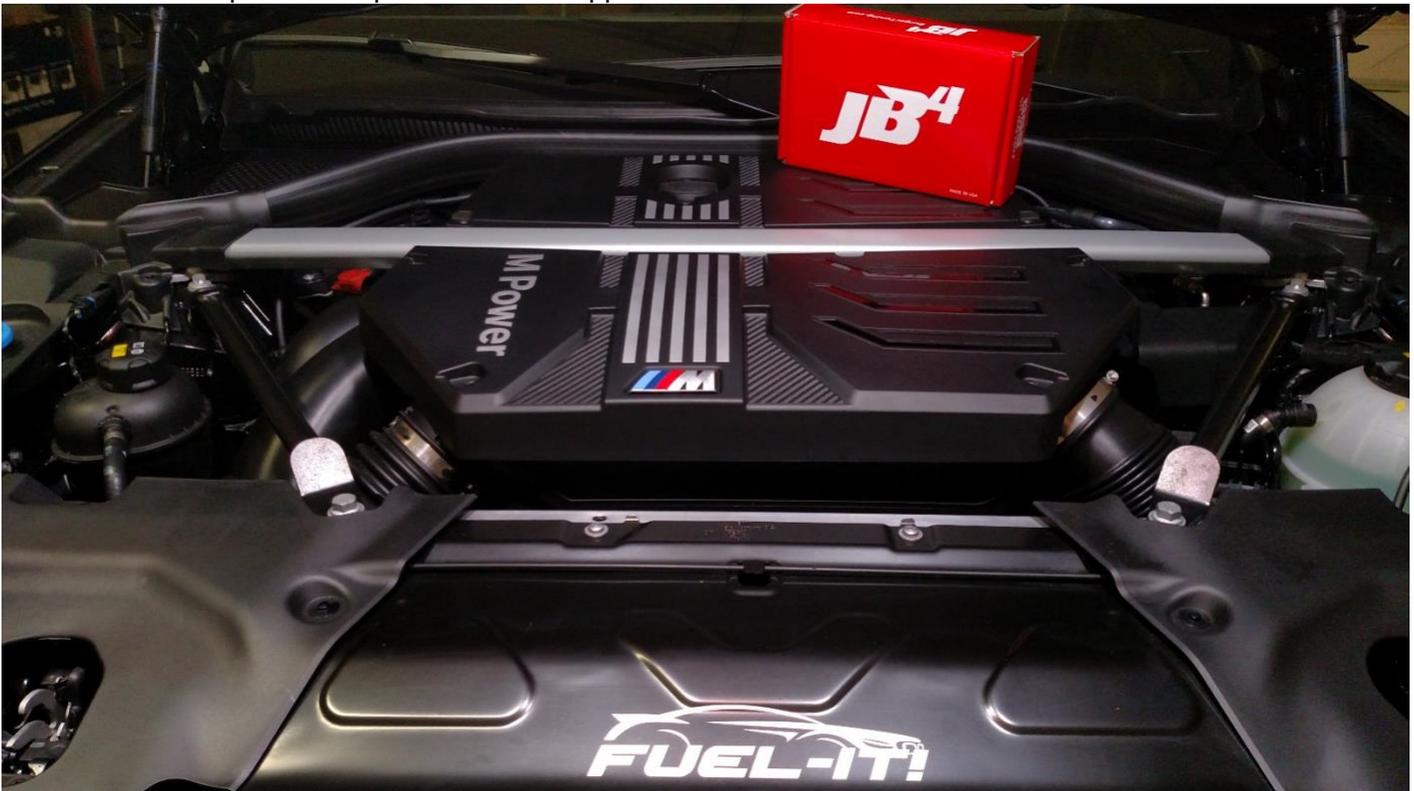


BMS 2020+ X3M/X4M G8X M3/M4 Install Guide

Last Updated: 6/10/2021

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Open the hood and place your key far enough from the car not to wake it up, and wait 20 min for the vehicles computer to go to sleep. If you open a door the ECU will wake up. You can also disconnect the negative terminal on the battery.

