



INSTALLATION INSTRUCTIONS

Unitronic LPFP Fueling Upgrade for MK8 GTI®

UH017-FLA

Unitronic recommends that you read through the entire installation instructions prior to beginning the installation to familiarize yourself with the included components, tools required, and procedures involved with the installation.

DISCLAIMER: Unitronic recommends that a Unitronic Authorized Dealer or other qualified and trained professional should perform the installation of this product.

Unitronic Installation Instructions are also available in digital format, if you prefer. Please visit the corresponding product page for a link to download the digital Installation Instructions.
www.getunitronic.com

It is recommended to confirm all parts are present prior to beginning the installation.

PACKING LIST:

Part Number	Description	Quantity
UH010-FL2	Upgraded Brushless LPFP	1
UH006-FL3	Upgraded Brushless LPFP Module	1
UH007-FL3	Fuel Level Sender	1
UH024-HW0	MQB Fuel Pump Gasket	1
UH020-FL7	MQB LPFP Harness (Module to Pump)	1
UH021-FL7	MQB LPFP Level Sensor Harness (FWD Level Sensor)	1
UH023-FL7	FWD LPFP Basket Plug	1
UH024-FL7	FWD LPFP Male-Male Quick Connect Fitting	1
UH015-HW4	20 AMP ATC/ATO Standard Fuse Blade	1



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QUESTIONS OR CONCERNS? CALL US TOLL-FREE AT 1.866.341.2447 OR EMAIL US AT INFO@GETUNITRONIC.COM

RECOMMENDED TOOL NEEDED:

- 90 deg Pick tool
- 10 mm socket
- 16 mm socket
- Ratchet
- T10202 Locking ring tool (OR) Flathead punch and small hammer

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1. Start by moving the front seats forward to leave clearance for working under the back seat where the low pressure fuel pump is located.



Fig.1

2. Rotate the child seat plastic clips towards yourself and pull upwards at the same time to unclip it from the lower seat cushion and the chassis brackets behind the rear seat.



Fig.2

3. Repeat for all 4 plastic child seat brackets and remove them from the bottom seat cushion.



Fig.3

4. Grab the lower rear seat cushion at the front where it meets the carpet on the driver side and on the passenger side. Pull firmly upwards to unclip the lower seat cushion from the chassis. Do not immediately pull the seat away from the car as the rear clips need to be pushed down and in towards the back of the car to release the back part of the lower seat cushion.

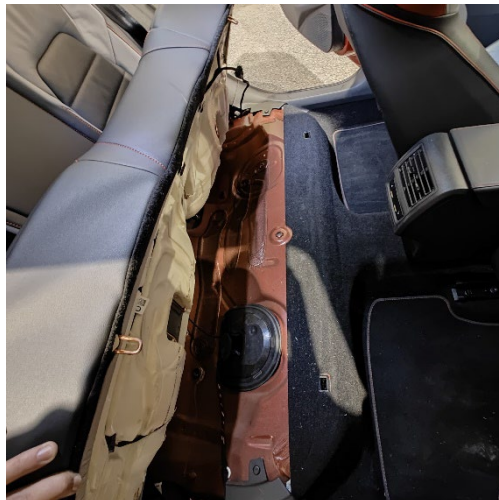


Fig.4

5. If your car is equipped with rear heated seats, make sure to disconnect the heater harness before removing the seat cushion.



Fig.5

6. On the passenger side of the chassis, you will see a plastic cover with a rubber grommet in the middle with wiring passing through. Pull the rubber grommet up carefully, grab the plastic cover from the middle opening and pull upwards to release the plastic cover clips without damaging them.

Before proceeding make sure to wear PPE to protect your skin and eyes from potential fuel spills. Make sure to disconnect the vehicle's battery to prevent any shorts that could cause a fire.



Fig.6

7. Once the plastic cover is removed, disconnect the factory fuel pump connector and carefully unclip the fuel line making sure to cover it with a rag to prevent fuel spraying.



Fig.7

8. Underneath the chassis sheet metal and towards the passenger side of the vehicle, there is a plastic bracket holding the LPFP controller module. Unclip the module from the bracket, unclip the factory wiring harness connector from the module and remove it from the car.

