

Hey all,

I couldn't really find a good write up for the fuel pump replacement on an STR besides how to replace the entire sending unit. The job itself is only a few more steps than replacing the entire unit and is a ton cheaper while more or less using an OEM pump (link below)... Long story short my right side pump failed while going to dinner one evening after my 03 STR had been sitting for quite a while. I had my scanner with me and saw about 20 PSI at the rail along with a P0191 code. I verified the right side pump was indeed getting power, but was not activating. Now here's the fun stuff- I could only find the whole fuel sending unit as a replacement which cost about \$450 (the cheapest one I could find and who knows if it was within proper specs). I am in the USA so parts are less available and or unreasonably expensive. Rock auto does have a \$92 option however don't be fooled. If you look closely at the pictures this indeed is the incorrect part as it has nipple for a fuel hose to connect at the top. The correct part routes fuel inside the tank to the left pump (see pictures below). Again I could not find any type of record on the forums that has been able to find a more or less oem replacement for the singular pump. This is a semi rough write up but it will get the job done...so here we go.

Begin by removing the rear seat. There will be 2 little levers on each side which you will need to push out. This actually was the easiest backseat removal I have ever done as Jaguar did a good job with the design there.



Once the Rear seat bottom is removed you will see a black circular cover on the right side. This can be a bit frustrating to remove but nothing that can't be done. You will want to gently pry the edge and lift up. Once removed it will reveal the sending unit. Go ahead and unplug the sending unit plug and move the connectors to the side.



At this point I would recommend moving the carpet back over the seat latch to avoid any fuel splashes.



I began removing the sending unit using a brass hammer and flat head (okay it wasn't brass but do as I say not as I do) by gently tapping the fuel ring counter clockwise. There is a specific tool for this if you were wondering. Notate where the arrow on the sending unit correlates to where it points at the gas tank. You will want to re-install the exact same way it was removed.



Pull out the pump gently, you'll see some hoses going to the opposite side of the tank which

does make it difficult to pull out. Keep in mind we are not removing the sending unit completely out. Re-routing those hoses are a PIA and would require use to open up the secondary fuel pump which is unnecessary unless you are planning on replacing both. Objective here is to get enough clearance for disassembly. Definitely be careful not to damage the float or the hoses at this point. Remove the three T15 screws (don't quote me on the screw size could of been T10) to reveal the failed pump. Pump is removed in photograph. I have directed arrows at the 3 screws.



It was easy and straight forward removing the pump from the housing. Cut or pry the old hose clamp which attaches the fuel hose to the pump. The pump should now be removed through the bottom. Now here's where my journey gets interesting:

I take a look at the pump to find the it was a German pump from the brand of "Pierburg". Again I could not find a pump that stated was compatible with the STR so I started thinking out of the box. My buddy owns an 03 BMW E39 540i and said it looked identical to his. Now the 540i pump will not provide enough pressure to run our STR's. However.. a 03 BMW M5 will. In fact the specs are an identical- 5 bar or 72.5 PSI for both the STR and M5. Not to mention they are literally the exact same pump (see pictures). So I hop on FCP Euro which specializes in BMW parts and holy cow I found the exact pump. \$165 is far more reasonable in my opinion for a high quality pump. You'll of course want to replace the O gasket to the sending unit which is universal to the other S types and easy to find. Now with the strainer sock... I could not find an identical part. You can probably use a universal one and have no problems however I did the dirty deed of reusing the old one. Yes I know... I'm an idiot. The pump failed because I let this car sit and I rarely drive it, not because of a fuel restriction. The sock was cleaned and showed no signs of deterioration or clogging so I made the poor choice of re-using it. I do not recommend you do the same. Installation is reverse of removal. I would recommend replacing your fuel filter at this time as well. This isnt the best Fuel pump removal write up however to my knowledge no one has done a write up on replacing just the pump on an STR.

Fuel Pump: [https://www.fcpeuro.com/products/bmw-fuel-pump-insert-pierburg-7-22013-61-0?ads\\_cmpid=1586640911&ads\\_adid=59893888775&ads\\_matchtype=&ads\\_network=g&ads\\_creative=298302526031&utm\\_term=&ads\\_targetid=pla-308954867660&utm\\_campaign=&utm\\_source=adwords&utm\\_medium=ppc&ttv=2&gclid=Cj0KCQiA-eeMBhCpARIsAAZfxZDmWrmrPWxO9nPBGj9eJcaQXZlsm5j2S0fs6KIBbVWdc0dbqGxytuEaAs3FEALw\\_wcB#fitment](https://www.fcpeuro.com/products/bmw-fuel-pump-insert-pierburg-7-22013-61-0?ads_cmpid=1586640911&ads_adid=59893888775&ads_matchtype=&ads_network=g&ads_creative=298302526031&utm_term=&ads_targetid=pla-308954867660&utm_campaign=&utm_source=adwords&utm_medium=ppc&ttv=2&gclid=Cj0KCQiA-eeMBhCpARIsAAZfxZDmWrmrPWxO9nPBGj9eJcaQXZlsm5j2S0fs6KIBbVWdc0dbqGxytuEaAs3FEALw_wcB#fitment)