

December 2, 2013

Mr. Scott Yon Vehicle Integrity Division (VID), NVS-212 U.S. Department of Transportation

National Highway Traffic Safety Administration (NHTSA) Office of Defects Investigation (ODI) Room W48-314 1200 New Jersey Avenue SE Washington, D.C. 20590

Reference: NVS-212ecf; PE13-034

Dear Mr. Yon:

Attached is Chrysler Group LLC's response to the referenced inquiry PE13-034. In performing the analysis and reaching conclusions, and by providing the information contained herein, Chrysler Group LLC is not waiving its claim to attorney work product and attorney-client privileged communications.

Sincerely,

Kustin Koloof

Kristin J. Kolodge

Attachment and Enclosures

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Mr. Scott Yon Reference: NVS-212ef; PE13-034 December 02, 2013

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- 1. State, by model and model year, the number of subject vehicles Chrysler has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Chrysler, state the following:
 - a. Vehicle identification number (VIN);
 - b. Date of manufacture;
 - c. Date warranty coverage commenced; and
 - d. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA."

A1. Chrysler Group LLC ("Chrysler") notes that the subject vehicle in response to PE13-034 is 2012MY Jeep Liberty vehicles.

Vehicle Type	MY Total					
2012 MY Jeep Liberty	104,593					
Total Vehicle Volume = 104,593						

The detailed response listing the production data as requested in subparts (a.) through (d.) is provided in ENCLOSURE 1- PRODUCTION DATA.

- 2. State the number of each of the following, received by Chrysler, or of which Chrysler is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
 - a. Consumer complaints, including those from fleet operators;
 - b. Field reports, including dealer field reports;
 - c. Reports involving a crash, injury or fatality;
 - d. Reports involving a fire;
 - e. Property damage claims; and
 - f. Third-party arbitration proceedings where Chrysler is or was a party to the arbitration; and
 - g. Lawsuits, both pending and closed, in which Chrysler is or was a defendant or codefendant.

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For subparts "a" through "g" state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "g," provide a summary description of the alleged problem and causal and contributing factors and Chrysler's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "f" and "g," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

- A2. The following summarizes the reports located by Chrysler that relate to, or may relate to, the alleged defect in the subject vehicles. Chrysler has conducted a reasonable and diligent search of records kept in the ordinary course of business for information responsive to this inquiry.
 - a. There are a total of four consumer complaints relating to two unique VINs.
 - b. There are no field reports.
 - c. There are no reports involving a crash, injuries or fatalities.
 - d. There are three reports of fire relating to the two unique VINs.
 - e. There are no reports of alleged property damage.
 - f. There are no third-party arbitration proceedings.
 - g. There are no lawsuits and two legal claims.

ODI sent Chrysler two VOQs that the NHTSA believes may be related to this inquiry (VOQ #'s 10459029 and 10504021). Both of these VOQs were also reported to Chrysler as consumer complaints and counted as reports of fire and legal claims in subparts (d.) and (g.), respectively.

With respect to the incidents identified in subparts (a.) and (d.) above, refer to ENCLOSURE 2 – REQUEST NUMBER TWO DATA, for a summary description of these incidents. For a summary description of the alleged problem and causal and contributing factors, refer to ENCLOSURE 4 – CONSUMER COMPLAINTS & LEGAL CLAIMS.

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- 3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:
 - a. Chrysler's file number or other identifier used;
 - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
 - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
 - d. Vehicle's VIN;
 - e. Vehicle's make, model and model year;
 - f. Vehicle's mileage at time of incident;
 - g. Incident date;
 - h. Report or claim date;
 - i. Whether the vehicle was disabled and had to be towed as a result of the fire;
 - j. Whether the driver's door could still be opened after the fire;
 - k. Whether the power windows or door locks functioned erratically during (or just prior to) the fire;
 - **I.** Vehicle's complete warranty history;
 - m. Whether a crash is alleged;
 - n. Whether property damage is alleged;
 - o. Number of alleged injuries, if any; and
 - p. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

- A3. The subpart (Q3-l) information (complete paid warranty history) for the two unique VINs responsive to Q2 can be found in ENCLOSURE 3 COMPLETE WARRANTY HISTORY. The information on the remaining subparts in Q3 is contained in ENCLOSURE 2 REQUEST NUMBER TWO DATA.
- 4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Chrysler used for organizing the documents.
- A4. ENCLOSURE 4 CONSUMER COMPLAINTS & LEGAL CLAIMS contains folders with copies of the available consumer complaints, legal claims and the backup data. Legal claims are arranged in a folder by the claimant name. There are no field reports.

