

## JB4 for 2019+ Ford 2.3L EcoBoost Ranger

Last Updated: 2/26/2020

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OPTIONAL JB4 APP SHOWN

Before starting installation open the hood, lock the doors, place the key out of range, and wait 10 minutes for the vehicle to go to sleep. Alternatively you may disconnect the negative battery terminal.

First attach the JB4 rainbow patch to the MAP sensor on top of the intake manifold. Slide the factory white clip back and push it down to release the connector. Plug it in to the JB4 male connector and plug the JB4 female connector in to the sensor completing the intercept.



The next connection is located on the intercooler and is accessed by lifting up the plastic radiator cover. Remove the 3 plastic tabs on the driver side of the engine bay by lifting up the pin and then pulling out the connector.



You can then pry up the panel enough to access the sensor on the driver side.



Plug in the JB4 brown connection to the MAP sensor as shown and reinstall the plastic cover.



At this stage the vehicle can be woken up to open the doors to install the optional OBDII cable. OBDII provides the JB4 CANbus access for improved performance, features, and logging, and is strongly suggested.

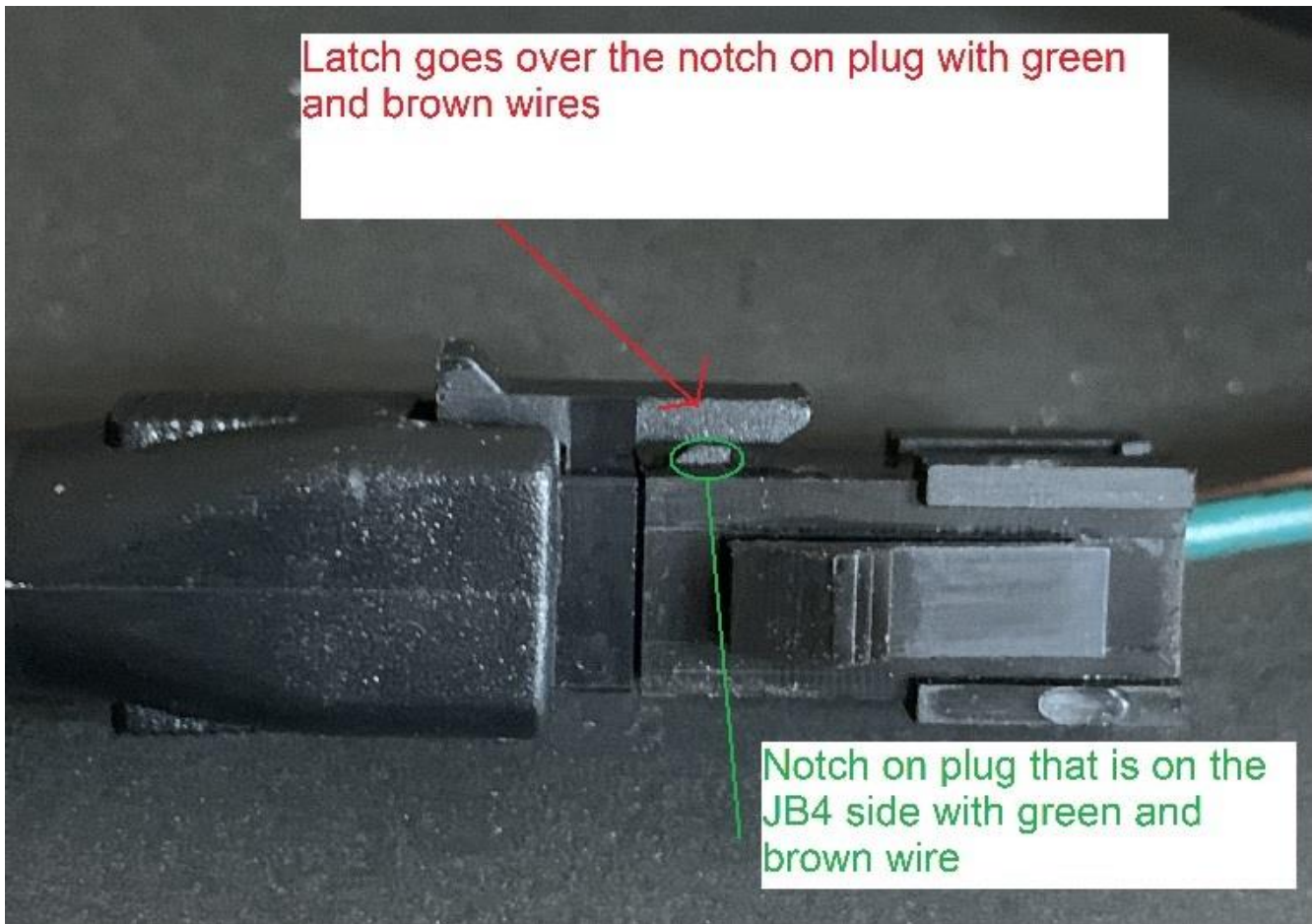
It can be routed the “quick” way and the “clean” way.

