

2019+ Ford Ranger 2.3L EcoBoost Performance Pac Level 1

Installation Instructions
P/N: 422178 (1419-PERFPK1)



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Application: 2019-2020 Ford Ranger 2.3L

Important Note:

Before installing your ROUSH Performance Product(s), please read through the entire installation procedure and check to make sure all items are present. Contact ROUSH Customer Service at 1-800-59-ROUSH, weekdays from 9:00 AM to 5:00 PM EST, with any questions regarding fit, missing parts or instructions that are unclear to you.



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PACKAGING LIST FOR KIT 422178 (1419-9600)

Description	Part Number	Quantity
Airbox Lid	1419-9643HC	1
Lid Foam Seal 71 in	1318-8K230	1
ROUSH Air Box Badge	1419-FLRBDG	1
MAF Tube - MAP Sensor Insert	1419-12B579	1
Clean Air Tube	1419-9B660	1
Air Filter-Dry	1419-9601R	1
Hardware Kit	1419-HWK1	1
Fitting - PCV SAE 16 mm	1311-9N285	1
Clamp Size 48	5348	1
Clamp 64-140 mm	R07130015-13	1
M6 Bolt	N605891-S437	6
Flash Pak - 2019 2.3L Ranger	1419-FLSHPK	1

EQUIPMENT AND SUPPLIES REQUIRED

- 10 mm Socket
- 7 mm Socket
- Trim Removal Tool

If you are missing any items, please call us toll free at 1-800-59-ROUSH.



LIMIT OF LIABILITY STATEMENT

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. ROUSH Performance Products (RPP) reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

SAFETY PRECAUTIONS



STOP

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 personal injury or death. Read each step of the installation manual carefully before starting the installation.

- Always wear safety glasses for eye protection.
- Place ignition switch in the OFF position.
- Always apply the parking brake when working on a vehicle.
- Block the front and rear tire surface to prevent unexpected vehicle movement.
- If working with a lift, always consult vehicle manual for correct lifting specifications.
- Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- Do not smoke or use flammable items near or around the fuel system.
- Use chemicals and cleaners in well-ventilated areas.
- Batteries produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or flammable substances 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 get caught in rotating parts or scratch surface finishes.
- Allow the engine, cooling system, brakes and exhaust to cool before working on a vehicle.

WORK SAFELY!

Perform this installation on a good clean level surface for maximum safety and with the engine turned off.

SECTION A – REMOVAL

The following section will guide you through the disassembly of the stock components. Special care should be taken to label fasteners and parts that are taken off during this procedure since many will be reused.

1. Cover both fenders with fender covers to protect the vehicle finish.
2. Disconnect the battery ground cable.
3. Disconnect the air temperature sensor connector as shown.



4. Remove the yellow PCV fitting.



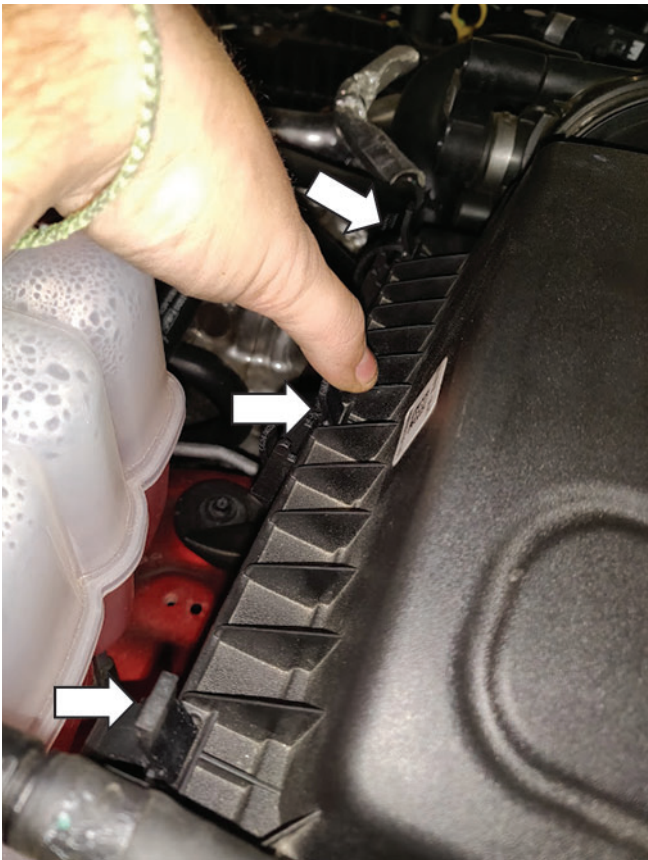
5. Loosen the bottom clean air tube clamp.



