

PE14-010

GM

9/19/2014

ATTACHMENT 1

Q 03

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Q 03

IMPORTANT NOTICE: Robert Bosch LLC and the manufacturers whose vehicles are accessible using the CDR System urge end users to use the latest production release of the Crash Data Retrieval system software when viewing, printing or exporting any retrieved data from within the CDR program. Using the latest version of the CDR software is the best way to ensure that retrieved data has been translated using the most current information provided by the manufacturers of the vehicles supported by this product.

CDR File Information

User Entered VIN	2G1115SL8E9[REDACTED]
User	BALL
Case Number	[REDACTED]
EDR Data Imaging Date	04/26/2014
Crash Date	03/11/2014
Filename	2G1115SL8E9[REDACTED].ACM.CDRX
Saved on	Saturday, April 26 2014 at 12:56:09
Collected with CDR version	Crash Data Retrieval Tool 12.3
Reported with CDR version	Crash Data Retrieval Tool 12.3
EDR Device Type	Airbag Control Module
Event(s) recovered	NONE

Comments

- DOWNLOAD AT HERTZ, ORLANDO AIRPORT
- DLC USED
- VEHICLE BATTERY STILL CONNECTED AND POWERING VEHICLE
- MILEAGE: 5820
- SIR LAMP CAME ON AND WENT OFF DURING KEY ON POWER UP
- PRESENT: MARIO KENNEDY AND BRIAN QUINN

Data Limitations

Recorded Crash Events:

There are two types of recorded crash events for Front, Side, and Rear (FSR) Events. The first is the Non-Deployment Event. A Non-Deployment Event records data but does not deploy the air bag(s). The minimum SDM Recorded Vehicle Velocity Change, that is needed to record a Non-Deployment Event, is five MPH [8 km/h]. A Non-Deployment Event contains Pre-Crash and Crash data. The oldest Non-Deployment event can be overwritten by a Deployment Event, if all three records are full and the Non-Deployment Event is not locked. Non-Deployment Events can be overwritten after approximately 250 ignition cycles. Also, a Non-Deployment event can be recorded if one of the following occurs without the Deployment of any of the frontal air bags, side air bags, or roll bars:

- Pretensioner(s) only Deployment
- Head Rest Deployment
- Battery Cut-Off Deployment

The second type of SDM recorded crash event for FSR Events is the Deployment Event. It also contains Pre-Crash and Crash data. Deployment Events cannot be overwritten or cleared by the SDM.

There are also two types of recorded crash events for Rollover Events. The first is the Non-Deployment (Non-rollover) Event. A Non-Deployment Event records data but does not deploy the air bag(s). A Non-Deployment Event contains Pre-Crash and Crash data. Non-Deployment Rollover event follow the same rules as FSR Non-Deployment events.

The SDM can store up to three Events.

Data:

For FSR Events, SDM Recorded Vehicle Velocity Change reflects the change in velocity that the sensing system experienced during the recorded portion of the event. SDM Recorded Vehicle Velocity Change is the change in velocity during the recording time and is not the speed the vehicle was traveling before the event, and is also not the Barrier Equivalent Velocity. For Deployment and Non-Deployment Events, the SDM will record 300 milliseconds of data after time zero. The SDM will also record 300 milliseconds of Vehicle Acceleration data after time zero.

For Rollover Events, the SDM may record Lateral Acceleration, Vertical Acceleration, and Roll Rate data, if the SDM is rollover capable. This data reflects what the sensing system experienced during the recorded portion of the event. For Non-Deployment (Non-rollover) Events, the SDM will record 1 second of data before a calibrated angle threshold is reached. For Rollover Deployment Events, the SDM will record up to 700 milliseconds of data before the Deployment criteria is met and 290 milliseconds after the Deployment criteria is met.

-Deployment loops may be displayed as being deployed in a Non-Deployment event record, if a Deployment event is qualified during the Non-Deployment event. That is, if two or more events are occurring at the same time and one is a Non-Deployment event and one of the others is a Deployment event, and the Deployment event is qualified while the Non-Deployment is still active, the deployed loops may be recorded in the Non-Deployment event record.

-Deployment loops can only be deployed once per module power cycle.

-Time between events is recorded in 10 msec intervals and is displayed in seconds for a maximum time of 655.33 seconds. The counter measures the time from the start of one event to the start of the next event if both events occur within the same ignition cycle.

- The Maximum SDM Recorded Vehicle Velocity Change may occur between the recorded 10 millisecond sample points of the SDM Recorded Vehicle Velocity Change.
- Event Recording Complete will indicate if data from the recorded event has been fully written to the SDM memory or if it has been interrupted and not fully written.
- SDM Recorded Vehicle Speed accuracy can be affected by various factors, including but not limited to the following:
 - Significant changes in the tire's rolling radius
 - Final drive axle ratio changes
 - Wheel lockup and wheel slip
- Brake Switch Circuit Status indicates the open/closed state of the brake switch circuit.
- Pre-Crash data is recorded asynchronously. The 0.5 second Pre-crash data value (most recent recorded data point) is the data point last sampled before Time Zero. That is to say, the last data point may have been captured just before Time Zero but no more than 0.5 second before Time Zero. All subsequent Pre-crash data values are referenced from this data point.
- Pre-Crash Electronic Data Validity Check Status indicates "Data Invalid" if:
 - The SDM receives a message with an "invalid" flag from the module sending the pre-crash data
- Pre-Crash Electronic Data Validity Check Status indicates "Data Not Available" if:
 - No data is received from the module sending the pre-crash data
- Belt Switch Circuit Status indicates the status of the seat belt switch circuit.
- The ignition cycle counter will increment when the power mode cycles from OFF/Accessory to RUN. Applying and removing of battery power to the module will not increment the ignition cycle counter.
- Ignition Cycles Since DTCs Were Last Cleared can record a maximum value of 253 cycles and can only be reset by a scan tool.
- Deployment Event Counter tracks the number of Deployment events that have occurred during the SDM's lifetime.
- Event Counter tracks the number of qualified events (either Deployments, Non-deploy, or Rollover events) that have occurred during the SDM's lifetime.
- The Time Zero to Deployment Command Criteria Met times for the following will be indicated for whichever occurs first:
 - Driver Thorax or Driver Curtain
 - Passenger Thorax or Passenger Curtain
 - Driver Pretensioner Loop #1 or Driver Pretensioner Loop #2
 - Passenger Pretensioner Loop #1 or Passenger Pretensioner Loop #2
- For Deployment Events, DTC B0052 (Deployment commanded) shall be recorded with the remainder of the data for this event even though it occurred after Event Enable.
- Once a firing loop has been commanded to be deployed, it will not be commanded to be deployed again during the same ignition cycle. Firing loop times for subsequent deployment type events, during the same ignition cycle, will record the deployment times as N/A.
- The GM parameter name is displayed in parentheses after the NHTSA Part 563 parameter name.
- The reported range of the longitudinal and lateral acceleration values is approximately ± 50 g.
- All data should be examined in conjunction with other available physical evidence from the vehicle and scene.

Data Source:

- All SDM recorded data is measured, calculated, and stored internally, except for the following:
- Vehicle Status Data (Pre-Crash) is transmitted by the Body Control Module, via the vehicle's communication network.
 - The Belt Switch Circuit is wired directly to the SDM.

Data Element Sign Convention:

The following table provides an explanation of the sign notation for data elements that may be included in this CDR report. Directional references to sign notation are all from the perspective of the driver when seated in the vehicle facing the direction of forward vehicle travel.

Data Element	Positive Sign Notation
Longitudinal Acceleration	Forward
Longitudinal Velocity Change	Forward
Lateral Acceleration	Left to Right
Lateral Velocity Change	Left to Right
Vertical Acceleration	Downward
Roll Rate	Clockwise Rotation

Hexadecimal Data:

Data that the vehicle manufacturer has specified for data retrieval is shown in the hexadecimal data section of the CDR

report. The hexadecimal data section of the CDR report may contain data that is not translated by the CDR program. The control module contains additional data that is not retrievable by the CDR tool.

01049_SDM30-autoliv_r006

System Status at Time of Retrieval

Dynamic Deployment Event Counter	0
Multi-Event, Number of Events (Dynamic Event Counter)	0
Dynamic OnStar Notification Event Counter	0
Vehicle Identification Number (VIN)	2G1115SL8E9 [REDACTED]
Ignition Cycle, Download (Ignition Cycles at Investigation)	985
End Model Part Number	00CF5CBC
System Type	N/A
Software Module Identifier 1	00CF5CBD
Software Module Identifier 2	0160EA7E
Software Module Identifier 3	0160EA7F
Manufacturing Traceability Data, Component Identifier	11
Manufacturing Traceability Data, Part Number/Broadcast Code	1332
Manufacturing Traceability Data, Supplier Code	3
Manufacturing Traceability Data, Traceability Number	050400661
ESS # 1 Traceability Data, Component Identifier	AU
ESS # 1 Traceability Data, Part Number/Broadcast Code	6422
ESS # 1 Traceability Data, Supplier Code	E
ESS # 1 Traceability Data, Traceability Number	055B5C4E0
ESS # 2 Traceability Data, Component Identifier	AT
ESS # 2 Traceability Data, Part Number/Broadcast Code	6422
ESS # 2 Traceability Data, Supplier Code	E
ESS # 2 Traceability Data, Traceability Number	044B8C4E0
ESS # 3 Traceability Data, Component Identifier	AH
ESS # 3 Traceability Data, Part Number/Broadcast Code	4470
ESS # 3 Traceability Data, Supplier Code	E
ESS # 3 Traceability Data, Traceability Number	033A43F02
ESS # 4 Traceability Data, Component Identifier	AJ
ESS # 4 Traceability Data, Part Number/Broadcast Code	4470
ESS # 4 Traceability Data, Supplier Code	E
ESS # 4 Traceability Data, Traceability Number	06EC04602
ESS # 5 Traceability Data, Component Identifier	DA
ESS # 5 Traceability Data, Part Number/Broadcast Code	4470
ESS # 5 Traceability Data, Supplier Code	E
ESS # 5 Traceability Data, Traceability Number	030D34602
ESS # 6 Traceability Data, Component Identifier	DB
ESS # 6 Traceability Data, Part Number/Broadcast Code	4470
ESS # 6 Traceability Data, Supplier Code	E
ESS # 6 Traceability Data, Traceability Number	005021C02
ESS # 7 Traceability Data, Component Identifier	00
ESS # 7 Traceability Data, Part Number/Broadcast Code	0000
ESS # 7 Traceability Data, Supplier Code	0
ESS # 7 Traceability Data, Traceability Number	000000000
ESS # 8 Traceability Data, Component Identifier	00
ESS # 8 Traceability Data, Part Number/Broadcast Code	0000
ESS # 8 Traceability Data, Supplier Code	0
ESS # 8 Traceability Data, Traceability Number	000000000

