

WHIPPLE

WHIPPLE 2.3L ECOBOOST INSTRUCTION MANUAL

2015-2017 FORD MUSTANG STAGE 1



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PREMIUM FUEL ONLY (91 OCTANE OR BETTER ALWAYS) RON+MON/2

CALIFORNIA AIR RESCOURCE BOARD EXECUTIVE ORDER D231-50

COMPETITION BASED PRODUCT MAY BE USED SOLELY ON VEHICLES USED IN SANCTIONED COMPETITION WHICH
MAY NEVER BE USED UPON A PUBLIC ROAD OR HIGHWAY

INTRODUCTION

Before beginning installation, please read this manual and important notes:

- Please read the installation manual and verify that all items are present. If you are missing hardware or have any questions, please contact your dealer or Whipple.
- Premium fuel (US 91 octane) is required to prevent spark-knock/detonation under certain operating conditions. Other countries must meet US 91 octane standards, RON+MON/2. If fuel of less than 91-octane is present in the vehicle fuel tank, the tank must be completely drained and refilled with 91 or higher octane to 1/8th of a tank.
- Operating your engine without the Whipple PCM recalibration can result in engine damage or failure and will void your warranty.
- COMPETITION BASED PRODUCT MAY BE USED SOLELY ON VEHICLES USED IN SANCTIONED COMPETITION WHICH MAY NEVER BE USED UPON A PUBLIC ROAD OR HIGHWAY, UNLESS PERMITTED BY SPECIFIC REGULATORY EXEMPTION (VISIT THE "EMISSIONS" PAGE AT [HTTP://WWW.SEMASAN.COM/EMISSIONS](http://www.semasan.com/emissions) FOR STATE BY STATE DETAILS.
- COMPETITION BASED PRODUCT IS LEGAL IN CALIFORNIA ONLY FOR RACING VEHICLES WHICH MAY NEVER BE USED, OR REGISTERED OR LICENSED FOR USE, UPON A HIGHWAY.
- IT IS THE RESPONSIBILITY OF THE INSTALLER AND/OR USER OF THIS PRODUCT TO ENSURE THAT IT IS USED IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

RECOMMENDED TOOLS AND SUPPLIES

The following items are not included in this supercharger kit and it is strongly recommended that they're used for ease of installation or maximum performance.

Safety glasses, 3/8" torque wrench, metric wrench set, 3/8" assorted metric socket set, trim pad tool (for pushpin removal).

PRE-INSTALLATION CHECKLIST

Before installing your Whipple Supercharger Kit, complete the following checklist.

1. Verify Condition of Vehicle: Before the upgrade kit is installed, ensure the engine runs smoothly and that the factory malfunction indicator light (MIL) is off. Only install the supercharger kit if the engine runs smoothly *and* the MIL is off.
2. **!! CAUTION !!** This product is intended for use only on STOCK, UNMODIFIED, WELL-MAINTAINED engines. Installation on a worn-out or modified engine is not recommended without factory computer and fuel system modifications. Custom engine configurations could require custom tuning and other supporting modifications.
3. Verify Fuel System: Upgrade systems should only be installed on vehicles that have new or clean fuel filters.
4. Assess Cleanliness of Installation Area: Make sure your work area and the under hood area are free from debris. This supercharger is a high-quality, close-tolerance compressor and must not be subjected to contamination by dirt or any type of foreign material. If necessary, vacuum around engine to remove any foreign material.
5. **!! CAUTION !!** Identify Kit Components: Before beginning installation, identify all the components of your Whipple Kit and ensure all items are present and undamaged.

SAFETY PRECAUTIONS



CAREFULLY READ THE IMPORTANT SAFETY PRECAUTIONS AND WARNINGS BEFORE PROCEEDING WITH THE INSTALLATION!

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personally injury or death. Read each step of the installation manual carefully before starting the installation.

- Always wear safety glasses for eye protection.
- Place the ignition switch in the off position.
- Always apply the parking brake when working on vehicle.
- Block the front and rear tire surfaces to prevent unexpected vehicle movement.
- Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- Do not smoke or use flammable items near or around fuel system.
- Use chemicals and cleaners only in well-ventilated areas.
- Batteries can produce explosive hydrogen gas which can cause personal injury. Do not allow flames, sparks or flammable sources to come near the battery.
- Keep hands and any other objects away from the radiator fan blades.
- Keep yourself and your clothing away from moving parts when the engine is running.
- Do not wear loose clothing or jewelry that can be caught in rotating or moving parts.



WARNING

****NOTICE:** Installation of Whipple products signifies that you have read this document and have agreed to the terms stated within.

It's the purchaser's responsibility to follow all installation instruction guidelines and safety procedures supplied with the product as it's received by the purchaser to determine the compatibility of the product with the vehicle or the device the purchaser intends to install the product on.

Whipple Superchargers assumes no responsibility for damages occurring from accident, misuse, abuse, improper installation, improper operation, lack of reasonable care or all previously stated reasons resulting from incompatibility with other manufacturer's products.

There are no warranties expressed or implied for engine failure or damage to the vehicle in any way, loss of use or inconvenience or labor reimbursement. This includes merchantability and fitness.

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. Whipple Superchargers reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

PCM CALIBRAITON NOTICE

Your Whipple kit was supplied with a SCT Flash tool. These tools are NOT preloaded with calibrations due to the amount of factory calibrations. Therefore, you must provide Whipple with the PCM/ECU strategy code for your calibration. NOTE: Whipple does not offer custom tuning. **Calibrations are provided for 100% stock vehicles with an exception to cat-back exhaust systems. Long tube headers, high flow cats and other engine mods are not supported.**

INSTALLATION INSTRUCTIONS

It is strongly recommended that you read through this guide **before** you begin installing the Whipple.

