



Preliminary Information

PIP5889A Diagnostic Tip: DTC P0299 Set As Current Or In History Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Buick	Envision	2021 - 2023	All	All	2.0 LSY	All
Cadillac	CT4	2021 - 2023	All	All	2.0 LSY	All
Cadillac	CT5	2021 - 2023	All	All	2.0 LSY	All
Cadillac	XT4	2021 - 2023	All	All	2.0 LSY	All
Cadillac	XT5	2021 - 2023	All	All	2.0 LSY	All
Cadillac	XT6	2021 - 2023	All	All	2.0 LSY	All
Chevrolet	Blazer	2021 - 2023	All	All	2.0 LSY	All
GMC	Acadia	2021 - 2023	All	All	2.0 LSY	All

Involved Region or Country:	North America
Condition:	DTC P0299 set as current or in history
Cause:	Possible Charge Air Bypass Valve sticking open intermittently.

Correction

If you encounter one of the above mentioned vehicles that has DTC p0299 set as current or in history complete the published SI diagnosis for the DTC.

If the diagnostics are inconclusive complete the following inspection.

Remove the Charge Air Cooler air inlet hose adapter from the turbo and using a bore scope inspect the compressor wheel for signs of damage.

If the compressor wheel is found to be damaged turbocharger replacement would be required.

If no damage has been identified with the compressor wheel use the bore scope and inspect the Charge Air Bypass Valve for possibly being in the stuck open position.

Reference pictures below.

Note: The Charge Air Bypass can stick open intermittently so it's recommended to use the bore scope for the inspection as attempting removal could unstick the valve causing it to return to a normally closed position.

If the Charge Air Bypass Valve is found to be stuck open or is causing an intermittent DTC p0299 replace the Charge Air Bypass Valve using current service parts listed in EPC.

Clear any remaining DTC's using GDS and evaluate.

The bore scope picture below is showing the Charge Air Bypass Valve in a stuck open position.



Picture below shows Charge Air Bypass Valve in stuck open position (plunger fully retracted)



Picture below shows Charge Air Bypass valve fully extended or closed position



Warranty Information

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation:	Description	Labor Time:
4088828	Charge Air Bypass Valve inspection	0.5 Hr.

Version History

Version	2
Modified	11/18/2022 - Created on. 01/06/2023- Updated to include 2023 Model year.



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