

BMS B38/B46/B48/B58 JB4 Install Guide

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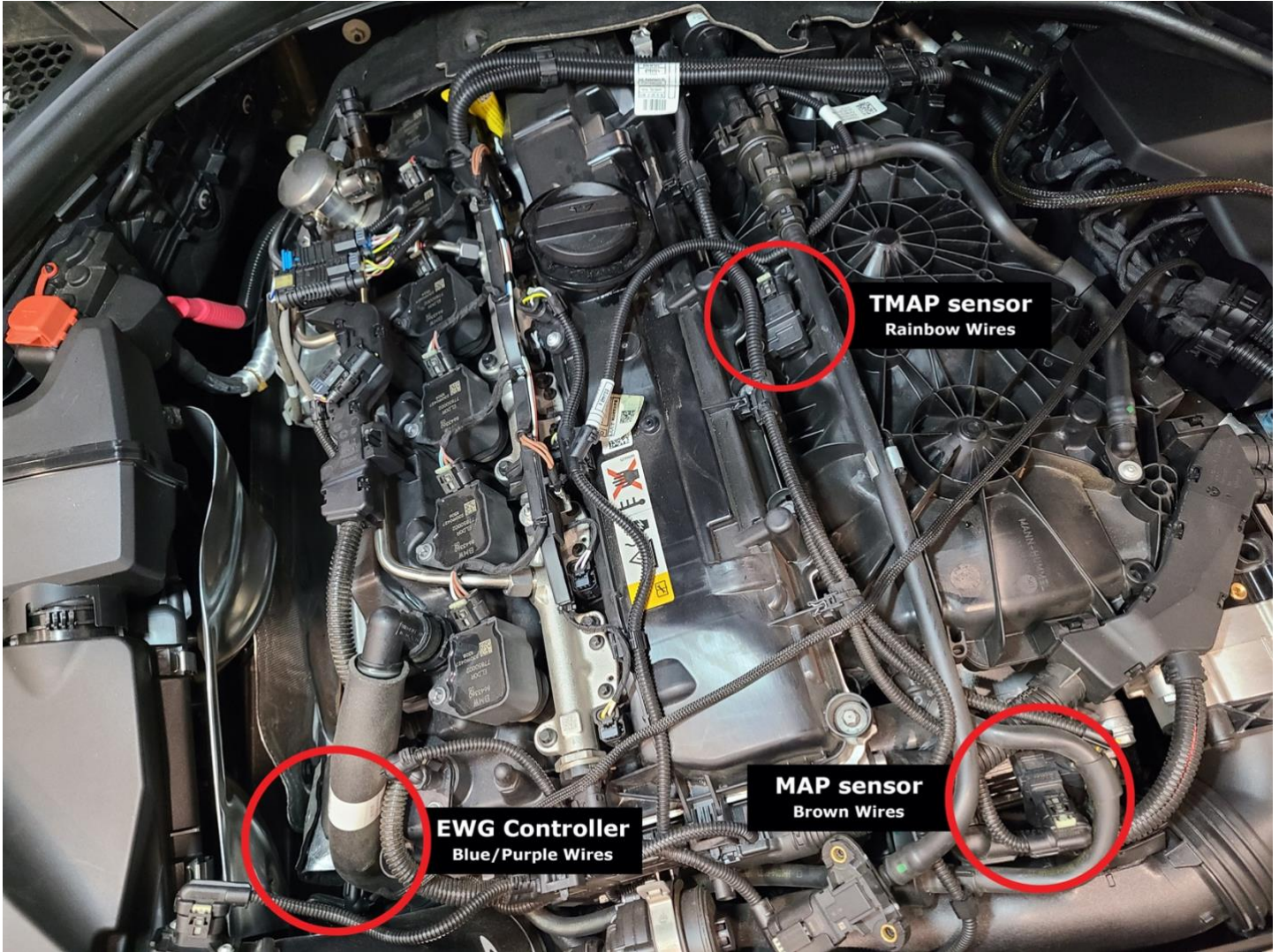
OPTIONAL JB4 APP SHOWN

Before starting installation lock the doors, and place the key at least 20 feet away from the vehicle. Wait 10 minutes for the vehicle to go to sleep.

