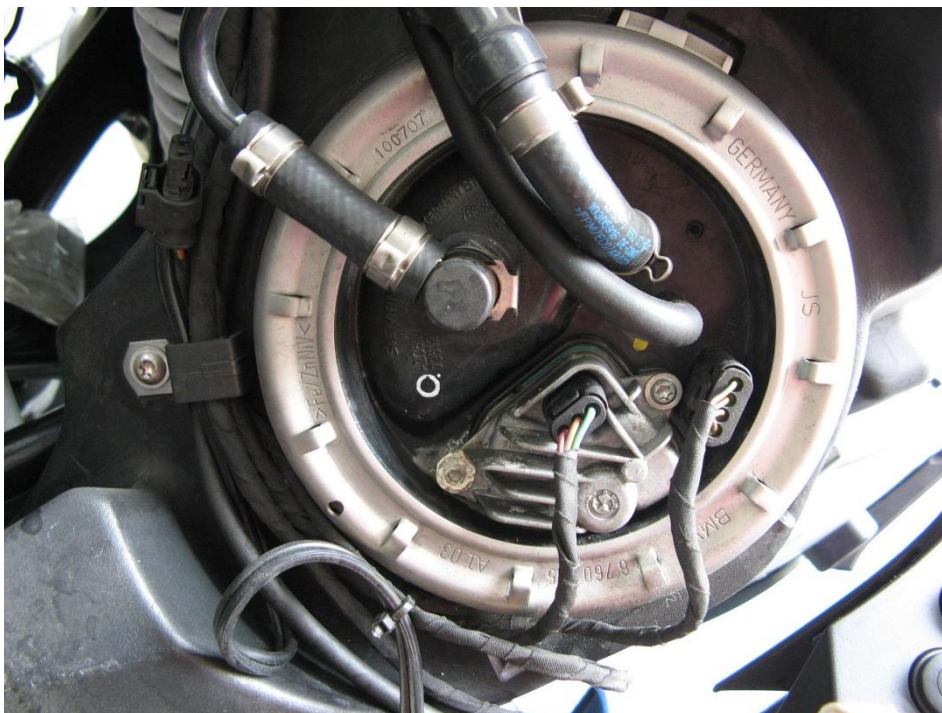


Fig. 2 Seen the fuel unit from above, the Float Control must be connected on the four-pole connector on the right. Pull the four-pole connector as shown in the picture from the unit.

Designing the Float Control



Fig. 3 Prototype of the Float Control on the workbench connected to the tank unit. On this picture you can already see how the Float Control and the wires of the original BMW float should be connected to the fuel pump unit. So, the new float is connected to the connector where previously the connector of the foil sensor was inserted.

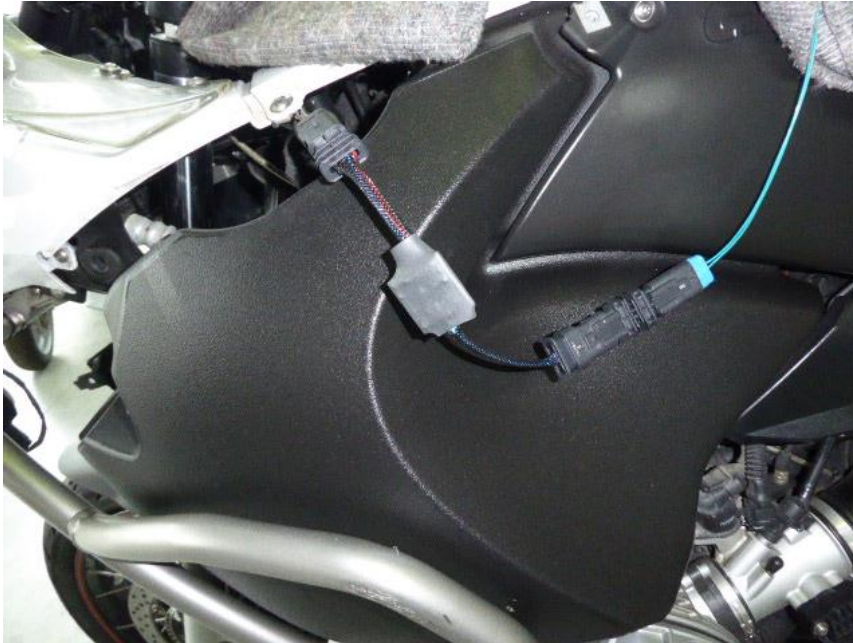


Fig. 5 First practice test on a R1200GSA with the float (see blue wire and connector) outside the tank.