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5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Chrysler to date that relate to, or may relate to, the subject component in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. Chrysler's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

- A5. The detailed response that lists the warranty claim information as requested in subparts (a.) through (k.) is provided in ENCLOSURE 5 WARRANTY DATA.
- 6. Describe in detail the search criteria used by Chrysler to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State by make and model year, the terms of the new vehicle warranty coverage offered by Chrysler on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Chrysler offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

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A6. The warranty claims identified in response to Q5 were selected by first identifying all potentially applicable Labor Operation Procedures ("LOP") relating to the service or replacement of the subject components. These LOPs are provided within ENCLOSURE 6A – DRIVER DOOR LOP DETAIL. These LOPs were used to search for responsive paid claims relating to the subject vehicles and are provided within ENCLOSURE 5 – WARRANTY DATA.

Chrysler believes that there are three warranty claims that may relate to the alleged defect; however, no conclusions can be drawn from the data. This small number of warranty claims was identified by reviewing available dealer narratives associated with the warranty claims and have been included in the total count of unique VINs responsive to the alleged defect.

Chrysler believes that the small number of remaining warranty claims are likely unrelated to the alleged defect as there are other reasons to replace certain components, such as a cracked or discolored power window switch. The number of warranty claims that are being reported may be artificially high with regard to the alleged defect. Thus, Chrysler has not drawn conclusions regarding trends from the warranty data alone.

Reports of alleged fire events are generally received by the Chrysler Office of the General Counsel, the Chrysler Customer Assistance Center (as a Customer Assistance Inquiry Request or "CAIR") and/or from other Chrysler field organizations. If an alleged fire event comes to the attention of a dealer technician during a warranty repair, Chrysler requires the dealership to notify the company and a CAIR is created. The CAIRs and legal claims, to the extent that they are responsive to this information request, are contained in ENCLOSURE 2 – REQUEST NUMBER TWO DATA and ENCLOSURE 4 – CONSUMER COMPLAINTS & LEGAL CLAIMS.

The requested Extended Warranty Sales data has been provided in ENCLOSURE 6B - EXTENDED WARRANTY SALES CONF BUS INFO, which has been submitted under separate cover to NHTSA's Chief Counsel with a request for confidential treatment.

The standard warranty offered on all 2012 MY Jeep Liberty vehicles was 36 months / 36,000 miles, whichever comes first.

7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Chrysler has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Chrysler is planning to issue within the next 120 days.

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- A7. Chrysler did not issue any documents that relate to the alleged defect and is not planning to issue any documents within the next 120 days.
- 8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Chrysler. For each such action, provide the following information:
 - a. Action title or identifier;
 - b. The actual or planned start date;
 - c. The actual or expected end date;
 - d. Brief summary of the subject and objective of the action;
 - e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

- A8. Due to the low number of inputs, no additional testing or data analysis was performed. Chrysler field inputs and VOQs provided by the agency were evaluated and are discussed in A12.
- 9. Describe all modifications or changes made by, or on behalf of, Chrysler in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:
 - a. The date or approximate date on which the modification or change was incorporated into vehicle production;
 - b. A detailed description of the modification or change;
 - c. The reason(s) for the modification or change;
 - d. The part number(s) (service and engineering) of the original component;
 - e. The part number(s) (service and engineering) of the modified component;
 - f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
 - g. When the modified component was made available as a service component; and
 - h. Whether the modified component can be interchanged with earlier production components.

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Also, provide the above information for any modification or change that Chrysler is aware of which may be incorporated into vehicle production within the next 120 days.

A9. Chrysler has made no modifications to the Driver Master Window Switch ("DMWS") assembly which relate, or may relate, to the alleged defect since the start of production and is not planning any changes within the next 120 days.

10. Produce two of each of the following:

- a. Field return samples of the subject components exhibiting the subject failure mode;
- b. Any kits that have been released, or developed, by Chrysler for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

A10. In response to this request, Chrysler responds as follows:

- a. Chrysler does not have field return samples of the subject vehicle DMWS exhibiting the alleged defect or any other failure modes.
- b. Chrysler did not develop or release any service repair kits for the subject components which relate to or may relate to the alleged defect.
- 11. State the number of each of the following that Chrysler has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (*including the cut-off date for sales, if applicable*):
 - a. Subject component; and
 - **b.** Any kits that have been released, or developed, by Chrysler for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which Chrysler is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

- A11. During a conference call on November 06, 2013, the NHTSA (Mr. Scott Yon) clarified that the subject component as it relates to Q11 was the DMWS only.
 - a. Production and service part sales and usage data relating to the subject vehicle, DMWS, are provided within ENCLOSURE 11- PARTS SALES & USAGE CONF BUS INFO. All data within ENCLOSURE 11 PARTS SALES & USAGE CONF BUS INFO has been submitted under separate cover to NHTSA's Chief Counsel with a request for confidential treatment.

