



## Preliminary Information

### PIT5836 Diagnostic Tips For Park Assist Off Message / Unwanted Or False Park Assist Alerts / No DTCs

#### Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Silverado 1500 (New Model)	2019	All	All	All	All
Chevrolet	Silverado	2020 - 2021	All	All	All	All
GMC	Sierra 1500 (New Model)	2019	All	All	All	All
GMC	Sierra	2020 - 2021	All	All	All	All

Involved Region or Country	North America
Additional Options (RPO)	UD7 or UD5
Condition	Some customers may comment on unwanted/false park assist alerts suggesting there is an object in front and/or behind the vehicle when there is nothing there. This condition can lead to the system disabling itself and a "Park Assist Off" message will be displayed in the DIC. Also, the LED in the park assist switch will be disabled.
Cause	If an issue exists with the way the park assist sensor and/or bezel is mounted or painted, the sensor can ground out or get squeezed and pick up normal vehicle vibrations. These normal vehicle vibrations would not ordinarily be picked up by the sensor when properly mounted and isolated from the vehicle. These vibrations can be interpreted by the park assist sensor as an object, when in fact there is no object present. Because the sensor is working normally, there will be no DTCs set. The cause of this condition could be one of several items and this document will provide some diagnostics tips.

#### Correction:

- Using GDS2, go into Module Diagnostic/Park Assist Module/Data Display/Parking Assist Disable History 1-4 and 5-7 Data and view the disable history. If the disable history shows "Trailer or Other Object Attached" this is a good indication there could be an issue with a park assist sensor(s) grounding out or getting squeezed. Don't over look the obvious things such as a trailer hitch installed or anything else attached to the vehicle.

**Note:** Be careful if the disable history shows "Manual Disable" along with "Trailer or Other Object Attached". Many times in an effort to make the Park Assist system operational, a customer will try cycling the park assist manual disable switch. This can cause "Manual Disable" to be displayed in the disable history and may mislead your diagnostics.

- Question the driver to see if they have received any unwanted/false park assist alerts. If so, the Parking Assist Display, located in the DIC, will indicate where the false alert is being displayed/detected. Use this information to

help narrow down which sensor(s) should be inspected. Example: the Parking Assist Display is falsely indicating an object at the left front of the vehicle. With this information the left front park assist sensors/bezels should be inspected more closely.

- If there are no unwanted/false parking assist alerts and they only have an issue with the Park Assist Off message, then on trucks with front and rear parking assist, try the following to help determine if the issue is with the front or rear sensor(s)/bezel(s). Connect GDS2 and go into Module Diagnostic/Park Assist Module/Data Display/Parking Assist System Data and monitor the following two parameters: "Attached Object Detected Front" and "Attached Object Detected Rear". See which parameter goes "active" when the Park Assist Off message is displayed and use this to determine if the issue is with the front or rear sensor(s)/bezel(s). This step can be omitted on vehicles with only rear park assist, as it would be only the rear sensor(s)/bezel(s) to inspect.

**Note:** On vehicles with both front and rear parking assist systems, it cannot be determined if there is an issue with either the front or rear parking assist sensor(s) or bezel(s) by the transmission position (Drive or Reverse) alone. Example: When the vehicle is shifted into reverse, both the front and rear parking assist sensors are active. Also, while driving forward the system determines if anything is attached to either the front or rear of the vehicle.

Once you have determined which sensor(s) to inspect, look for the following issues:

1. Perform a visual inspection of the park assist sensor(s) and bezel(s). Look for any stone chips/dents, paint chips, damage, etc., as well as, any issues with the silicone ring. See example (1) below of a silicone ring which is not properly installed. If any issues are found then repair as necessary.