1) Remove the plastic engine cover. The cover simply lifts off. Also remove the driver side cowl cover. Turning the lock tab 90 degrees will release the tab and allow you to pull the cover off. This is where the JB4 will be stored. Run the wires between the weather stripping into the engine compartment.

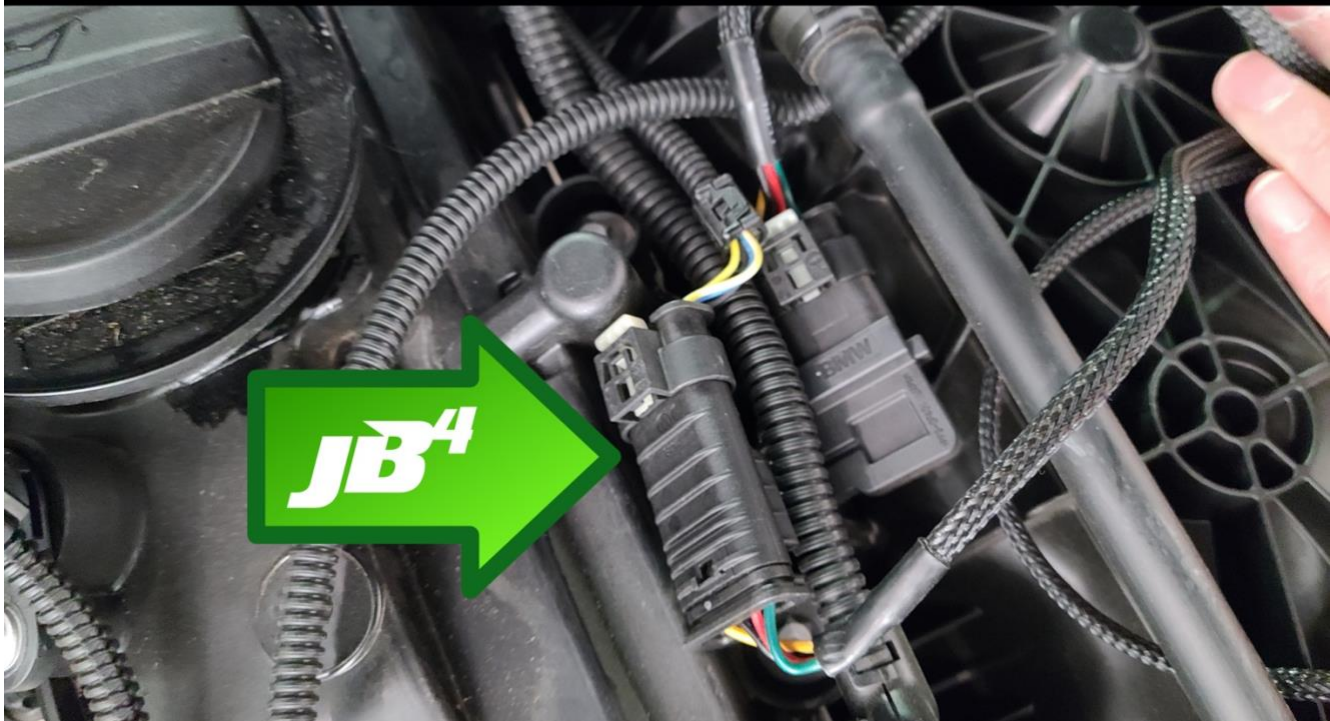
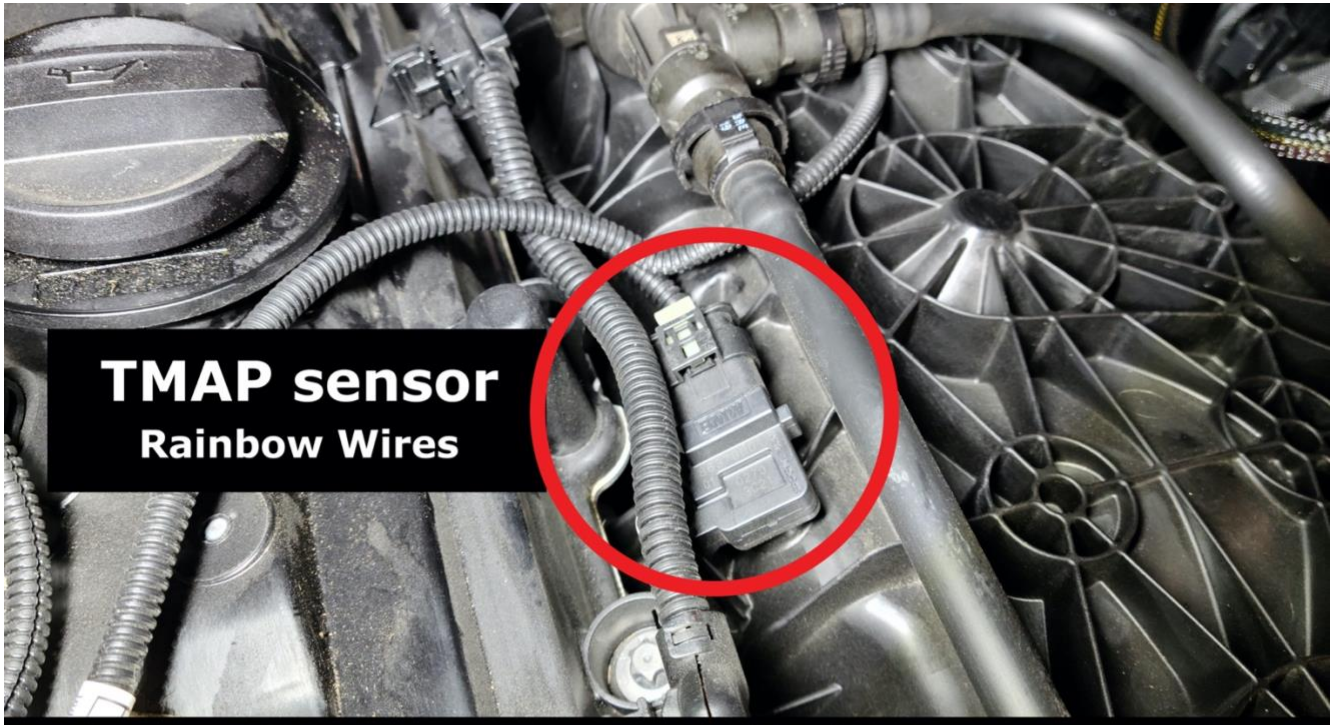