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Note: The subject vehicle switches were released for production within the 2010 calendar year for use on both the 2011MY Jeep Liberty and Dodge Nitro platforms. At this point these switches also became the retroactive service replacement switches for all platforms identified within ENCLOSURE 11 – PARTS SALES & USAGE PUBLIC.

b. Chrysler did not develop or release any service repair kits for the subject components which relate to or may relate to the alleged defect.

The DMWS parts as used in the subject vehicle (identical part numbers) can be found in ENCLOSURE 11- PARTS SALES & USAGE PUBLIC, "SUBJECT VEHICLE, DRIVER'S DOOR SWITCH PRODUCTION PART SALES DATA.pdf", which includes the switch supplier and representative contact details.

The service parts sale table contained within ENCLOSURE 11 – PARTS SALES & USAGE CONF BUS INFO, includes parts that were used for repair (including any repairs unrelated to the alleged defect), parts sold to third party facilities (repair shops and retail outlets) and parts that are kept on hand by more than 2,500 U.S. Chrysler dealerships, in addition to domestic and international parts depots. It is difficult to determine whether the alleged defect prompted these part sales as there are unrelated circumstances that generate sales. Thus, Chrysler has concluded that the use of part sales data will not be conclusive to assess any trend related to the alleged defect. Furthermore, Chrysler's records management program removes part sales data after 5 years.

12. Furnish Chrysler's assessment of the alleged defect in the subject vehicle, including:

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);
- d. The risk to motor vehicle safety that it poses; and
- e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
- f. The reports included with this inquiry.
- A12. A review of the DMWS electrical function revealed that the DMWS receives power when the key is in the following positions: *Run, Accessory* and *Lock*. The DMWS can be powered up to 10 minutes when the Key-Off Power Delay feature is active. This feature is canceled when either front door is opened. Chrysler has received no reports of door fires where the vehicle has been left parked and unattended.

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Inputs

Chrysler received three fire inputs associated with two unique VINs that relate, or may relate, to the alleged defect. These VINs were identified in response to Q2 (consumer complaints and legal claims). Chrysler also identified three additional VINs that had been repaired under warranty in which the repairing dealer used words associated with fire. These three VINs are identified in response to Q5 (warranty claims). Of the five unique VINs, Chrysler was able to inspect only one vehicle that was reported to experience an actual door fire. Below is a summary of these five reports.

1. <u>CAIR # 22228877</u>

This fire report was initially received as a consumer complaint (CAIR #22228877) on May 5, 2012 and later became a legal claim (Legal Claim #1230815). This VIN was also reported to NHTSA (VOQ #10459029). This was the only vehicle of the five events being reported that Chrysler had the opportunity to inspect related to the DMWS. The owner stated that while driving he noticed smoke coming from the left front door switch. He pulled into a parking lot and turned the ignition off and the smoke dissipated. The dealer then towed the vehicle to a service department. At that time the ignition was turned on at which time the door caught fire again. The dealer put it out with a fire extinguisher. An inspection of the vehicle revealed that the origin of the fire was within the DMWS and appeared to be as a result of an electrical short.

2. <u>CAIR # 23157262 / 23682537</u>

There are two reports for this VIN alleging separate instances of door fires. Chrysler received an initial consumer complaint (CAIR # 23157262) of a door fire that occurred in February 2013. This VIN was also reported to NHTSA on March 1, 2013 (VOQ# 10504021). In both reports, the customer alleged smoke started coming out of the DMWS area. The vehicle was repaired prior to Chrysler being notified and, therefore, the vehicle was not inspected. It is unknown whether this fire can be attributed to the subject components.

On July12, 2013 Chrysler received a second consumer complaint (CAIR # 23682537) from the same customer where the customer alleged a fire occurred in the same vehicle, reporting a fire in the area of the door and instrument panel. This incident became a legal claim (Legal Claim #1240350). The customer stated they were river kayaking for approximately eight hours and after returning to the vehicle, the flashers were on. The owner opened the door to find fire damage in the left side of the instrument panel. The fire had self-extinguished prior to the owner's return to the vehicle. On July 22, 2013, Chrysler

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inspected this vehicle, but could not determine the cause due to extensive damage in the instrument panel area. The inspection photographs, included with this submission, reveal that no fire damage occurred at the door panel, or more specifically the DMWS. Chrysler believes this second reported fire to be unrelated to the subject components.

