

Issue Number: **A-83ZA-81205** PDF Date Submitted



Part - Location: **SWITCH ASM-IGN & START -IGNITION SWITCH**

Complaint: **ELECTRICAL CONCERN**

Issue Type: **Pre - Phy Test**

Vehicle/Product Line: **ZAcar**

Region: **GMNA**

Severity: **2**

Primary Metric/Score: **/**

Vehicle / Product Description

Primary Project No:	83ZA	Model Year:	2003
Other Project No(s):		Model Year Qtr:	
Vehicle/Prop. #:	73Z2403	Model Code:	SEDAN
Marketing Division:	Saturn	Hardware Stage:	Alpha 2
Marketing Region(s):		(VIN) Vehicle ID #:	
Engine(s):	L61	Transmission(s):	M86
Engine Serial #:		Transmission Serial #:	
Drive Type(s):		Option(s):	
Steering:	N/A	PIMREP No:	A-83ZA-81205

Odometer Reading or Range in from to

Part / Supplier Information

1st Level (VPPS):	2nd Level (VPPS):	3rd Level (VPPS):	4th Level (VPPS):
7 Information & Controls	2 Customer Switches		
UPC:	FNA:	Part Name:	Part Number:
6Y 4	1050A	SWITCH ASM-IGN & START	12450250
Supplier(s) Name:	DUNS Code(s):	Part Year:	Drawing Revision Date:
		2003	
Suspect Part(s) available?	Location of Suspect Part(s)	PIM (EPS/PAD)	EPN
<input type="radio"/> Yes <input checked="" type="radio"/> No			

Incident Description

Date first reported:	07/31/2001	Complaint Category:	ELECTRICAL CONCERN
Incident Discovered by:	SEWELL, JIM	Discoverer's Dept:	GMNA
Discoverer's Phone:		Plants w/ same Problem:	

Source Level 1:	Source Level 2:	Source Level 3:
Test - Performance Integration	Electrical	C

Incident Description: (Give detailed description of incident)

ISSUE DESCRIPTION - Codes B2648 (Ambient Light Sensor Circuit High) and B2657 (Security System

Sensor Data Circuit Low) were setting in the IBCM. The Passlock Data circuit (#1390 Cav #5 at IGN Switch) was checked using DPIDS and a DVOM. When using class 2 data (DPID \$09) was reading \$FF (12V) when the key-in circuit was activated and \$00 (0V) when the IGN switch was turned to any position except for OFF. When measured with the DVOM the signal exhibited the same results.

TRIM LEVEL - none
PILOT CATEGORY - Reserve

PIMREP History Information Begin

Comment

PIMREP History date - 08/22/2001 3:57:10 PM

PIMREP History Action - The issue has been approved. The Responsible Staff Engineer is now: SKELTON, BILL

PIMREP History Responsible - KEITH PATERSON

PIMREP History Information End

PIMREP History Information Begin

Root Cause

PIMREP History date - 09/13/2001 3:52:48 PM

PIMREP History Action - The switch as received by Rod Davies measured 0.2 Ohms in RUN and 373.5 Ohms in CRANK position across pins 5 & 6. Switch forwarded to Delphi-Mechatronics for analysis.

PIMREP History Responsible - Rod Davies

PIMREP History Information End

PIMREP History Information Begin

Root Cause

PIMREP History date - 11/14/2001 3:07:13 PM

PIMREP History Action - Tear down evaluation on the switch revealed two causes of failure. Low contact force and low detent plunger force.

PIMREP History Responsible - Ray DeGiorgio

PIMREP History Information End

PIMREP History Information Begin

Solution

PIMREP History date - 11/14/2001 3:09:29 PM

PIMREP History Action - Both issues were addressed with Beta level parts per EWO MB612.

PIMREP History Responsible - Ray DeGiorgio

PIMREP History Information End

PIMREP History Information Begin

Implementation

PIMREP History date - 11/14/2001 3:11:19 PM

PIMREP History Action - Representative parts have been implemented on Beta Coupes.