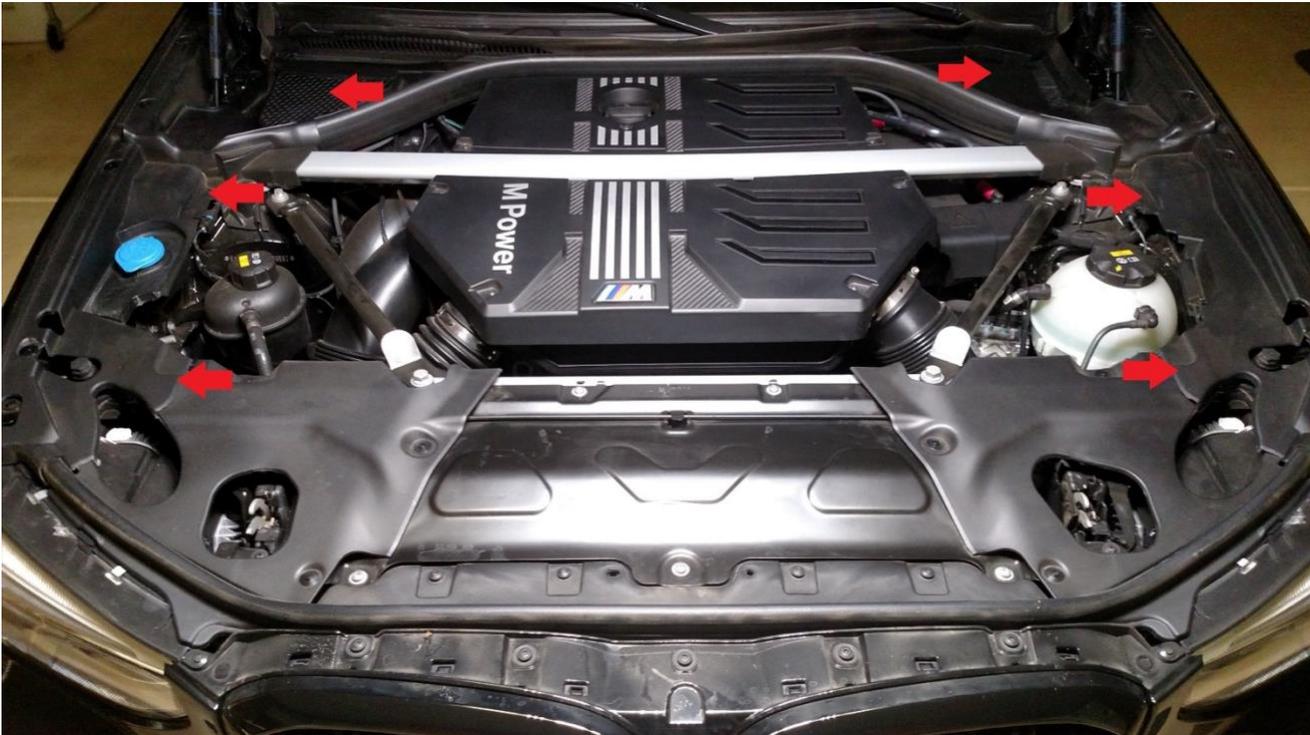
The JB4 system has 5 connections total:

- Map on intake manifold (Rainbow colored wires, 4 position connector)
- MAP on charge pipe (Brown and black colored wires, 4 position connector)
- EWG_A (Purple/Blue colored wires, 5 position connector)

EWG_B (Purple/Blue colored wires, 5 position connector)
OBDII (black wire, small 4 position connector to attach to JB4 harness)

Note photos below are from an X4M but the directions/steps are similar for all models.

Remove left and right side engine bay covers.



Remove these engine covers.

