



NUMBER: 08-109-21

GROUP: 08 - Electrical

DATE: July 1, 2021

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This Technical Service Bulletin has also been released as a Rapid Response Transmittal (RRT) 21-083, date of issue July 01, 2021. All applicable Sold and Un-Sold RRT VINs have been loaded. To verify this RRT 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 RRT will expire 18 months after the date of issue.

SUBJECT:

3.6L Check Engine Light and Rough Running Engine

OVERVIEW:

This bulletin involves cutting off a wiring harness eyelet and splicing in a pigtail to the engine ground harness.

MODELS:

2021 (DT) RAM 1500 Pickup

NOTE: This bulletin applies to vehicles within the following markets/countries: North America and LATAM.

NOTE: This bulletin applies to the following vehicles built on or after October 16, 2020 (MDH 1016XX) and on or before October 18, 2020 (MDH 1018XX) equipped with a 3.6L V6 24V VVT E-torque Engine Upgrade I (Sales Code ERG).

SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find one or more of the following Diagnostic Trouble Codes (DTCs) have been set:

- P1050 - Intake Valve Control Solenoid 1 Circuit/Open.
- P1053 - Intake Valve Control Solenoid 2 Circuit/Open.
- P1056 - Intake Valve Control Solenoid 3 Circuit/Open.
- P1059 - Intake Valve Control Solenoid 4 Circuit/Open.
- P0010 - Bank 1 Camshaft 1 Position Actuator Circuit Open.
- P0020 - Bank 2 Camshaft 1 Position Actuator Circuit Open.
- P0013 - Bank 1 Camshaft 2 Position Actuator Circuit Open.
- P0023 - Bank 2 Camshaft 2 Position Actuator Circuit Open.

In addition, the customer may notice one or more of the following conditions:

- The check engine light is illuminated.
- The engine is misfiring.
- A rough running engine.

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 any vehicle not on the VIN list exhibits the symptom/condition or DTC, perform the repair. **This RRT only applies to vehicles on the RRT VIN list.**

PARTS REQUIRED:

Qty.	Part No.	Description
1	05018526AA	Splice (Heat Shrink & Medium)
1	68552801AA	Engine Harness (Seven Wire Pigtail & Eyelet Assy.)
1	04861965AA	Gasket, EGR Cooler
(AR)	68065586AA	Tesa Tape

REPAIR PROCEDURE:

NOTE: DO NOT replace the upper or lower intake manifold gaskets. The intake manifold gaskets are to be reused for this Repair Procedure.

1. Remove the engine cover. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 - Engine, 3.6L / cover, Engine / Removal.
2. Remove the upper intake manifold. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 - Engine, 3.6L / Manifolds / Manifold, Intake / Removal.
3. Remove the lower intake manifold. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 - Engine, 3.6L / Manifolds / Manifold, Intake / Removal.
4. Remove right ground bolt (**G927A**) and engine ground eyelet ([Fig. 1](#)) from the engine.

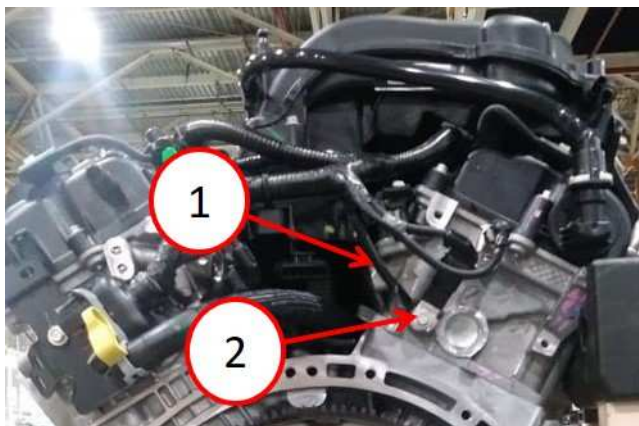


Fig. 1
Engine Ground Wiring Harness And Eyelet Bolt

- 1 - Engine Ground Wiring Harness To Cut
- 2 - Engine Ground Eyelet Bolt

5. Using a wire cutting tool, cut engine ground eyelet from engine ground wiring harness ([Fig. 1](#)) .

6. Remove and discard electrical tape from seven wire ends.
7. Using a wire stripping tool, cut and strip the seven wire ends.
8. Splice in and twist the seven wire pigtail with engine ground eyelet, to the engine ground wiring harness (Fig. 2) .



Fig. 2
Spliced And Twisted Wires

9. Crimp band clamp and solder wires to engine ground wiring harness.
10. Using a suitable heat gun, heat all tubing until it is tightly formed around the harness and sealant begins to seep out of both ends of the tubing (Fig. 3) .



Fig. 3
Shrink Wrapped Wires

11. Using Tesa tape, wrap seven wires to engine ground wiring harness.
12. Install the ground eyelet and ground bolt on engine (Fig. 1) . Tighten ground bolt to 20 N·m (15 ft. lbs.).
13. Install the lower intake manifold. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 - Engine, 3.6L / Manifolds / Manifold, Intake / Installation.
14. Install the upper intake manifold. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 - Engine, 3.6L / Manifolds / Manifold, Intake / Installation.

15. Install the engine cover. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: 09 - Engine, 3.6L / cover, Engine / Installation.
16. Clear any DTCs that may have been set.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
08-90-65-9E	Wiring Harness, Replace Engine Harness Ground Pigtail (2 - Skilled)	6 - Electrical and Body Systems	2.2 Hrs.

FAILURE CODE:

ZZ	Service Action
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