File In Section: Product Recalls Bulletin No.: 04006A

Date: July 2004







# **PRODUCT SAFETY RECALL**

**ELECTRONIC COLUMN LOCK SYSTEM** SUBJECT:

**MODELS:** 1997-2004 CHEVROLET CORVETTE EQUIPPED WITH A MANUAL

**TRANSMISSION** 

1997-2000 CHEVROLET CORVETTE EQUIPPED WITH AN AUTOMATIC

TRANSMISSION

2001-2004 CHEVROLET CORVETTE EQUIPPED WITH AN AUTOMATIC

TRANSMISSION - EUROPEAN EXPORT ONLY

THIS BULLETIN CANCELS AND REPLACES BULLETIN 04006, ISSUED APRIL 2004. ADDITIONAL VEHICLES HAVE BEEN ADDED TO THE POPULATION. THIS BULLETIN DOES NOT INCLUDE A SERVICE PROCEDURE FOR 1997 MANUALS AND EXPORT AUTOMATICS, OR 1998 MANUALS AND EXPORT AUTOMATICS BUILT THROUGH 5/25/98. THE BULLETIN WILL BE REVISED WHEN PARTS FOR THESE **VEHICLES ARE AVAILABLE.** 

ALL COPIES OF BULLETIN 04006 SHOULD BE DESTROYED.

### CONDITION

General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 1997-2004 model year Chevrolet Corvette vehicles. When you remove the ignition key, the electronic column lock (ECL) system prevents turning of the steering wheel. When the vehicle is started, it unlocks the steering. Two conditions can prevent steering while the vehicle is moving:

- 1. The vehicle is designed so that if the column fails to unlock when the vehicle is started, the fuel supply will be shut off if the driver tries to move the vehicle. If voltage at the powertrain control module is low or interrupted, however, the fuel shut off may not occur and the vehicle can be accelerated while the steering is locked.
- During quick cranks, the ECL lock pin may not withdraw fully and, in vehicles where there is abnormally low clearance to the lock plate, there may be contact between the pin and lock plate. This can cause a noise or ratcheting when the steering wheel is turned or, if there is insufficient clearance, the steering wheel cannot be turned.

If one of these conditions occurs, a crash could occur without warning.

### **CORRECTION**

Dealers are to remove the column lock plate on U.S. and Canadian vehicles equipped with an automatic transmission. After the service correction, the steering column will no longer lock when the key is removed.

On vehicles equipped with a manual transmission, and export vehicles equipped with an automatic transmission, dealers are to 1) reprogram the PCM, and 2) verify there is adequate lock plate clearance and, if necessary, replace the lock plate. After the service correction, the steering column will continue to lock when the key is removed.

### **VEHICLES INVOLVED**

Involved are certain 1997-2004 Chevrolet Corvettes equipped with a manual transmission, 1997-2000 Chevrolet Corvettes equipped with an automatic transmission, and 2001-2004 Chevrolet Corvette equipped with automatic transmission (European export only), built within these VIN breakpoints:

YEAR	DIVISION	MODEL	FROM	THROUGH
1997	Chevrolet	Corvette	V5100001	V5109707
1998	Chevrolet	Corvette	W5100001	W5131069
1999	Chevrolet	Corvette	X5100001	X5133283
2000	Chevrolet	Corvette	Y5100001	Y5133610
2001	Chevrolet	Corvette	15100001	15135601
2002	Chevrolet	Corvette	25100002	25135762
2003	Chevrolet	Corvette	35100003	35135465
2004	Chevrolet	Corvette	45100001	45120862

**IMPORTANT:** Dealers should confirm vehicle eligibility through **GMVIS** (GM Vehicle Inquiry System) prior to beginning recall repairs. [Not all vehicles within the above breakpoints may be involved.]

<u>For US</u>: For dealers with involved vehicles, a Campaign Initiation Detail Report containing the complete Vehicle Identification Number, customer name and address data has been prepared and will be loaded to the GM DealerWorld, Recall Information website. Dealers that have no involved vehicles currently assigned, will not have a report available in GM DealerWorld.

<u>For Canada</u>: For dealers with involved vehicles, a Campaign Initiation Detail Report containing the complete Vehicle Identification Number, customer name and address data has been prepared, and is being furnished to involved dealers. Dealers that have no involved vehicles currently assigned, will not receive a Campaign Initiation Detail Report.

