



Preliminary Information

PIP5510A DTC P20EE - Diagnostic Procedure for SCR System

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Silverado	2017 - 2018	All	All	6.6 L5P	All
GMC	Sierra	2017 - 2018	All	All	6.6 L5P	All
Involved Region or Country:		North America and Israel				
Condition:		A dealer may encounter a customer concern of the Malfunction Indicator Lamp (Check Engine Light) coming on.				
Cause:		Diagnostics may show that DTC P20EE has set. DTC P20EE can set due to other reasons when the SCR hardware is functioning properly.				

Correction:

Complete the current SI diagnostic for any trouble code or symptom found. If SI diagnostics does not resolve the concern or if the results are inconclusive the following procedure can be used to determine if the vehicle's SCR system is healthy.

Service Procedure:

- Record and complete any repairs for any DTCs that may have set other than those listed above.
 - Clear all DTCs.
 - Verify DEF concentration.
 - With the scan tool, read and record the Reductant Concentration found in the reductant system data.

NOTE: Check the reductant temperature with the scan tool. The Reductant Concentration reading in the scan tool may be inaccurate if the reductant is frozen or has ice crystals in it. If the reductant temperature is below -4 degrees C (25 degrees F) it may be necessary for the fluid in the tank to warm up before the scan tool reductant concentration reading is accurate. This can be accomplished by parking the truck in a warm environment until the DEF tank temperature is warmer than -4 degrees C (25 degrees F).

 - If the concentration is NOT between 28.8% and 36.2%, replace the DEF Fluid and continue with procedure.
 - Run the Emission Reduction Fluid Injector Quantity Test:
 - If the test does not pass, refer to Emission Reduction Fluid Injector Quantity Test in Service Information (SI) and then re-run the test.
 - If the test passes, continue to the next step.
 - Start the engine and warm the vehicle to operating temperature.

Note: Failure to warm the vehicle to proper operating temperature may cause the Reductant System Malfunction Warning Service Bay Test to time out.
 - Perform the Reductant System Malfunction Warning Service Bay Test:
 - If the test passes, return the vehicle to the customer.
 - If the test fails, repeat the Reductant System Malfunction Warning Service Bay Test up to 2 more times. If the test fails after 3 attempts, refer to the P20EE service procedure in SI.
 - If service information diagnostics (SI) point to an SCR replacement, command regen enable and drive the vehicle on the road to perform a DPF regen. After the on-road regen completes re-run the Reductant System Malfunction Warning Service Bay Test.
 - If the test passes, return vehicle to customer.
 - If the test fails, replace the SCR.
- If returning the vehicle to the customer without repairs, please communicate to the customer that we apologize for this inconvenience and that General Motors is working on a solution for DTC P20EE. Once a solution is available, this bulletin will be updated with additional details - allowing dealership personnel to contact the customer to schedule a service appointment and repair the vehicle.

TIP:
Enablement requirements for “Reductant System Malfunction Warning Service Bay Test” to avoid the test being aborted.

- Gear = Park or Neutral
- Accel pedal position < 5%
 - Barometric pressure > 70 kPa
 - DEF pressure between 400 and 550 kPa
 - DEF tank temp > -5 deg. C
 - Engine coolant between 60 and 110 deg. C
 - Fuel temp < 80 deg. C
 - DPF soot estimate < 90%
 - Battery voltage between 11.5 and 16 V

Do	Do Not
Charge the Reductant System Malfunction Warning Service Bay Test To labor code 4081848	Do not charge this diagnostic as DPF service regen labor code 4025942
Charge the Reductant System Tamper Bay Test (within P20EE service procedure) To labor code 4081848	Do not charge this diagnostic as DPF service regen labor code 4025942

Warranty Information

Labor Operation:	Description:	Labor Time:

4081848*	Labor Operation:	SCR Testing	Description:	Straight Time:	Labor Time:
*This is a unique Labor Operation for Bulletin use only.					

Version History

Version	2
Modified	8/24/2017 to add 2018, information about reductant temperature and re-arrange the order of the diagnostic steps.



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