

# INSTALLATION INSTRUCTIONS

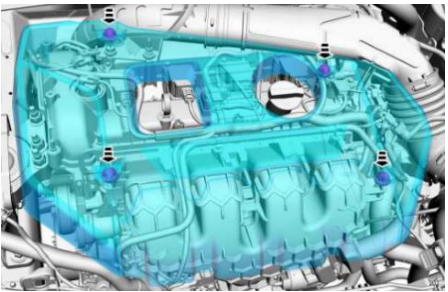
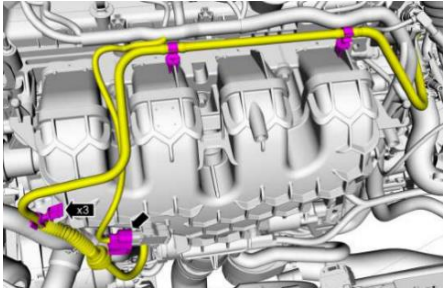
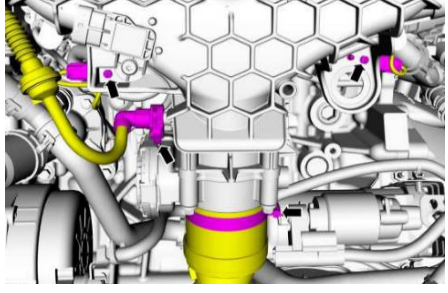
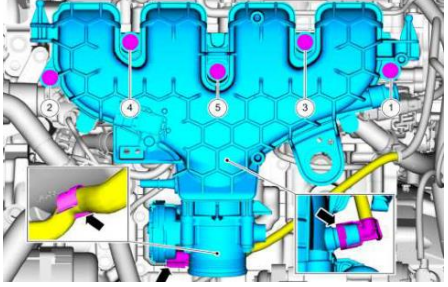
## PCV Baffle Plate





### FORD ECOBOOST/MAZDA MZR


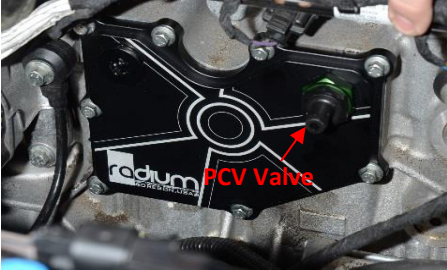


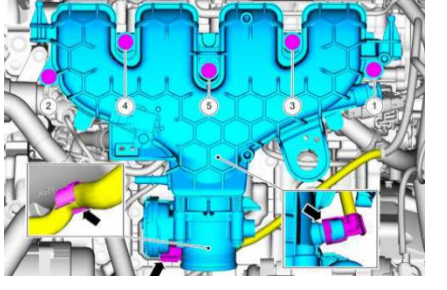
Document: 19-0158

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The steps shown in this instruction manual outline installation on a Ford Focus RS. Steps may vary for other vehicles.

| STEP | TOOLS NEEDED | INSTRUCTIONS  | PHOTO   |
|------|--------------|---|---|
| 1    | 10mm Socket  | Prop the hood and disconnect the battery's negative terminal.   |   |
|      |              | Remove the engine cover by carefully pulling upwards until released. Pay close attention to where the 4 pegs from the cover interface with the rubber grommets. Set the cover aside.          |   |
|      |              |   |   |
|      |              |   |   |
| 2    |              | Remove the intake manifold by following the steps below:  |  |
|      |              | First, disconnect the MAP sensor on the front of the plenum, as shown.  |   |
|      |              | In 3 locations, pop off the EVAP purge tube from the intake runners.  |   |
|      |              |   |   |
| 3    |              | To remove the EVAP purge connector fitting, simply press the black tab inwards and pull away from the intake manifold.  |  |
|      |              | Unlatch the grey connector housing from the back left side of the intake manifold. It does not need to be disconnected.   |   |
|      |              | Loosen the compressor coupler clamp on the throttle body. This will generally be unique to the vehicle. OEM clamps require a 7mm wrench. Aftermarket clamps typically require a 7/16" wrench. |   |
|      |              |   |   |
| 4    | 10mm Socket  | Remove the five M8 bolts that secure the manifold to the cylinder head using a 10mm socket wrench.  |  |
|      |              | When pulling the intake manifold away there will be 2 more connections (described below).   |   |
|      |              |   |   |
|      |              |   |   |

