



Cylinder Block Caution on 2017-2019 Ford 2.0L Ecoboost Engines

The AERA Technical Committee offers the following information regarding head gasket failures on 2017-2019 Ford 2.0L Ecoboost engines. AERA is aware of members having these engines in their shops for head gasket failure repairs. The head gasket fails, and the cylinders have coolant seep into them. This appears to be a common problem, and Ford issued a bulletin about coolant intrusion into the cylinders. They direct dealers to pull the engine and replace the long block if the condition is found.

There has been discussion that the slot cast between the cylinders does not provide enough clamp load surface area to properly seal the head gasket. At the printing of this bulletin, AERA does not have any documentation to verify the claim and is only cautioning our members of the problem. See Figure 1 for slot design. Ford has removed the slot starting in 2020 and instead cross drilled to allow coolant flow between cylinders. This provides more surface area to seal against. See Figure 2 for cross drilled design.

Members who encounter the 2017-2019 2.0L Ecoboost head gasket failure need to be aware of this issue so they can make an informed decision to repair or decline the job. Servicing the engine to replace the head gasket will put the vehicle back in service but for how long before the issue comes back is an unknown.

2017-2019 Design Block

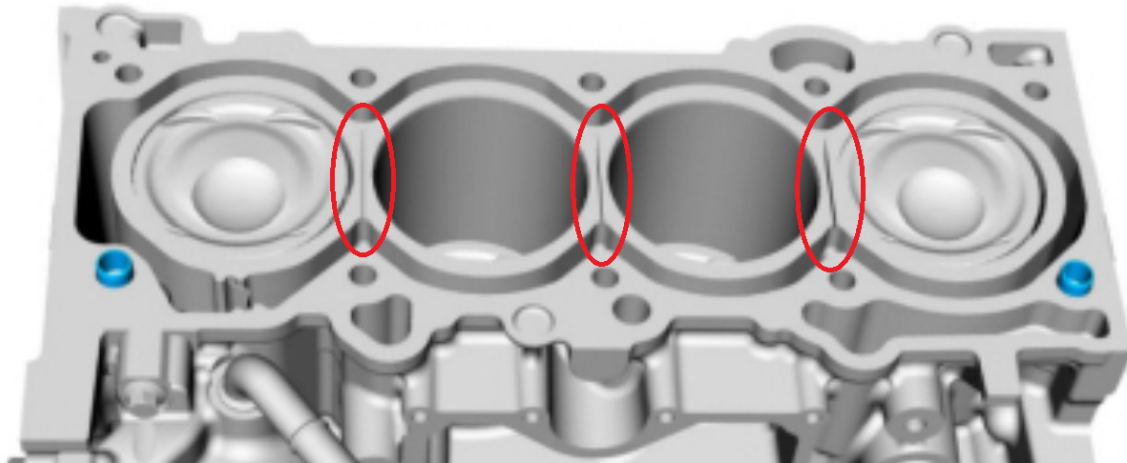


Figure 1: The slot between cylinders shown above in red circles.

2020-2024 Design Block

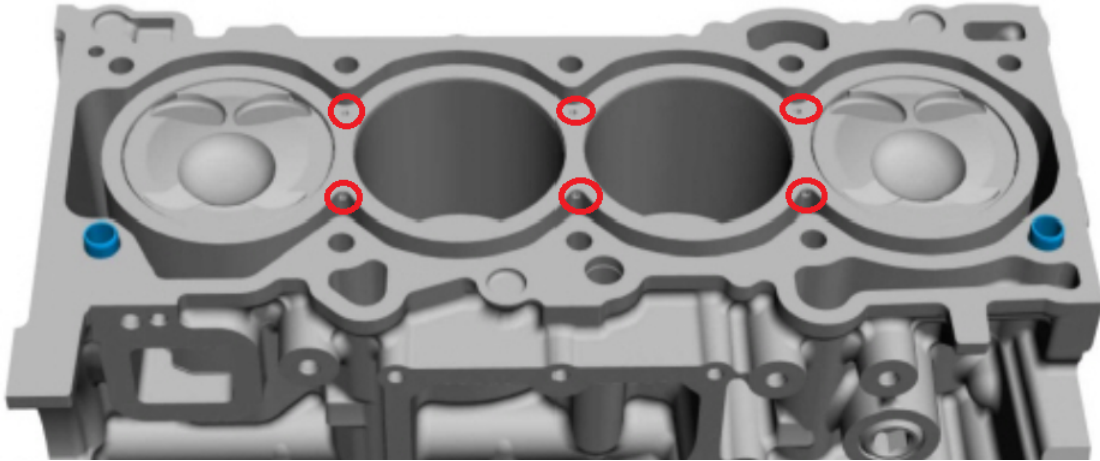


Figure 2: Slot between cylinders removed and the block is cross drilled between cylinders. The coolant flows through the head, block and head gasket then across to the side of the cylinder locations circled in red.



Figure 3: Failed Head Gasket