

## **Technical Service Bulletin (TSB)**

Engine Ticking Noise

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REFERENCE:	<b>TSB</b> : 09-009-23 REV. D <b>GROUP</b> 09 - Engine	Date:	May 20, 2023	REVISION:	09-009-23 REV. C
VEHICLES AFFECTED:	2022 - 2023 (RU) Ch 2022 - 2023 (JL) Jee 2022 - 2023 (JT) Jee 2022 - 2023 (DT) Ra 2022 - 2023 (WL) Je 2022 - 2023 (WL) Je 2022 - 2023 (WD) De • This bulletin vehicles buil 0603XX) and 0408XX) eq Engine Upgr VVT E torqu PHEV Hybri • VF vehicles buil	Engine 2022 (WK) Jeep Grand Cherokee 2022 - 2022 (PU) Charles Projfice		MARKET APPL	ICABILITY: ⊠MEA ⊠IAP ⊠CH
CUSTOMER SYMPTOM:	Engine makes an abnormal ticking noise. There may be Diagnostic Trouble Codes (DTCs) present.				
CAUSE:	Sticking intake Hydraulic Lash Adjusters (HLAs).				

This bulletin supersedes Technical Service Bulletin (TSB) 09-009-23 REV. C, date of issue May 17, 2023, which should be removed from your files. All revisions are highlighted with \*\*asterisks\*\* and include updated Repair Procedure steps.

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 23-131, date of issue May 09, 2023. All applicable RSU VINs have been loaded. To verify this RSU service action is applicable to the vehicle, use VIP or perform a VIN search in DealerCONNECT/ Service Library. All repairs are reimbursable within the provisions of warranty. This RSU will expire 18 months after the date of issue.

#### **REPAIR SUMMARY:**

This bulletin involves inspecting and if needed, replacing the intake HLAs.

NOTE: ALL VEHICLES ON THE RSU VIN LIST REQUIRE ALL 12 INTAKE HYDRAULIC LASH ADJUSTERS TO BE REPLACED.

# CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
09-85-01-98	Intake Hydraulic Lash Adjuster-Replace All (WD Model) (RSU Only) (3 – Skilled)	09 - Engine	4.8 Hrs.
09-85-01-98	Intake Hydraulic Lash Adjuster-Replace All (JL/JT Model) (RSU Only) (3 – Skilled)	09 - Engine	5.5 Hrs.
09-85-01-98	Intake Hydraulic Lash Adjuster-Replace All (DT Model) (RSU Only) (3 – Skilled)	09 - Engine	4.7 Hrs.
09-85-01-98	Intake Hydraulic Lash Adjuster-Replace All (WL Model) (RSU Only) (3 – Skilled)	09 - Engine	5.0 Hrs.
09-85-01-97	Intake Hydraulic Lash Adjuster-Replace Left Bank and Right Bank (WK/WD Model) (3 – Skilled)	09 - Engine	4.8 Hrs.
09-85-01-97	Intake Hydraulic Lash Adjuster-Replace Left Bank and Right Bank (RU Model) (3 – Skilled)	09 - Engine	4.8 Hrs.
09-85-01-97	Intake Hydraulic Lash Adjuster-Replace Left Bank and Right Bank (JL/JT Models) (3 – Skilled)	09 - Engine	5.5 Hrs.
09-85-01-97	Intake Hydraulic Lash Adjuster-Replace Left Bank and Right Bank (DT Model) (3 – Skilled)	09 - Engine	4.7 Hrs.
09-85-01-97	Intake Hydraulic Lash Adjuster-Replace Left Bank and Right Bank (WL Model) (3 – Skilled)	09 - Engine	5.0 Hrs.
09-85-01-97	Intake Hydraulic Lash Adjuster-Replace Left Bank and Right Bank (VF Model) (3 – Skilled)	09 - Engine	6.0 Hrs.

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# 09-009-23 REV. D

Labor Operation No:	Labor Description	Skill Category	Labor Time
Failure Code	ZZ	Service Action	

## **RELATED LOP:**

Labor Operation No:	Labor Description	Skill Category	Labor Time
07-FF-01-50	Coolant Drain and Fill (3 – Skilled)	7 - Cooling	0.3 Hrs.
08-00-01-50	Power Down 12 Volt Hybrid Vehicle (PHEV Models) (3 – Skilled)	9 - Engine	0.3 Hrs.

### **SPARE PARTS:**

12	05047883AC	Dual feed lash adjuster	Intake (RSU Only)
12	05047883AC	Dual feed lash adjuster	
1 (AR)	04893805AB	Gasket Cylinder head cover LT	
1 (AR)	04893804AB	Gasket Cylinder head cover RT	
6 (AR)	05184778AB	Seal Spark Plug Well	
1 (AR)	04861965AA	Gasket EGR to manifold	Left Head Only
1 (AR)	05281492AB	Gasket - EGR Tube Flange	Left Head Only
1 (AR)	05281493AB	Gasket - EGR Tube Flange	Left Head Only
1 (AR)	68082860AB	Mopar <sup>®</sup> Threebond Engine RTV Sealant	

### **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/ Service Library, verify all related systems are functioning as designed. If DTCs or symptom conditions, other than the ones listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer's VIN is listed in VIP or your RSU VIN list, perform the repair. If any vehicle not on the VIN list exhibits any of the symptoms listed above in the customer symptom section, perform the Repair Procedure.

# NOTE: ALL VEHICLES ON THE RSU VIN LIST REQUIRE ALL 12 INTAKE HYDRAULIC LASH ADJUSTERS TO BE REPLACED.

- 1. Is the vehicle on the RSU VIN list?
  - YES>>> Proceed to Step 1 of the Repair Procedure.
  - NO>>> Proceed to Step 2.
- 2. Raise and lower RPM to confirm the noise is coming from the engine. Listen and determine if the noise is coming from the valvetrain of the engine. Use of a stethoscope may be necessary.

- 3. Is the noise coming from the engine valvetrain?
  - YES>>> Proceed to Step 4.
  - NO>>> This bulletin does not apply. Normal diagnosis should be performed.
- 4. Remove the valve cover of the suspected cylinder head. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 Engine, 3.6L / Cylinder Head / Cover(s), Cylinder Head / Removal and Installation.
- 5. Inspect the intake lash adjuster(s) for a collapsed condition. Press down on the intake rocker arm in a manner that would compress the intake lash adjuster(s). Normal intake adjuster(s) should feel very firm and difficult to compress. If the intake lash adjuster(s) can be compressed or there is lash between the rocker arm and cam lobe, proceed to Step 1 of the Repair Procedure.

NOTE: Exhaust adjuster(s) are designed to be compressible. They will exert a reactionary spring force during compression and return to full expansion without a compression force. If the exhaust lash adjusters are shown faulty, follow normal service procedures. This bulletin is for replacing the INTAKE lash adjuster(s) only.

#### **REPAIR PROCEDURE:**

- \*\* Replace all the HLAs on the intake side only of BOTH of the cylinder heads. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 - Engine, 3.6L / Cylinder Head / Lifters(s), Hydraulic / Removal and Installation.\*\*
- 2. Run engine and confirm noise is not present.

#### **POLICY:**

Reimbursable within the provisions of the warranty.

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