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Case Number: S2618000003 Rev. G

Release Date: August 2026

Symptom/Vehicle Issue: MIL-On, Engine Runs Rough

Models Affected: 2026 Jeep Grand Cherokee (WL)

Customer Complaint/Technician Observation: The customer's complaint may include a MIL-on condition. They may also experience a rough running engine. Upon further inspection, the technician may find Diagnostic Trouble Codes (DTCs) for one or more of the following issues:

- P0300-Multiple Cylinder Misfire
- P0301-Cylinder 1 Misfire
- P0302-Cylinder 2 Misfire
- P0303-Cylinder 3 Misfire
- P0304-Cylinder 4 Misfire

Discussion: There are circumstances where spark plug damage can cause cylinder misfire and subsequent engine failure. If the vehicle is exhibiting any of the symptoms mentioned in the section above, search for other applicable service actions (CSNs, TSBs, RSUs) to determine the proper diagnostic path based on the vehicle's condition.

If you were directed to this SOL from CSN 66D for a "Spark Plug ceramic broken and fallen into combustion chamber", proceed to step 2 under **Spark Plug Insulator Broken or Fallen into Cylinder.**

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

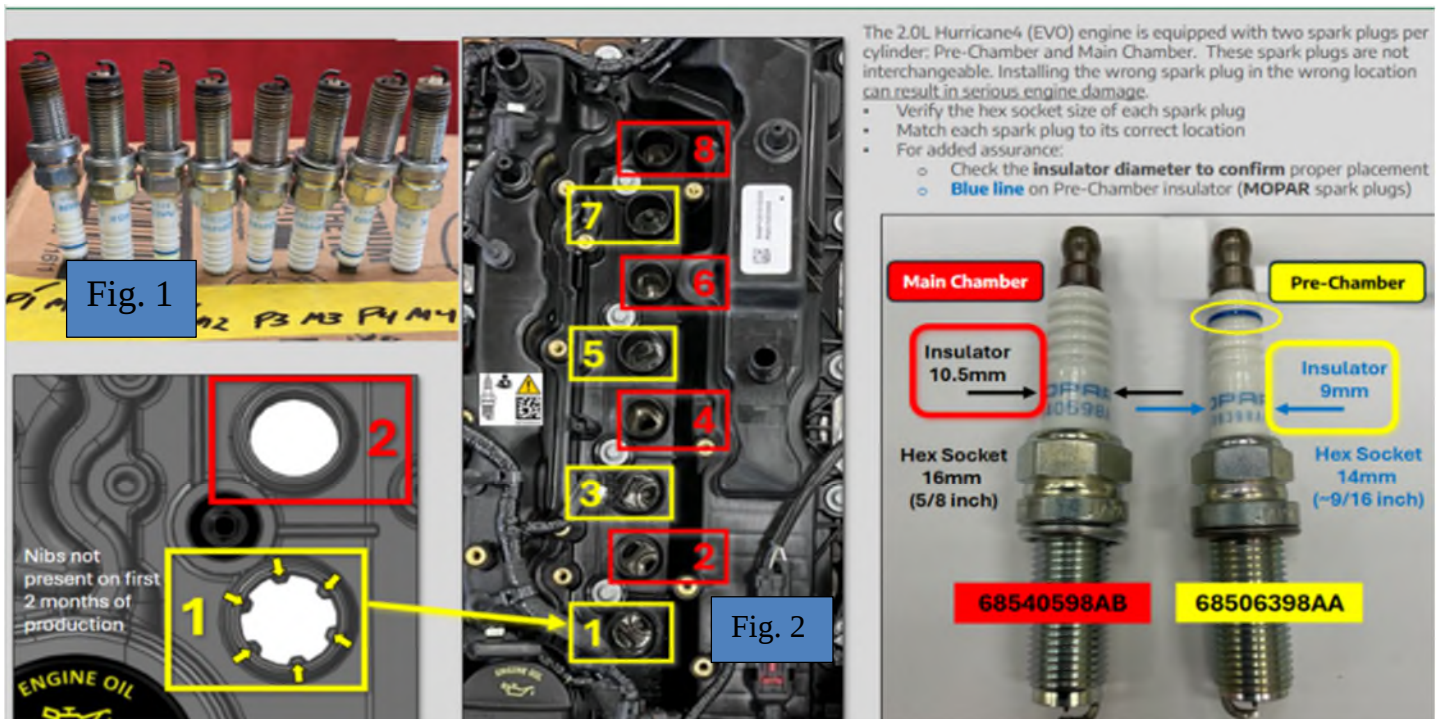


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Inspection and Repair:

1. Remove the Main Chamber and Pre-Chamber Spark Plugs and mark the location of each plug (as shown in Fig. 1) so they can be easily identified once they are removed from the engine (use locations 1-8 as indicated in Fig. 2). **Be sure to take clear pictures of the spark plugs, they will be needed for claim submission.**