PIMREP History Responsible - Ray DeGiorgio

PIMREP History Information End

PIMREP History Information Begin

Feedback

PIMREP History date - 11/14/2001 3:12:18 PM

PIMREP History Action - Beta Coupes have been evaluated and the problem does not exist anymore.

PIMREP History Responsible - Ray DeGiorgio

PIMREP History Information End

PIMREP History Information Begin

Comment

PIMREP History date - 11/14/2001 3:13:29 PM

PIMREP History Action - Issue Closed

PIMREP History Responsible - SKELTON, BILL
PIMREP History Information End

Preliminary Root Cause: (Give preliminary Root Cause if known, do not speculate!)

PRELIMINARY / ASSUMED ROOT CAUSE - IGN swith Passlock Data circuit open when IGN turned to any position other than OFF.

PROPOSAL / TEMPORARY SOLUTION - IGN switch replaced to repair vehicle, codes did not continue to set. DRE informed and switch is to be returned to him.

Potential Root Cause Champion: (Select potential Root Cause Champion.)

Select: Potential Champion
Department :
or:
Name :

Evaluation Information (Test)

Procedure: (Test Schedule)	% Complete (Test Schedule): 0	Driving Conditions:	Environmental Conditions:
Odometer: 0	Vehicle Test: 0	Part Durability: 0	Part Test: 0

Enter Containment Information Here

Containment

Plant Information

Description of Plant Containment:

Plant: VIN: Breakpoint Date: Contact Person: Tel. No:

Field Information

Description of Field Containment:

Breakpoint Date: Contact Person: Tel. No:

Involved Components

Component: Plant:

Originator Information

Document Originator: JAMES D SEWELL/US/GM/GMC 08/22/2001 03:55:27 PM
Location: Milford Proving Ground Building 104 Phone:
Dept.: Development, Validation *** Electrical Development & Powertrain Interface MPG

Document Information

History

Issue Number: **A-83ZA-81205**

External Designee History:

Root Cause Analysis

Target Date: 08/29/2001	Actual Date: 11/14/2001 Late	Actual date reported by champion:
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Description of Root Cause Investigation Progress and Verification:
START OF ACTION - STATUS ACTION - The switch as received by Rod Davies measured 0.2 Ohms in RUN and 373.5 Ohms in CRANK position across pins 5 & 6. Switch forwarded to Delphi-Mechatronics for analysis.
START OF ACTION - RESPONSIBLE - Rod Davies

Problem Solving Methodology:
Document the Solving Process seen as appropriate

Potential Solution Champion / Department:
Department: Potential Champion:
or
Name:

Problem mainly caused by: Field Remedy Requested?
No

Root Cause Summary:
Tear down evaluation on the switch revealed two causes of failure. Low contact force and low detent plunger force.:Ray DeGiorgio

Document Information		
Document created by:	Keith A. Paterson/US/GM/GMC	09/13/2001
Last Modified by:		
Issue Number:	A-83ZA-81205	
Part - Location:	SWITCH ASM-IGN & START -IGNITION SWITCH	
Complaint:	ELECTRICAL CONCERN	

Assign Solution Champion

Department: Champion:
Infotainment, Controls, Displays *** Skelton, Bill - [REDACTED]
Controls

Nomination Comments:

Champion History:

Champion Designee History:

Assignment Date:	Department: Name:	Champion Designee:
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External Designee History:

Develop Solution / Make Decision on Solution

Target Date: 11/14/2001	Actual Date: 11/14/2001 Late	Actual date reported by champion:
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Description of Solution Investigation Progress and Verification:

Aftersales Field Fix: N/A

EWO Mandatory: Yes No

EWO

EWO #:	Approval / Release Date (i.e. CAB, etc):	Validation Part Availability Date:	TID (Target Implementation Date) of EWO:
MB612			

EWO Comment:

EWO Part Actions

New Part Number Required? <input type="radio"/> Yes <input checked="" type="radio"/> No	New Part Number		
Stock Disposition Domestic	Stock Disposition Export	Service Disposition (Retailer)	Service Interchange

Exchange Aftersales Warehouse Parts according to Engineering/VLDM decision?