Hexadecimal Data

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1010 FF FF FF FF FF FF FF FF FF FF
1020 FF FF FF FF FF FF FF FF FF FF
1030 FF FF FF FF FF FF FF FF FF FF
1040 FF FF FF FF FF FF FF FF FF FF
1050 FF FF FF FF FF FF FF FF FF FF
1060 FF FF FF FF FF FF FF FF FF FF
1070 FF FF FF FF FF FF FF FF FF FF
1080 FF FF FF FF FF FF FF FF FF FF
1090 FF FF FF FF FF FF FF FF FF FF
1100 FF FF FF FF FF FF FF FF FF FF
1110 FF FF FF FF FF FF FF FF FF FF
1120 FF FF FF FF FF FF FF FF FF FF
1130 FF FF FF FF FF FF FF FF FF FF
1140 FF FF FF FF FF FF FF FF FF FF
1150 FF FF FF FF FF FF FF FF FF FF
1160 FF FF FF FF FF FF FF FF FF FF
1170 FF FF FF FF FF FF FF FF FF FF
1180 FF FF FF FF FF FF FF FF FF FF
1190 FF FF FF FF FF FF FF FF FF FF
1200 FF
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Disclaimer of Liability

The users of the CDR product and reviewers of the CDR reports and exported data shall ensure that data and information supplied is applicable to the vehicle, vehicle's system(s) and the vehicle ECU. Robert Bosch LLC and all its directors, officers, employees and members shall not be liable for damages arising out of or related to incorrect, incomplete or misinterpreted software and/or data. Robert Bosch LLC expressly excludes all liability for incidental, consequential, special or punitive damages arising from or related to the CDR data, CDR software or use thereof.

PE14-010

GM

9/19/2014

ATTACHMENT 1

Q 03

Work Order Detail
for Equipment **5SL8E9**

Work Order: 130192-2013-55468			Status: CLOSED
Dept: FLEET - FLEET		Warranty: NO	
Asset No: 013985792767	Opened By: 175772	Date In: 12-20-2013 10:42 AM	
License: [REDACTED]	Current Equip Status:	Date Due: 12-20-2013 12:42 PM	
Job Type: REPAIR	Account:	Opened: 12-20-2013 10:42 AM	
Meter 1: 3.00	Reference WO:	Finished: 12-21-2013 8:38 AM	
Meter 2: 0.00	Estimated Hours: 0.30	Closed: 12-22-2013 6:41 PM	
Shop Hrs: 12.30	User Hours: 55.98	Warranty Expire: 1-1-2020	
Serial No: 2G1115SL8E9	Equipment Type: 2014-C-NI1R		
Priority: B - B	Accident:		
Incident:	Project:		

Service Request Tasks		
Service Request: 5SL8E9217551-2941527		
Symptom: STANDARD JOBS - STANDARD JOBS		
Comments:		
Cause: PDI - PRE DELIVERY INSPECTION		
Correction: PERFORMED PRE DELIVERY INSPECTION SERVICE PER MANUFACTURERS GUIDELINES		
Task: (018-1) Pre Delivery Inspection	Warranty: NO	
WAC:	Reason:	
Work Class:	Comments:	
Labor		Labor Hrs Cost
Emp: (175772) Miguel Soto		0.05 2.37

PM Checklist	
Task / Comment	Employee
018-1	
(PDI001) INSP OIL, OIL FILTER, AIR FILTER, BELTS, HOSES	(175772) MIGUEL SOTO
(PDI002) CK STARTING PARK/NEUTRAL, TIRE PRESSURE	(175772) MIGUEL SOTO
(PDI003) CK FLUID: TRANSM, P/S, BRKES, RAD/COOLNT, BTTRY, W/S WSHR	(175772) MIGUEL SOTO
(PDI004) CK SPECS FROM WINDOW STICKER VS. EQUIPMNT ON CAR	(175772) MIGUEL SOTO
(PDI005) CK: IG KEY WARN, SIDE VW MIRR, SEAT BELTS/WARN, AIR BAG WARN	(175772) MIGUEL SOTO
(PDI006) CK: DOOR-TRUNK-GLOVE COMP LOCKS, KNOBS, CIG LGHTR (IF APPL)	(175772) MIGUEL SOTO
(PDI007) CK: HORN, A/C, RADIO/CLOCK, HEATER/DEF, W/S WPRS, TRIP ODOM	(175772) MIGUEL SOTO
(PDI008) CK HDLGHTS, TURN SIG, HAZ LGHTS, DASH/INT LGHTS, SEAT ADJSTR	(175772) MIGUEL SOTO
(PDI009) CK REAR VW MIRR, SEAT BACK LTCH UP, IGN COL LCK, BRAKES-PRKG	(175772) MIGUEL SOTO
(PDI010) CK EMSSNS CNTRL SYS, GAS CAP, WEATHER STRP/MLDG/EMBLEMS	(175772) MIGUEL SOTO
(PDI011) RD TST DVBLTY-SQKS-RATTLES-BRAKES+PRKG BRAKE-BELT NOISE	(175772) MIGUEL SOTO
(PDI012) RD TST THROTTLE/IDLE RTN, STEERING CNTRL, TRNSMSSN PERFMNCE	(175772) MIGUEL SOTO

Work Order Detail

Work Order: 130192-2013-55468

Comments:	Internal Parts Cost:	
	Internal Labor Cost:	\$2.37
	Commercial Parts Cost:	
	Commercial Labor Cost:	
	Commercial Misc Cost:	
	Commercial Markup:	
	Overhead Costs:	\$0.00
	Sub Total:	\$2.37
Commercial Total:	\$0.00	
Work Order Total:	\$2.37	

Date: 2/3/2014 02:39 PM
 Estimate ID: H909064-1398-5792767
 Estimate Version: 0
 Preliminary
 Profile ID: * DTG DOMESTIC

DTG OPERATIONS

MIAMI 3670 NW SOUTH RIVER DRIVE, MIAMI, FL 33144
 (305) 894-5032
 Fax: (305) 894-5070
 Email: rafael.gonzales@dtg.com

Gaby Taint

Damage Assessed By: RAFAEL GONZALES

Vend Date: _____

Due Date: _____

Return Date: _____

Estimate Type: Repair
 Date of Est: 1/20/2014
 Deductible: UNKNOWN
 PO #: JH410020

Unit #: H909064-1398-5792767

Webdocs #: H909064

Mitchell Service: 911598

Description: 2014 Chevrolet Impala LT
 Body Style: 4D Sed
 VIN: 2G1115SL8E9
 Mileage: 1,850
 OEM/ALT: A
 Color: GREY

Drive Train: 2.5L Inj 4 Cyl 6A FWD
 License: [REDACTED]

Search Code: N/A

Options: PASSENGER AIRBAG, DRIVER AIRBAG, POWER DRIVER SEAT, POWER LOCKS, POWER WINDOW
 REAR WINDOW DEFOGGER, CRUISE CONTROL, TILT STEERING COLUMN
 TELESCOPIC STEERING COLUMN, ANTI-LOCK BRAKE SYS., TRACTION CONTROL
 ALUM/ALLOY WHEELS, AUXILIARY INPUT, SATELLITE RADIO, TINTED GLASS
 AUTO AIR CONDITION, TRIP COMPUTER, TELEMATIC SYSTEMS, VARIABLE ASSISTED STEERING
 SIDE AIRBAGS, ANTI-THEFT SYSTEM, AUTOMATIC HEADLIGHTS, SECOND ROW SIDE AIRBAG
 SIDE HEAD CURTAIN AIRBAGS, VEHICLE THEFT TRACKING/NOTIFICATION
 DAYTIME RUNNING LIGHTS, AM/FM STEREO CD/MP3 PLAYER, ELECTRONIC STABILITY CONTROL
 FRONT BUCKET SEATS, FRONT SEATS WITH POWER LUMBAR SUPPORT, INTERIOR AIR FILTER
 KEYLESS ENTRY SYSTEM, POWER DISC BRAKES, POWER LIFTGATE/TRUNK
 STEERING WHEEL AUDIO CONTROLS

Line Item	Entry Number	Labor Type	Operation	Line Item Description	Part Type/ Part Number	Dollar Amount	Labor Units
<u>Front Bumper</u>							
	100178	BDY	REMOVE/INSTALL	Frnt Bumper Cover			1.5 #
	100351	BDY	REPAIR	Frnt Bumper Cover	Existing		3.0*#
		REF	REFINISH/REPAIR	Frnt Bumper Cover			C 1.4*
MODIFIED REFINISH WITH FULL CLEAR COAT							
<u>Front Lamps</u>							
	100471	BDY	REMOVE/REPLACE	L Front Combination Lamp Assembly	3111943 GM PART	568.07	0.3 #
		BDY	CHECK/ADJUST	Headlamps			0.4
<u>Front Fender</u>							