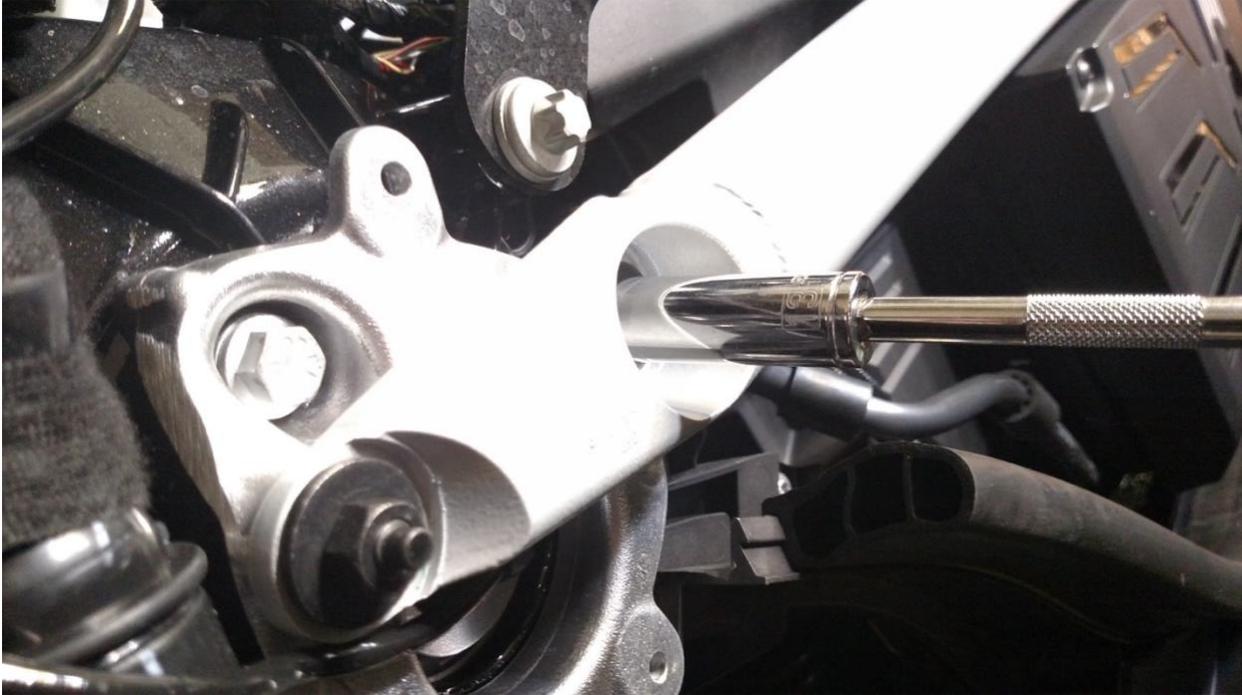


To remove the covers near the windshield, unlock as shown and lift the covers. Remove the pins around the strut brace and pull the rubber covers back to access the strut brace bolts.



Remove the strut brace

Remove the four 13mm strut brace nuts and the strut brace.



Remove the stock intake filter assembly which is integrated into the engine cover.

Loosen the four hose clamps to the intake filter assembly with a 6mm socket shown below.



Remove the intake filter assembly by pulling straight up on the assembly and plug intake hoses with towels so that nothing can accidentally be dropped in to them.



We suggest mounting/placing the JB4 on the driver side of the engine bay under the plastic cover. It can be zip tied to the strut brace or tucked out of the way. If equipped with the optional JB4 mobile adapter try to locate it so that it is not touching metal which may reduce its range. Also avoid mounting the box or wires too close to the wiper arm assembly which will move when wipers are turned on.

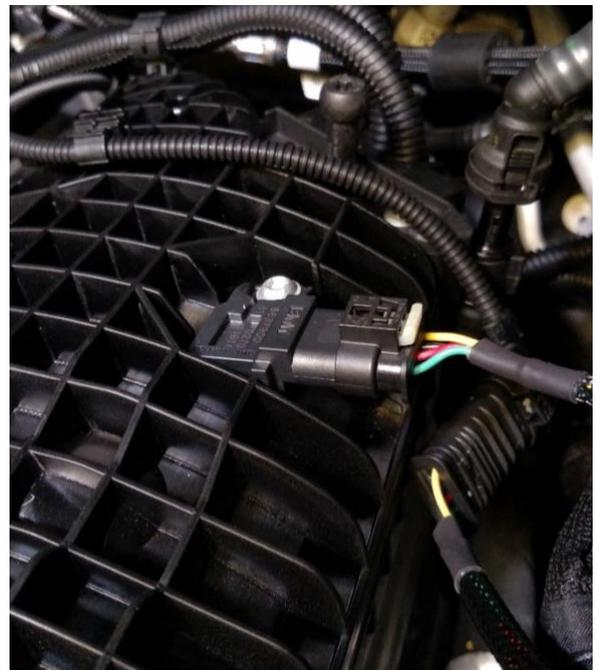


Install the JB4 MAP sensor connection on the intake manifold

Locate the stock MAP sensor on the intake manifold and disconnect it.

