



# Service Bulletin

File in Section: -

Bulletin No.: PI0928A

Date: September, 2013

## PRELIMINARY INFORMATION

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

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

This PI has been revised to add the 2014 model year, add the Trax model, update the Recommendation/Instructions information and update the Labor Operation to the Global Labor Code (GLC). Please discard PI0928.

### 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.

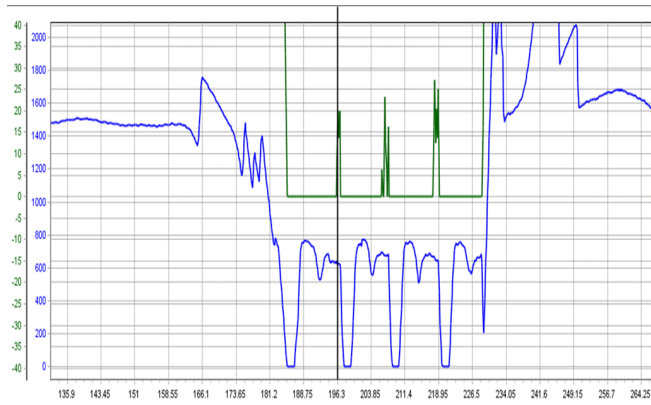
Moving the transmission shift lever to the manual shift position will prevent the Neutral Idle feature from functioning.

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 |
|--------------------------------------|------------------|-----------------------------|---------|---------|-------|------|
| <span style="color: blue;">■</span>  | Transmission ISS | Transmission Control Module | 823     |         |       | RPM  |
| <span style="color: green;">■</span> | 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 |