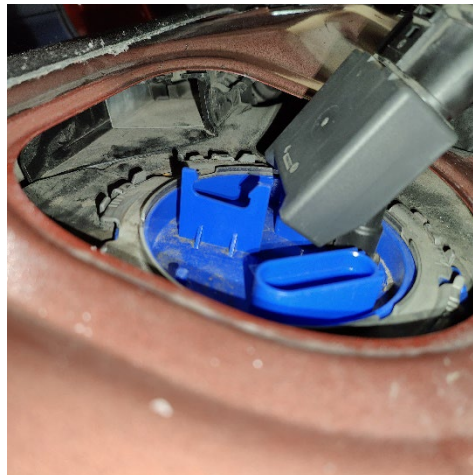


Fig.8

9. **Before opening the LPFP lock ring, we recommend cleaning the pump's surrounding area, the top of the fuel tank and the pump itself in order to avoid introducing any dirt into the fuel system.**
10. With the wiring and fuel line disconnected, use the T10202 lock ring tool or if not available, use a flathead screwdriver and small hammer to carefully undo the LPFP lock ring in the counterclockwise direction.

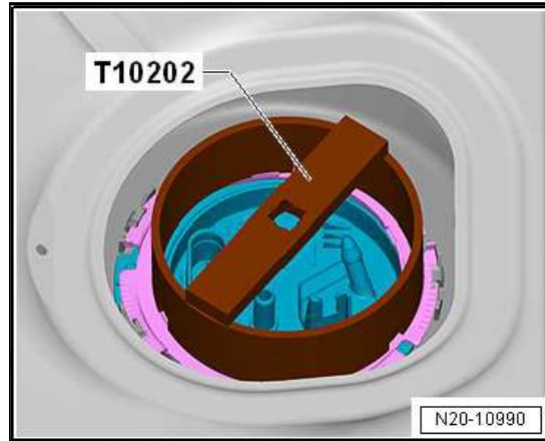


Fig.10

11. Carefully lift the LPFP out of the fuel tank, pour the remaining fuel in the basket back into the fuel tank and carefully disconnect the in-tank quick connect fuel fitting from the LPFP basket. Be careful to avoid damaging the fuel level sensor of the OEM LPFP unit.



Fig.11

12. Before installing the upgraded LPFP into the car, first prepare it by assembling the required parts on the workbench. Locate the Upgraded Brushless LPFP (UH010-FL2), Fuel Level Sender (UH007-FL3), FWD LPFP Basket Plug (UH023-FL7) and the FWD LPFP Male-Male Quick Connect Fitting (UH024-FL7).
13. Install the FWD LPFP Basket Plug (UH023-FL7) into the lower central hole on the Upgraded Brushless LPFP (UH010-FL2) and then push down the white plastic locking tab to secure the plug. Take the LPFP Male-Male Quick Connect Fitting (UH024-FL7) and insert it into the lower right quick connect fitting on the LPFP basket.

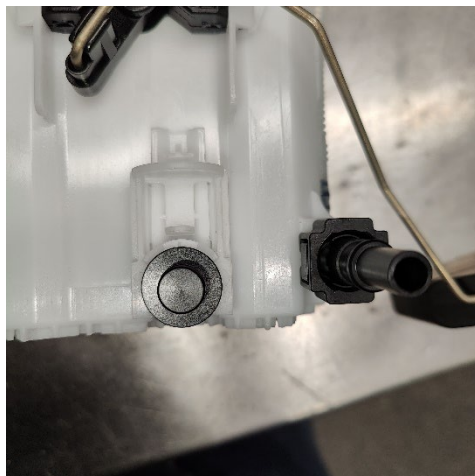


Fig.13

14. Now take the Fuel Level Sender (UH007-FL3) and slide it into the appropriate slot on the LPFP basket until it clips into place, as shown in this image.

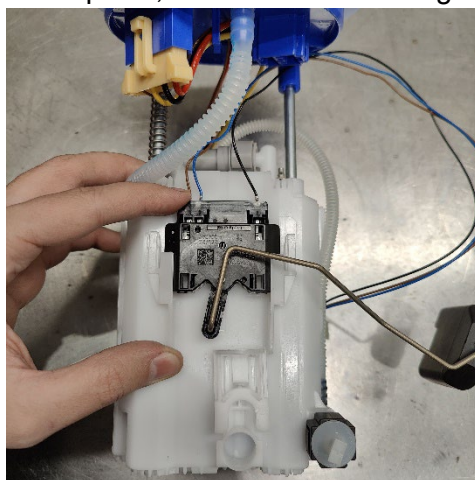


Fig.14

15. Carefully clip the wiring from the fuel level sender into the 3 wiring slots and route below the fuel clear tubes as shown in the image.