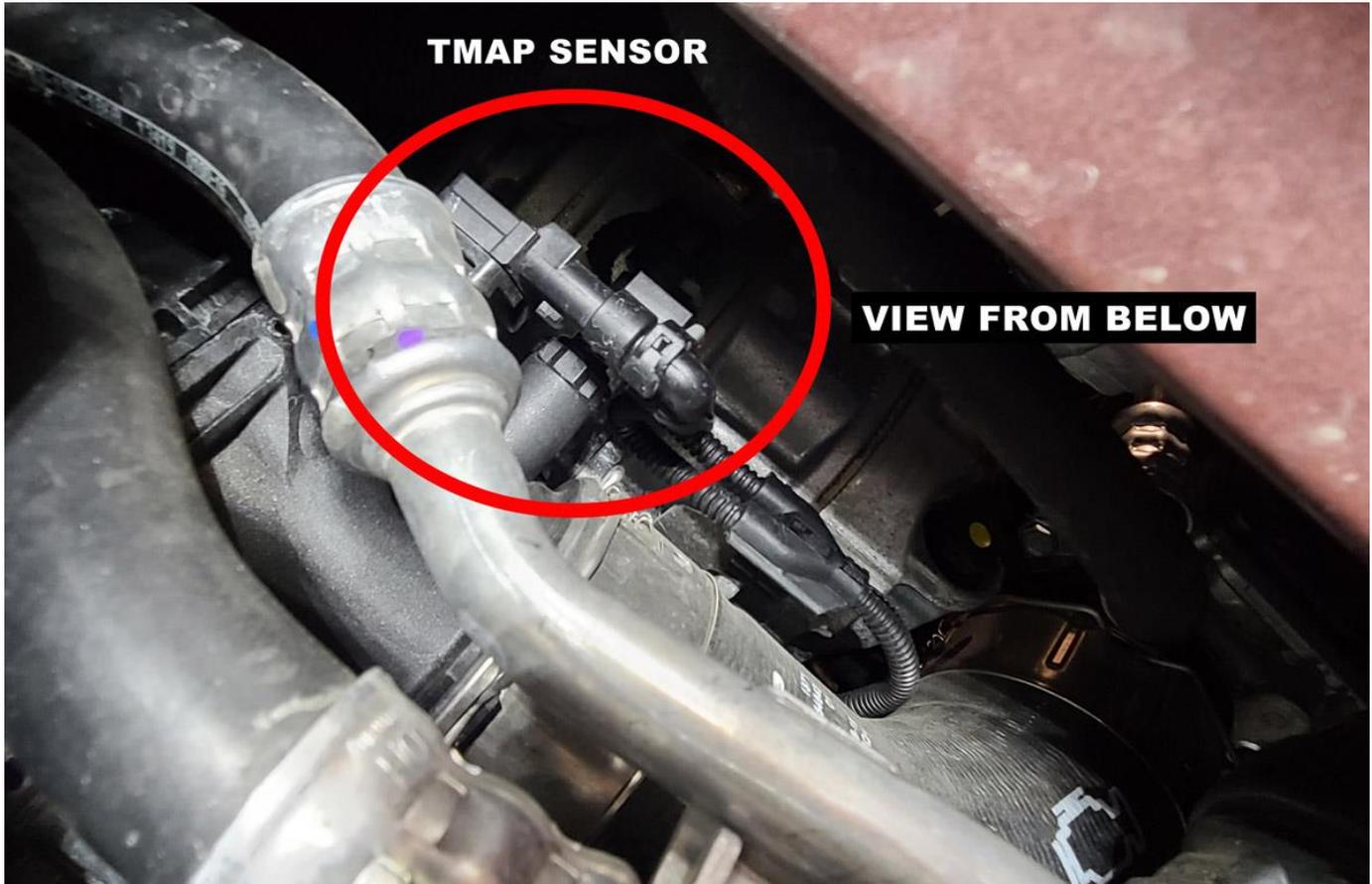


Connect the red, green, black, and yellow JB4 patch wire connectors to the stock manifold sensor and stock connector.