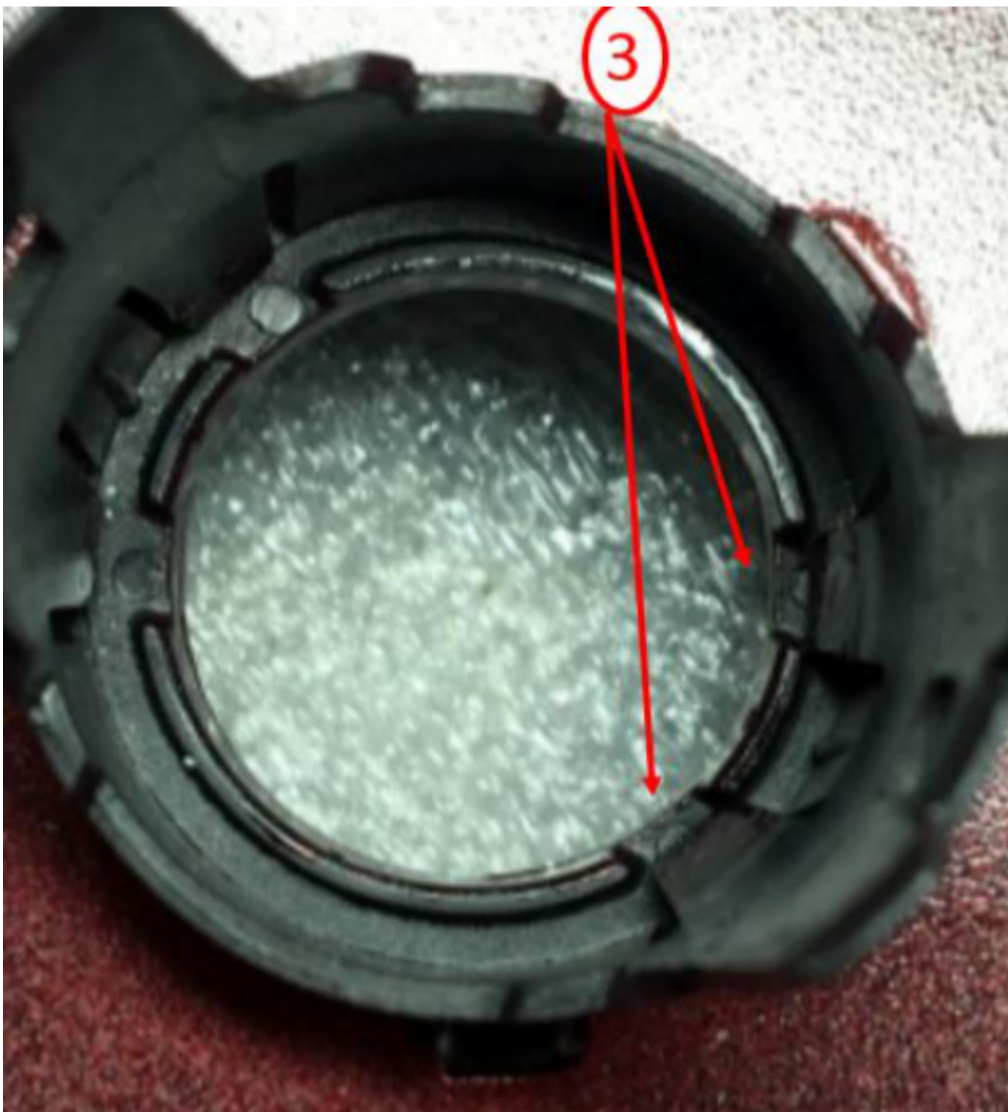


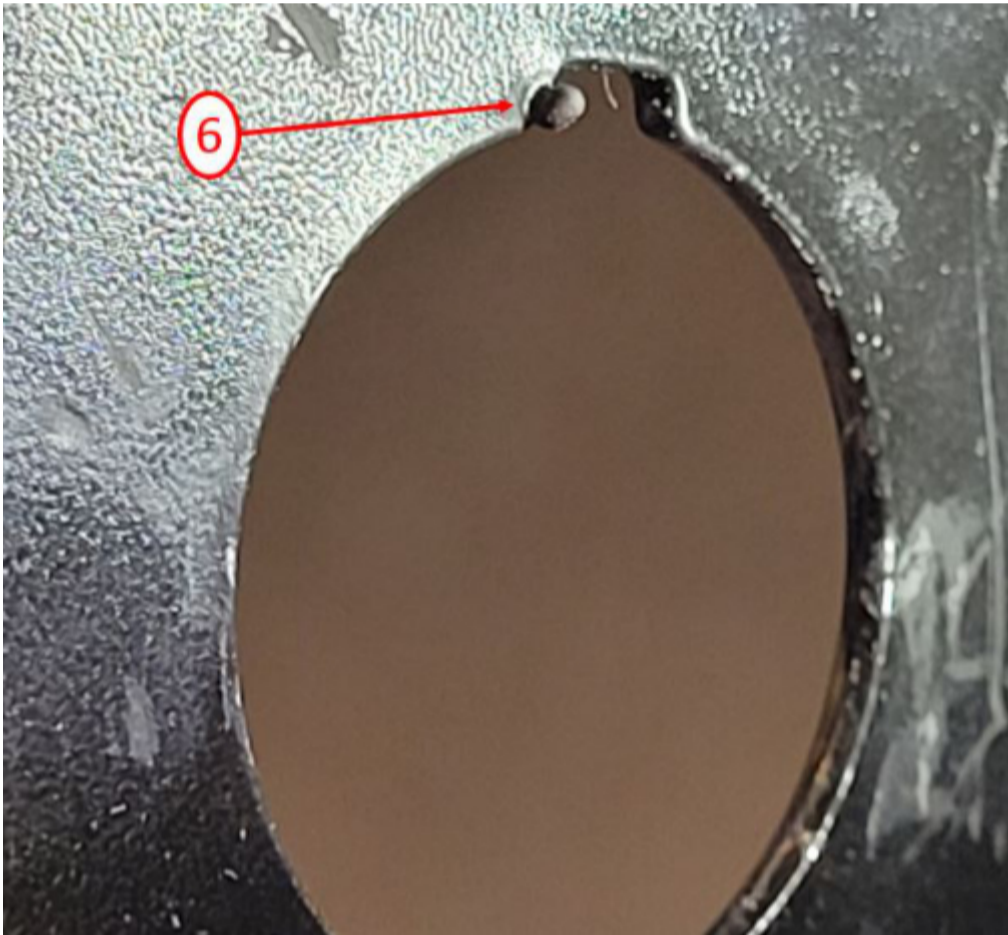
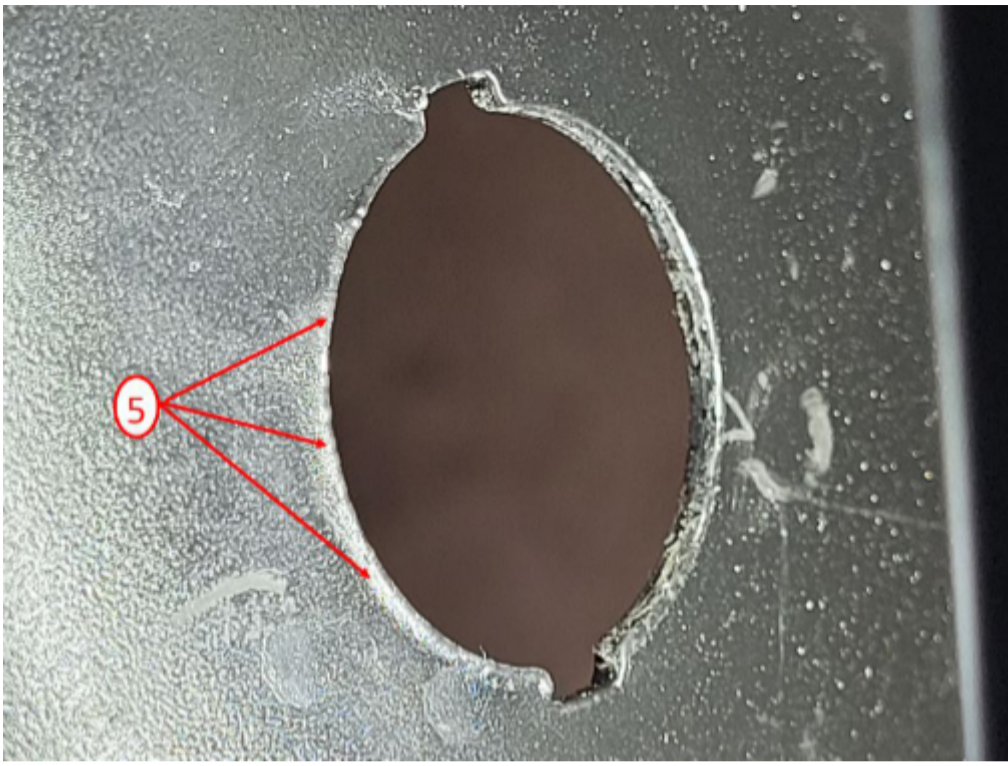
**Note:** In most cases, these next inspections will require the bumper to be removed.

