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ENGINEERING**

## **Integrated Engineering's 5-Bar MAP Sensor Kit Install Guide**

Part Number: IEELC15

Thank you for purchasing another high quality Integrated Engineering product! This instruction guide is used for installation of the IE 5-Bar MAP Sensor Kit for VW MK7 GTI, GLI, Golf R and Audi 8V A3, S3, TT, TTS 2.0T EA888.3 MQB engines. This kit needs to be installed by a professional or an experienced technician. Integrated Engineering is not responsible for any damage caused by incorrect installation.

**Do not install on your vehicle without a specific ECU tune calibrated to this 5-bar MAP sensor kit**



### Kit contents

- 1X Manifold Absolute Pressure sensor (MAP)
- 1X Pressure up throttle (PUT)

### Required tools

- T20 torx driver
- T25 torx driver
- Flathead screwdriver
- Socket wrench with 1/4" socket

Provide your custom tuner the following data for the new sensors. Calibration data is the equal for both the IE MAP and PUT sensors.

- 11HPA= .5 Volts
- 5000HPA= 4.5 Volts

Before you begin, park your vehicle in a safe and level location. Allow plenty of time for the engine bay to completely cool before beginning the installation procedure. Unbox your IE MAP sensor box and verify the proper part numbers of both sensors (IEELC13 and IEELC14) and check for any possible shipping damage. Prepare your work space and verify you have the required tools listed above available.

IE recommends pre-reading the entire installation guide ahead of your install to both prepare yourself for each step and to make sure you don't have any questions before beginning. If you have any questions or need clarification, please contact our helpful support team specialists at [support@performancebyie.com](mailto:support@performancebyie.com)



Begin by removing the engine cover to gain access to the intake manifold and disconnecting the MAP sensor harness. Unlock the harness connector by pulling up on the gray lock tab using a small flathead screwdriver or your thumbnail.

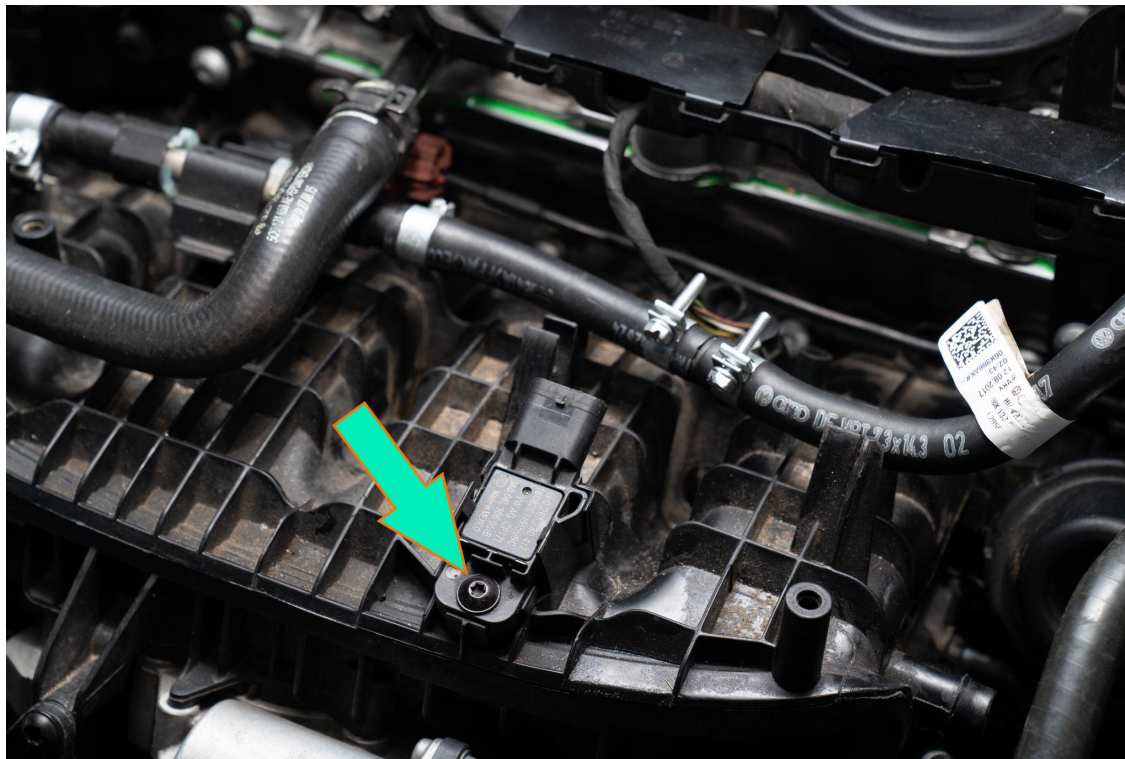


Pinch the sides of the connector locks and pull back to remove the connector harness from the sensor.