2) The JB4 harness is divided into wire loops each with its own wire color which will be routed to a specific sensor on the vehicle. In addition, there are a pair of green and brown CAN wires that will connect to the CANbus using the included OBDII adapter.



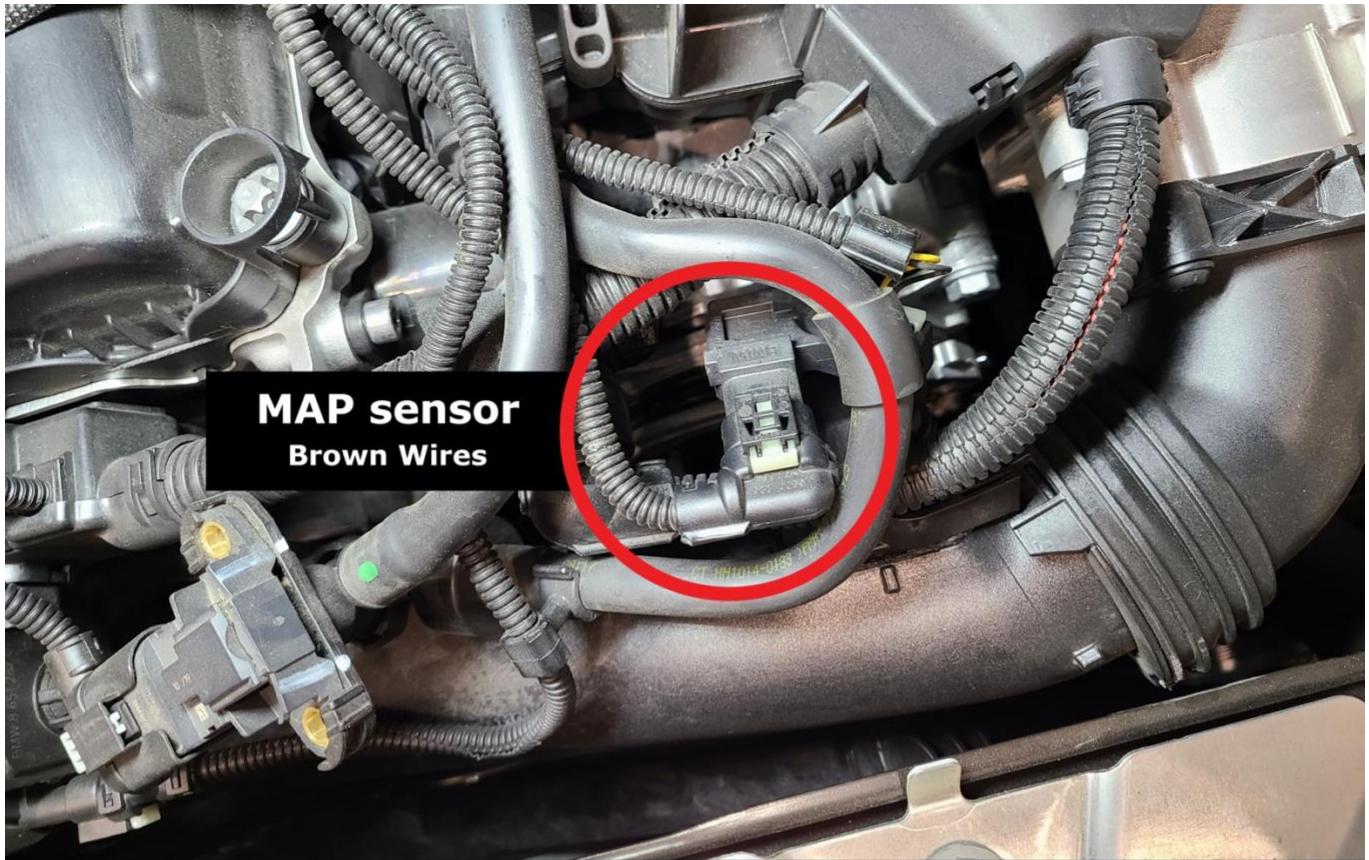
3) TMAP sensor, rainbow patch:

The TMAP sensor is located on the intake manifold on the top of the engine next to the oil filler cap. Unplug the factory harness, plug the JB4 harness into the sensor, and plug the factory harness in to the JB4. The clip is released by pushing back and pressing down on the gray locking tab. Alternatively you can use a small flat head screwdriver to lift the clip up from the front.



4) MAP sensor, brown patch:

The MAP sensor is located on the top of charge pipe several inches before the throttle body and disconnects similar to the TMAP sensor. Unplug the factory harness, plug the JB4 harness into the sensor, and plug the factory harness in to the JB4.