<u>For IPC</u>: For dealers with involved vehicles, a Campaign Initiation Detail Report containing the complete Vehicle Identification Number, customer name and address data has been prepared, and is being furnished to involved dealers. Dealers that have no involved vehicles currently assigned, will not receive a report with the recall bulletin.

# **PARTS INFORMATION**

Parts required to complete this recall are to be obtained from General Motors Service Parts Operations (GMSPO). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered on a CSO = Customer Special Order.

Part Number	Description	Quantity/Vehicle	
88952427	Harness Kit, Strg Whl Theft Dtrnt Lk Shorting	1	
	(automatics except export vehicles)		
88952428	Wire Kit, Strg Whl Theft Dtrnt Lk	1 (If Req'd)	
	(1998-2000 manuals & export automatics)		
26056108	Nut,Strg Whl	1 (If Req'd)	
26094767	Plate, Strg Shf Lk (manuals except exports)	1 (If Req'd)	
88964588	Plate, Strg Shf Lk (export)	1 (If Req'd)	
05694191	Ring, Strg Shf Lk Plt Ret	1 (If Reg'd)	

# **SERVICE PROCEDURE**

The required repairs vary depending on the model year, build date, and whether Customer Satisfaction Program 01044 or Technical Service Bulletin 01-02-35-008 have previously been performed. Refer to the chart below to determine the correct repairs for the vehicle you are working on. After determining the required repairs for the vehicle you are working on, proceed to the appropriate service procedure.

	PROCEDURE 1A	PROCEDURE 1B	PROCEDURE 2	PROCEDURE 3	
				Functional Test	
Models	Install Wire Kit 88952427	Install Wire Kit 88952428	Reprogram	Tech 2	Tech 2 w/SPX Tool
1997 – 2000 Automatic (except export vehicles)					
verlicles)	X				
1997 – All Manual & Export Automatic					
All			X		X
1998 – All Manual & Export Automatic					
Built through 5/25/98			X		x
Built on or after 5/26/98 and CSC 01044 was performed (V0743)			х	х	
Built on or after 5/26/98 and CSC 01044 was not performed (V0743)		x	x	x	
1999-2000 – All Manual & Export Automatic					
CSC 01044 or TSB 01-02-35- 008 (V0743 or N8505) was performed			х	x	
CSC 01044 or TSB 01-02-35- 008 was <u>not</u> performed (V0743 or N8505)		x	х	X	
2001-2004 – All Manual & European Automatics					
All			Х	X	

# 1997-2000 Corvettes Equipped With Automatic Transmission (Excludes Export Vehicles)

The following service procedure provides instructions for disconnecting the electric column lock (ECL) on vehicles equipped with an automatic transmission. DO NOT use this procedure on vehicles equipped with a manual transmission or on export vehicles.

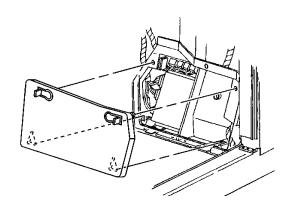
### **Tools Required**

- J 1859-A Steering Wheel Puller
- J 42120 Steering Wheel Puller Legs
- J 23653 SIR, Steering Column Lock Plate Compressor
- J 42137 Cam Orientation Plate Adaptor

### **Important**

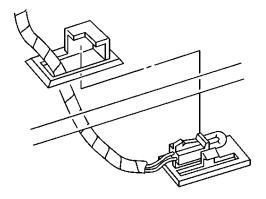
Disregard all instruction sheets that may be in the harness kit, and follow the instructions provided in this service procedure.

- 1. Turn the steering wheel so that the vehicle's front wheels are pointing straight ahead.
- 2. Turn the ignition switch to the OFF position.
- 3. Open the hood and disconnect the negative battery cable.



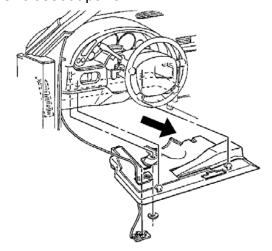
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- 4. Disengage the upper latches on the front floor kick-up panel on the passenger side.
- 5. Lift the kick-up panel's lower edge out of the slots in the relay bracket.
- 6. Remove the SDM fuse from the IP fuse block located behind the kick-up panel that was just removed.



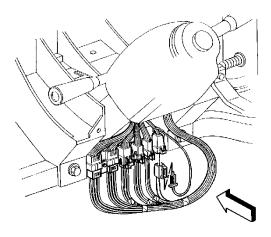
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7. Using a flat-bladed tool, carefully pry the IP courtesy lamp assembly from the driver's side lower closeout panel.