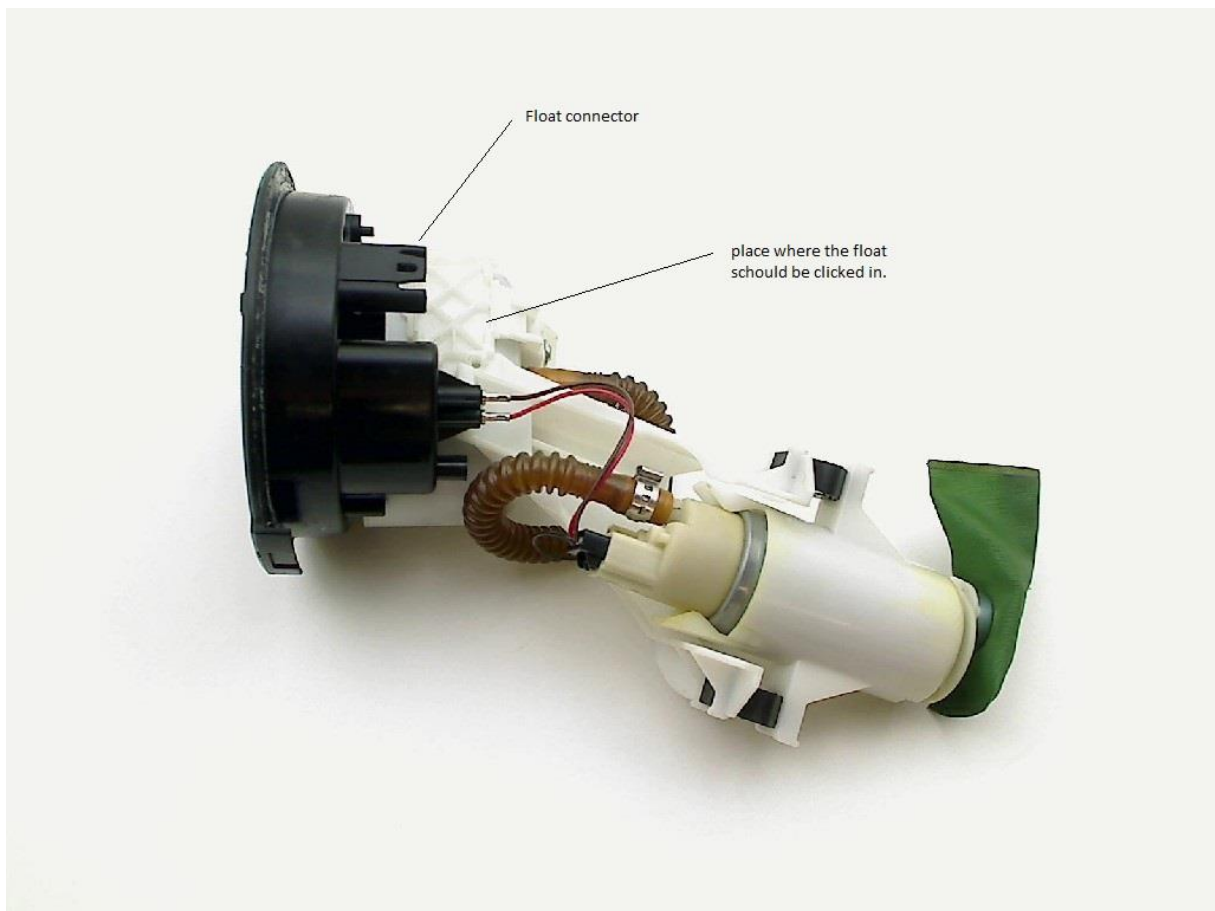


Fig. 6 Picture where you should place (click) the new BMW float and where the connector of it must be inserted.