Use a T20 torx bit to remove the MAP sensor mount bolt.



Use your fingers to gently pry the manifold retaining clips away from the sensor while pulling up to free the sensor from the plastic mount.



Apply upwards pressure to remove the sensor from the intake manifold. You may need to assist removal by gently prying the front corner of the sensor up with a flathead screwdriver.



Open your IE 5 Bar Sensor Kit and locate the new MAP sensor.





Align the new sensor into the factory position and press down to snap it into the mount retainers.



Reinstall the factory mount screw with a T20 torx driver.

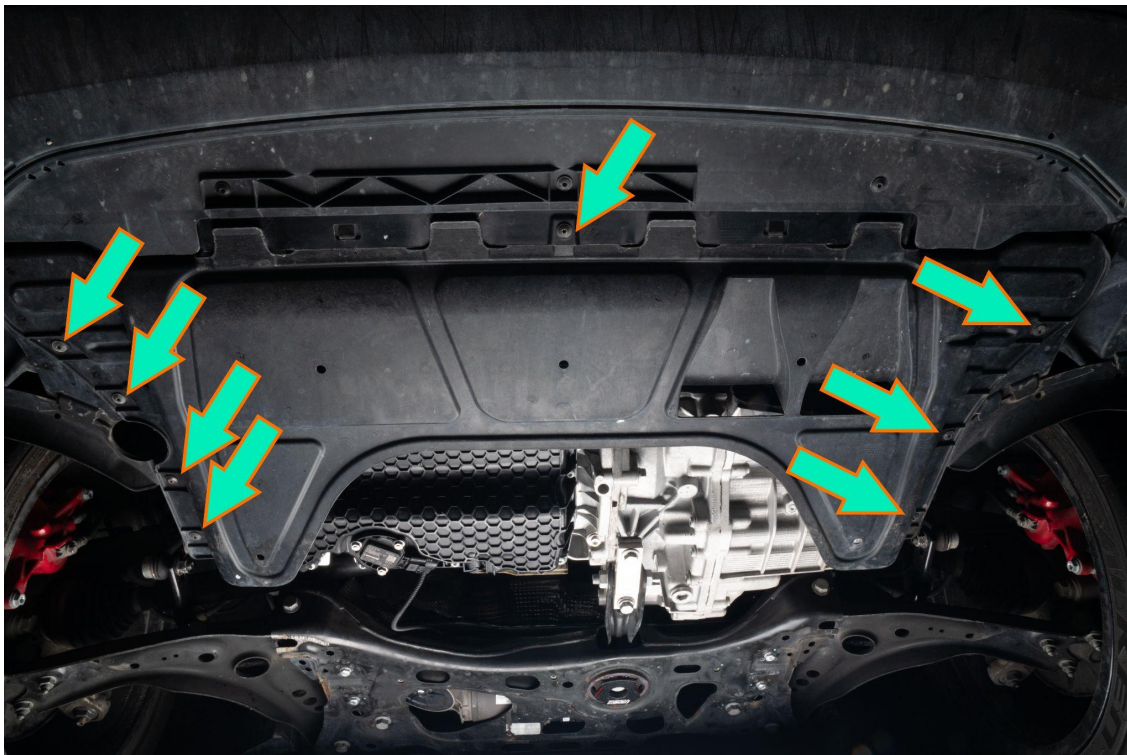




Reconnect the factory harness to the new sensor and lock it down by snapping the gray lock clip back into place. Make sure the connector is fully seated and locked before moving to the next step.



Gain access to the belly pan safely with jack stands or autolift. Using a T25 torx driver, remove all 8 screws from the belly pan and remove it from the vehicle.

