STAR ONLINE PUBLICATION

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Symptom/Vehicle Issue: Check Engine Lamp On With Active Grill Shutter (AGS) Codes.

Customer Complaint/Technician Observation: Check engine light is on. One or more of following diagnostic trouble codes (DTCs) may be set: P1D73, P059F, P05AE, U11E9, U0285, U0284. This SOL is written based on findings from many vehicle lines and some items may not apply to your vehicle.

Discussion:
The following issues can cause the AGS code to turn on the check engine light.

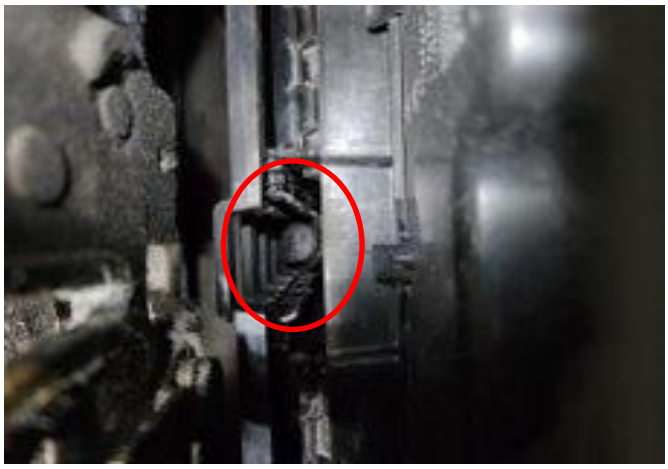
1. AGS is physically jammed or broken. Part or debris dropped in the AGS.
2. Loose AGS motor connection.
3. Corrosion issues at connectors.
4. Ground lug is loose or making poor connection.
5. Nick in the wire harness.
6. Active Air Dam has an issue.

The following steps should be taken to determine if any of these issues are present.

1. Part dropped in the AGS or damaged.
    a. The linkage is the part on the AGS which moves each of the fins. Two of the fins are driven by the motor, while the remaining are then driven by the connecting linkage. Inspect for binding of the fins to the frame.
    b. If a small part is dropped into this area of the AGS, it can stop the linkage from fully opening and closing the AGS.

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Contact STAR Center, or your Technical Assistance Center Via TechConnect, eCONTACT or Service Library entry if no solution is found.

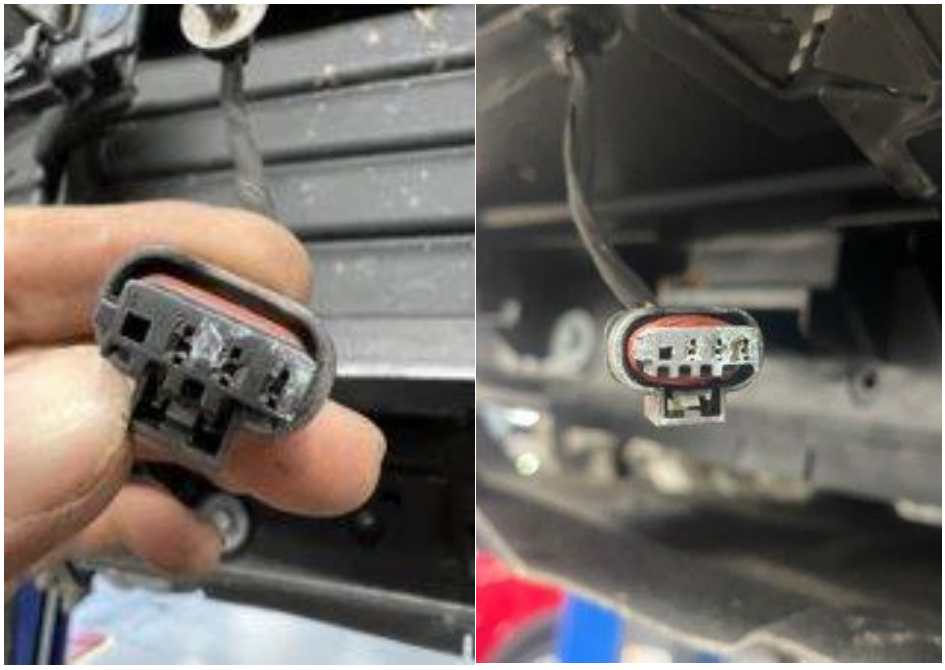


2. Loose AGS motor connection
    a. Review the connector on the wire harness side for corrosion.
        a. If corrosion is found, replace the AGS connector with a repair kit. Be sure to strip the wire insulation and find the point where the wires are clean of corrosion.
        b. If corrosion is found on the connector, you should always replace the AGS. Do not clean and apply grease.

3. Review the AGS motor for corrosion.
        a. If corrosion is found, replace the AGS.
        b. If corrosion is found, also replace the AGS connector.

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4. Lug nut of ground is loose.
    a. If the AGS has intermittent issues, it may be related to the ground connection.
    b. Locate the ground G946A (WL) G904A (HD truck DJ D2 DD).
        a. Ensure this ground connection has a lug nut which is tight.
        b. After tightening the lug nut, retest the AGS to see if the issue is still present.

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5. Nick in the wire harness causes the AGS to stop working.
   a. If the AGS is not working, and replacing the AGS has not resolved the issue, there may be a nick in the wire harness.
   b. To find this, review the wire harness which the AGS is connected to for any cuts or kinks which can allow water intrusion.
   c. If one is found, replace the whole wire harness, to ensure that any water intrusion which moved to other parts of the wire harness do not get missed.



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6. Issue with the Active Air Dam (DT model)
    a. The active air dam is on the same LIN bus as the AGS. If the active air dam stops working, it will also stop the AGS from working.
    b. If replacing the AGS does not fix the issue, check if the active air dam is in working condition. If the active air dam is not working, start to root cause the active air dam instead of the AGS. Once it is fixed or replaced, the AGS should start working.



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