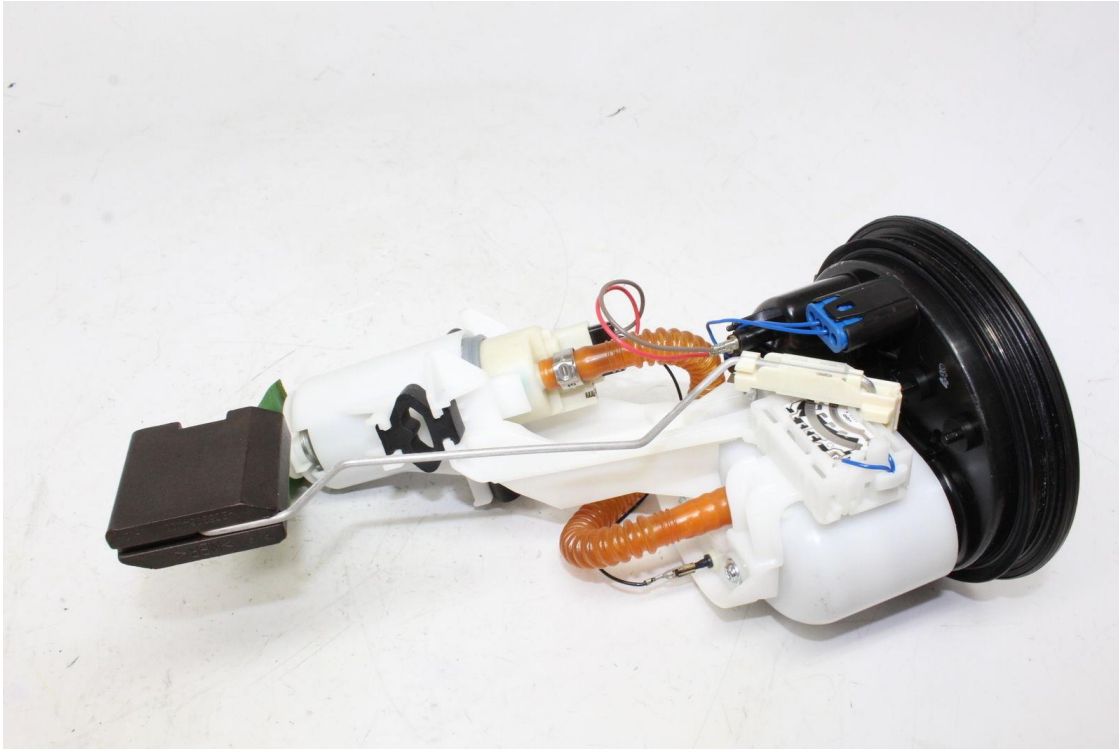


Fig. 8 With float attached

The Float Control

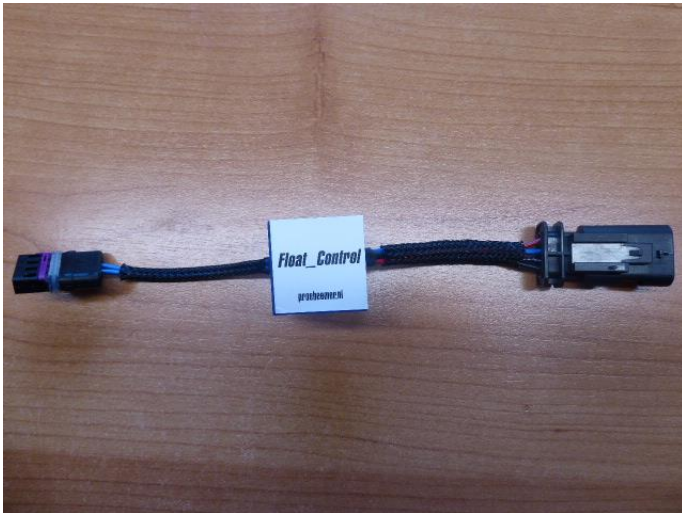


Fig. 8 Above you see the photo of the Float Control with the connectors.