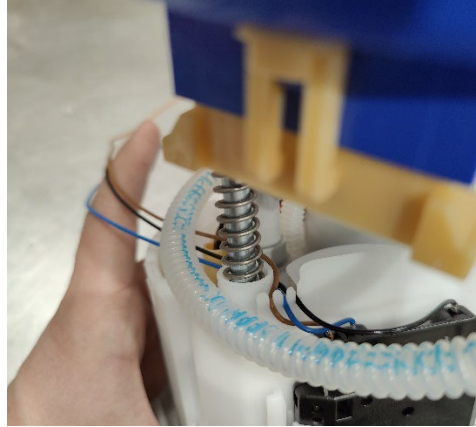


Fig.15

16. Route the wiring around the LPFP basket using the existing plastic clips to hold the wiring in place as shown.

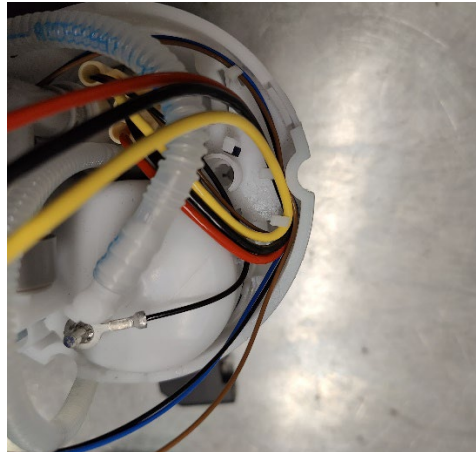


Fig.16

17. Finally, connect the fuel sender wiring harness into the corresponding connector on the underside of the LPFP top plate.

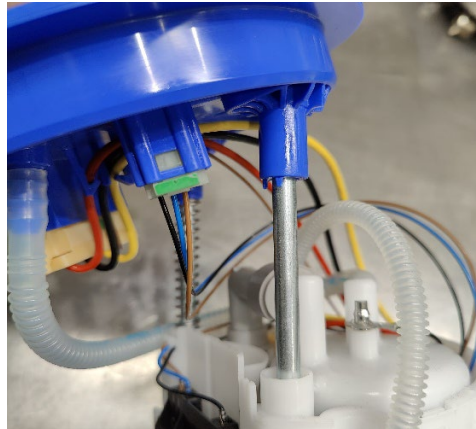


Fig.17

18. Prepare to install the Upgraded LPFP unit by first installing the MQB Fuel Pump Gasket (UH024-HW0) in the fuel tank opening.



Fig.18

19. Connect the in-tank quick connect fuel line to the male quick connect on the upgraded LPFP, tilt the pump to pass the level sender float into the tank and carefully place the pump unit down into the fuel tank over the new gasket. Make sure the alignment tab on the upgraded LPFP top cover is facing towards the rear of the car or as it was oriented from the factory.
20. Reinstall the locking ring and tighten using the OEM tool T10202 or by using a small hammer and punch to lock it in clockwise. The arrow on the locking ring should be close to or aligned with the alignment tab on the LPFP top cover.



Fig.20

21. Reconnect the quick connect fuel line onto the now upgraded LPFP unit.

22. Locate the MQB LPFP Level Sensor Harness (FWD Level Sensor) (UH021-FL7) and connect it to the OEM pump connector on the chassis harness on one end and to the level sensor 5 pin port on the upgraded LPFP unit.

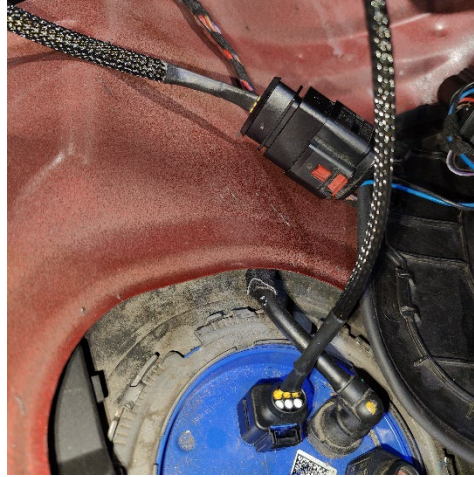


Fig.22

23. Locate the MQB LPFP Harness (Module to Pump) (UH020-FL7) and connect one end to the chassis plug that was used for the OEM LPFP control module. Connect the other two ends to the upgraded LPFP unit and to the upgraded LPFP module.

