



Preliminary Information

PIT5937A ABS / TCS / Stability / Brake Warning Indicators Illuminated With Wheel Speed Sensor DTCs

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Silverado 4500HD, 5500HD and 6500HD	2019 - 2024	All	All	All	All

Involved Region or Country	North America
Condition	<p>Some customers may comment on an ABS, TCS/Traction/Stability, and/or Brake warning indicators illuminated. When checking for DTC's any of the following DTCs may be found:</p> <ul style="list-style-type: none"> • DTC C0500 or C0501 Left Front Wheel Speed Sensor (WSS) • DTC C0506 or C0507 Right Front Wheel Speed Sensor (WSS) • DTC C050C or C050D Left Rear Wheel Speed Sensor (WSS) • DTC C0512 or C0513 Right Rear Wheel Speed Sensor (WSS)
Cause	Possible causes for these concerns maybe WSS air gap out of adjustment, loose hub bearings, debris on WSS sensor, and/or damaged reluctor ring.

Correction:

Before replacing the WSS please perform the following inspections:

1. Are all tires the same size and tread wear.
2. Inspect harness to the WSS sensor for any signs of damage or loose terminal interface.
3. Inspect the WSS air gap and make sure it is adjusted per the WSS replacement document (large gap may lead to erratic signal, no gap may present as noise). If it appears the WSS air gap is out of adjustment, then remove, clean, reinstall and test, see note below.
4. Visually inspect for a buildup of debris between the backing plate and the rotor (mud, Ice, dirt ECT.). Clean as needed.
5. Inspect for a loose wheel bearing and check the torque as called out in SI.
6. Use an oscilloscope and look at the WSS pattern. Look for any spikes that can be caused by a damaged reluctor, that will need to be inspected.
7. If a determination is made that there are no issues with the tires, wiring, connections, bearing, hub, reluctor ring, or WSS air gap then install a new WSS.
8. Be sure to drive the vehicle after any repairs to validate the vehicle is repaired.

Note: For proper installation and air gap, ensure the WSS bottoms out on the reluctor ring inside of the hub. The air gap will be established by the contact between the reluctor ring and the WSS.

Engineering is looking into the concern, and information will be updated when obtained.

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
2486298*	Wheel Speed Sensor Inspection	0.5 Hrs.
*This is a unique Labor Operation for Bulletin use only.		

NOTE: Use the above labor op to inspect the vehicle, then use the appropriate labor op for the actually repair being completed.

Version History

Version	2
Modified	08/11/2022 - Created on. 2/16/2024 - Update to model years.



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