The connector at the top right of the photo is inserted into the male connector on top of the fuel unit. This was the connector that is on the cable harness. Plug the connector of the cable harness into the connector as shown at the bottom left of the picture. It is plug & play because you cannot mount it the other way around.



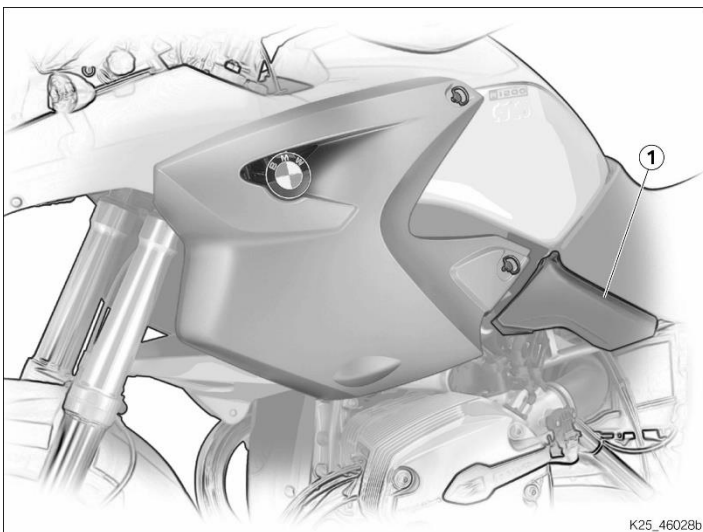
Fig. 9 Use of original BMW connectors so they fit well on the existing connectors.

Mounting the Float Control

Warning: The Float Control is as a kit and the work on the fuel pump of your motorcycle is on your own responsibility. If in doubt, have the modification done by an experienced BMW mechanic.

Make sure there is as little fuel as possible in the tank preventing that you are leaking a lot of fuel when you remove the unit from the tank.

1. Remove the gray or black panel on the left side of the tank. See the drawing below. When it is removed you will see the fuel unit.



2. Disconnect the two connectors and the fuel line at the top of the unit.

3. Then unscrew the big ring with a BMW tool or simply with a metal plate that you put against the upright metal strips. Lift the entire unit out of the tank.
4. Disassemble the fuel cap because the foil sensor hangs below it. The electrical connector of the foil sensor plugs into the connector on the bottom of the unit. Leave the fuel cap open for a while, because that opening can be used when mounting the float.
5. Place (click) the float in place on the petrol pump body (see fig. 6) then slide the blue connector in place.

Order numbers for the floats;

GSA 16148554065

GS 16148554064

6. Reassemble the unit with a new float and first tighten the ring by hand and then with the metal plate. Make sure that the float does not run into anything when it moves, because then you get a wrong indication on the screen. Use the tank cap hole with which you can check with a piece of wire on the float whether the float is free running.
7. Mount the fuel hose and the three-pole fuel pump connector on top of the unit.
8. Finally push the female connector of the Float Control into the connector on the outside of the unit. Slide the male connector of the Float Control to that of the cabling, which was previously on the unit.
9. Reassemble the plating and the fuel cap and check everything again before you drive.
10. Be sure that the fuel system gives no errors in e.g. the diagnosis with GS911 and that you assign "foil sensor" with the GS911.

In practice, the float does not go all the way up in the tank due to the shape of the tank, so with a full tank the display indication will only drop after a while. Depending on your driving style.

Trouble shooting

If the Float Control does not work immediately, first ensure that there are no error codes in the fuel sensor system, see point 10.

Connect a LED (cathode to GND) via a 1 k Ohm resistor between the red and black (-) wires of the four-pole connector.

Now start the engine where you should see that the LED is on at a given moment for about 12 seconds and then it goes out for about 30 seconds, repeatedly. If this is not the case, then there is an error regarding the engine management. Because data is reading in that 12 sec and the value is plotted on the gauge.

Disclaimer:

It may happen that the set does not work properly on a particular motorcycle, therefore it is delivered as is and does not guarantee. But the Float Control has been tested on many GS (A) 's so it will work in 99.9% of most cases.

For further questions you can also visit my website www.proebeemer.nl