1. Connect the SCT device to the OBD II port, turn key to the "ON" position.
2. Using the on-screen device menu, select VEHICLE INFO and follow the on screen prompts.



3. Write down the PCM/ECU OS strategy code/part number _____



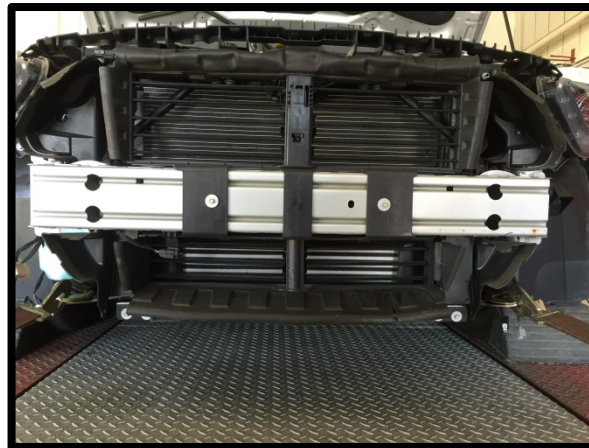
4. Email the PCM/ECU OS Strategy/part number to tuning@whipplesuperchargers.com, calibrations can take up to 48 hours.
5. Using an air hose, blow off any loose dirt or debris from engine compartment. If really dirty, then steam clean the engine compartment before proceeding to the next step.
6. Lift the front of the vehicle using the Ford recommended lifting points and place on to safety stands.
7. Remove the factory plastic radiator shroud by pulling the center of the (8) push pins and then out. Use a flat head screw driver to pry the center head up. This will all be reused.



8. Remove the driver and passenger side inner wheel well push pins (14) securing the inner wheel well to fascia.
9. Remove the (19) lower close-out panel bolts and the (2) push pins. Remove the lower close-out panel from vehicle. Use a 7mm socket.
10. To remove the front fascia, just behind and below the headlights, there is (1) bolt (per side) that secures the fascia to the body. Using a 7mm wobble socket on a ¼" ratchet and an 8" extension. You will have to loosen from the gap between the body and fender.

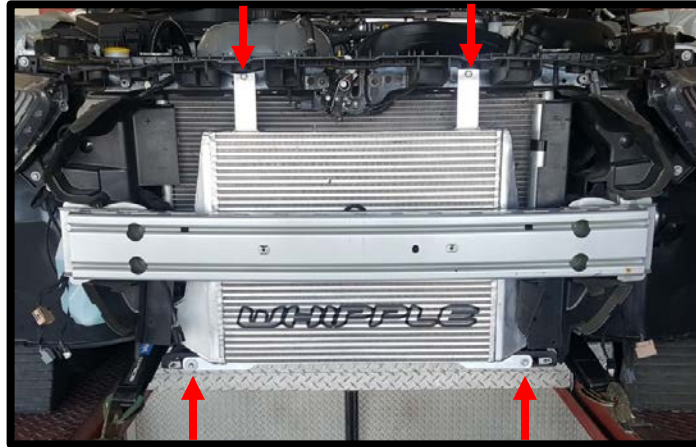


11. Carefully pull the fascia forward, disconnect the fog lamps before pulling away.
12. Remove the ambient air temp sensor from plastic shrouding.
13. Remove the active grill shutters from the vehicle by removing the (2) factory bolts. Disconnect electrical connector before removing.

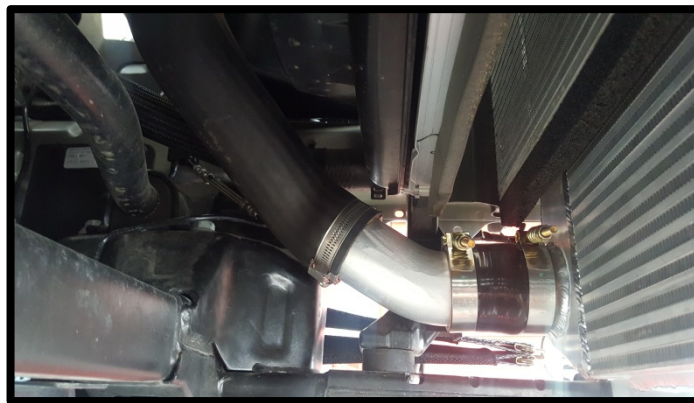


14. Remove the factory intercooler inlet tube to the intercooler by loosening the hose clamp.
15. Remove the factory intercooler outlet tube from the intercooler by loosening the hose clamp.
16. Remove the factory sensor from the intercooler by removing the (1) torx head bolt (T20).
17. Install the factory sensor into the upgraded intercooler using the factory torx head fastener (T20).
18. Remove the (2) factory intercooler 10mm bolts securing it to vehicle.
19. Remove factory intercooler from the bottom.

20. Install the upgraded intercooler core from the bottom up. Secure the core at the (4) mounting points. Use the supplied (2) 6mm x 25mm in the upper (2) mounts. Use the (2) stock 10mm fasteners on the lower mounting holes.



21. Couple the factory inlet and outlet hoses using the supplied aluminum coupler and silicone hose. Use the factory clamps on the factory hose. Use the supplied clamps to secure the silicone hose to the coupler.



22. Reinstall the fascia by securing the upper (2) factory bolts in inner fender and reconnecting fog lights.



23. Reinstall the (19) lower close-out panel bolts and the (2) push pins. Reinstall the lower close-out panel from vehicle. Use a 7mm socket.
24. Reinstall the driver and passenger side inner wheel well push pins (14) securing the inner wheel well to fascia.