2. Inspect the park assist sensor bezel(s) for not being properly mounted in the bumper hole. If the bezel is not properly mounted into the bumper hole it can lead to a sensor grounding out or the sensor getting squeezed. The bezel has four locking tabs that secure the bezel to the bumper. Make sure all four mounting tabs are fully engaged. See example (2) for a mounting tab that is not fully engaged (view from the back side of the bumper/bezel). If any tab is not fully engaged it can protrude into the opening where the park assist sensor mounts and cause it to ground out or get squeezed. See example (3) for a tab not fully engaged and protruding into the opening for the sensor. If any of the bezel mounting tabs are not fully engaging, inspect the following:

- Burrs on the back side of the bumper hole, see example 5 and 6
- Excessive paint/clear coat on the bumper around the mounting hole, see example 7.
- Plastic flashing on the park assist sensor bezel itself, see examples 8 and 9.
- Inspect the bumper hole for being slightly too small. The bezel should easily slide into the bumper hole without force.

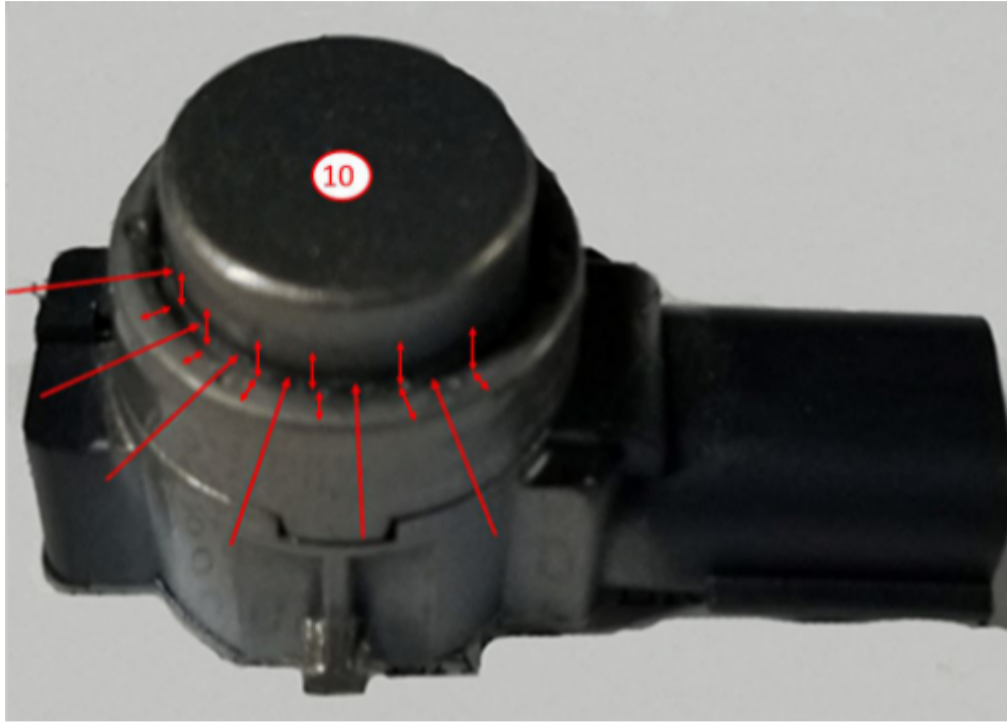
If any of these concerns exist, then use a file or grinding wheel to remove any burrs or flashing. If needed, enlarge the bumper hole opening. On any exposed/bare metal apply an Anti-Corrosion Treatment, see Document ID: 2096919. After repairing any bumper hole or bezel issues then reinstall the bezel and make sure the four mounting tabs are fully engaged and then reinstall the park assist sensor. There is no need to replace the bezel or sensor unless they are damaged.







3. If the park assist sensors have been painted, it is important that only the tip of the sensor is painted and clear coated. The tip of the park assist sensor is isolated from the rest of the sensor body by an internal decoupling ring. If paint or clear coat is allowed to run or drip down the sides of the sensor's tip and/or into the gap between the body and sensor tip, as shown below, this can cause the sensor to ground out.



### Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the appropriate labor operation for your repair. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

### Version History

Version	1
Modified	4/22/2021 - Created on.



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