



Preliminary Information

PIP5882 Diagnostic Tips - 2014 through 2021 6L80 MYC and 6L90 MYD Transmissions with an Overheat Concern

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Express	2014 - 2021	All	All	All	MYD
Chevrolet	Silverado 1500	2014 - 2018	All	All	All	MYC
Chevrolet	Silverado 1500 New Model	2019	All	All	All	MYC
Chevrolet	Silverado 1500	2020 - 2021	All	All	All	MYC
Chevrolet	Silverado 2500/3500	2014 - 2021	All	All	All	MYD
Chevrolet	Suburban	2014 - 2020	All	All	All	MYC
Chevrolet	Tahoe	2014 - 2020	All	All	All	MYC
GMC	Savana	2014 - 2021	All	All	All	MYD
GMC	Sierra 1500	2014 - 2018	All	All	All	MYC
GMC	Sierra 1500 New Model	2019	All	All	All	MYC
GMC	Sierra 1500	2020 - 2021	All	All	All	MYC
GMC	Sierra 2500/3500	2014 - 2021	All	All	All	MYD
GMC	Yukon Models	2014 - 2020	All	All	All	MYC

Involved Region or Country	North America & NA Exports
Condition	Some customers may comment that the transmission fluid temperature is too hot.
Cause	Diagnostic aid to help isolate a transmission overheat concern.

Correction:

Information on Transmission Thermal By-Pass Valve (TBV) operation:

The TBV starts to open between 180 to 187 F (82-86 C).

The TBV is fully opened at 194 F (90 C).

Note : If the TBV has been replaced following TSB 21-NA-199, the operating temperature will be lower.

The TBV starts to open between 138 to 145 F (59-63 C).

The TBV is fully opened at 158 F (70 C).

Reference TSB [21-NA-199](#) to help identifying the new TBV.

Diagnosis:

- Drive the vehicle long enough to bring the transmission fluid temperature up to 190 F to insure

the TBV is open.

- Use an infrared thermometer and check the temperature of the pan surface.
- Compare the pan temperature to the transmission temperature in the scan tool data. The pan temperature and the transmission data temperature should be close to the same.
- Use the infrared thermometer to check the temperature of the TBV.
- Use the infrared thermometer to check the temperature of both cooler lines about 6 inches away from the TBV.
- The cooler line going to the cooler will be higher than the pan temperature.
- If the cooling system is working correctly the cooler return line will be lower in temperature than the line going to the cooler.
- If the TBV is not opening both cooler lines temperatures will be lower than the transmission pan temperature and the TBV temperature will be higher than the pan temperature.

Compare the pan temperature to the DIC trans temp, if is more than 15 degrees higher than the pan temperature, the temp sensor maybe bad. The sensor is part of the TEHCM

If the 3 temperatures are all about the same, then the TBV valve is working correctly.

If the pan temperature is 10-15 degrees F higher than the cooler line temperature, then the TBV is not working correctly and should be replaced.

If all three temperature points are above the engine coolant temperature, then there could be an aux cooler flow issue and the flow should be checked.

The cooler should also be checked to make sure nothing is restricting the air flow across it.

Version History

Version	1
Modified	10/03/2022 - Created on.



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