



Service Bulletin

File in Section: -

Bulletin No.: PI0928C

Date: September, 2014

PRELIMINARY INFORMATION

Subject: Bump, Surge or Vibration at Idle in Drive at a Stop

Models: 2013-2014 Buick Encore
2012-2014 Chevrolet Cruze, Sonic
2013 Chevrolet Tracker, Trax
Equipped with 1.4L and 1.8L Engines (RPOs LUJ, LUV, 2H0) and 6T40 Automatic Transmission (RPOs MHB, MH8)
Vehicles Built Prior to August 1, 2013

This PI has been revised to remove the 2014 Trax and Tracker. Please discard PI0928B.

Condition/Concern

Some customers may comment on a bump feeling, a surge or an engine vibration while stopped at idle with the transmission in Drive and their foot on the service brake.

Note: This condition is only when stopped at idle with the transmission in Drive and foot on the service brake.

Recommendation/Instructions

This condition may be caused by the transmission Neutral Idle feature. When the service brakes are applied and the vehicle speed, throttle position, and transmission temperature are within the calibration defined limits, the TCM commands the transmission to Neutral.

Important: The Neutral Idle feature will only function when transmission fluid temperature is 37°C (99°F) or greater. Verify that the transmission fluid temperature is 37°C (99°F) or greater before diagnosing this condition.

When the concern occurs, move the transmission shift lever to the manual position.

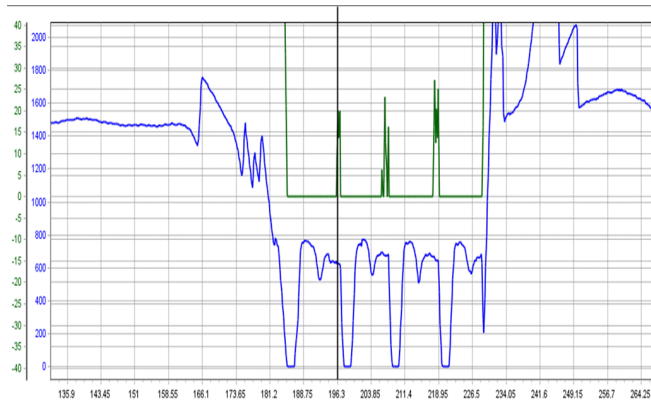
Moving the transmission shift lever to the manual shift position will prevent the Neutral Idle feature from functioning.

If the concern is eliminated by moving the transmission shift lever to the manual position, it is caused by the Neutral Idle feature and variation in the 1-2-3-4 clutch fiber plates. The 1-2-3-4 clutch fiber plates should be replaced with the part number listed below. This is a kit that contains two clutch fiber plates.

If the concern is not eliminated by moving the transmission shift lever to the manual position, it has a different cause and further diagnosis is required.

Important: These clutch plates will only correct a continuous, on/off bump, surge or vibration feel that occurs while stopped in Drive with a foot on the service brake. These clutch plates will not eliminate the single bump feeling that occurs as the vehicle comes to a stop and the transmission enters neutral. These clutch plates will not eliminate the single bump feeling that occurs when the service brake is released and the transmission engages the 1-2-3-4 clutch. These single bump feelings are normal and cannot be eliminated.

For diagnosis purposes, a typical Neutral Idle bump is illustrated in the GDS2 snapshot below. When Neutral Idle is activated Transmission ISS will nearly match Engine Speed. When Neutral Idle is deactivated, 1st gear will be engaged and Transmission ISS will drop to zero as long as the vehicle is stopped. The variation in the 1-2-3-4 clutch fiber plates create the variation in Transmission ISS and the small spikes in the Transmission OSS. These Transmission OSS spikes cause Neutral Idle to be commanded on/off/on/off as seen below creating the bump or surge sensation.



Legend	Parameter Name	Control Module	Value 1	Value 2	Delta	Unit
■	Transmission ISS	Transmission Control Module	823			RPM
■	Transmission OSS	Transmission Control Module	10			RPM

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Parts Information

Part Number	Description	Qty
24268545	Plate Kit, 1-2-3-4 Clutch	1

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
8467352	Low and Reverse and 1-2-3-4 Clutch Housing Overhaul	Use Published Labor Operation Time