

## BMS Ford F150 Raptor / EcoBoost Stage1 & JB4

Last Updated: 5-25-2018

## Use subject to terms and conditions posted at <a href="http://www.burgertuning.com/terms.html">http://www.burgertuning.com/terms.html</a>

THIS PART IS LEGAL FOR USE ONLY IN COMPETITION RACING VEHICLES AS DEFINED UNDER CALIFORNIA LAW, AND IS NOT LEGAL FOR USE IN ANY OTHER MOTOR VEHICLE. California law defines a "racing vehicle" as "a competition vehicle not used on public highways." (Calif. Health & Safety Code 39048) This part may only be used on competition racing vehicles operated exclusively on a closed course in conjunction with a sanctioned racing event. Competition-only motor vehicles may not be driven to a racing event on a public highway and must be transported on a trailer or other carrier. USE OF THIS PART IN ANY OTHER VEHICLE MAY SUBJECT YOU TO FINES AND PENALTIES FOR VIOLATION OF FEDERAL AND/OR STATE LAW, WILL VOID YOUR WARRANTY FROM BURGER MOTORSPORTS, INC, AND CAN VOID YOUR VEHICLE'S WARRANTY. It is your responsibility to comply with all applicable federal and state laws relating to use of this part, and Burger Motorsports, INC hereby disclaims any liability resulting from the failure to use this part in compliance with all applicable federal and state laws.



Open the hood, lock the doors, place your key far enough from the car not to wake it up, and wait 5 min for the vehicles computer to go to sleep.

The Stage1 & JB4 harness has two similar looking connectors on it. The one with the brown colored wires will attach to the TMAP sensor in the front of the engine, while the one with the rainbow wires will attach to the MAP sensor on the back of the intake manifold. The 2.7L, 3.5L, and Raptor installs are all identical except for the 2.7L model you must remove the engine cover which is held down with two 10mm bolts to access the MAP sensor.

Attach the brown connection to the TMAP sensor in the red square below:



Attach the rainbow connection to the MAP sensor shown below. Finally, route the cables and place the control box next to the battery.



Install box placement shown with optional JB4 Mobile adapter.



If installing Stage1 installation is complete. If installing a JB4 there is an optional OBDII cable to route under the drivers seat. If not installed the JB4 will act like a Stage1.

Plug the OBDII adapter in the port under the steering wheel.



Push out grommet from under dash and pass OBDII wire through to engine bay. After attaching it to the JB4 harness push the grommet back in from the engine bay over the wire you've routed.



Route the OBDII cable along the firewall tucking it over the brake booster and other factory mounts to keep it from sitting on the engine cover and plug in to the matching JB4 connector.



Installation is complete! The Stage1 comes preset to 3psi over stock while JB4 comes preset to map1 which runs 4psi peak tapering to 3psi at higher engine speed.

Directions for adjusting this using a BMS data cable or JB4 Mobile adapter are available on n54tech.com. Refer to n54tech for additional map and use suggestions.