Department: or Name: Potential Champion:

Summary

Solution Type

2. Design change without new requirement/specification

Solution Summary:

Both issues were addressed with Beta level parts per EWO MB612.:Ray DeGiorgio

Document Information

Document created by: Bill Skelton/US/GM/GMC 11/14/2001

Last Modified by:

Issue Number: **A-83ZA-81205**

Part - **SWITCH ASM-IGN & START -IGNITION SWITCH**

Location:

Complaint: **ELECTRICAL CONCERN**



Assign Implementation Champion

Department: Infotainment, Controls, Displays *** Champion: Skelton, Bill - [REDACTED]

Controls

Implement Solution

Target Date: 11/14/2001	Actual Date: 11/14/2001 Late	Actual date reported by champion:
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Description of Implementation:

Breakpoint(s)

Plant: _____ Date: _____ VIN / Val Vehicle #: _____

Breakpoint(s) Involved Components			
Plant*Component / Supplier*Part:		Serial - No:	Date Breakpoint:
Component/Part:	Plant / Supplier:	Serial - No:	Breakpoint:

Department : _____ Potential Champion: _____
 or
 Name : _____

Service Bulletin			
Service Bulletin Requested:	Service Bulletin #:	Bulletin Release Date:	Applicable Region/Country:
Service Bulletin Name/Desc.:			

Summary
 Implementation Summary:
 Representative parts have been implemented on Beta Coupes.:Ray DeGiorgio

Document Information			
Document created by:	Bill Skelton/US/GM/GMC	11/14/2001	
Last Modified by:			
Issue Number:	A-83ZA-81205		
<input checked="" type="checkbox"/> Part -	SWITCH ASM-IGN & START -IGNITION SWITCH		
Location:			
<input checked="" type="checkbox"/> Complaint:	ELECTRICAL CONCERN		



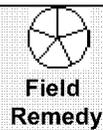
Assign Feedback Champion
 Department: _____ Champion: _____
 Infotainment, Controls, Displays *** Skelton, Bill - [REDACTED]
 Controls

Feedback

Target Date:	Actual Date:	Actual date reported by champion:
11/14/2001	11/14/2001	Late
Did the Solution fix the problem?		
<input type="radio"/> Yes <input type="radio"/> No		
Copy of the data analysis to support the above conclusion:		

Feedback Summary:
 Beta Coupes have been evaluated and the problem does not exist anymore.:Ray DeGiorgio

Document Information			
Document created by:	Bill Skelton/US/GM/GMC	11/14/2001	
Last Modified by:			
Issue Number:	A-83ZA-81205		
<input checked="" type="checkbox"/> Part -	SWITCH ASM-IGN & START -IGNITION SWITCH		
Location:			
Complaint:	ELECTRICAL CONCERN		



Assign Field Remedy Champion

Department:	Champion:
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Field Remedy

Field Remedy Comment:

Last Break Point

Date	VIN / Part Number	Measure

Document Information

Document created by:
Last Modified by

Issue Number:	A-83ZA-81205	 LL
❏ Part -	SWITCH ASM-IGN & START -IGNITION SWITCH	
Location:		
❏ Complaint:	ELECTRICAL CONCERN	

Solution for new Design / Project

Shall a Lessons Learned Request be sent?	<input type="radio"/> Yes <input type="radio"/> No
Step when issue was flagged as Lessons Learned:	
Flagged by:	
Standard Work Element:	
Lesson Learned Number:	
Has the issue been entered in the Lessons Learned database?	<input type="radio"/> Yes <input checked="" type="radio"/> No

Document Information	
Document created by:	
Last Modified by	