For the “quick” way simply plug the connector in to the OBDII port and route it along the door jamb up to the JB4 harness.

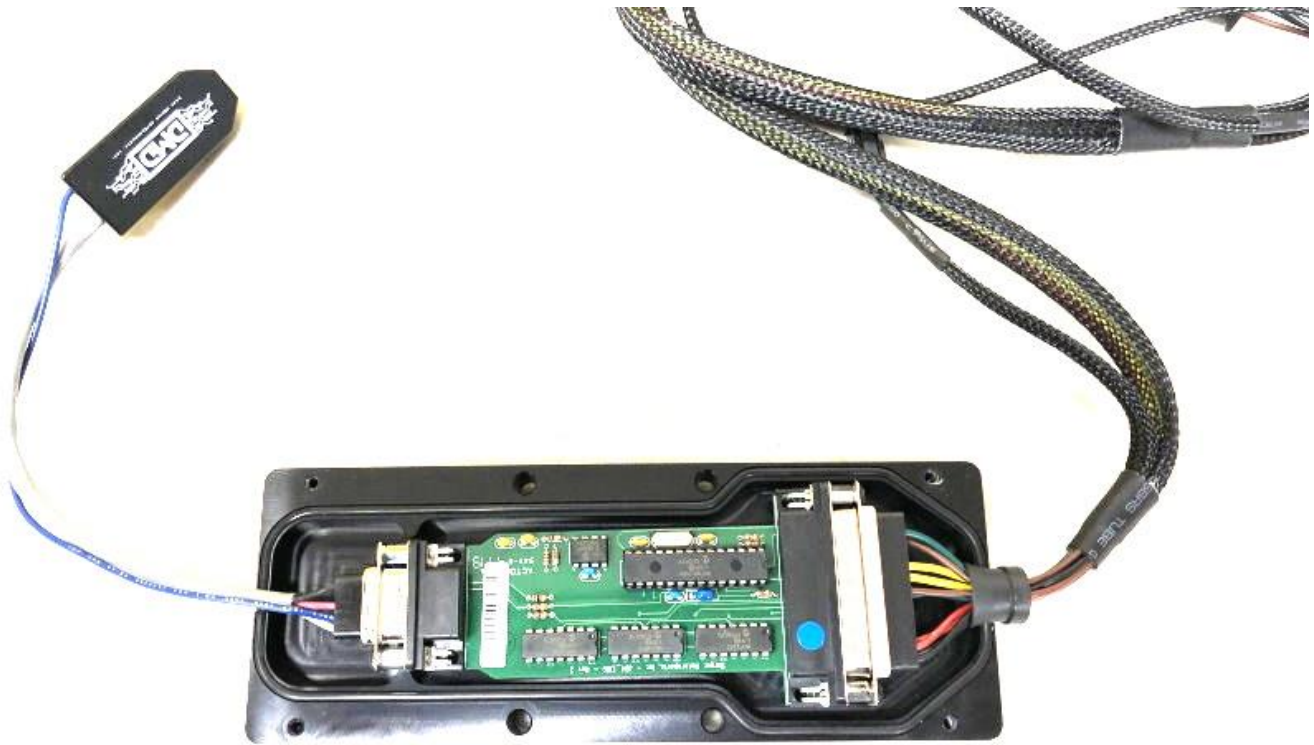
For the “clean” way you’ll push back the large grommet under the dash and using a coat hanger or long screwdriver push/route the JB4 harness side in to the engine bay up to the JB4.



The OBDII cable attaches to the JB4 connection by plugging in the harness. Ensure the clip is aligned with the latch for proper orientation.



If you've purchased the optional JB4 mobile adapter open the enclosure and plug the adapter in to 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 is fully closed to avoid board damage if misaligned.



Finally place the JB4 box out of the way as shown. It can be secured using a zip-tie.



Installation is complete! The JB4 comes preset to map1 which is around 3.5psi peak over factory. Refer to this post for the full map guide, latest firmware, and additional details:

<https://www.n54tech.com/forums/showthread.php?t=61151>