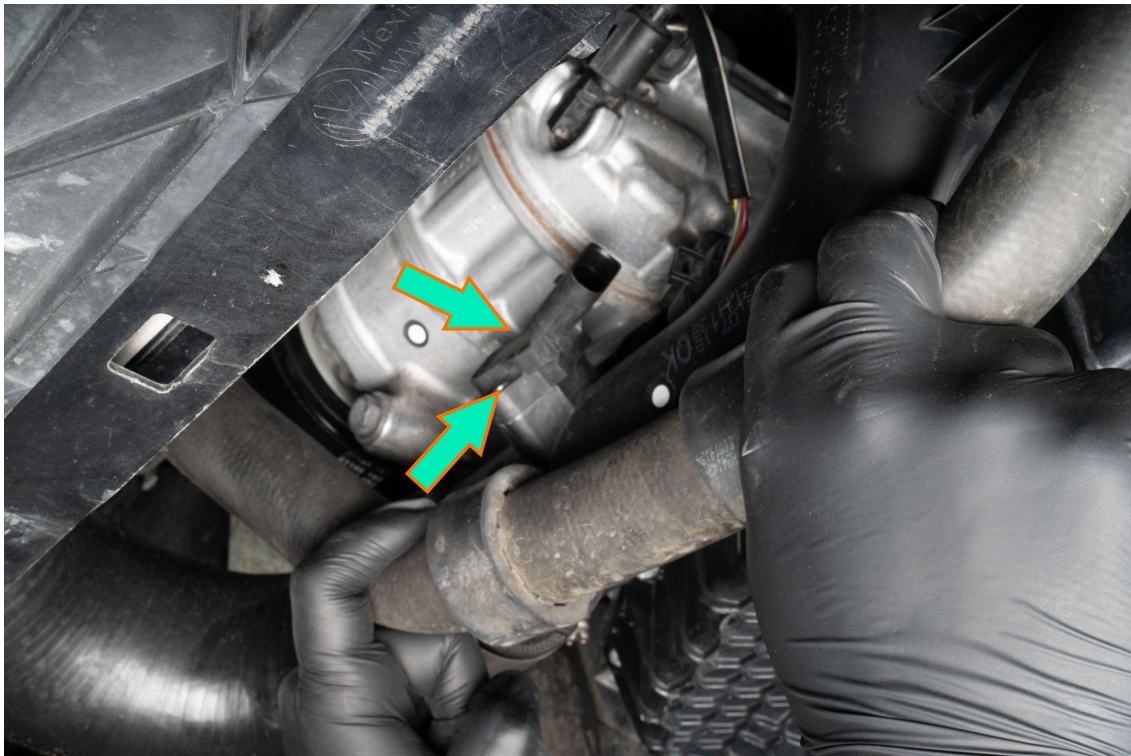




Locate the PUT sensor on the charge piping. Disconnect the harness connector.



Use a T20 torx driver to remove both mount screws from the sensor.

