



Service Bulletin

PRELIMINARY INFORMATION

Subject: DTC C0544 and/or U0415 Set and Will Not Clear, Malfunction Lamp Indicator (MIL) On

Models: 2013 Buick LaCrosse, Regal
2013 Chevrolet Equinox, Malibu
2013 GMC Terrain
2012 Chevrolet Volt Built After VIN Breakpoint CU119678
2012 Opel Ampera Built After VIN Breakpoint CU119438
2013 Opel Insignia
Equipped with NJ1 Steering

This PI is being revised to add models and DTC U0415. Please discard PI0800.

Condition/Concern

Some customers may comment on a Malfunction Indicator Lamp (MIL) on and a drop in power steering assistance.

Technicians may find DTC C0544 with fault byte 5A and/or DTC U0415 with fault byte 75 set that does not clear.

DTC C0544 with fault byte 5A and/or DTC U0415 with fault byte 75 sets and does not clear if the Steering Angle Sensor alignment procedure is performed incorrectly. If the car is driven in this condition, as speed increases the driver will experience the car attempting to steer to the left or right (depending how which offset to left or right was set during the alignment procedure).

While steering at low speeds (parking lot), the driver will experience power steering assist for only a fraction of a turn left or right (dependent on offset) and a drop in power steering assist (full manual steering).

Recommendation/Instructions

To clear the DTC(s), it will be necessary to flash the Electric Power Steering Control Module (EPS) to a different software.

- Identify DTC C0544 DTC with fault byte 5A and/or DTC U0415 with fault byte 75 is set.
- Try to clear the DTC(s) with the service diagnostic tool.
- Confirm DTC C0544 and/or DTC U0415 is still set as current.

To reprogram the Electric Power Steering Control Module (EPS), follow the procedure below:

1. Verify the battery voltage is more than 12 volts but less than 16 volts before proceeding with reprogramming. The battery must be fully charged **BEFORE** reprogramming a control module.
2. During reprogramming, the battery voltage must be maintained within the proper range of 12-15.5 volts. **CONNECT** the approved Midtronics® PSC 550 Battery Maintainer (SPS Programming Support Tool (EL-49642) to the vehicle or the GR8 (EL50313) in the power supply mode.

Notice: It is essential that the TIS terminal, MDI, Tech 2® and/or Scan Tool are updated with the latest software available.

3. Verify that the devices being used are updated with the latest available software version **BEFORE** beginning the reprogramming event.
4. **BEFORE** beginning reprogramming you **MUST** refer to **Control Module References** in SI for the appropriate Programming and Setup

procedures.

5. If a wireless connection will be used for reprogramming, a secure service department connection **MUST** be used. **DO NOT** use any public WiFi connection from the customer lounge.
6. Reprogram the Electric Power Steering Control Module with the special VCI number provided by the Techline Customer Support Center (TCSC). Contact TCSC for instructions. Use Service Programming System (SPS) with the latest calibrations available on TIS2WEB. Refer to the SPS procedures in SI.
7. When the Electric Power Steering Control Module (EPS) VCI reprogramming is complete, Key off ignition, open and close door, allow vehicle's network bus to go to sleep (wait 3 minutes).
8. Place ignition into Run (engine not running) power mode.
9. Reprogram the Electric Power Steering Control Module (EPS) again using Service Programming System (SPS), selecting "Replace and Reprogram" then selecting EPS programming in Support Controllers.
10. After reprogramming is completed, key off ignition, open and close door, allow vehicle's network bus to go to sleep (wait 3 minutes).
11. Start the car and perform a diagnostics check. The DTC C0544 and/or DTC U0415 should no longer appear.
12. Perform the steering endstop learn procedure. Refer to Software Endstop Learning within Power Steering Control Module Calibration in SI.
13. Test drive the car and check for codes. There should not be any DTCs set.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9683*	Reprogram Electric Power Steering Control Module (EPS)	0.8 hr
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from this information.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION