Subject: Engineering Information - Information on Seized A/C Compressor

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.

This El has been revised to update the Subject and Condition. Please discard PIE0747.

Brand:	Model:	Mode	l Year:	VIN Breakpoint:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado 1500 New (RPO J22, VIN Digit 5 = A / D)	2022	2022	_	_	L84, L87	_
	Silverado 1500	2023	2023				
GMC	Sierra 1500 New (RPO J22, VIN Digit 5 = H / U)	2022	2022				
	Sierra 1500	2023	2023				

Involved Region or Country	U.S. Dealers ONLY			
Condition	The purpose of this EI is to inform dealership personnel on information for seized A/C compressors.			
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 we be used to "root cause" the customer's concern and develop/validate a field fix.			

## Correction

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

If you encounter a vehicle with the above concern, perform the following steps contact the engineer listed below with your findings:

1. Confirm if the A/C compressor is seized by examining the rubber portion of the compressor clutch/belt condition and the rotation of inner portion of the hub.

**Note:** If the belt/rubber portion of clutch has damage or appears melted and the compressors inner hub does not rotate freely, the A/C compressor is seized.

- 2. What was the condition and timing that the issue was noticed?
  - 2.1. How was the issue noticed? (ex. vent temp started to rise, dash light/indication, smell, noise, etc.)
  - **2.2.** What time of day was the issue noticed?
  - 2.3. Was the issue noticed at engine start or did it occur at some point while driving?
  - 2.4. What were the operating conditions at the time of failure? (ex. Idle/warm-up, stopped at a stop light, 70 mph, stop & go traffic, etc.)
  - **2.5.** How long was the vehicle running prior to the failure? (Immediately or at start up? Shortly after start up? After significant driving? Turned off then occurred after restart?)
  - 2.6. What were the HVAC operating conditions at the time of failure? (ex. A/C on or off, Auto temp setting at 72°F, low blower, etc.)
  - 2.7. Any additional details available regarding the vehicle operation prior to the trip when the failure occurred? (ex. Driving/idling, HVAC settings,

operation time, etc.)

- 3. Confirm the amount of refrigerant remaining in the A/C system.
  - **3.1.** Evacuate the A/C system and record the refrigerant amount recovered.
  - **3.2.** If the charge is low compared to expected vehicle charge, hold vacuum for 15 minutes and record any pressure increase to identify if there is a system leak.
  - 3.3. If a system leak is identified, use SI to identify and record the suspected location of leakage.
- 4. Confirm the condition of the oil within the A/C compressor.
  - **4.1.** Remove the A/C compressor from the vehicle and drain the oil through the compressor oil plug into a container. Record the condition of oil such as color, amount of oil in grams or cc, foreign material presence, etc.

Important: Retain the oil that was drained for return.

**4.2.** If the oil appears dark in color or has signs of foreign material, flush the A/C system and replace the desiccant/condenser filter and the TXV BEFORE installing the replacement A/C compressor and fill the system with a full oil charge per SI.

Important: Retain these components with the oil that was drained and failed A/C compressor for return.

5. Call the engineer listed below with your findings.

## **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					
4488378*	Engineering Information - Information on Seized A/C Compressor	2.0 Hrs.					
*This is a unique Labor Operation for bulletin use only.							

Version
 2

 Modified
 Released May 10, 2023 Revised June 05, 2023 - Updated the Subject, Condition and Warranty Information.