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|-----|--------------------|---|---|
| 5   |                    | To disconnect the electrical plug from the throttle body, first pull the red locking tab back. Next, press the thumb tab in and pull away to release.   |    |
|     |                    |   |   |
|     |                    |   |   |
|     |                    |   |   |
|     |                    |   |   |
| 6   |                    | Disconnect the PCV tube from the intake manifold.   |    |
|     |                    | For the Focus EcoBoost (shown), simply squeeze each side of the PCV line's connector fitting and pull away.   |   |
|     |                    | For the Mustang EcoBoost, press the PCV line's SAE quick connect white tabs inward on the intake manifold side and the PCV valve side and pull away. Remove the OEM PCV line assembly from the vehicle.   |   |
|     |                    | Remove the intake manifold from the vehicle.  |   |
|     |                    |   |   |
| 7   | 8mm Socket         | Using a 8mm socket wrench, remove the eight PCV plate M6 bolts.   |   |
|     |                    | Carefully pull the PCV plate off the engine and place on a bench.   |   |
|     |                    |   |   |
|     |                    |   |   |
|     |                    |   |   |
| 8   | 5/64" Allen Wrench | Find the Radium Engineering PCV plate, 2 green baffles, and 6 small screws included in the kit.   |  |
|     | Threadlocker       | Apply a small amount of high-strength threadlocker on each to the six small screws.   |   |
|     |                    | Install the baffles as shown and tighten the screws.  |   |
|     |                    |   |   |
|     |                    |   |   |
| 9   |                    | Remove the gasket from the OEM PCV plate. Clean the gasket and install it in the groove on the Radium PCV plate.  |  |
|     |                    | Make sure the small tab on the OEM gasket aligns with the slot on the Radium PCV plate, as shown.   |   |
|     |                    |   |   |
|     |                    |   |   |
|     |                    |   |   |
| 10a | Heat Gun           | <b>P/N: 20-0327-01 OEM Configuration Install (Focus EcoBoost ONLY)</b><br>If using the Radium Engineering plate with the OEM PCV system (P/N: 20-0327-01) and <u>no catch can</u> , the OEM PCV black tubing will need to be removed from the blue OEM PCV valve so the tubing can be reused. |  |
|     |                    | Use a heat gun to warm plastic tube until it can be pulled off the OEM PCV valve. Do not overheat and melt the tube.  |   |
|     |                    |   |   |
|     |                    |   |   |
|     |                    |   |   |

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|-----|----------------------|--|---|
| 10b | Heat Gun             | <b>P/N: 20-0327-01 OEM Configuration Install (Mustang EcoBoost ONLY)</b>   |    |
|     |                      | <p>If using the Radium Engineering plate with the OEM PCV system (P/N: 20-0327-01) and no catch can, use a heat gun to warm the plastic tube near the SAE quick connect fitting that connected to the intake manifold.</p> <p>The one 90 degree SAE quick connect fitting will be reused. The opposite side which has the OEM tubing attached will NOT be reused.</p>  |   |
|     |                      |  |   |
|     |                      |  |   |
|     |                      |  |   |
| 11  | 8mm Socket           | <p>Lubricate the adapter O-rings with oil. Do not use PTFE paste or tape. Install necessary adapters into the two PCV plate 10AN ORB female ports. If installing 20-0327-01 (OEM Configuration), install the plug and Radium PCV valve as shown. <i>Note: The PCV valve may look different than pictured if purchased directly from Radium Engineering after April 2019.</i></p> <p>For custom installations with aftermarket hoses and fittings, screw the appropriate adapters into the PCV plate and tighten.</p> <p>Clean the mating surface on the block and install the Radium Engineering plate to the engine. Ensure gasket is seated correctly. Tighten all bolts in an <b>alternating pattern to 106 in-lbs.</b></p> |    |
|     | Light Oil            |  |   |
|     |                      |  |   |
|     |                      |  |   |
|     |                      |  |   |
| 12a | Phillips Screwdriver | <p>To connect the Radium PCV valve to the intake manifold (<b>without a catch can</b>), slide the OEM PCV tube removed in Step 10a onto the Radium PCV valve barb, as shown. This is best done after the Radium PCV valve installed into the plate. Secure with the provided EFI hose clamp. No heating is necessary. This tube will connect to the intake manifold as before.</p> <p><b>NOTE:</b> If installing the PCV plate with the Radium Engineering Focus EcoBoost catch can kit, leave the black plastic tube off, and follow the instructions for the catch can kit.</p>  |   |
|     | 3/8" Allen Wrench    |  |   |
|     | 1" Wrench            |  |   |
|     | Light Oil            |  |   |
|     |                      |  |   |
| 12b | Light Oil            | <p><b>Installation on Mustang EcoBoost:</b></p> <p>Install the Radium PCV valve into the LH port and the -10AN ORB plug into the RH port, as shown above. First, lubricate the fitting O-rings with light oil. Do not use thread tape or past on the screw threads.</p> <p>Install the provided rubber PCV hose to the OEM 90 degree SAE quick connect fitting (from Step 10b) and the other side to the Radium PCV valve. Secure both ends with the included spring clamps. After the intake manifold is reinstalled, the rubber PCV hose can be cut to length, if necessary.</p> <p><b>NOTE:</b> The included EFI hose clamp will NOT be used for the Mustang.</p>   |  |
|     | 1" Wrench            |  |   |
|     | Pliers               |  |   |
|     | 3/8" Allen Wrench    |  |   |
|     |                      |  |   |
| 13  | 10mm socket          | <p>Reinstall the intake manifold and all associated parts that were removed in previous steps.</p> <p>Torque the intake manifold bolts to 15 ft-lb in an alternating pattern starting with the center bolt.</p> <p><b>INSTALLATION COMPLETE</b></p>  |  |
|     |                      |  |   |
|     |                      |  |   |
|     |                      |  |   |
|     |                      |  |   |