During the course of this investigation, Chrysler discovered a Car Fax report that identified an aftermarket remote starting system had been installed in January, 2013. It is noteworthy that both fires occurred after the installation of the remote starter system.

3. <u>Claim id #'s 297980, 473804 & 857040</u>

Chrysler identified three unique warranty claims in which words associated with fire were present in the dealer technician's narrative of the claim. All of the dealer narratives suggest the possibility of localized, minor thermal damage in the area around the DMWS. Chrysler did not perform an inspection or an analysis and, therefore, no root cause could be determined. Chrysler instructs dealers to immediately contact the Customer Assistance Center if property damage occurs as a result of a fire. There were no such reports.

Other Similar DMWS Investigations

Chrysler also reviewed the publicly available information relating to NHTSA's investigations of power window switch fires for other manufacturer. Figure 1, below, summarizes a comparison of incident rates in the subject vehicle to incident rates in other manufacturers' vehicles.

Investigation	Mfgr	MY/Make	Model	MPWS Supplier	Action Taken	Population	Reported Inputs (non-warranty)	Unique Vin Rate (c/100,000)
PE13-034	Chrysler	2012 Jeep	Liberty	Kostal North America		104,593	VOQ - 2 OEM - 5 Uniq - 5	4.8
EA 12-004 PE12-003	GM	06-07 Chev	Trailblazer & 4 other models	Solectron Invotronics Inc. (ON)	12v406 13v248	341,786	VOQ - 170 OEM - 619 Uniq - 742	217
EA 12-006 PE12-002	Toyota	07-09 Toyota	8 models	Tram, Inc (US) Tokai Rika (Jpn)	12v491	1,424,747	VOQ - 58 OEM - 319 Uniq - 377	27
EA 11-004 PE10-047	Honda	2006 Honda	CR-V	Omron & Denso	11v456 12v486	150,000	VOQ - 9 OEM - 45 Uniq - 50	33
EA 08-011 PE08-014	MMNA	01-03 Mitsubishi	Gallant	Omron	Closed Ext. Warranty	292,945	VOQ - 6 OEM - 29 Uniq - 35	12

Figure 1: PE13-034

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Other Similar Driver Master Window Switch Fire Investigations

Figure 1 illustrates that the rate of fire in the subject vehicle is insignificant when compared to the NHTSA investigations resulting in a recall, on the low-end by a factor of 5 (recall 12v491) and on the high-end by a factor of 45 (recalls 12v406 and 13v248). Unlike most of the other investigations in Figure 1 that ended in a recall, Chrysler does not have a single related report of a fire that breached the door panel and spread to the rest of the passenger compartment. Moreover, there is no common supply source for the subject components among the various manufacturers that have experienced driver's door fire events.

Risk to Motor Vehicle Safety

Not only is the rate comparatively low in Figure 1, but in the three possible door fires reported to Chrysler there was only one confirmed minor fire related to the DMWS and the damage was localized to the door (VIN# CW100392). In the case of the vehicle of which two, separate fires were reported (VIN# CW203563), only one is possibly related to a fire at the DMWS. The second reported door fire in this vehicle was, in fact, a fire that appears to have actually originated in the instrument panel, and was unrelated to the DMWS (VIN# CW203563). The remaining three events (warranty claims) made mention of "smoke" or "burn" in the dealer narratives, but there were no inspections. Because only a DMWS was replaced in each of these three vehicles, it is clear that these events could have only involved a localized, minor thermal event involving an overheated switch. In other words, there is no evidence that a malfunction within the DMWS propagated to a fire in the door.

In the two possible door fire events and the three warranty claims, it is apparent that the drivers had ample opportunity to notice smoke, make a controlled stop and turn off the ignition, and then safely exit the vehicle. The instrument panel fire that did not involve the DMWS (VIN# CW203563), occurred when the vehicle was parked and unattended.

Conclusion

Chrysler believes the alleged defect poses no unreasonable risk to motor vehicle safety and that this investigation should be closed.