ESTIMATE RECALL NUMBER: 01/20/2014 10:09:31 H909064-1398-5792767

Mitchell Data Version: OEM: DEC_13_V

MAPP: DEC_13_V

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Page 1 of 3

Software Version: 7.1.162

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Date: 2/3/2014 02:39 PM
 Estimate ID: H909064-1398-5792767
 Estimate Version: 0
 Preliminary
 Profile ID: * DTG DOMESTIC

100441	BDY	REPAIR	L Fender Panel	Existing	2.0*#
	REF	REFINISH	L Fender Outside		C 2.1
			<u>Front Door</u>		
101433	REF	BLEND	L Frt Door Outside		1.0*
			<u>ADDITIONAL OPERATIONS</u>		
0	REF	ADD'L OPR	Clear Coat		1.5
			<u>MANUAL ENTRIES</u>		
1	900500	BDY*	APPRAISAL FEE	Sublet	35.00 * 0.0*
			<u>Additional Costs & Materials</u>		
2		ADD'L COST	Paint/Materials		84.00 *
3		ADD'L COST	Hazardous Waste Disposal		5.00 *

* - Judgment Item
 # - Labor Note Applies
 C - Included in Clear Coat Calc

Estimate Totals

Labor Subtotals	Units	Rate	Add'l Labor Amount	Sublet Amount	Totals	II. Part Replacement Summary	Amount	
Body	7.2	19.00	0.00	35.00	171.80 T	Taxable Parts	568.07	
Refinish	6.0	19.00	0.00	0.00	114.00 T	Parts Adjustments	132.93-	
					Taxable Labor	285.80	Total Replacement Parts Amount	435.14
Labor Summary	13.2				285.80			
Additional Costs					<u>Amount</u>	IV. Adjustments	<u>Amount</u>	
Taxable Costs					89.00	Customer Responsibility	0.00	
Total Additional Costs					89.00			
 Paint Material Method: Rates Init Rate = 14.00 , Init Max Hours = 99.9, Addl Rate = 0.00								
						I. Total Labor:	285.80	
						II. Total Replacement Parts:	435.14	
						III. Total Additional Costs:	89.00	
						Gross Total:	809.94	
						IV. Total Adjustments:	0.00	
						Net Total:	809.94	

This is a preliminary estimate.
Additional changes to the estimate may be required for the actual repair.

ESTIMATE RECALL NUMBER: 01/20/2014 10:09:31 H909064-1398-5792767

Mitchell Data Version: OEM: DEC_13_V

MAPP:DEC_13_V

Software Version:

7.1.162

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Date: 2/ 3/2014 02:39 PM
Estimate ID: H909064-1398-5792767
Estimate Version: 0
Preliminary
Profile ID: " DTG DOMESTIC

Point(s) of Impact

11 Left Front Corner (P)

RA #: _____

Vended by Signature: _____

Inspected by Signature: _____

Approved for Pymt by Sig: _____

ESTIMATE RECALL NUMBER: 01/20/2014 10:09:31 H909064-1398-5792767

Mitchell Data Version: OEM: DEC_13_V

MAPP:DEC_13_V

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Software Version: 7.1.162

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Handwritten initials

Estimate # H909064031214

Date: 3/12/2014 09:15 AM
Estimate ID: H909064-1398-5792767
Estimate Version: 0
Preliminary
Profile ID: DTG DOMESTIC

DTG OPERATIONS

MIAMI 3670 NW SOUTH RIVER DRIVE, MIAMI, FL 33142
(305) 894-5032
Fax: (305) 894-5070
Email: rafael.gonzales@dtg.com

MIC

Damage Assessed By: RAFAEL GONZALES

Vend Date: 03/12/14

Due Date: 03/18/14

Return Date: _____

Keystone
Estimate # 26883016166 H909064

Estimate Type: Repair
Date of Est: 3/12/2014
Deductible: UNKNOWN
PO #: JF335257

Unit #: H909064-1398-5792767

Webdocs #: H909064

Mitchell Service: 911598

Description: 2014 Chevrolet Impala LT
Body Style: 4D Sed
VIN: 2G1115SL8E
Mileage: 4,081
OEM/ALT: A
Color: GREY

Drive Train: FWD Inj 4 Cy 6A FWD
License: _____

Search Code: MIA

Options: PASSENGER AIRBAG, DRIVER AIRBAG, POWER DRIVER SEAT, POWER LOCKS, POWER WINDOW REAR WINDOW DEFOGGER, CRUISE CONTROL, TILT STEERING COLUMN TELESCOPIC STEERING COLUMN, ANTI-LOCK BRAKE SYS., TRACTION CONTROL ALUM/ALLOY WHEELS, AUXILIARY INPUT, SATELLITE RADIO, TINTED GLASS AUTO AIR CONDITION, TRIP COMPUTER, TELEMATIC SYSTEMS, VARIABLE ASSISTED STEERING SIDE AIRBAGS, ANTI-THEFT SYSTEM, AUTOMATIC HEADLIGHTS, SECOND ROW SIDE AIRBAG SIDE HEAD CURTAIN AIRBAGS, VEHICLE THEFT TRACKING/NOTIFICATION DAYTIME RUNNING LIGHTS, AM/FM STEREO CD/MP3 PLAYER, ELECTRONIC STABILITY CONTROL FRONT BUCKET SEATS, FRONT SEATS WITH POWER LUMBAR SUPPORT, INTERIOR AIR FILTER KEYLESS ENTRY SYSTEM, POWER DISC BRAKES, POWER LIFTGATE/TRUNK STEERING WHEEL AUDIO CONTROLS

Line Item	Entry Number	Labor Type	Operation	Line Item Description	Part Type/Part Number	Dollar Amount	Labor Units
<u>Rear Door</u>							
1	101442	REF	BLEND	L Rear Door Outside			1.0*
<u>Side Body</u>							
2	101808	REF	REFINISH	L Quarter Panel Outside			C 2.1
3	100928	BDY	REPAIR	L Side Body Panel Assembly	Existing		5.0*#
<u>Rear Lamps</u>							
4	101659	BDY	REMOVE/REPLACE	L Rear Combination Lamp Assembly	2964657 GM PART	195.00	0.3 #
5		BDY	REMOVE/INSTALL	Rear Bumper Cover			INC #
<u>Rear Bumper</u>							

ESTIMATE RECALL NUMBER: 03/12/2014 09:11:45 H909064-1398-5792767

Mitchell Data Version: OEM: FEB_14_V
MAP: FEB_14_V

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Software Version: 7.1.163

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1065270

Date: 3/12/2014 09:15 AM
 Estimate ID: H909064-1398-5792767
 Estimate Version: 0
 Preliminary
 Profile ID: DTG DOMESTIC

3	BDY	OVERHAUL	Rear Bumper Cover Assy							
* 101734	BDY	REMOVE/REPLACE	Rear Bumper Cover		22934635	GM PART	451.68	INC #	1.9 #	
3	REF	REFINISH	Rear Bumper Cover					C 3.2		
<u>ADDITIONAL OPERATIONS</u>										
1	REF	ADD'L OPR	Clear Coat						1.5	
<u>MANUAL ENTRIES</u>										
0	900500	BDY *	ADD'L LABOR OP	TOW	Sublet		687.50	*	0.0*	
<u>Additional Costs & Materials</u>										
1		ADD'L COST	Paint/Materials				109.20	*		
2		ADD'L COST	Hazardous Waste Disposal				5.00	*		

* - Judgment Item
 # - Labor Note Applies
 C - Included in Clear Coat Calc

Estimate Totals

Labor Subtotals	Units	Rate	Add'l Labor Amount	Sublet Amount	Totals	II. Part Replacement Summary	Amount	
Body	7.2	19.00	0.00	687.50	824.30 T	Taxable Parts	646.68	
Refinish	7.8	19.00	0.00	0.00	148.20 T	Parts Adjustments	247.03	
					Taxable Labor	972.50	Total Replacement Parts Amount	399.65
Labor Summary	15.0				972.50			
					Amount	IV. Adjustments	Amount	
Additional Costs					Taxable Costs	114.20	Customer Responsibility	0.00
Total Additional Costs					114.20			
Paint Material Method: Rates Init Rate = 14.00 , Init Max Hours = 99.9, Addl Rate = 0.00								
						I. Total Labor:	972.50	
						II. Total Replacement Parts:	399.65	
						III. Total Additional Costs:	114.20	
						Gross Total:	1,486.35	
						IV. Total Adjustments:	0.00	
						Net Total:	1,486.35	

This is a preliminary estimate.
Additional changes to the estimate may be required for the actual repair.

