

# VOLKSWAGEN

GROUP OF AMERICA

OFFICE OF DEFECTS &  
INVESTIGATIONS

2014 AUG 26 A 8:35



Scott Yon  
Chief, Vehicle Integrity Division  
Office of Defects Investigation  
U.S. Department of Transportation  
National Highway Traffic Safety Administration  
1200 New Jersey Avenue S.E.  
Washington, DC 20590

CHRISTOPHER T. SANDVIG NAME  
GM - COMPLIANCE / TREAD TITLE  
PRODUCT COMPLIANCE DEPARTMENT  
248-754-5000 PHONE  
248-754-5093 FAX  
AUGUST 22, 2014 DATE

Subject: EA14-002 – Peer Review of Panoramic Sunroof System

VOLKSWAGEN GROUP OF AMERICA, INC.  
3800 HAMLIN ROAD  
AUBURN HILLS, MI 48326  
PHONE +1 248 754 5000

Dear Mr. Yon:

Please find, attached, Volkswagen's response to your request, dated July 25, 2014, for comparative assessment of Volkswagen vehicles equipped with a glass "panoramic" type sunroof system, as it relates to the subject condition described in the (MY) 2011-2013 Kia Sorento investigation, EA14-002. Per your request, the enclosed information is inclusive of 2011-2014 MY Volkswagen vehicles equipped with the Panoramic Sunroof System (Volkswagen Jetta SportWagen, Volkswagen Tiguan, and Volkswagen Touareg) manufactured and sold to Volkswagen Group of America, Inc. for resale or lease in the United States.

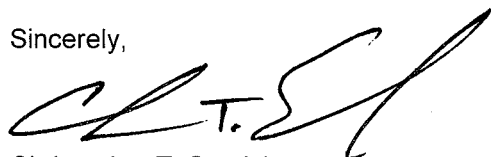
To ensure clarity in the presentation of information included in this response, Volkswagen understands the "subject condition" to refer to allegation of glass breakage of the panoramic glass roof that occurs either while the vehicle is parked or being driven.

For your convenience, each request is restated verbatim and then followed by our response.

Please be advised that the individual suppliers of Volkswagen panoramic sunroof glass will provide documents under separate cover, in addition to submitting a request for confidentiality.

Please contact me if you have any questions regarding this response.

Sincerely,



Christopher T. Sandvig  
General Manager - Compliance/TREAD  
Service and Quality

Attachments

Request 1

State, by model and model year, the number of subject and peer vehicles VW has manufactured for sale or lease in the United States. Separately, for each subject and peer vehicle manufactured to date by VW, state the following:

- a. Vehicle identification number (VIN);
- b. Make;
- c. Model;
- d. Model Year;
- e. Date of manufacture;
- f. Date warranty coverage commenced; and
- g. 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.” See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

Response 1

In response to this inquiry, Volkswagen has identified the following number of 2011-2014 Model Year (MY) Touareg, Tiguan and Jetta Sportwagen vehicles manufactured and sold to Volkswagen Group of America, Inc. for resale or lease in the United States, including “states” as defined in 49 U.S.C. 30102(a)(10), that were equipped with a panoramic sunroof system:

| Subject Vehicles | MY 2011 | MY 2012 | MY 2013 | MY 2014 |
|------------------|---------|---------|---------|---------|
| Touareg          | 3805    | 3825    | 6377    | 5975    |
| Tiguan           | 11857   | 13891   | 9921    | 9027    |
| Jetta Sportwagen | 15898   | 14016   | 13703   | 13173   |

Please see Microsoft Excel file entitled “PRODUCTION DATA.xlsx” for responses to subparagraphs a) through g), in the folder attached hereto as Exhibit to Request 1.

Source: Business Objects Vehicles Universe

Date Gathered: Through the date of the inquiry

Exhibit to Request 1

PRODUCTION DATA

Data is provided labeled as “PRODUCTION DATA.xlsx” in Microsoft Excel format in the Exhibit to Request 1 folder on the EA14-002 Data Collection Disc

## Request 2

State the number of each of the following, received by VW, or of which VW is otherwise aware, which relate to, or may relate to, the alleged defect in the subject and peer 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. Property damage claims;
- e. Third-party arbitration proceedings where VW is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which VW is or was a defendant or codefendant.

For subparts “a” through “f,” 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 “f,” provide a summary description of the alleged problem and causal and contributing factors and VW’s assessment of the problem, with a summary of the significant underlying facts and evidence. For items “e” and “f,” 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.