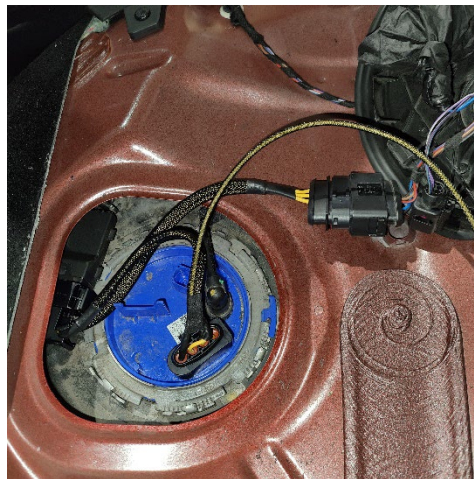


Fig.23

24. Place the upgraded LPFP module towards the front and route the wires and connectors flat and out of the way so that the plastic cover can be reinstalled properly and clip into place. Make sure to route the ground wire with the ring terminal through the middle of the plastic cover before closing it.



Fig.24

25. With the plastic cover clipped back into place, pull the ground wire as far as possible through and orient it towards the back of the vehicle. Reinstall the wiring grommet into place by clipping it into the groove all around the edge and over the ground wire as shown.

Disclaimer:

The ground wire can be installed on any of the chassis grounds whether that be a stud, bolt or another ground lug but it is critical that the surfaces be sanded to bare metal for a proper electrical connection.



Fig.25

26. We recommend using the seatbelt buckle bracket as the closest grounding point. Start by loosening the 16mm nut holding the seatbelt bracket, sand the underside of the bracket and the chassis in the place where the bracket is installed. Then sand the side tab of the bracket and install a bolt and nut of your choice (we recommend M6 bolt and

10mm M6 nut) to clamp the ground wire to the chassis. Reinstall the seat belt bracket and retighten the 16mm nut.



Fig.26

27. Finally using the manufacturers user manual, locate the corresponding fuse location for the low pressure fuel pump module and replace it with the provided 20A fuse. In our case for the MK8 GTI the fuse location was fuse F6 shown here.

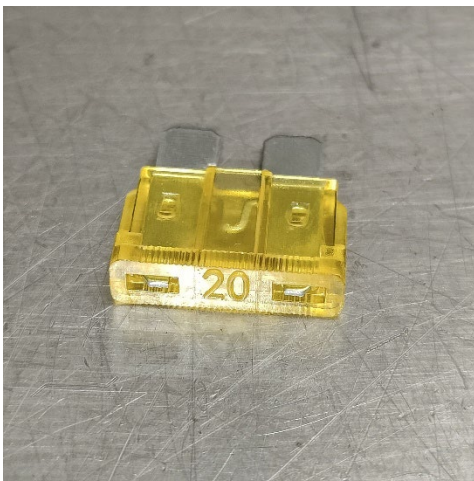


Fig.27-A

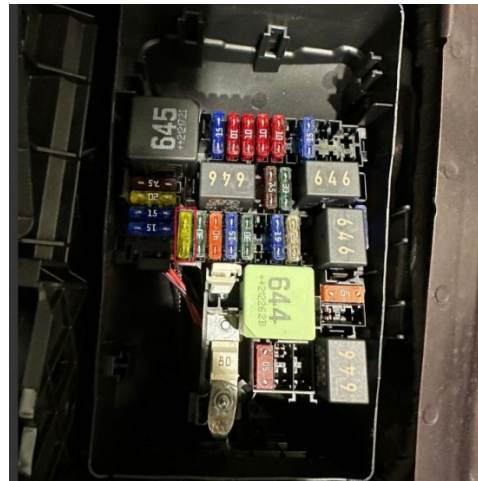


Fig. 27-B

CONGRATULATIONS! You have successfully installed your Unitronic Upgraded Brushless LPFP!