Point(s) of Impact

* Left Rear Corner (P)

ESTIMATE RECALL NUMBER: 03/12/2014 09:11:45 H909064-1398-5792767

Mitchell Data Version: OEM: FEB_14_V

MAPP: FEB_14_V

Software Version:

7.1.163

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Date: 3/12/2014 09:15 AM
Estimate ID: H909064-1398-5792767
Estimate Version: 0
Preliminary
Profile ID: DTG DOMESTIC

RA #: _____

Vended by Signature: _____

Inspected by Signature: _____

Approved for Pymt by Sig: _____

ESTIMATE RECALL NUMBER: 03/12/2014 09:11:45 H909064-1398-5792767

Mitchell Data Version: OEM: FEB_14_V

MAPP:FEB_14_V

Software Version:

7.1.163

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VEHICLE MOVEMENT - Search Results

Version ID: ASAP-2.24.0 Login Location: FLORL16

Sat Apr 26 11:50:19 CDT 2014, by The Hertz Corporation

Logon/Logoff	Owning Area/Veh #	01398	5792767	Serial #	2G1115SL8E9	License/State	TN	
#1 Club Update								
Admin								
ASAP Reports	Vehicle	Model	Dates			Turnback		
City Message	Fleet Class/Type	F A	Description	SIR IMPALA 5P2	Delivery	12/09/13	Change Of Asset	TB Date Cap
Local Info	Vehicle Class	F	Code/Year	NI1R 14	In Service	12/13/13	Override	No Retail/TB
Refueling Rates	Depreciation	A	NL N SR Y HOD N	Car Control Add	12/15/13	Eligible	Sale/Trans	
RR Print	Vision	Y	Zibox Model	Days In Service	134	Max Mileage	0	Sale Doc 915 0
Security	SPI Code	4GAS5	Prestige	Days Remaining	231	Miles to Penalty	13196	
Sig Capture History	Color Desc	GRA=GRAY	Fleet Comments	URGENT - SEND TO	Misc Comments	MAINT ASAP		

Maintenance

PM Mileage 0 Fleet Message S STOP SAFETY

Vehicle Document Listings

Select Vehicle Item #

Item #	Document #	Checkout		Checkin Area Loc	Checkin Date	Mileage Out	Mileage In	Doc		Reporting Codes			
		Area Loc	Date					Type	St	Op	St	MM	CI
1	00305454	01301-015	01/20/2014	B 01397-163	01/20/2014	1850	1850	T	C	BD			
2	MIA93530	00572-013	01/19/2014	01397-001	01/19/2014	1850	1854	S	C	RT			
3	0092208104	01397-001	01/19/2014	01397-001	01/19/2014			I	C	BD			
4	H90906300	00571-014	01/19/2014	00571-014	01/19/2014	2583	2583	I	C	BD			
5	MIA93516	00572-013	01/18/2014	00572-013	01/19/2014	1850	1860	T	C	RT			
6	JH4100202	00772-014	01/13/2014	00772-014	01/18/2014	1712	1850	R	C	RT			
7	SX0252836	00684-038	12/29/2013	00572-013	01/13/2014	750	1712	R	C	RT			
8	JH4064815	00772-014	12/22/2013	00772-014	12/29/2013	6	750	R	C	RT			
9	H909063640	00684-038	12/21/2013	00684-038	12/21/2013	750	750	I	C	RT			
10	575596000	01301-015	12/21/2013	01301-015	12/21/2013	5	5	R	V	RT			
11	MIA93066	00572-013	12/21/2013	* 00572-013	12/26/2013	6		T	O	RT			

No Further Information Available

AC4-7024

F1	F2	F3	F4 Clear Screen	F5 Next Page	F6 Previous	F7 Display Doc	F8 Display Vehicle
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VEHICLE MOVEMENT - Search Results

Version ID: ASAP-2.74.0 Login Location: FLORL16

Sat Apr 26 11:50:46 CDT 2014, by The Hertz Corporation

Logon/Logoff Owing Area/Veh # 01398 5792767 Serial # 2G1115SL8E9 License/State TN

Admin	Vehicle	Model	Dates	Turnback
ASAP Reports	Fleet Class/Type F A	Description SIR IMPALA 5P2	Delivery 12/09/13	Change Of Asset TB Date Cap
City Message	Vehicle Class F	Code/Year NI1R 14	In Service 12/13/13	Override No Retail/TB
Local Info	Depreciation A	NL N SR Y HOD N	Car Control Add 12/15/13	Eligible Sale/Trans
Refueling Rates	Vision Y	Zibox Model	Days In Service 134	Max Mileage 0 Sale Doc 915 0
RR Print	SPI Code 4GAS5	Prestige	Days Remaining 231	Miles to Penalty 13196
Security	Color Desc GRA=GRAY	Fleet Comments	URGENT - SEND TO	Misc Comments MAINT ASAP

Maintenance
 PM Mileage 0 Fleet Message S STOP SAFETY

Vehicle Document Listings Select Vehicle Item #

Item #	Document #	Area Loc	Checkout Date	Area Loc	Checkin Date (*)=Due	Mileage Out	Mileage In	Doc Type	St	Op St	Reporting Codes MM	CI	MU
1	SH6440593	00571-014	02/28/2014	00571-014	03/04/2014	3833	4081	R	C	RT			
2	SH6323704	00571-014	02/01/2014	00571-014	02/28/2014	2683	3833	R	C	RT			
3	SH6308853	00571-014	01/29/2014	00571-014	02/01/2014	2583	2683	R	C	RT			
4	JF3748544	00771-023	01/27/2014	00771-023	01/29/2014	1889	2583	R	C	RT			
5	SD0990323	00572-013	01/26/2014	00571-014	01/26/2014	1872	1889	R	C	RT			
6	588909602	01301-015	01/22/2014	01301-015	01/22/2014	6	6	R	V	RT			
7	SD0974396	00572-013	01/22/2014	00572-013	01/26/2014	1854	1872	R	C	RT			
8	0022036210	01301-015	01/22/2014	00572-013	01/22/2014	6	6	S	C	RT			
9	0022137986	01397-001	01/22/2014	01301-015	01/22/2014	9999	9999	S	C	RT			
10	0021235362	01397-001	01/22/2014	01397-001	01/22/2014			I	C	MM			
11	0020719090	01397-163	01/22/2014	B 01397-163	01/22/2014			I	C	BD			

Transaction completed

AC4-7027

F1	F2	F3	F4 Clear Screen	F5 Next Page	F6 Previous	F7 Display Doc	F8 Display Vehicle
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VEHICLE MOVEMENT - Search Results

Version ID: ASAP-2.24.0 Login Location: FLORL16

Sat Apr 26 11:50:59 CDT 2014, by The Hertz Corporation

Logon/Logoff	Owning Area/Veh #	01398	5792767	Serial #	2G1115SL8E9	License/State	██████	TN
#1 Club Update								
Admin	Vehicle	Model	Dates			Turnback		
ASAP Reports	Fleet Class/Type	F A	Description	SIR IMPALA 5P2	Delivery	12/09/13	Change Of Asset	TB Date Cap
City Message	Vehicle Class	F	Code/Year	NI1R 14	In Service	12/13/13	Override	No Retail/TB
Local Info	Depreciation	A	NL N SR Y	HOD N	Car Control Add	12/15/13	Eligible	Sale/Trans
Refueling Rates	Vision	Y	Zibox Model		Days In Service	134	Max Mileage	0 Sale Doc 915 0
RR Print	SPI Code	4GAS5	Prestige		Days Remaining	231	Miles to Penalty	13196
Security	Color Desc	GRA=GRAY	Fleet Comments	URGENT - SEND TO	Misc Comments		MAINT ASAP	

Maintenance

PM Mileage	0	Fleet Message	S	STOP SAFETY
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Vehicle Document Listings

Select Vehicle Item #

Item #	Document #	Checkout		Checkin (*)=Due		Mileage		Doc			Reporting Codes		
		Area Loc	Date	Area Loc	Date	Out	In	Type	St	Op St	MM	CI	MU
1	113156105	01324-016	03/27/2014	01324-016	03/30/2014	5025	5442	R	C	RT			
2	H90906861	01397-001	03/27/2014	01397-001	03/27/2014	4081	4081	T	C	RT			
3	110911732	01324-016	03/24/2014	01324-016	03/27/2014	4931	5025	R	C	RT			
4	108388711	01301-015	03/19/2014	01324-016	03/24/2014	4284	4931	R	C	RT			
5	08638210	01397-150	03/19/2014	B 01397-150	03/19/2014	4279	4279	I	C	BD			
6	0090756293	01301-015	03/19/2014	01301-015	03/19/2014			I	C	RT			
7	0081934941	01397-001	03/18/2014	01301-015	03/18/2014	4282	4282	S	C	RT			
8	0081939900	01301-015	03/18/2014	01301-015	03/18/2014			I	C	TC			
9	00308195	01397-001	03/12/2014	B 01397-150	03/12/2014	4081	4081	T	C	BD			
10	0020508563	01397-001	03/11/2014	01397-001	03/11/2014			I	C	MM			
11	JF3852575	00771-023	03/06/2014	00772-014	03/11/2014	4081	4359	R	C	RT			

Transaction completed

AC4-7027

F1	F2	F3	F4 Clear Screen	F5 Next Page	F6 Previous	F7 Display Doc	F8 Display Vehicle
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Version ID: ASAP-2.24.0 Login Location: FLORL16

VEHICLE MOVEMENT - Search Results

Sat Apr 26 11:51:13 CDT 2014, by The Hertz Corporation

- Logon/Logoff
- #1 Club Update
- Admin
- ASAP Reports
- City Message
- Local Info
- Refueling Rates
- RR Print
- Security
- Slq Capture History
- Tiered LDW
- Upsell
- Vehicle Movement
- Car Control
- Counter Functions
- Gold Service
- Information Search
- Inventory Mgmt
- Lost And Found
- Rental Management
- Res Processing
- Res/Rental Research
- Central Site

Owning Area/Veh #	01398	5792767	Serial #	2G1115SL8E9	License/State	TN		
Vehicle								
Fleet Class/Type	F	A	Description	SIR IMPALA SP2	Delivery	12/09/13	Change Of Asset	TB Date Cap
Vehicle Class	F		Code/Year	NI1R 14	In Service	12/13/13	Override	No Retail/TB
Depreciation	A		NL N SR Y HOD	N	Car Control Add	12/15/13	Eligible	Sale/Trans
Vision	Y		Zibox Model		Days In Service	134	Max Mileage	0
SPI Code	4GAS5		Prestige		Days Remaining	231	Miles to Penalty	13196
Color Desc	GRA=GRAY		Fleet Comments	URGENT - SEND TO	Misc Comments			MAINT ASAP
Maintenance								
PM Mileage	0		Fleet Message	S	STOP SAFETY			