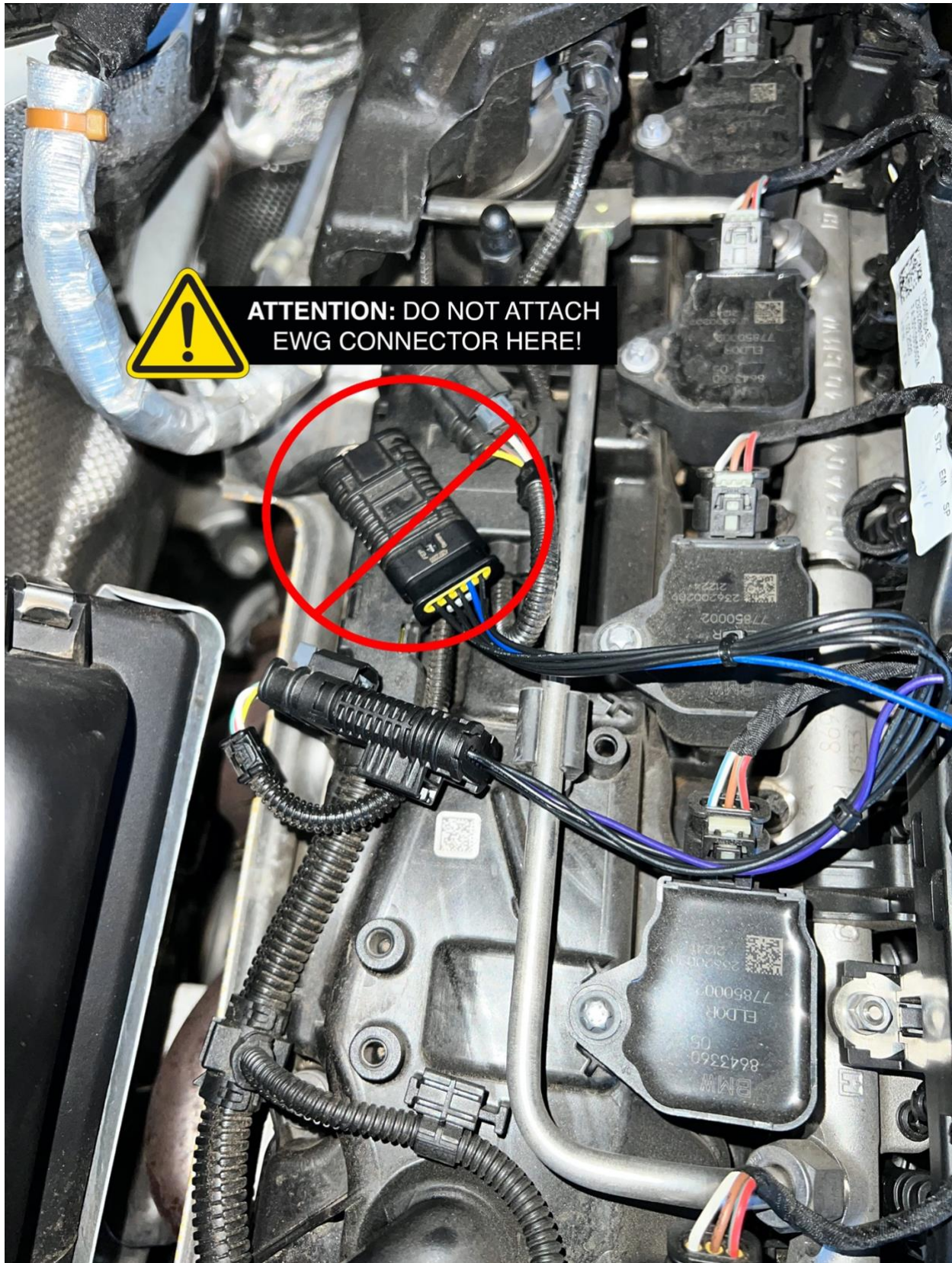
5) Optional EWG controller, blue/purple patch:

This optional connection is used by those planning on running higher boost levels or concerned with maximum performance. If you elect not to attach it simply tuck it out of the way next to the JB4 control box.

For G chassis the Electronic Waste Gate (EWG) connector is located on the lower left side of the engine between the intake and the engine. For F chassis the EWG connector is located UNDER the factory airbox which must be lifted up to access it. Some models have a snap on heat cover that needs to be unsnapped to access the EWG connector. After connecting secure the JB4 wires away from hot exhaust components. The connector can be zip tied to the PCV hose or somewhere out of the way.



Note there is a similar size connector on the passenger side for the oxygen sensor.
DO NOT attach the EWG connector to it!



6) CANbus/OBDII connector: green/brown wires on JB4

Vehicle can now be unlocked, and doors opened as OBDII can be installed/connected with vehicle awake.

This optional connector attaches to the OBDII port to allowing the JB4 to take in additional advanced engine parameters to incorporate in to tuning and logging via the app.



There are two ways to do this, the quick method, and the clean method. For the quick method simply route the OBDII cable around the door jamb as shown.



For the clean method you'll route the OBDII cable through a hole in the firewall and into the engine bay.

Remove the panel under the steering wheel by turning the 2 tabs and if you need the room unplug the courtesy light and speaker connection so the panel can be moved out of the way all together.