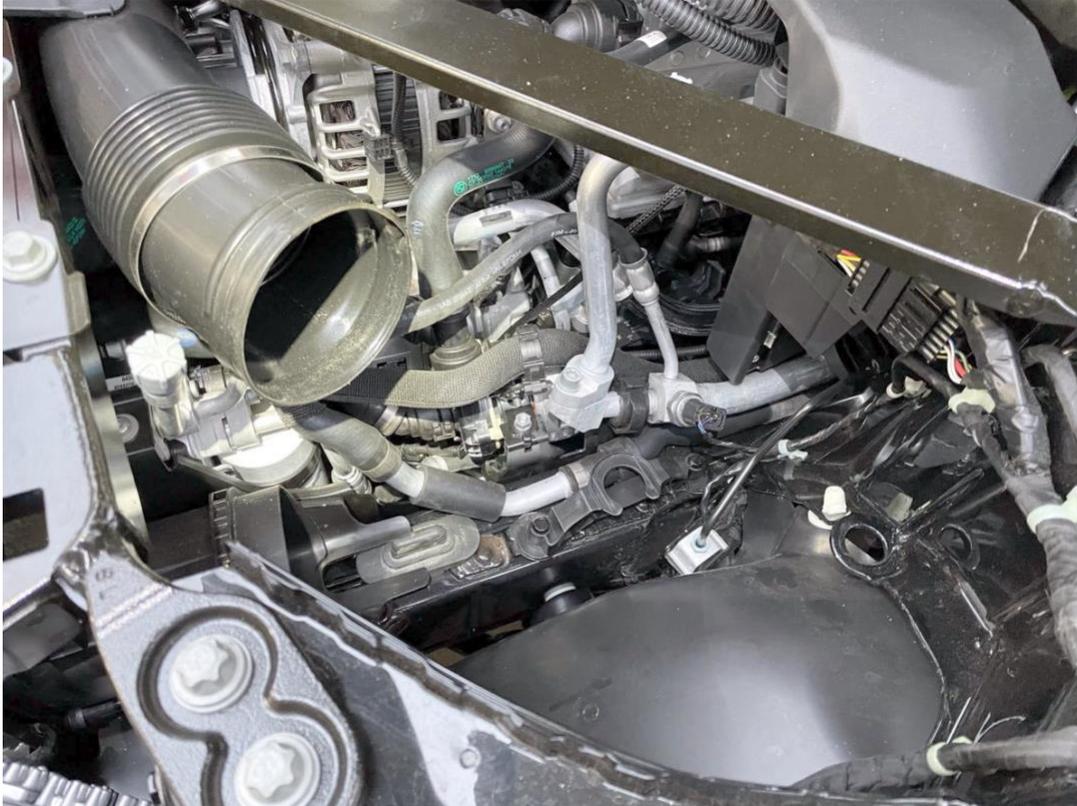


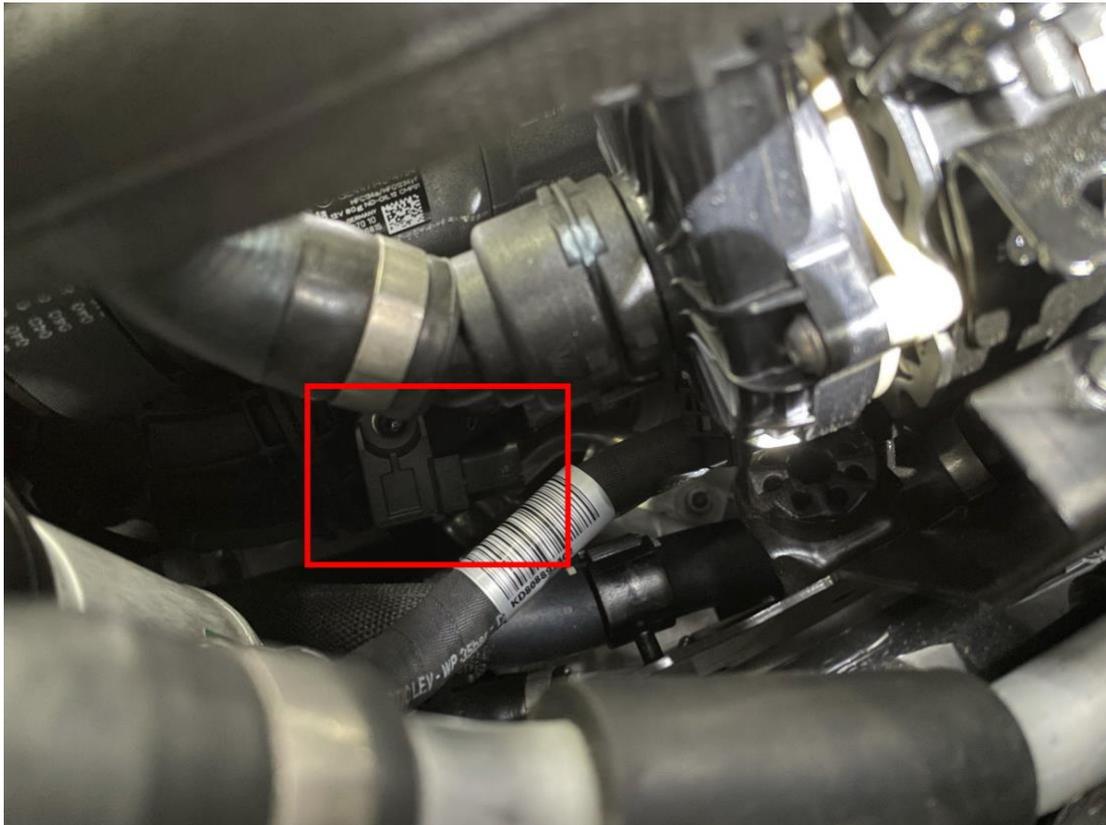
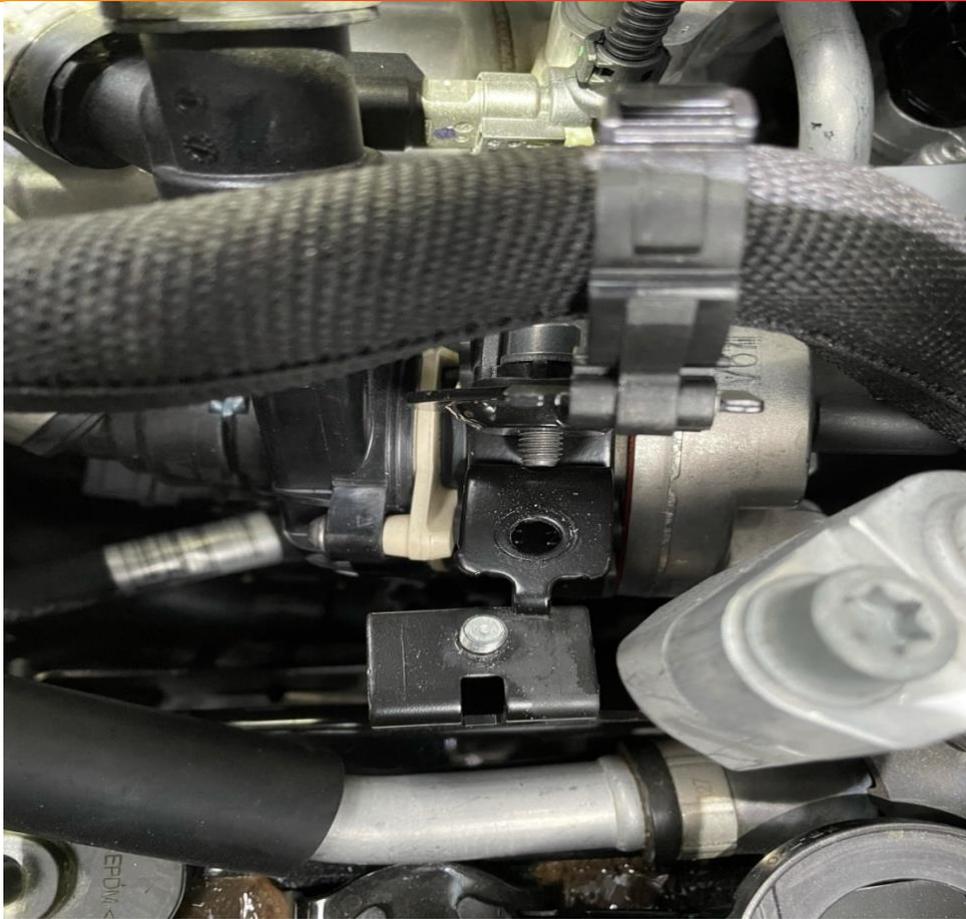
Connect the brown and black JB4 patch wire connectors to the TMAP sensor on the charge pipe.