Vehicle Document Listings											Select Vehicle Item #
Item #	Document #	Area Loc	Checkout Date	Checkin (*)=Due Area Loc	Date	Mileage Out	In	Doc Type	St	Op St	Reporting Codes MM CI MU
1			04/25/2014								
2	0041324743	01398-004	04/24/2014	01324-016	04/24/2014	5803	5804	S	C	RT	
3			04/23/2014								
4	0072032951	01398-004	04/17/2014	01398-004	04/17/2014			I	C	HA	
5	0042114240	01398-004	04/14/2014	01398-004	04/14/2014			I	C	HA	
6	0091739093	01398-004	04/09/2014	01398-004	04/09/2014			I	C	HA	
7	0072059654	01398-004	04/07/2014	01398-004	04/07/2014			I	C	MM	
8	0072063994	01324-016	04/07/2014	01398-004	04/07/2014	5799	5800	S	C	MM	
9			04/07/2014								
10	114494332	01324-016	03/30/2014	01324-016	04/07/2014	5433	5798	R	C	RT	
11	H90906871	01397-001	03/28/2014	01397-001	03/28/2014	4359	4359	T	C	RT	

Transaction completed

F1	F2	F3	F4 Clear Screen	F5 Next Page	F6 Previous	F7 Display Doc	F8 Display Vehicle
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AC4-7027

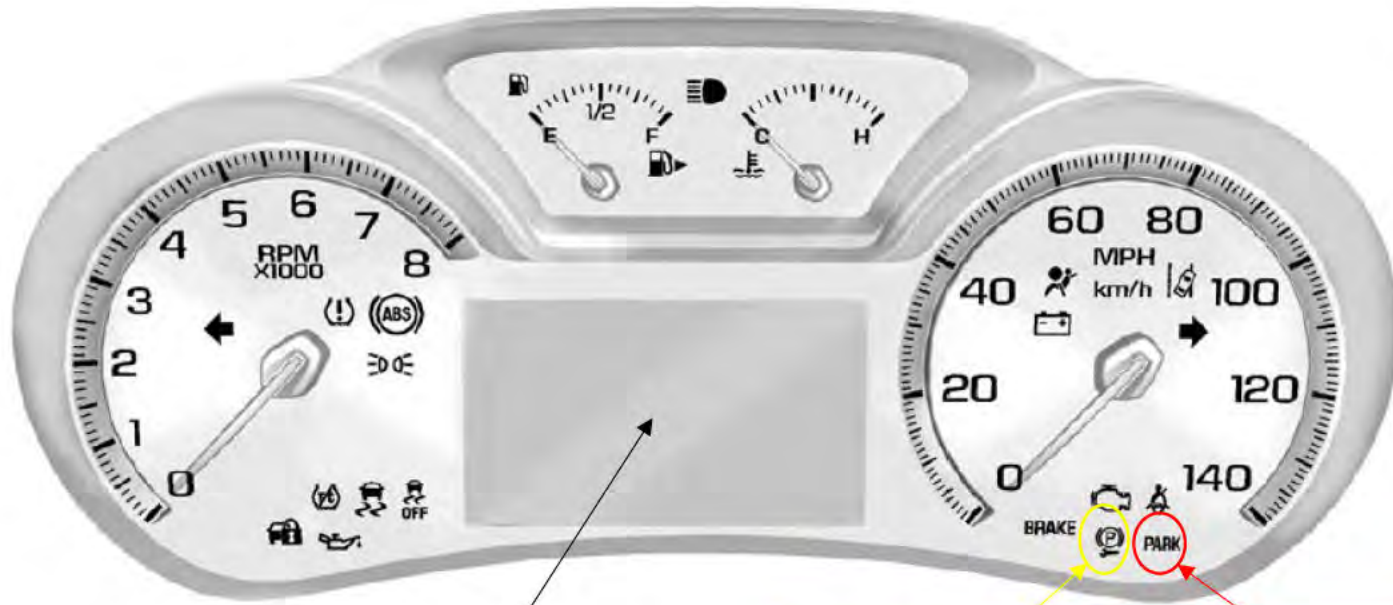
PE14-010

GM

9/19/2014

ATTACHMENT 1

Q 06



DIC: Driver Information Center

Service Parking Brake Telltale

Park Brake Engaged Telltale

RELEASE PARK BRAKE
This message is displayed when park brake switch is applied and held at vehicle speeds greater than 5kph

Brake System Messages

BRAKE FLUID LOW

This message is displayed when the brake fluid level is low. See *Brake Fluid* on page 10-26.

PARK BRAKE RELEASED

This message is displayed when the parking brake is released.

PARK BRAKE SET

This message is displayed when the parking brake is set.

RELEASE PARKING BRAKE

This message is displayed if the Electric Parking Brake is on while the vehicle is in motion. See *Parking Brake* on page 9-31.

SERVICE BRAKE ASSIST

This message may be displayed when there is a problem with the brake boost assist system. When this message is displayed, the brake boost assist motor might be heard operating and you might notice

pulsation in the brake pedal. This is normal under these conditions. Take the vehicle to your dealer for service.

SERVICE PARKING BRAKE

This message is displayed when there is a problem with the parking brake. Take the vehicle to your dealer for service.

STEP ON BRAKE TO RELEASE PARK BRAKE

This message is displayed if you attempt to release the Electric Parking Brake without the brake pedal applied. See *Parking Brake* on page 9-31.

Compass Messages

Dashes may be displayed if the vehicle temporarily loses communication with the Global Positioning System (GPS).

PE14-010

GM

9/19/2014

ATTACHMENT 1

Q 07

Electronic Park Brake Drag



2013-2015 MY Cadillac XTS & 2014-2015 MY Chevrolet Impala

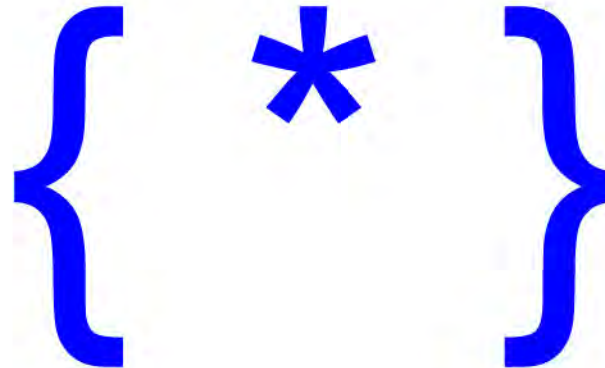
175,990 Globally / 136,790 – GMNA

{ ** }

GFPE: N-140471

Condition: The electronic park brake controlled piston actuation arm that applies pressure to the back of the brake pads may not fully retract and cause the brake pads to stay partially engaged with the rotor.

Effect of the Condition: The customer may experience brake drag causing the vehicle not to move when trying to accelerate, poor vehicle acceleration or undesired deceleration during an idle coast down. Brake drag could result in excessive heat and premature wear to some brake components over time. In cases of a significant amount of drag and extended driving there is a potential for the rear brakes to generate smoke and/or sparks. Vehicles fail to conform to Federal Motor Vehicle Safety Standard 135 if the park brake indicator does not illuminate while the park brake is engaged.



Electronic Park Brake Drag

Discovery: NHTSA opened a Preliminary Evaluation PE14-010 to investigate allegations of inappropriate autonomous braking while driving on the 2014 Chevrolet Impala on 17APR14. Review of the warranty data pulled on 23APR14 showed an issue related to park brake drag on those vehicles. A PIE was issued to the dealers on 20MAY14 to contact Engineering if a vehicle experiencing brake drag was brought in. The issued was root caused based on this evaluation. An updated version of the software to help correct the issue was released on 28JUL14.

The XTS and Impala share the same electronic park brake system.

Current Status : EWO has been approved with updated software for the electronic park brake (EWO# 2080346). There is no established breakpoint as of yet.

Immediate Improvement /Containment: The software update is now available and engineering is working on a plan to implement the change under TWO# 2110429 and 2121007 . The updated software was available for service on 28JUL14.

{ * }

Electronic Park Brake Drag

Population: As of 22AUG14 (Built 14FEB12 – CURRENT)

Veh Country Best Estimate	Model Year	Build Country	Plant	Make	Model	Nbr Produced	Sold	Stock	Fleet	Retail	Nbr Company Veh
BAHRAIN	2013	CA	Oshawa #1	Cadillac	XTS	12	9	3	3	9	
BAHRAIN	2014	CA	Oshawa #1	Cadillac	XTS	5	1	4		5	
BAHRAIN	2015	CA	Oshawa #1	Chevrolet	Impala E	7		7		7	
CANADA	2013	CA	Oshawa #1	Cadillac	XTS	938	920	18	38	900	7
CANADA	2014	CA	Oshawa #1	Cadillac	XTS	630	463	167	98	532	13
CANADA	2014	US	Hamtramck	Chevrolet	Impala E	922	712	210	109	813	6
CANADA	2015	CA	Oshawa #1	Cadillac	XTS	27		27		27	7
CANADA	2015	CA	Oshawa #1	Chevrolet	Impala E	179	17	162	3	176	38
CANADA	2015	US	Hamtramck	Chevrolet	Impala E	55	6	49	1	54	5
JORDAN	2013	CA	Oshawa #1	Cadillac	XTS	2	2		2		
KUWAIT	2013	CA	Oshawa #1	Cadillac	XTS	120	96	24	36	84	
KUWAIT	2014	CA	Oshawa #1	Cadillac	XTS	36	11	25		36	
KUWAIT	2015	CA	Oshawa #1	Chevrolet	Impala E	13		13		13	
LEBANON	2013	CA	Oshawa #1	Cadillac	XTS	17	17		2	15	
LEBANON	2015	CA	Oshawa #1	Cadillac	XTS	2		2		2	
OMAN	2013	CA	Oshawa #1	Cadillac	XTS	11	6	5	2	9	
OMAN	2014	CA	Oshawa #1	Cadillac	XTS	9	1	8		9	
QATAR	2013	CA	Oshawa #1	Cadillac	XTS	34	34		12	22	
QATAR	2014	CA	Oshawa #1	Cadillac	XTS	30	21	9		30	
QATAR	2015	CA	Oshawa #1	Chevrolet	Impala E	20		20		20	
SAUDI ARABIA	2013	CA	Oshawa #1	Cadillac	XTS	260	256	4	84	176	
SAUDI ARABIA	2014	CA	Oshawa #1	Cadillac	XTS	107	65	42		107	
SAUDI ARABIA	2015	CA	Oshawa #1	Cadillac	XTS	13		13		13	
SAUDI ARABIA	2015	CA	Oshawa #1	Chevrolet	Impala E	139		139		139	
U. A. E.	2013	CA	Oshawa #1	Cadillac	XTS	117	96	21	40	77	14
U. A. E.	2014	CA	Oshawa #1	Cadillac	XTS	98	44	54	28	70	8
U. A. E.	2015	CA	Oshawa #1	Cadillac	XTS	2		2		2	2
U. A. E.	2015	CA	Oshawa #1	Chevrolet	Impala E	64		64	3	61	