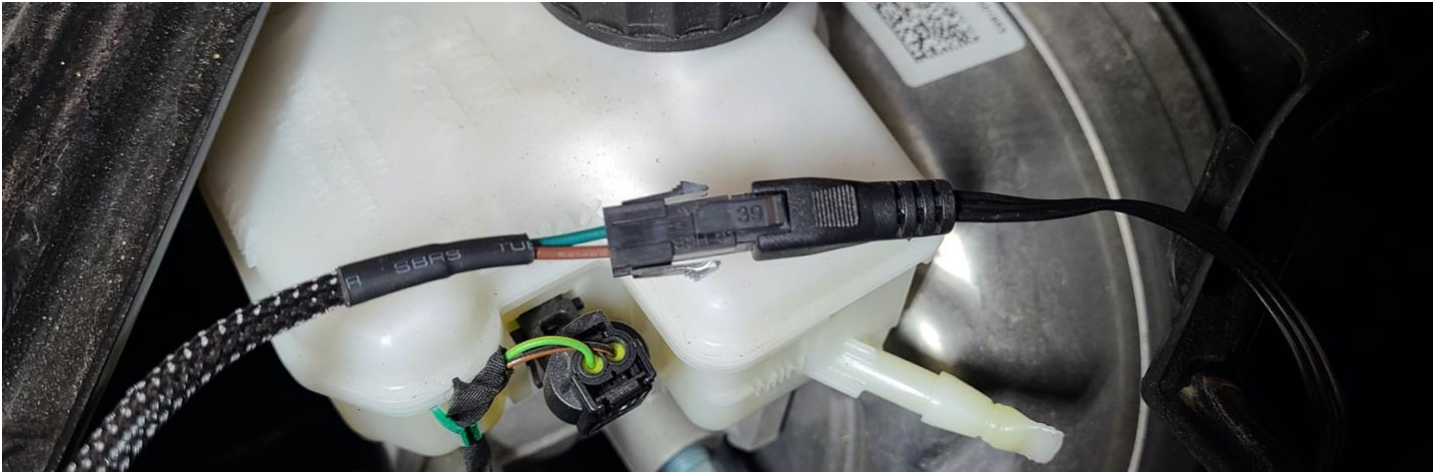
Using a long screwdriver push out the rubber cap or puncture the rubber seal here. Feed the OBDII wire from the interior through the hole to the engine compartment.



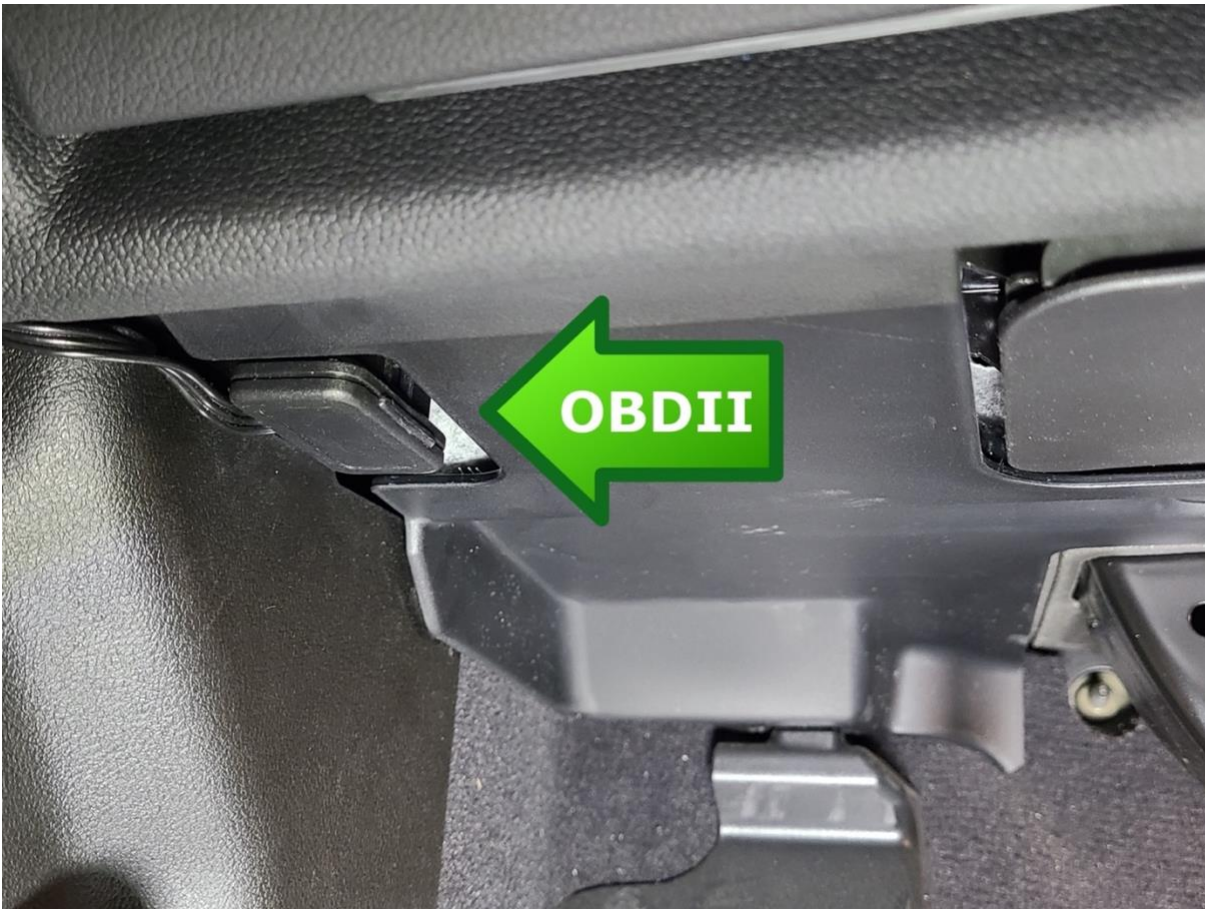
The wire will come out here behind the brake booster.



