



## STAR ONLINE PUBLICATION



**Case Number: S2509000001 Rev. A**

**Release Date: March 2025**

**Symptom/Vehicle Issue:** Engine Rattle Noise

**Customer Complaint/Technician Observation:** Customer's complaint may include a rattling noise coming from the engine.

**Discussion:** \*\*Make sure the engine reaches normal operating temperature (194°F-230°F). Once it reaches normal temperature, turn the engine off. Proceed with the steps below.\*\*

1. Start engine, wait 30 seconds, noise will be present after this time.
2. Step on gas pedal and the noise will go away, release the gas pedal and noise will be present again. Repeat 3 times. If this is true, the noise might be phaser related.
3. With the use of a stethoscope, confirm the bank where the noise is coming from (there is a high probability that it will come from the right bank).
4. Once it's confirmed that this is phaser related and the bank has been confirmed (most likely right), replace the suspect phaser **using the repair procedure outlined below.**

**Repair Procedure:** \*\* ATTENTION: THE REPAIR PROCEDURE BELOW IS A MODIFICATION TO THE CURRENTLY ISSUED SERVICE PROCEDURE IN SERVICE LIBRARY \*\*

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found**

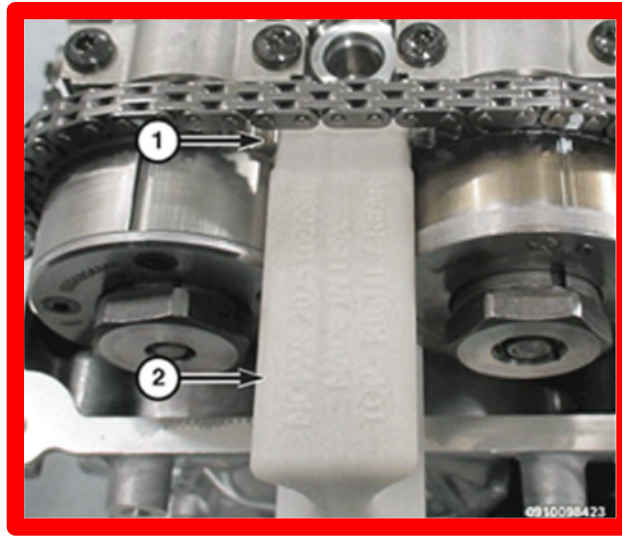


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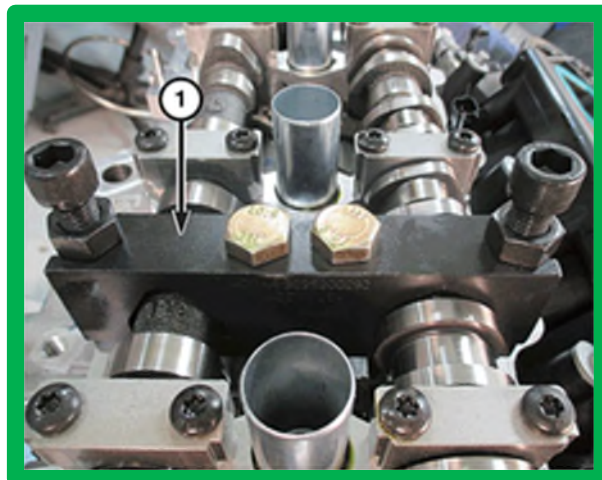
1. **DO NOT** use the camshaft phaser holding tool (Tool # 2025102090) while torquing the OCVs.

**DO NOT USE** (#2 in pic below)



2. **DO** use the cam holding tool (Tool #2025200090) while torquing the OCVs.

**DO USE** (#1 In pic below)



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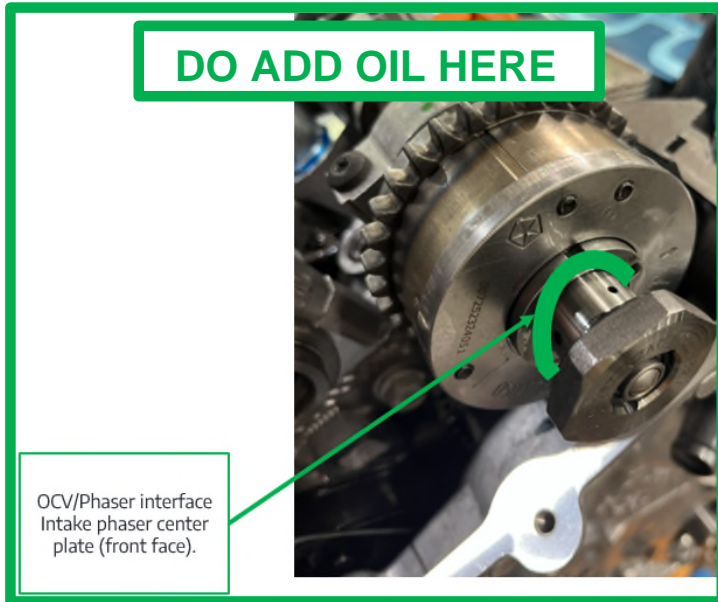
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3. After placing the intake phaser on the camshaft, the front face of the phaser that contacts the OCV must be lubricated with clean engine oil. **DO NOT** lubricate the rear face of the phaser that contacts the camshaft.



The service information in Service Library is being updated to reflect the changes mentioned above.

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