Electronic Park Brake Drag

Population: As of 22AUG14 (Built 14FEB12 – CURRENT)

Veh Country Best Estimate	Model Year	Build Country	Plant	Make	Model	Nbr Produced	Sold	Stock	Fleet	Retail	Nbr Company Veh
UNITED STATES	2013	CA	Oshawa #1	Cadillac	XTS	41,954	41,589	365	2,856	39,098	111
UNITED STATES	2014	CA	Oshawa #1	Cadillac	XTS	28,963	18,569	10,394	4,201	24,762	1,073
UNITED STATES	2014	US	Hamtramck	Chevrolet	Impala E	44,625	35,837	8,788	8,038	36,587	302
UNITED STATES	2015	CA	Oshawa #1	Cadillac	XTS	1,537	295	1,242	660	877	68
UNITED STATES	2015	CA	Oshawa #1	Chevrolet	Impala E	9,639	4,387	5,252	4,133	5,506	179
UNITED STATES	2015	US	Hamtramck	Chevrolet	Impala E	6,203	2,717	3,486	2,483	3,720	169
Grand Total						136,790	106,171	30,619	22,832	113,958	2,002

Electronic Park Brake Drag Chronology

Date	Event
17JUL14	Assigned to Product Investigator (Pete Kalaj)
17JUL14	Reviewed issue with Chassis SMT
28JUL14	Follow-Up with Electrical and Chassis SMT
29JUL14	Received VOQs
31JUL14	Received Warranty Data
31JUL14	Received TREAD Data
14AUG14	Completed warranty and TREAD data review
21AUG14	Reviewed FMVSS 135 and FMVSS 108 status
22AUG14	Received population data
22AUG14	Confirmed no issues to FMVSS 108
25AUG14	Confirmed potential Non-Compliance to FMVSS 135
25AUG14	Review at OIR
27AUG14	Review at SFADA

Electronic Park Brake Drag

Population: State updated date

Veh Country Best Estimate	Model Year	Build Country	Plant	Make	Model	Nbr Produced	Sold	Stock	Fleet	Retail	Nbr Company Veh	Prod Date Min	Prod Date Max	VIN Min	VIN Max
BAHRAIN	2013	CA	Oshawa #1	Cadillac	XTS	12	9	3	3	9		14SEP2012	07MAR2013	2G6185S35D9	2G6185S3XD9
	2014	CA	Oshawa #1	Cadillac	XTS	5	1	4		5		29OCT2013	07DEC2013	2G6185S87E9	2G6185S31E9
	2015	CA	Oshawa #1	Chevrolet	Impala E	7		7		7		17AUG2014	21AUG2014	2G1175S39F9	2G1175S39F9
BAHRAIN - Total						24	10	14	3	21					
CANADA	2013	CA	Oshawa #1	Cadillac	XTS	938	920	18	38	900	7	14FEB2012	14JUN2013	2G61U5S32D9	2G61V5S36D9
	2014	CA	Oshawa #1	Cadillac	XTS	630	463	167	98	532	13	21JUN2013	30MAY2014	2G61N5S3XE	2G61N5S35E9
	2014	US	Hamtramck	Chevrolet	Impala E	922	712	210	109	813	6	13FEB2013	30MAY2014	1G1T15SL3EU	1G1T15S34EU
	2015	CA	Oshawa #1	Cadillac	XTS	27		27		27	7	24APR2014	22AUG2014	2G61P5S34F9	2G61M5S38F9
	2015	CA	Oshawa #1	Chevrolet	Impala E	179	17	162	3	176	38	24MAR2014	21AUG2014	2G1135SN9F9	2G1165S39F9
	2015	US	Hamtramck	Chevrolet	Impala E	55	6	49	1	54	5	02JUN2014	15AUG2014	1G1T25SL8FU	1G1T25S3XFU
CANADA - Total						2,751	2,118	633	249	2,502	76				
JORDAN	2013	CA	Oshawa #1	Cadillac	XTS	2	2		2			31JAN2013	11FEB2013	2G6185S32D9	2G6185S3XD9
JORDAN - Total						2	2		2						

Electronic Park Brake Drag

Population: State updated date

Veh Country Best Estimate	Model Year	Build Country	Plant	Make	Model	Nbr Produced	Sold	Stock	Fleet	Retail	Nbr Company Veh	Prod Date Min	Prod Date Max	VIN Min	VIN Max
KUWAIT	2013	CA	Oshawa #1	Cadillac	XTS	120	96	24	36	84		12SEP2012	14JUN2013	2G6185S36D9	2G6185S31D9
	2014	CA	Oshawa #1	Cadillac	XTS	36	11	25		36		07OCT2013	30JAN2014	2G6185S81E9	2G6185S32E9
	2015	CA	Oshawa #1	Chevrolet	Impala E	13		13		13		17AUG2014	21AUG2014	2GT1175S31F9	2GT1175S31F9
KUWAIT - Total						169	107	62	36	133					
LEBANON	2013	CA	Oshawa #1	Cadillac	XTS	17	17		2	15		12SEP2012	11MAR2013	2G6185S36D9	2G6185S39D9
	2015	CA	Oshawa #1	Cadillac	XTS	2		2		2		01AUG2014	21AUG2014	2G6185S32F9	2G6185S3XF9
LEBANON - Total						19	17	2	2	17					
OMAN	2013	CA	Oshawa #1	Cadillac	XTS	11	6	5	2	9		13FEB2013	11MAR2013	2G6185S39D9	2G6185S39D9
	2014	CA	Oshawa #1	Cadillac	XTS	9	1	8		9		28OCT2013	03FEB2014	2G6185S86E9	2G6185S34E9
OMAN - Total						20	7	13	2	18					
QATAR	2013	CA	Oshawa #1	Cadillac	XTS	34	34		12	22		29AUG2012	01MAR2013	2G6185S30D9	2G6185S36D9
	2014	CA	Oshawa #1	Cadillac	XTS	30	21	9		30		05NOV2013	11NOV2013	2G6185S80E9	2G6185S85E9
	2015	CA	Oshawa #1	Chevrolet	Impala E	20		20		20		01AUG2014	22AUG2014	2G1175S37F9	2G1175S36F9
QATAR - Total						84	55	29	12	72					

Electronic Park Brake Drag

Population: State updated date

Veh Country Best Estimate	Model Year	Build Country	Plant	Make	Model	Nbr Produced	Sold	Stock	Fleet	Retail	Nbr Company Veh	Prod Date Min	Prod Date Max	VIN Min	VIN Max
SAUDI ARABIA	2013	CA	Oshawa #1	Cadillac	XTS	260	256	4	84	176		29AUG2012	30MAY2013	2G6185S37D9	2G6185S39D9
	2014	CA	Oshawa #1	Cadillac	XTS	107	65	42		107		12AUG2013	04FEB2014	2G6185S34E9	2G6185S36E9
	2015	CA	Oshawa #1	Cadillac	XTS	13		13		13		23JUL2014	21AUG2014	2G6185S3XF9	2G6185S81F9
	2015	CA	Oshawa #1	Chevrolet	Impala E	139		139		139		01AUG2014	22AUG2014	2G1175S34F9	2G1175S33F9
SAUDI ARABIA - Total						519	321	198	84	435					
U. A. E.	2013	CA	Oshawa #1	Cadillac	XTS	117	96	21	40	77	14	19MAR2012	12MAR2013	2G6185S34D9	2G6185S33D9
	2014	CA	Oshawa #1	Cadillac	XTS	98	44	54	28	70	8	21MAY2013	26NOV2013	2G6185S3XE9	2G6185S88E9
	2015	CA	Oshawa #1	Cadillac	XTS	2		2		2	2	22MAY2014	12JUN2014	2G6185S36F9	2G6185S83F9
	2015	CA	Oshawa #1	Chevrolet	Impala E	64		64	3	61		18JUN2014	22AUG2014	2G1175S35F9	2G1175S37F9
U. A. E. - Total						281	140	141	71	210	24				