PE13-034 CHRYSLER 12/2/2013**ENCLOSURE** 11 DRIVER'S DOOR SWITCH, **PRODUCTION AND** SERVICE USAGE BY PLATFORM AND MODEL YEAR

Driver's Door Switch (Identical part numbers), Production and Service Usage by Platform and Model Year

		MY/Model		Do	dge Ni	tro				Jeep L	iberty				Dod	ge Jou	rney		Chı	•	Fown & ge Cara		try
Sales Code	Switch Description	P/N	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2012	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
JPD	Power Windows, Driver One Touch Down	04602632AG	S	S	S	S	P/S	n/a	S	S	S	P/S	P/S	n/a	S	S	S	n/a	n/a	n/a	n/a	n/a	n/a
JP3	Power Windows, Front Windows One Touch Up/Down	04602533AF	S	n/a	n/a	S	P/S	n/a	n/a	n/a	S	P/S	P/S	n/a	n/a	n/a	S	n/a	n/a	n/a	n/a	S	P/S

Part Usage Key							
S	Service Usage Only						
P/S Production & Service Usage							

Note:

The above switches were released for production within the 2010 calendar year for use on both the 2011MY Jeep Liberty and Dodge Nitro platforms. At this point these switches also became the retroactive service replacement switches for the platforms listed above.

PE13-034 CHRYSLER 12/2/2013 ENCLOSURE 11 SUBJECT VEHICLE, DRIVER'S DOOR SWITCH PRODUCTION PART SALES

Subject Vehicle, Driver's Door Switch Production Parts Sales Data									
Switch P/N	Sales Code	Production Volumes	Suppliers Name	Suppliers Contact Name	Telephone #				
04602632AG	JPD	59,388	Kostal	Cathy Ludwig	248-284-6289				
04602533AF	JP3	45,205	North America Inc	Cathy Ludwig	240-204-0209				
		104,593	Total 2012MY, vehicle volume						

PE13-034 CHRYSLER 12/2/2013 ENCLOSURE 6A DRIVER DOOR SWITCH LOP DETAILS

Driver's door switch related LOP's.

LOP	Description	Problem Code				
	Switch power window front - Test and replace	14 - Short or Open				
08805401	Front driver side or center	18 - Circuit Open				
08803401		3R - High/Low Operating Effort				
		48 - Grounded or Shorted				
23202203	Panel, door trim - Rerplace Front - Left - One	X2 - Split, Cut or Torn				
23202203	piece	11 - Broken or Cracked				
		1C - Connector loose not attached				
		1T - Terminal(s) bent				
		1W - Wires cut by sharp edge				
		18 - Circuit open				
		2C - Connector broken/fractured				
		2T - Terminal(s) broken/fractured				
		2W - Wires cut by moving mechanism				
		3C - Wires crossed in connector				
		3T - Terminal(s) corroded				
		3W - Wires cut by by bolt/screw				
0891PCE4	Power Door Locks/Keyless Entry	4T - Terminal(s) not properly crimped				
		4W - Wires burned/damaged				
		48 - Grounded or shorted				
		5T - Terminal(s) pushed out				
		5W - Broken splice in harness				
		51 - Improperly installed				
		58 - Internal defect				
		6T - Terminal(s) spread				
		6W - Harness missing or wrong				
		61 - intermittent operation				
		7W - Harness not clipped or strapped				
23424503	Handle, door inside remote - Replace Front-Left	11 - Broken or Cracked				
		69 - Discolored				
		1C - Connector loose not attached				
		1T - Terminal(s) bent				
		1W - Wires cut by sharp edge				
		18 - Circuit open				
		2C - Connector broken/fractured				
		2T - Terminal(s) broken/fractured				
		2W - Wires cut by moving mechanism				
		3C - Wires crossed in connector				
		3T - Terminal(s) corroded				
		3W - Wires cut by by bolt/screw				
0891PDD4	Power windows	4T - Terminal(s) not properly crimped				
		4W - Wires burned/damaged				
		48 - Grounded or shorted				
		5T - Terminal(s) pushed out				
		5W - Broken splice in harness				
		51 - Improperly installed				
		58 - Internal defect				
		6T - Terminal(s) spread				
		6W - Harness missing or wrong				
		61 - Intermittent operation				
		7W - Harness not clipped or strapped				

Driver's door switch related LOP's.

08522003	Motor, window regulator - Test andRreplace Front door-Left	07 - Binds, sticks, or seized 14 - Short or Open 18 - Circuit Open 87 - Rusted
08191403	Module, front door control - Test and replace	X6 - Terminal(s) damaged 1T - Terminal(s) bent 2T - Terminal(s) broken/fractured 3T - Terminal(s) corroded 48 - Grounded or shorted 58 - Internal defect 83 - Connection loose
08652001	Relay, electric door lock - Test and replace	14 - Short or Open 18 - Circuit Open 48 - Grounded or shorted 83 - Connection loose
23341007	Regulator, window - Replace Front - Electric - Left	07 - Binds, sticks, or seized 18 - Circuit Open 27 - Damaged 58 - Internal defect 61 - intermittent operation