For the X3/X4 the easiest access is to remove the driver's side front wheel and small plastic wheel well cover shown below. Looking up from the plastic cover you removed you'll see the TMAP sensor.



For the M3/M4 you can access the sensor from the top by removing the driver side airbox. Note the connection is down there so if you're able to reach it without removing any parts you're attaching it to the wrong spot. The AC condenser pressure sensor is nearby and often confused for the TMAP sensor.





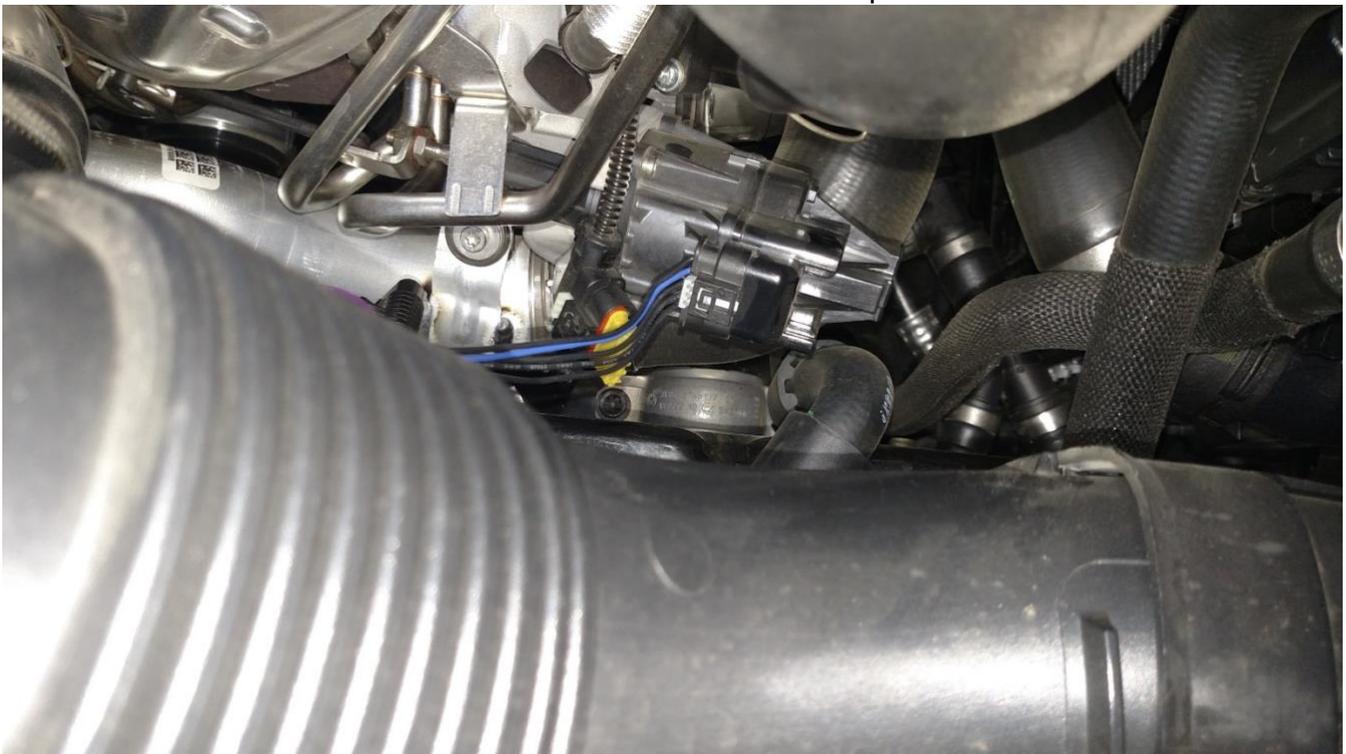
Install the optional EWG connections

The optional but suggested EWG connections allow the JB4 to directly adjust WGDC for maximum performance gains and tuning flexibility. The wastegates connections are located below the passenger side intake hoses.

Remove both stock connectors by pulling out the white tab then pressing on them and pulling outward.



Plug the JB4 harness in to the wastegate controller and plug the stock connector in to the JB4 harness for both turbos. Note: There is no particular order.



Install the optional OBDII connector

The optional OBDII CANbus connection allows the JB4 to perform more advanced tuning functions, diagnostics/logging, CANflap, and in the near future in dash map changes and controls.



Connect the OBDII connector to the JB4.