Electronic Park Brake Drag

Population: State updated date

Veh Country Best Estimate	Model Year	Build Country	Plant	Make	Model	Nbr Produced	Sold	Stock	Fleet	Retail	Nbr Company Veh	Prod Date Min	Prod Date Max	VIN Min	VIN Max
UNITED STATES	2013	CA	Oshawa #1	Cadillac	XTS	41,954	41,589	365	2,856	39,098	111	14FEB2012	21JUN2013	2G61N5S38D9	2G61P5S34D9
	2014	CA	Oshawa #1	Cadillac	XTS	28,963	18,569	10,394	4,201	24,762	1,073	12FEB2013	24JUL2014	2G61S5S32E9	2G61P5S38E9
	2014	US	Hamtramck	Chevrolet	Impala E	44,625	35,837	8,788	8,038	36,587	302	15JAN2013	30MAY2014	1G1145SLXE	1G1125S35EU
	2015	CA	Oshawa #1	Cadillac	XTS	1,537	295	1,242	660	877	68	23APR2014	22AUG2014	2G61P5S30F9	2G61S5S37F9
	2015	CA	Oshawa #1	Chevrolet	Impala E	9,639	4,387	5,252	4,133	5,506	179	07MAR2014	22AUG2014	2G1145SR6F9	2G1125S38F9
	2015	US	Hamtramck	Chevrolet	Impala E	6,203	2,717	3,486	2,483	3,720	169	21MAR2014	15AUG2014	1G1115SL7FU	1G1125S34FU
UNITED STATES - Total						132,921	103,394	29,527	22,371	110,550	1,902				
Grand Total						136,790	106,171	30,619	22,832	113,958	2,002				

Electronic Park Brake Drag

Product Investigation Overview

GFPE Number:

N-140471

OIR Date: 08/25/2014

SFADA Date: 08/27/2014

Supplier:

Mando Pyeongtaek

343-1 Manho-ri, Poseung-eup

Pyeongtaek-si, 451 821, South Korea

82.2.6244.2807

Korea

Chronology:

Include in the Base Presentation

Population of Vehicles: Update will be provided by FPE team on the FPE tab.

Electronic Park Brake Drag

GM Technical References

<u>GFPE Number:</u>	N-140471
<u>Product Investigator:</u>	Pete Kalaj
<u>Global Functional Leader:</u>	Gary V Bandurski/Brandon S Vivian
Systems Mgmt Team:	Electrical/Chassis
<u>Design Release Engineer:</u>	Frank J Pichler Jr
<u>BOM Family Owner:</u>	Paul S Shaub/Brian W Quinn
<u>Vehicle Chief Engineer:</u>	Nichole L Dean-Kraatz/Jeffrey A Yanssens
<u>Supplier Quality Engineer:</u>	Seunghyuck Ryu
<u>Asm Plant Quality Manager:</u>	Violet Williams/David G Robinson

Back-up

File Last Revised 8/26/2014
3:00 pm

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Electronic Park Brake Drag

Estimated Cost:

CORPORATE COST ESTIMATE

<u>Total Vehicles Involved</u>		136,790			
<u>Labor</u>		(Avg. Labor Rate = { ** })			
* Inspection Only	0.0	0	Veh. X	{ ** }	P/Veh. = { ** }
* Labor Operations	0.3	136,790	Veh. X	{ ** }	P/Veh. = { ** }
<u>Parts</u>					
{ * }		0	Veh. X	{ ** }	P/Veh. = { ** }
		0	Veh. X	{ ** }	P/Veh. = { ** }
SUBTOTAL - Parts & Labor (@ 100% Completion)					{ ** }
					85.00%
					100%
SUBTOTAL - Parts & Labor (@ Expected Return Rate)					{ ** }
<u>Administrative</u>					
* Customer Follow-Up (N/A for SC/CS/SU)		136,790	Veh. X	{ ** }	P/Veh. = { ** }
* First Class Mail		136,790	Ltr. X	{ ** }	P/Veh. = { ** }
* If applicable: Reimbursement	12%		Veh. X		P/Veh. = { ** }
TOTAL Inspection, Correction, and Notification Costs (including internal profit):					{ ** }
(above is sum of Administrative Costs and Parts & Labor @ exp return rate)					=====
					100%
					{ ** }
FINANCIAL RESERVE HANDLING					
ACCRUAL SETUP					{ ** }
ACCRUAL SETUP @ GMNA COST					{ ** }



Electronic Park Brake Drag

FMVSS 108 Evaluation (Lamps, Reflective Devices, and Associated Equipment):

NHTSA defines service brakes and parking brake differently, see definitions below. 108 does not require the brake lamps to operate upon application of the parking brakes... it requires the brake lamps "must be activated upon application of the service brakes."

NHTSA definition of "**service brake**" - means the primary mechanism designed to stop a motor vehicle."
NHTSA definition "**parking brake**" - means a mechanism designed to prevent the movement of a stationary motor vehicle.

CMVSS 108 allows DRLs to deactivate upon application of the parking brake, see paragraph (55)(b) below.

CMVSS 108 requires:

(54) Subject to subsections (55) and (56), daytime running lamps shall be on continuously when the engine is operating and the master lighting switch is not in the headlamps on position.

(55) Daytime running lamps may switch off

(a) while the automatic transmission control is in the park or neutral position;

(b) while the parking brake is applied; or

(c) after the engine is started but before the vehicle is set in motion for the first time.

{ * }

Electronic Park Brake Drag

FMVSS 135 Evaluation (Light Vehicle Brake Systems):

Paragraphs S5.5.1 and S5.5.1(c) of FMVSS 135 requires that a telltale be illuminated when the parking brake is applied.

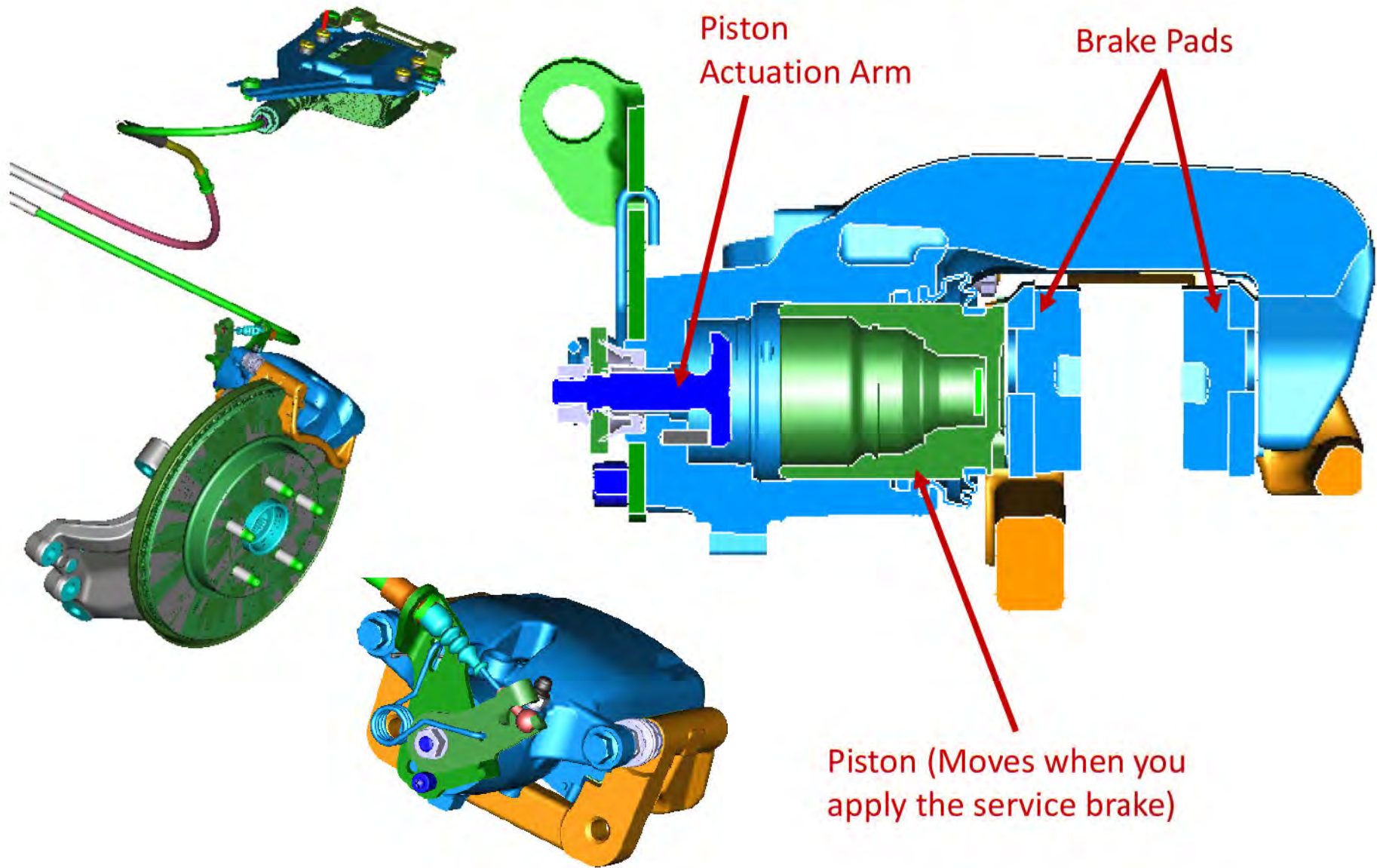
5.5.1. Activation.

An indicator shall be activated when the ignition (start) switch is in the "on" ("run") position and whenever any of conditions (a) through (g).

(c) Application of the parking brake.

