

**GM SERVICE AND PARTS OPERATIONS
DCS1129
URGENT - DISTRIBUTE IMMEDIATELY**

Date: February 11, 2004

Subject: Upcoming Safety Recall
04006 – Electronic Steering Column Lock

Models: Certain 1997-2000 Chevrolet Corvette with Automatic Transmission
(Excluding Vehicles Repaired by Customer Satisfaction Program
01044 or Technical Service Bulletin 01-02-35-008)

All 1997-2004 Chevrolet Corvette with Manual Transmission

To: All Chevrolet Dealers

Attention: Dealer Operator, General Manager, Sales Manager, Used Car
Manager, Service Manager, Parts Manager and Warranty
Administrator

Based on information from the National Highway Traffic Safety Administration (NHTSA) web site, the media may report that General Motors will be announcing a safety recall involving certain 1997-2000 model year Chevrolet Corvettes with automatic transmissions and all 1997-2004 model year Chevrolet Corvettes with manual transmissions.

These vehicles have a condition in which the vehicle can operate when the electronic steering column falls to unlock. If this were to occur the driver would have no ability to steer the vehicle.

To correct this condition in the 1997-2000 vehicles with automatic transmissions, Chevrolet dealers will remove the column lock plate in vehicles that were not repaired by Customer Satisfaction Program 01044 or Technical Service Bulletin 01-02-35-008. To correct this condition in 1997-2004 vehicles with manual transmissions, Chevrolet dealers will reprogram the Powertrain Control Module (PCM) software. These repairs will be performed at no cost to the customers.

There are approximately 140,000 vehicles involved. GM is working with its suppliers to obtain the parts needed to correct this condition as quickly as possible. Based on the anticipated schedule, we plan to notify customers about this recall during the second quarter of 2004. **GMVIS information will not be available until the recall is formally announced.**

Listed below are some anticipated questions and answers to assist in responding to customer inquiries.

- Q1: What vehicles are in the recall population?**
A1: Certain 1997-2000 model year Chevrolet Corvettes with automatic transmissions that were not previously repaired by Customer Satisfaction Program 01044 or Technical Service Bulletin 01-02-35-008 and all 1997-2004 model year Chevrolet Corvettes with manual transmissions.
- Q2: What is the condition that prompted a safety recall?**
A2: Some involved vehicles have a condition in which the vehicle can operate when the electronic steering column fails to unlock.
- Q3: What might occur as a result of this condition?**
A3: The driver would have no ability to steer the vehicle.
- Q4: Why does the engine stall in some cases and in other cases remain running, allowing the vehicle to move, when the steering column remains locked?**
A4: In the event that the Electronic Column Lock (ECL) fails to unlock when the driver starts the engine of 1997-2004 model year Corvettes, the Body Control Module (BCM) sends a signal to the PCM to inhibit fuel so, when the vehicle travels (reverse or forward) at the speed of about 2 MPH, the vehicle engine stalls. However, if the power supply to the PCM is interrupted or voltage is low, the PCM resets during engine starts and does not inhibit fuel. The driver is capable of moving the vehicle with a locked steering column.
- Q5: Why should we be concerned about this condition?**
A5: In the event that PCM does not inhibit fuel, the vehicle could travel at speeds higher than 2 MPH. In both cases, the driver would not have steering capability.
- Q6: What was the cause of the condition that allows movement when the steering column remains locked?**
A6: By design, when the ECL during ignition or engine start up, senses a steering column that has mechanically failed to unlock or cannot confirm that the ECL is in an unlocked state, the BCM signals the PCM to inhibit the fuel to avoid the possibility of moving the vehicle without being able to steer. If the power supply to the PCM is interrupted or voltage is low, the PCM resets during engine start up and does not have enough time to see the BCM's inhibit fuel signal. If the PCM does not see the inhibit fuel signal within a specified amount of time, it will allow vehicle motion. The PCM, then, does not act on any new signals from the BCM regarding the column lock/unlock state. If the column has failed to unlock, the driver could move the vehicle.
- Q7: Did GM conduct a recall for 1998-2000 model year Corvettes for a similar condition?**
A7: GM conducted Customer Satisfaction Program 01044 and recalled 1998-2000 model year Chevrolet Corvettes built between April 1, 1998 through December 12, 1999. We conducted this program beginning in July 2001 for ECLs failing to unlock, causing inconvenience to the customers. The potential for the column to be locked and for the vehicle to be driven was only discovered recently.

