Special Service Message

NOTE: A Special Service Message is a formal communication issued by Jaguar and carries the same importance of a Technical Service Bulletin. An SSM is a quick method of communicating "Need To Know" information to the technical service community. SSM's may be issued in advance of a technical bulletin or may be the only communication on a given topic. All information contained in Jaguar technical communications are intended for use by trained, professional technicians with the knowledge, tools, and equipment required to complete the procedure correctly and safely. It informs the Technicians of conditions that may occur on some vehicles, or provides information that could assist in correct vehicle and diagnostic service.

SSM 75559 - AJ20-P4 engine – Coolant leak from Thermostat

Models : E-Pace / X540
F-Pace / X761
F-Type / X152
XE / X760
XF / X260

Engineer Name : Shilvock Matthew

Last Modified : 20 OCT 2021 16:46:11

Category : Driveline

Symptom : 510000 Fluid Concerns

Content : Issue: JLR is investigating AJ20-P4 thermostats with complaints for coolant leaks (on any vehicle) that are coming into service with evident leak or with low coolant MIL warning [sometimes associated with P0128 DTC]

Causes: JLR investigation in progress

Action: If you see this issue present on a vehicle, and if you suspect the coolant leak is from the thermostat

A. Gross leak from thermostat

1. Screenshot of the latest DTCs / warning light
2. Share video evidence of fresh leak
3. Check if the housing is sitting properly – refer image (A) attached. If there are signs of incorrect assembly, replace the thermostat with a new
4. If no issue found in step (3), document evidence of location and reason for gross leak and replace the part with a new one

B. Evident fresh leak [not gross] from thermostat.

1. Screenshot of the latest DTCs / warning light
2. Share video evidence of fresh leak

3. Clean the fresh leak thoroughly and also ensure the grooves do not hold any residual coolant
4. Test drive the car for about 30 minutes and check for leak again
5. If there is a leak, provide video evidence of the leak and proceed with replacing the part with a new one.
6. If there is no leak, perform the standard cooling system pressure test and show evidence that leak is observed in thermostat
7. If the pressure test does not confirm leak on the thermostat, do not change the thermostat. Check rest of the coolant circuit for leak

C. No evident fresh leak but only dried up coolant deposit is seen on the body of the thermostat [Image B]

1. Screenshot of the latest DTCs / warning light
2. Confirm if there was any external coolant spill [either at dealer end or customer end]
3. Check the coolant pipes on top of / around the thermostats for any leak / damage [pipes which has possibility of leaking coolant to the thermostat body]
4. Clean the thermostat surface and the suspect leak location thoroughly [without removing thermostat from the engine]
5. Make sure the grooves do not contain any residual coolant.
6. Test drive the car for about 30 minutes and inspect the thermostat again for any fresh leak
7. If there is no leak, perform the standard cooling system pressure test and show evidence that leak is observed in thermostat
8. If the pressure test does not confirm leak on the thermostat, do not change the thermostat. Check rest of the coolant circuit for leak

NOTES:

- If the car comes in for repeat failure, perform the same checks as above. But replace the part with a new one and prepare the removed part for return to Engineer.
- Thermostats as a whole is a serviceable part. So, do not manipulate the thermostats in anyway.
- If P0128 DTC Is present, first perform actions as per TOPIX against the DTC prior to performing the actions in SSM.

Thank you for your assistance with this matter.

File : AJ20-P4 engine – Coolant leak from Thermostat.pdf