- Subject: Engineering Information Check Engine Lamp Illuminated On Drivers Information Center (DIC), DTCs U0284, U0285, P059F and/or P05AE Set
- Attention: Proceed with this EI ONLY if the customer has commented about this concern AND the PIE number is listed in the Global Warranty Management / Investigate History link (GWM/IVH). If the customer has not commented about this condition or the EI does not show in GWM/IVH, disregard the PIE and proceed with diagnostics found in published service information. THIS IS NOT A RECALL refer to Service Bulletin 04-00-89-053 for more details on the use of Engineering Information bulletins.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado 1500 (New Model)	2019	2019	-	-	-	-
	Silverado 1500	2020	2021				
GMC	Sierra 1500 (New Model)	2019	2019				
	Sierra1500	2020	2021				

Involved Region or Country	North America	
Additional Options (RPOs)	Equipped with SHUTTERS-FRONT GRILLE, ACTIVE, UPR AND LWR (RPO WMI)	
Condition	Important: If the customer did not bring their vehicle in for this concern, DO NOT proceed with this EI. Some customers may comment on the check engine lamp being illuminated on the drivers information center (DIC). Technicians may find the following DTCs set: U0284 – Lost Communication with Active Grille Air Shutter 1 Motor Module U0285 – Lost Communication with Active Grille Air Shutter 2 Motor Module P059F – Active Grille Air Shutter 1 Performance P05AE – Active Grille Air Shutter 2 Performance	
Cause	GM Engineering is attempting to determine the root cause of the above condition. Engineering has a need to gather information on vehicles PRIOR to repair that may exhibit this condition. As a result, this information will be used to "root cause" the customer's concern and develop/validate a field fix.	

Correction

If you encounter a vehicle with the above concern, follow the steps that match the DTCs set in the ECM and contact the engineer listed below with your findings:

If $\ensuremath{\text{DTCs}}$ U0284/U0285 are set, follow the steps listed below.

- 1. Remove the fascia and ensure that the connectors are properly engaged to the upper and lower aero shutter assemblies, along with the FWD Lamp/Engine Wire harness to the aero shutter jumper harnesses. If the connectors are not fully engaged, then engage the connectors and cycle the shutters. If the shutters are functional, no further action is needed. If the problem is not solved, proceed to steps 2 7.
- 2. Inspect the aero shutter jumper harness for signs of damage and/or corrosion. Take pictures of the damage and/or corrosion areas on the jumper harness.
- 3. Check the continuity on each jumper wire harness, upper and lower shutters. Disconnect the FWD Lamp/Engine Wire harness from the shutter assemblies.
- 4. Check the continuity on the FWD Lamp/Engine Wire harness.
- 5. If step 3 is NOT OK and step 4 is OK, then replace the aero shutter and send the aero shutters to the WPC with the jumper harness attached.
- 6. If step 3 is OK and step 4 is NOT OK, then replace/repair the FWD/Engine Wire Harness.
- 7. If both step 3 and 4 are NOT OK, then replace aero shutter and repair FWD Lamp/Engine Wire Harness. Send the aero shutters to the WPC with the jumper harness attached.

If steps 1 - 7 did not address the issue, replace the Aero Shutter and send to WPC with the jumper harness attached.

If DTCs P059F/P05AE are set, follow the steps listed below.

- 1. Check for a foreign object such as a rock, stick or bolt that went through the grille in the upper and lower shutters, that may be stuck in between the louvers/vanes. If a object is found, please try to remove it from aero shutter assembly if possible. Record and take pictures of removed foreign object.
- 2. If no foreign object is found in the aero shutter assembly, cycle the upper and lower aero shutter assemblies. Look for any binding locations and note them if found.
- 3. Check the Outside Air Temperature (OAT) Sensor for the temperature reading and record the value. If recorded value doesn't match actual conditions e.g. 40C° service/repair OAT sensor. Check the OAT sensor temperature value to ensure it is reading accurately, cycle the shutters.
- 4. If the aero shutter does not move or is binding after cycling, remove the aero shutter assembly and closely look at the potential binding locations. At this time if there is any debris that wasn't seen in the aero shutter assembly, remove debris and reconnect the aero shutter assembly back to the vehicle and cycle shutters. If the shutters DO NOT move, replace the assembly. If there was no debris found, analyze the shutter for disengaged louvers or damage to the linkage.

If the shutter is replaced, send the shutter to the WPC for engineering analysis. DO NOT remove the jumper wire harness off of the assembly.

Contact Information

The Contact Information has been redacted.

Please include the following information if leaving a message:

- Technician name
- Dealer name and phone number
- Complete VIN and repair order (R.O) number

On the repair order, document the date and time the call was placed (even if the engineer was not reached).

If engineering is unable to return the call within one hour, proceed with diagnosis and repair based on information found in SI.

Warranty Information

If engineer was contacted or required information was provided, use:

Labor Operation	Description	Labor Time		
1481438*	Engineering Information - Check Engine Lamp Illuminated On Drivers Information Center, Multiple DTCs Set	1.2 hr		
* This is a unique labor operation for bulletin use only.				

Version	1
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