Plug the OBDII wire in to the JB4 green/brown pair connector. Note it CAN be installed wrong so be sure the OBDII clip is sliding over the latch. If after installation your app shows no advanced data (engine speed, air/fuel ratio, ignition advance, etc.) then check this first, it's usually the problem.



Plug the OBDII cable into the OBDII port under the driver's side dashboard.



If you've purchased the optional JB4 mobile adapter or the wired connection open the enclosure and plug the adapter into the JB4 board directly as shown. When closing the enclosure ensure the control board is properly lined up and only tighten down screws once the case closes smoothly to avoid damaging the JB4 board.

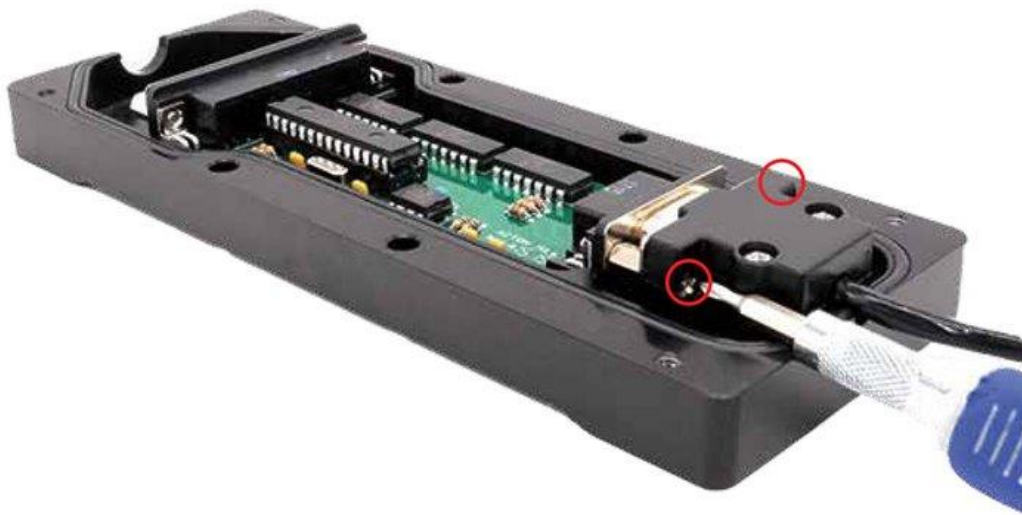
JB4 Connect Kit (Pinned Power) Install Guide

04-13-2020

1) Open the JB4 enclosure.



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



Installation is complete! The JB4 comes preset to map1 which is suitable for all 91+ octane pump gas fuels. For additional map details refer to the map guide within the app or to the n54tech.com JB4 support thread for your specific application.