6. Remove the coolant line using a trim tool.



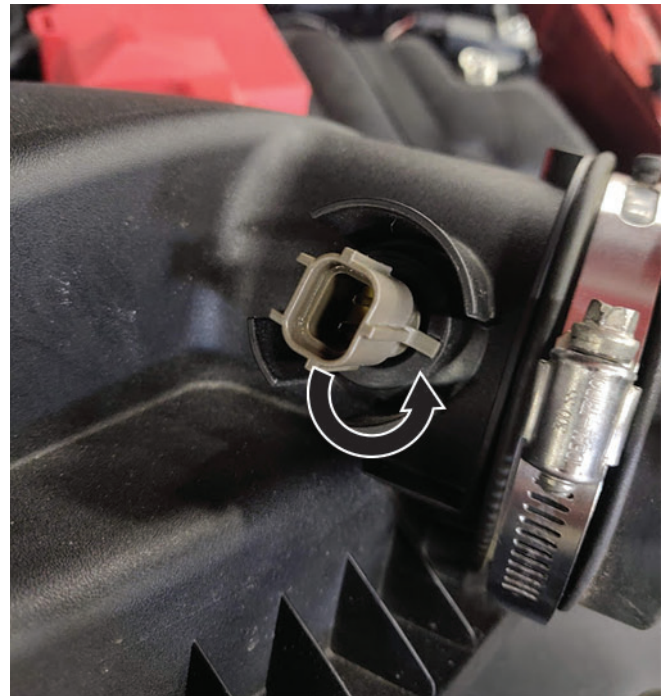
7. Unclip the three (3) plastic push clips on the back of the intake box.



8. Remove the air box lid, clean air tube, and the filter from the vehicle.



9. Remove the air temperature sensor from the MAF tube by pulling outwards and counterclockwise.



SECTION B – INSTALLATION

The following section will guide you through the installation of the ROUSH components.

1. Install the temperature sensor that was removed into the ROUSH MAF tube (1419-12B579).



2. Install the PCV fitting (1311-9N285) into the clean air tube (1419-9B660).



3. Install the air filter (1419-9601R) on the air box lid (1419-9643HC) in the orientation shown. Position clamp and tighten.



4. Install foam seal to the air box lid and trim as necessary.





5. Install the air box lid and filter assembly into the stock lower air box tray.



6. Install the air box lid into the clean air tube and tighten the clamp to 3 Nm.



SECTION C – PCM FLASHING

Proceed with steps 1 and 2 if you have a SAE J2534 pass through device (e.g. Puma, VCM I, VCM II). If you do not have a SAE J2534 device, visit your local ROUSH Dealer or Performance Shop with the appropriate tools for PCM Calibration.

1. If equipped with a SAE J2534 pass through device, refer to the RDT-CALIM manual found on our website. <http://rdt.roush.com> The RDT-CALIM manual will guide you through the ROUSH Diagnostic Tool (RDT) software installation process and the ROUSH PCM flashing procedure detailed in RDT-CALIM.
2. Once the PCM has been successfully recalibrated, start the engine and check for unusual noises, dash service lights, and unusual operation. If problems are detected, immediately stop the engine or vehicle, diagnose and repair the problem.

Congratulations, the installation is complete!