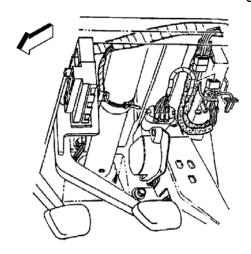
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- 8. Remove the push-on retaining nut from the steering column bracket stud.
- 9. Release the driver's side lower closeout panel push-in retainers from the IP lower support beam.
- 10. Insert the IP courtesy lamp assembly up through the opening in the closeout panel.
- 11. Lower and remove the closeout panel. Release the notch, in the right-hand forward edge of the closeout panel, from the tab on the accelerator pedal bracket.



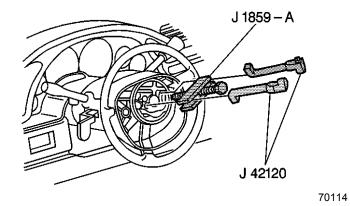
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12. Remove the connector position assurance (CPA) from the driver's yellow 2-way air bag connector located at the base of the steering column and disconnect the connector.

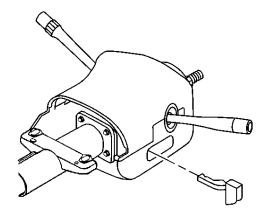


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- 13. Remove the CPA from the passenger yellow 2-way air bag connector, also located at the base of the steering column, and disconnect the connector.
- 14. Remove the screws attaching the driver's inflator module to the steering wheel (3) and pull the module away from the steering wheel.
- 15. Disconnect the SIR electrical connector (2) from the backside of the module, the horn wiring harness connector (6) from the steering column, and the ground wire (5) from the steering column. Remove the module.
- 16. Remove the nut attaching the steering wheel to the column and discard the nut.



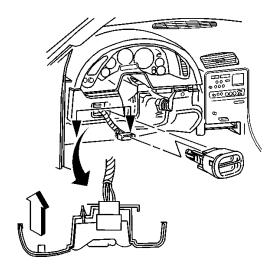
17. Using tool J 1859-A, Steering Wheel Puller, and J 42120, Steering Wheel Puller Legs, remove the steering wheel from the column.



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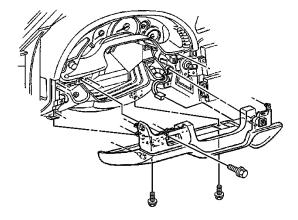
18. Using a small flat-bladed screwdriver, release the locking tab from the tilt lever handle and pull the lever straight out.

Page 9 July 2004 Bulletin No.: 04006A



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19. Using a small flat-bladed screwdriver, pry the lower edge of the combination fog lamp/trunk release switch to release the locking tab. Disconnect the electrical connector from the switch. Repeat this step on the inside air temperature grill located to the right side of the steering column.

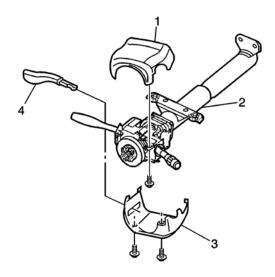


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### **Important**

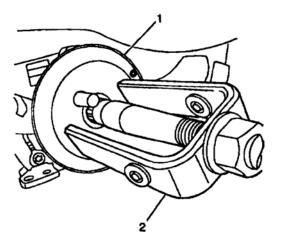
When removing the driver's side knee bolster trim panel as described below, care must be taken not to damage the console trim plate as the knee bolster trim panel tucks in behind the console trim plate.

- 20. Remove the driver's side knee bolster trim panel retaining screw, located behind the area where the combination fog lamp/trunk release switch is installed. Repeat this step on the screw located in the inside air temperature cavity.
- 21. Remove the driver's side knee bolster trim panel lower retaining screws.
- 22. Grasp the trim panel at the side edges and firmly pull rearward to release the locking tabs and remove the panel.
- 23. If equipped, disconnect the electrical connector from the inside air temperature sensor.



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- 24. Remove the two screws that attach the lower steering column cover (3) to the upper (1).
- 25. Remove the one screw that attaches the upper steering column cover to the column and remove the upper cover.
- 26. Remove the snap ring and SIR coil from the steering column.



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## **Notice**

Tool J 23653-SIR MUST be used when removing the retaining ring and lock plate in the next step.

27. Using J 23653-SIR (2), remove the retaining ring and the lock plate (1) and discard both.