- Q8: Why was the recall conducted in July 2001 a Customer Satisfaction Program and this current field action a Product Safety Recall?**
- A8:** The July 2001 program addressed a customer concern that could occur in certain 1998-2000 model year Corvettes where the steering column would fail to unlock during the initial key-in and start up. This current field action is a safety recall because of the potential for the driver to move the vehicle with the steering column in a lock mode.
- Q9: Have there been any reports of incidents, injuries or fatalities related to this condition?**
- A9:** GM has not confirmed any occurrences of this condition in the field. There are no confirmed occurrences of crashes, injuries, or fatalities related to the condition.
- Q10: Why do some ECLs on Corvettes remain locked after engine start up?**
- A10:** Some ECLs may remain locked after start up because the lock pin is not retracting from the steering column lock. There may be an electrical or mechanical problem that doesn't allow the steering column to unlock.
- Q11: How was this condition discovered?**
- A11:** The failure of the ECL to unlock, but the vehicle can be moved was identified during the investigation GM was conducting. GM recently discovered that the fuel was not being inhibited by the PCM even though the ECL was locked because of low battery voltage.
- Q12: Does the lack of a steering column that locks when the key is removed make the Corvette noncompliant with FMVSS 114 "Theft Protection?"**
- A12:** FMVSS "Theft Protection" requires vehicles to either lock the steering column or lock the vehicle in "Park" when the key is removed. A locking steering column is not required on automatic transmission Corvettes because these vehicles lock in "Park." Locking steering columns were standard production content for model years 1997-2000. The locking steering column was not included in automatic transmission vehicles after the 2000 model year. All Corvettes with manual transmissions for model years 1997-2004 have a locking steering column, because obviously these vehicles do not have a lock in "Park" feature.
- Q13: What will GM do to correct this condition on the subject vehicles?**
- A13:** To correct this condition in the 1997-2000 vehicles with automatic transmissions, Chevrolet dealers will remove the column lock plate in vehicles that were not repaired by Customer Satisfaction Program 01044 or Technical Service Bulletin 01-02-35-008. To correct this condition in 1997-2004 vehicles with manual transmissions, Chevrolet dealers will reprogram the PCM software. These repairs will be performed at no cost to the customers.
- Q14: When can customers bring in their vehicles for repair?**
- A14:** Customer notification begins in the second quarter of 2004. Customers should contact their dealers to arrange for servicing after they get their recall notification letters.

Q15: Are these vehicles safe to drive?

A15: The vehicles that are part of this recall meet all FMVSS standards and are safe to drive. The conditions of column lock up/stall and column lock up/vehicle movement are not common occurrences. Until their vehicles are repaired, drivers can avoid the problem by turning the steering wheel fully left and right, after engine start up, and before shifting into gear. While doing this, if a "ratcheting" noise is heard, drivers should turn the engine off, remove the key, and contact a Chevrolet dealer to schedule repair. If no "ratcheting" noise is heard, drivers can continue to operate their vehicles but should bring the vehicle in for repair when they receive the recall notification letter.

Q16: What if the driver experiences column lock up, stalling, or lack of steering ability before they get the recall notice?

A16: If drivers experience column lock up, stalling, or lack of steering ability after starting the engine, they should contact a Chevrolet dealer to schedule repair.

Please contact the GM Dealer Business Center at 1-888-414-6322 (Prompt #3) if you have questions about this message.

END OF MESSAGE

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