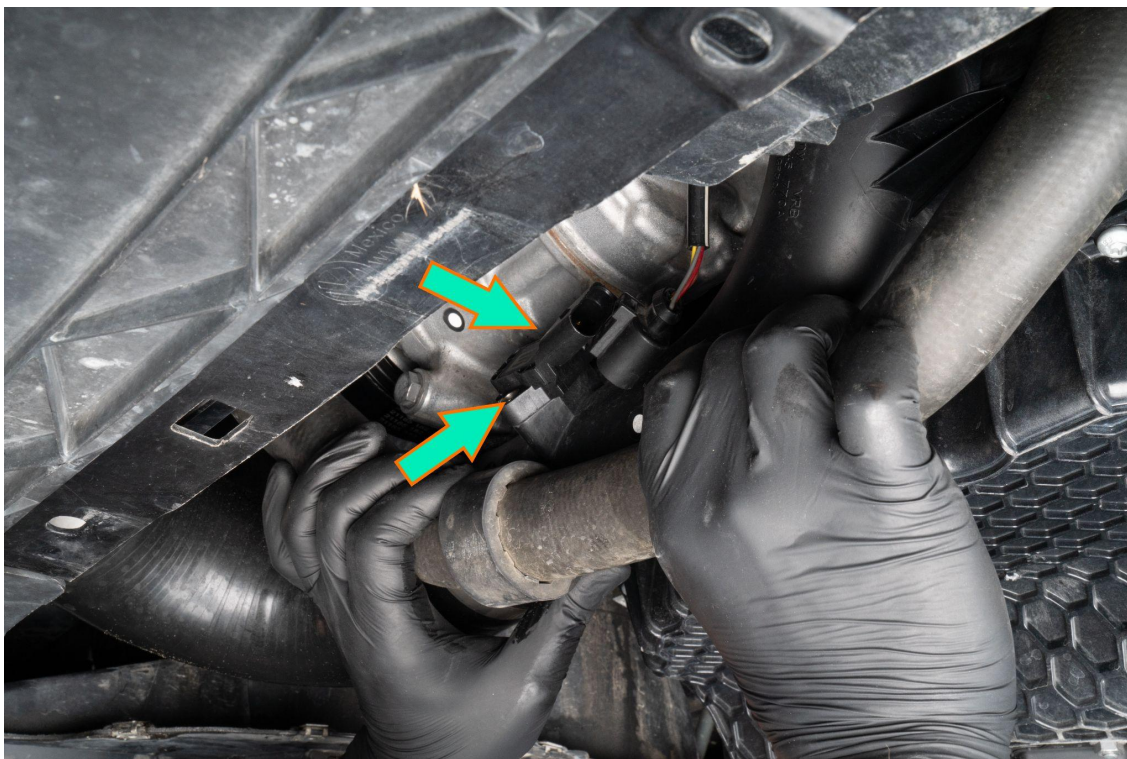




Remove the factory sensor from the charge pipe and directly replace it with your new IE sensor in the same position.



Reinstall both factory mount screws with a T20 torx driver.

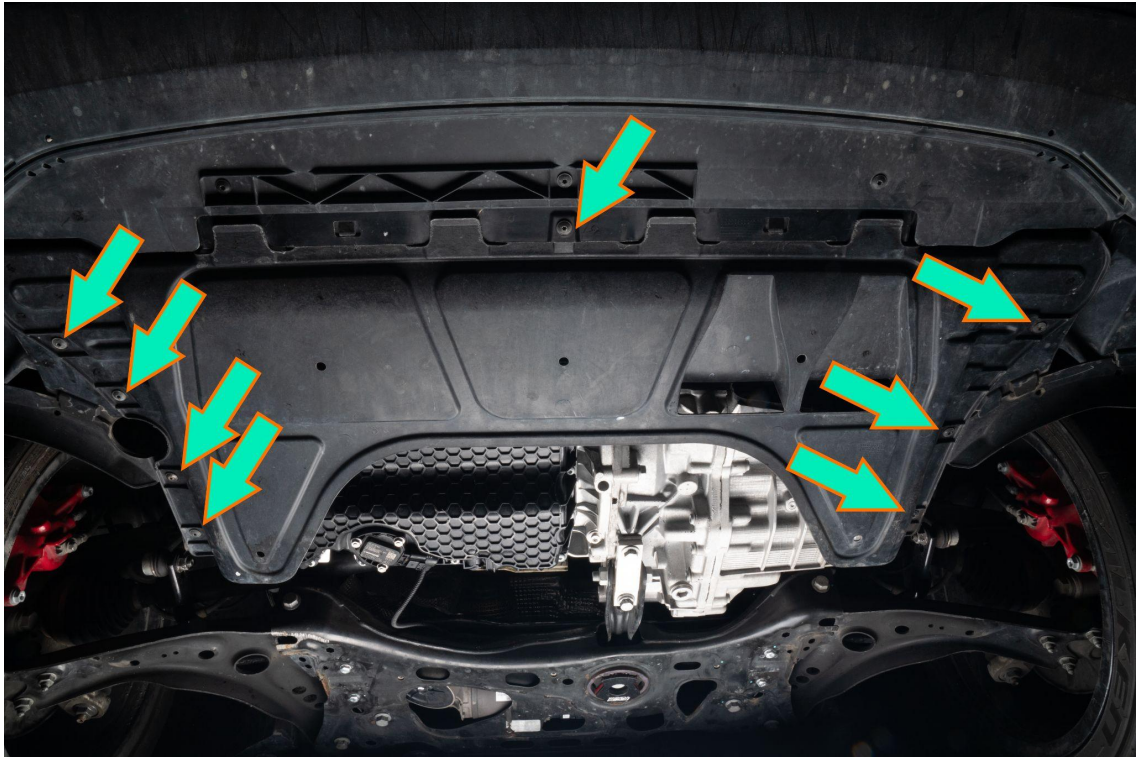




Reinstall the harness connector and verify its fully seated and locked onto the new IE PUT sensor.



Reinstall your belly pan and all 8 mount screws with a T25 torx driver.





Reinstall the engine cover and be sure to flash your matching ECU software. Enjoy the new tuning possibilities with your IE Sensor kit. *Do not start the car unless the tune on your vehicle has the correct calibration.*



Thank you for purchasing another Integrated Engineering product. We are dedicated to serving your VW/Audi engine and performance needs. Please check our website frequently for new product releases. If you have any questions or concerns about this product, please do not hesitate to contact us.

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