2. Identify the condition of each spark plug:

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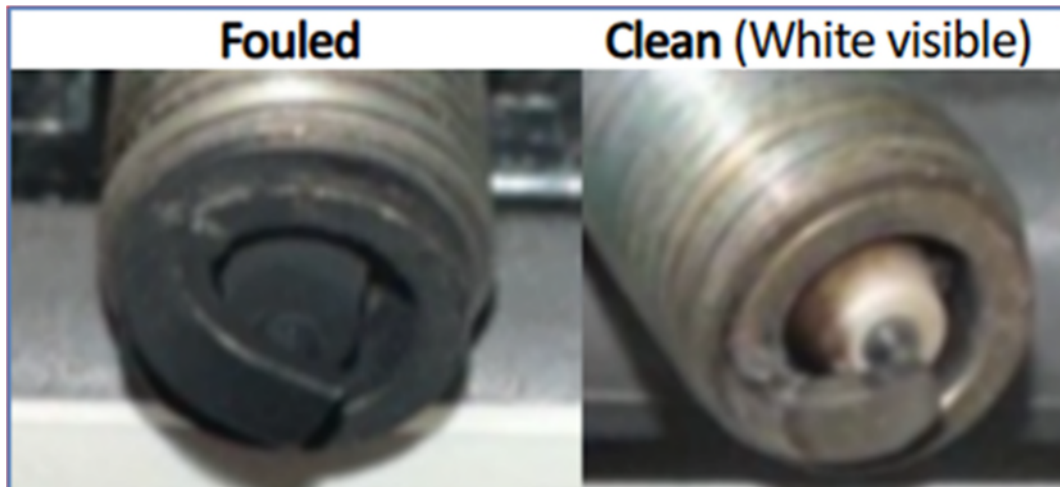
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Spark Plug Clean or Fouled:



1. If the spark plugs are clean, you should proceed with applicable published diagnostic testing for cylinder misfire found in Service Library.
2. If the spark plugs are fouled, replace all 8 spark plugs (4 main chamber spark plugs p/n-68540598AC or latest AND 4 pre-chamber spark plugs p/n-68506398AA or latest). See TSB 09-017-26 for possible applicability. To complete the repair after plugs are replaced, you must use wiTECH to perform the "Reset ECU" routine located in Guided Diagnostics > Reset ECU > ensure the ignition is on, engine is off then click Continue > Choose PCM then follow on-screen instructions to complete the procedure.

Additional applicable diagnostic testing should be performed to ensure there is no other root cause for the misfire other than the spark plug itself.

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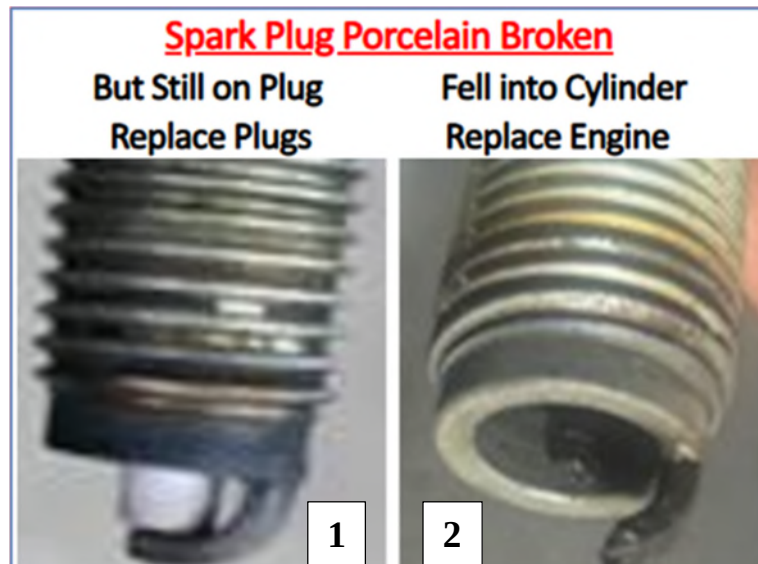
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Spark Plug Insulator Broken or Fallen into Cylinder:



1. If any of the spark plugs look like the plug in example 1 above, replace all 4 spark plugs of the corresponding set. For example, if a main chamber spark plug fails, replace all 4 main chamber spark plugs (p/n-68540598AC or latest) OR if a pre-chamber spark plug fails, replace all 4 pre-chamber spark plugs (p/n-68506398AA or latest).
2. If any of the **main chamber** spark plugs look like the plug in example 2 above, replace the engine (68576058AE or latest). **Using a borescope, be sure to also take pictures of any cylinders that are found to have main chamber plugs with MISSING ceramic insulators.**
3. If any of the **pre-chamber** spark plugs look like the plug in example 2 above, block plug openings to other cylinders. For the cylinder with the damaged spark plug, use a soft-tipped air gun to pressurize the cylinder through the main chamber plug opening to clear any debris from the pre-chamber plug opening. Replace all 4 pre-chamber spark plugs (p/n- 68506398AA or latest).

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Reminder: If spark plug or engine replacement is necessary for any repairs, you must use wiTECH to perform the "Reset ECU" routine located in Guided Diagnostics > Reset ECU > ensure the ignition is on, engine is off then click Continue > Choose PCM then follow on-screen instructions to complete the procedure.

If engine replacement is necessary for any repairs, please drain the fuel tank using the applicable procedure found in Service Library (09 - Engine, 2.0L / Fuel System / Standard Procedure / DRAINING FUEL TANK). **Leave enough fuel (as required) in the fuel tank to drive the vehicle to a fueling station.** Take the vehicle to a fueling station and fill it with **premium fuel** before returning the vehicle back to the customer. For more information regarding the fuel fill process, please see Warranty Bulletin D-26-14 for engine replacement repairs.

Make sure to check for additional service bulletins relating to misfire and perform any related procedures if applicable.

If any of the above conditions do not apply to the vehicle but possible misfire symptoms still exist, please follow published diagnostic routines found in Service Library.

At this time, service replacement engines for this application are on parts restriction and must be ordered through the STAR Center. Please contact STAR as soon as possible to support expedited parts procurement for repairs.

Engineering is currently investigating conditions under which spark plug damage may occur. Additional updates and recommended actions will be provided as they become available.

In the interim, please ensure affected customers are supported through the Courtesy Transportation Program.

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