Potential Non-Compliance to FMVSS 135

Electronic Park Brake Drag







Electronic Park Brake Drag

Warranty “Fire” Claims:

VIN	CUSTOMER_VERBATIM	Dealer Notes and repairs
1G1155S32EU	CUSTOMER STATES HE WAS DRIVING DOWN 79 ON SATURDAY AND HEARD A NOISE A LMOST AS IF HE HAD A FLAT TIRE. HE GOT OUT TO CHECK ANDBOTHHIW REAR BRAKES WERE ON FIRE . HE STATES THAT HE DID NOT HAVE THE EMERGENCY BRAK ON. PLEASE CHECK AND ADVISE	Brakes smell burnt. Rotors over heated, pads flaking from heat and backing plates discolored. Rear placed rear pads and rotors.
2G1125S34E9	PARKING BRAKES CAUGHT ON FIRE	Heat damaged the rear pads, rotors. Brake calipers, hubs and backing plate had the paint melted off.
1G1115SL7EU	customer states tow veh due to rear brakes in flames	Removed all brakes, rotors calipers. All show damaged by excessive heat. Replaced EPB, cable, rotors, brake shield, rear wheel bearings and hub to correct concern.
1G1155S35EU	customer states emergency brakes did not disengage and burned the brakes sparks / fire coming from brakes advise	Rear brakes and backing plates damaged from heat. Replaced rear pads, rotors and backing plate

File Last Revised 8/26/2014
3:00 pm

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Electronic Park Brake Drag

1G1155S32EU [REDACTED] Repair Comments

Job Card Date: 04/21/2014	Job Card Number: 252575	Transaction Detail
Repair Service Agent: 113517 BAIERL CHEVROLET CADILLAC 10430 PERRY HWY WEXFORD PA 15090-9241 7249353711		Odometer Reading: 3,152 MI Authorization Code: E4N8

Process Date:
05/22/2014

Transaction Type:
ZREG----Regular Vehicle
Transaction

Transaction Expense Category:
Warranty

Customer Complaint Code:
0133-Brakes - Pulsation

Job Card Line #: 1

Transaction Adjustment:

Cause Code: 3073-Rotating Part -
Seized/Binds/Sticks

Labour Op 2451110-Electronic Parking Brake Control Module Replacement

Causal Part Number 000000000013501701-MODULE ASM-ELEK PARK BRK CONT

→ [See other Parts and/or Net Items](#)

Line Total: USD 1,094.50

Qty	Part Number	Description	Major Assembly	Traceability
2	000000000013501701	MODULE ASM-ELEK PARK BRK CONT	No	
2	000000000013501290	ROTOR-RR BRK	No	
1	000000000022846361	PAD KIT-RR DISC BRK	No	
	<u>Net Item Code</u>	<u>Description</u>		

File Last Revised 8/26/2014

3:00 pm

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Electronic Park Brake Drag

2G1125S34E9 XXXXXXXXXX Repair Comments

Job Card Date: 05/06/2014	Job Card Number: 110584	Transaction Detail
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Repair Service Agent: 114106
MAYPOLE CHEVROLET, INC.
2625 HWY 17 ALT
TOCCOA GA 30577-8691
7068867481

Odometer Reading: 8,320 MI
Authorization Code: E7N8

Process Date:
07/02/2014

Transaction Type:
ZREG---Regular Vehicle
Transaction

Transaction Expense
Category:
Warranty

Customer Complaint Code:
0132-Brakes - Noise

Job Card Line #: 1 Transaction Adjustment Cause Code: 6573-Module/Component - No/Incorrect Communication

Labour Op 2451110-Electronic Parking Brake Control Module Replacement

Causal Part Number 00000000013501701-MODULE ASM-ELEK PARK BRK CONT

→ See other Parts and/or Net Items

Line Total USD 1,866.31

Qty	Part Number	Description	Major Assembly	Traceability
1	00000000013579139	HOUSING ASM-RR BRK CLPR	No	
1	00000000013579138	HOUSING ASM-RR BRK CLPR	No	
1	00000000022846361	PAD KIT-RR DISC BRK	No	
2	00000000013501290	ROTOR-RR BRK	No	
1	00000000020941794	SHIELD-RR BRK	No	
1	00000000020941793	SHIELD-RR BRK	No	
2	00000000022859843	HUB,FRT WHL	No	
1	00000000013501701	MODULE ASM-ELEK PARK BRK CONT	No	

Net Item Code	Description
Z_NIC	
Z_NIT	

File Last Revised 8/26/2014

3:00 pm

GM Confidential

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Electronic Park Brake Drag

1G1115SL7EU [REDACTED] Repair Comments

Job Card Date: 04/15/2014	Job Card Number: 384825	Transaction Detail
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Repair Service Agent: 112305 VAN CHEVROLET 1700 SOUTH I-35E CARROLLTON TX 75006-7492 9723896700	Odometer Reading: 3,458 MI Authorization Code:
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Process Date:
05/03/2014

Transaction Type:
ZREG---Regular Vehicle
Transaction

Transaction Expense Category:
Warranty

Customer Complaint Code:
0130-Brakes - Fluid Leaks

Job Card Line #: 1	Transaction Adjustment	Cause Code: 3049-Rotating Part - Warped/Wavy/Wrinkled
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Labour Op 2451110-Electronic Parking Brake Control Module Replacement

Causal Part Number 00000000013501701-MODULE ASM-ELEK PARK BRK CONT

[See other Parts and/or Net Items](#)

Line Total: USD 580.05

Qty	Part Number	Description	Major Assembly	Traceability
1	00000000020941794	SHIELD-RR BRK	No	
2	00000000020912243	HOSE ASM-RR BRK	No	
1	00000000022944243	CABLE ASM-PARK BRK	No	
1	00000000013501701	MODULE ASM-ELEK PARK BRK CONT	No	
2	00000000019299818	FLUID, BRAKE - DOT 3 HYDRAULIC 16OZ	No	
1	00000000020941793	SHIELD-RR BRK	No	

Net Item Code	Description
Z_NIT	

Qty	Part Number	Description	Major Assembly	Traceability
1	00000000013579138	HOUSING ASM-RR BRK CLPR	No	
1	00000000013579139	HOUSING ASM-RR BRK CLPR	No	
Net Item Code		Description		
Qty	Part Number	Description	Major Assembly	Traceability
2	00000000013501290	ROTOR-RR BRK	No	
1	00000000022846361	PAD KIT-RR DISC BRK	No	
Net Item Code		Description		

File Last Revised 8/26/2014
3:00 pm

GM Confidential

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Electronic Park Brake Drag

1G1155S35EU [REDACTED] Repair Comments

Job Card Date: 05/10/2014 Job Card Number: 364976 [Transaction Detail](#)

Repair Service Agent: 171635
 GREGG YOUNG CHEVROLET, INC.
 17750 BURT ST
 OMAHA NE 68118-3311
 4025728080

Odometer Reading: 3,291 MI
 Authorization Code: E4N8

Process Date:
 05/21/2014

Transaction Type:
 ZREG---Regular Vehicle
 Transaction

Transaction Expense Category:
 Warranty

Customer Complaint Code:
 0133-Brakes - Pulsation

Job Card Line #: 1

Transaction Adjustment:

Cause Code: 3051-Rotating Part -
 Worn/Stripped

Labour Op 2451110-Electronic Parking Brake Control Module Replacement

Causal Part Number 00000000013501701-MODULE ASM-ELEK PARK BRK CONT

[See other Parts and/or Net Items](#)

Line Total: USD 1,246.28

Qty	Part Number	Description	Major Assembly	Traceability
2	00000000013501290	ROTOR-RR BRK	No	
1	00000000013579139	HOUSING ASM-RR BRK CLPR	No	
1	00000000013579138	HOUSING ASM-RR BRK CLPR	No	
1	00000000022846361	PAD KIT-RR DISC BRK	No	
1	00000000013501701	MODULE ASM-ELEK PARK BRK CONT	No	
1	00000000020941793	SHIELD-RR BRK	No	
1	00000000020941794	SHIELD-RR BRK	No	

Net Item Code

Description

Z_NIC

File Last Revised 8/26/2014

3:00 pm

GM Confidential



Electronic Park Brake Drag

Selected VOQs

City: ACCOKEEK State: MD VIN: 2G1155S39E9 Crash?: N Fire?: N Injured 0 Deaths: 0
Model Year: 2014 ODI No: 10585185 Complaint No: 1060444 Occurrences:
Manuf: General Motors LLC Miles: 13756 Date Reported: 20140428 Date Added: 20140428
Make: CHEVROLET Model: IMPALA Incident Date: 20140403

Complaint:

PARKING BRAKE WOULD NOT RELEASE (SUPPOSED TO DO SO AUTOMATICALLY, ALSO WOULD NOT RELEASE MANUALLY) ON MULTIPLE OCCASSIONS. HAD BURNING BRAKE SMELL WHILE DRIVING. BRAKE CALIPERS WORN DOWN. NO SERVICE CODES SET. PARKING BRAKE WORKING AS DESIGNED AT THE TIME OF SERVICE. GM TECHNICAL ASSIST STARTED CASE #71-1290786709.

City: BLOOMINGTON State: IL VIN: 1G1155S38EU Crash?: N Fire?: N Injured 0 Deaths: 0
Model Year: 2014 ODI No: 10610041 Complaint No: 1084427 Occurrences:
Manuf: General Motors LLC Miles: 4000 Date Reported: 20140712 Date Added: 20140712
Make: CHEVROLET Model: IMPALA Incident Date: 20140711

Complaint:

THE PARKING BRAKE WILL NOT DISENGAGE THE REAR BRAKES AFTER PRESSING THE ELECTRONIC PARKING BRAKE BUTTON. THE RED PARKING BRAKE LIGHT ON THE DASH GOES OUT BUT THE REAR BRAKES ARE STILL ENGAGED. THE DRIVER WILL BE UNAWARE THAT THE PROBLEM EXISTS UNTIL SMOKE BEGINS ROLLING OUT OF THE REAR WHEELS. THIS IS A SAFETY HAZARD THAT SHOULD BE INVESTIGATED BY NHTSA DUE TO THE NUMBER OF SIMILAR COMPLAINTS ALREADY REPORTED.