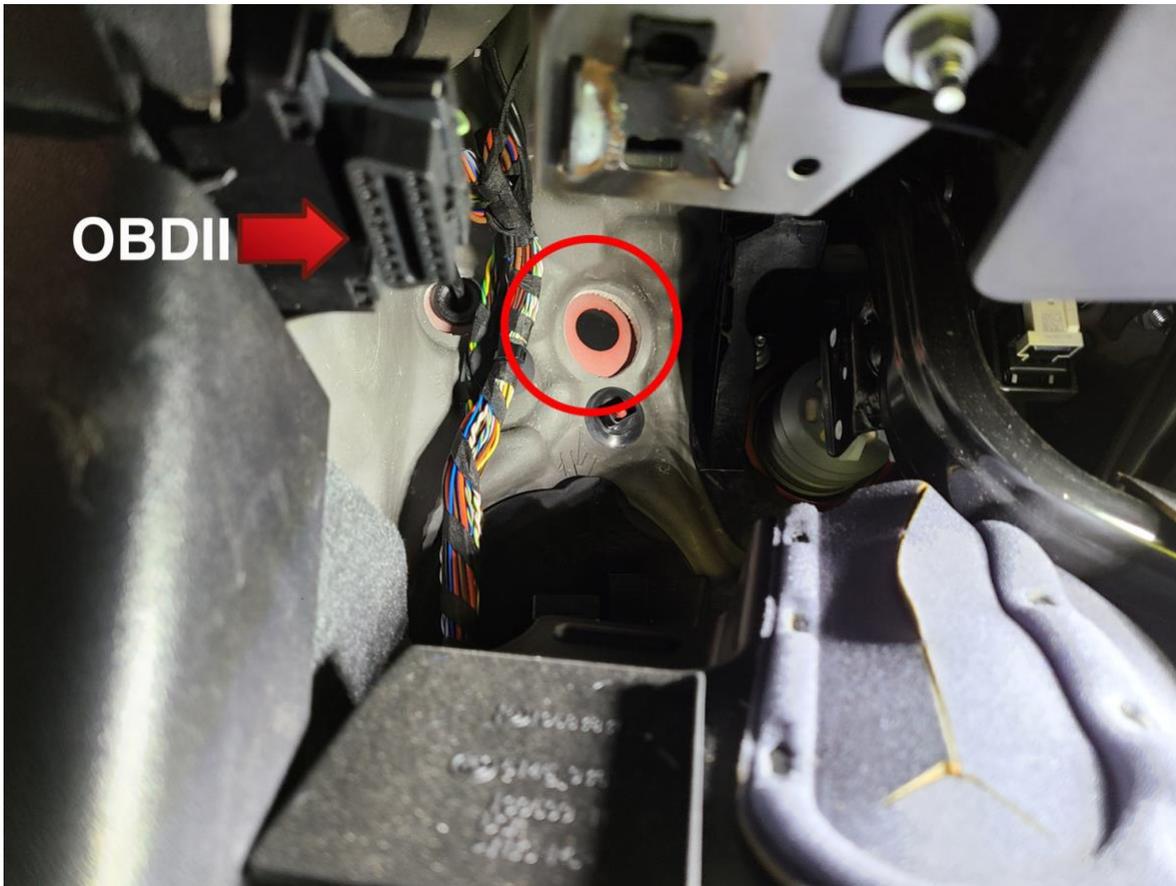


There are 2 ways of routing the JB4 OBDII connection.

OBDII Option 1: Route the JB4 OBDII cable to the driver's side, through the fender, driver's door seal, and plug in to the OBDII port under the dash near the driver's side door.



OBDII Option 2: Use a knife to pierce this existing hole. Route the JB4 OBDII cable to the driver's side under the dash through the hole in the firewall and plug in to the OBDII port under the dash near the driver's side door. Top pic: X3M/X4M Bottom Pic: M3/M4



For those who election for the optional JB4 mobile adapter and app attach the adapter as shown.

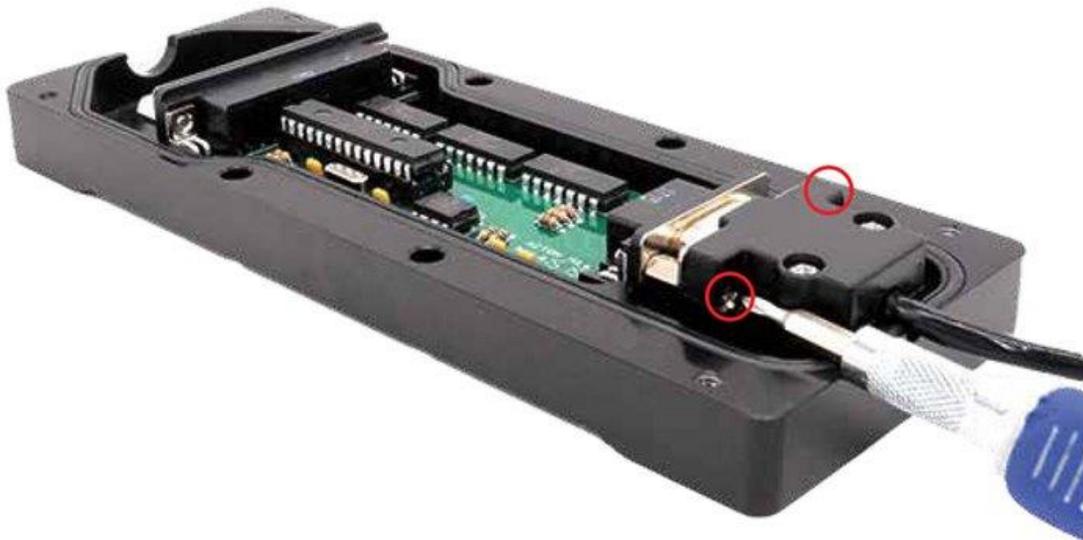
JB4 Connect Kit (Pinned Power) Install Guide

04-13-2020

1) Open the JB4 enclosure.



2) Install the DB9 connector and ensure both screws are secure.



3) Put the JB4 enclosure back together.



*****Very Important*****

4) Ensure the Connect Kit ***IS NOT*** in direct contact with the metal JB4 enclosure or any other nearby metal. Aim the smaller side of the Connect Kit (circled below) **DIRECTLY** towards the driver's seat for best signal quality. Failure to do this may lead to connectivity issues.



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Installation is complete! The JB4 comes preset to map1 which is suitable for all 91+ octane fuels.

Refer to this post for the latest map guide, firmware notes, and additional details:

<https://www.n54tech.com/forums/showthread.php?t=59392>