

2003-2007 Ion, HHR, Solstice, Sky, Opel GT, G2XETQ N-TBDIgnition Switch – Unintended RotationVehicles 840,153Cost Estimate: \$34.3M (Switch Only)Locations: US, CAN, MEX

### **<u>Condition</u>**:

Front airbag non-deployment has been identified in certain crash events. In those events the ignition switch had moved from RUN to ACCESSORY or OFF.

**Effects:** The airbags will not deploy if the ignition has moved from RUN.

**<u>Root Cause</u>**: The ignition switch torque performance may be below specifications.

**Service Bulletin:** Bulletin #05-2-35-007 – Inadvertent key turning – issued Oct 2005.

## Number of Reports:

- 6 allegations of front airbag nondeployment.
  Field incidents involve vehicles going off the road or hitting smaller objects shortly before a more significant impact.
- 9 VOQs for "Ignition Off" while driving.
- 224 application of Service Bulletin (the key insert).

Ignition Switch Change: Increased effort for RUN to ACCESSORY.

**Potential Field Remedy:** Replace ignition switch.

**Potential Field Action Category:** Safety Recall



## Reports - Potential Unintended Key Rotation – U.S. Only

	Cobalt '05-'07	G5 '07	HHR '06-'07	lon (A) '03-'07	Sol./Sky '06-'07	
Airbag Non-Deploy Incidents (# of vehicle reports)	23	2	2	4	0	Data Pull 2/20/14 Included Sources:
Fatalities	8	0	0	5	0	GM's Legal
Injuries	16	2	2	0	0	Database (Team Connect) NHTSA VOQ Database
Fatality - Insufficient Information*			0	0	0	
Injuries - Insufficient Information*			0	2	0	
Inconclusive**			0	2	0	
VOQs	28	0	5	3	0	
Key Insert (Svc. Bulletin)	246	4	37	182	5	
Total	297	6	44	189	5	
Vehicle Counts	674,547	64,674	213,247	488,957	55,479	
IPTV	0.44	0.09	0.21	0.39	0.09	

(A) Ion uses Class 2 architecture which does not record in ACCESSORY.

\* "Insufficient Information" indicates that additional information is being pursued.

\*\* "Inconclusive" indicates that no additional information can be obtained and the incident can not be included or ruled out.

Note: The above counts represent the best judgment based on available data.

# Engineering Problem Resolution (PRTS) Summary Ignition Switch Related

### • PRTS issued for the following programs:

_	Chevrolet Cobalt/Pontiac G5	3
_	Chevrolet HHR	0
_	Pontiac Solstice	0
—	Saturn Sky	0
_	Saturn Ion	8 *

Source: Brian Thompson, Engineering Manager, Switches & Controls 2/23/2014 \*Includes 3 Field Product Reports

# Estimated Vehicles Remaining In Service:

Models	2003	2004	2005	2006	2007	
Cobalt Produced			160,785	260,724	253,038	
Cobalt In Service			129,774	222,324	225,233	778,562 Prod
G5 Produced					64,674	667,868
G5 In Service					57,567	Remain In
Pursuit Produced			12,665	26,676		Service (86%)
Pursuit In Service			10,222	22,747		J
Models	2003	2004	2005	2006	2007	~
Ion Produced	107,993	132,330	83,707	110,215	110,515	
lon In Service	74,771	99,733	67,562	93,982	98,371	
HHR Produced				124,006	109,592	840,153 Prod.
HHR In Service				105,742	97,550	691,921
Solstice Produced				21,273	24,018	Remain In
Solstice In Service				18,140	21,379	Service (82%)
Sky Produced					16,504	
Sky In Service					14,690	
Opel GT					TBD	
Daewoo G2X						