## Response 2

- a. In response to this inquiry, Volkswagen has identified 9 consumer complaints related to the alleged defect in the subject vehicles;
- b. In response to this inquiry, Volkswagen has identified 8 field reports related to the alleged defect in the subject vehicles;
- c. In response to this inquiry, Volkswagen has not received any reports involving a crash, injury or fatality, or notices/claims of injury or death alleging or proving that a death or injury was caused by the alleged defect in the subject vehicles. Volkswagen has not received any property damage claims, consumer complaints, or field reports involving or referring to a death or injury related to the alleged defect in the subject vehicles;
- d. In response to this inquiry, Volkswagen has not identified any property damage claims;
- e. In response to this inquiry, Volkswagen has not identified any third-party arbitration proceedings where VW is or was a party to the arbitration;
- f. In response to this inquiry, Volkswagen has not identified any lawsuit, in which VW is or was a defendant or codefendant.

Source: LISTEN, PL, FRED, FTIS, ATA/VTA

Date Gathered: Through the date of the inquiry

### Request 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. VW'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 occupied when the incident occurred;
- j. Whether the vehicle was in motion when the incident occurred;
- k. Whether a crash is alleged;
- l. Whether property damage is alleged;
- m. Number of alleged injuries, if any; and
- n. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

### Response 3

Responses to subparagraphs a) through n) are provided in a file entitled, REQUEST NUMBER TWO DATA.xlsx in the folder attached hereto as Exhibit to Request 3. Records are organized by case number then by category.

Source, Date Gathered: See Response 2

Exhibit to Request 3

REQUEST NUMBER TWO DATA

Data is provided labeled as “REQUEST NUMBER TWO DATA.xlsx” in Microsoft Excel format in the Exhibit to Request 3 folder on the EA14-002 Data Collection Disc

#### Request 4

Produce copies of all documents related to each item within the scope of Request No. 2 that alleges a crash, injury, or fatality occurred. (Also include all documents related to any incident in which VW conducted a field assessment of the incident vehicle, including all photographs.) Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method VW used for organizing the documents. Describe in detail the search methods and search criteria used by VW to identify the items in response to Request No. 2.

#### Response 4

Volkswagen has not identified any items within the scope of Request No. 2 that allege a crash, injury, or fatality occurred.

In response to this inquiry, the following search criteria were used to identify items in response to Request No. 2:

- Identify 2011-2014 Model Year (MY) Volkswagen Touareg, Tiguan, and Jetta Sportwagen vehicles equipped with a panoramic sunroof system, manufactured and sold to Volkswagen Group of America, Inc. for resale or lease in the United States
- Identify all panoramic sunroof system glass part identification numbers in the subject vehicles

The individual items were then manually screened to identify those which contained customer concerns related to the subject allegation of glass breakage of the panoramic glass roof that occurs either while the vehicle is parked or being driven.

Source, Date Gathered: See Response 2

Exhibit to Request 4

Volkswagen has not identified any records responsive to Request No. 4 that are within the scope of Request No. 2, that allege a crash, injury, or fatality occurred.



## Request 5

State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by VW to date that relate to, or may relate to, the alleged defect in the subject and peer 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. VW'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. Whether the vehicle was occupied when the incident occurred;
- k. Whether the vehicle was in motion when the incident occurred;
- l. Concern stated by customer; and
- m. 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." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

## Response 5

In response to this inquiry, Volkswagen has identified 31 warranty claims related to the alleged defect in the subject vehicles. Volkswagen notes that 5 of these claims are duplicative of consumer complaints and 7 are duplicative of field reports.

Information for these claims is provided in Microsoft Excel format, entitled "WARRANTY DATA.xlsx", in the folder attached hereto as Exhibit to Request 5. The claims are organized by claim number.

Source: Business Objects Warranty Universe

Date Gathered: Through the date of the inquiry

Exhibit to Request 5

WARRANTY DATA

Data is provided labeled as “WARRANTY DATA.xlsx” in Microsoft Excel format  
in the Exhibit to Request 5 folder on the EA14-002 Data Collection Disc

## Request 6

Describe in detail the search criteria used by VW 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 VW 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 VW 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.

## Response 6

In order to respond to this inquiry, the following search criteria were used to search the Warranty Claims data to identify claims in response to Request No. 5:

- Identify 2011-2014 Model Year (MY) Volkswagen Touareg, Tiguan, and Jetta Sportwagen vehicles equipped with a panoramic sunroof system, manufactured and sold to Volkswagen Group of America, Inc. for resale or lease in the United States
- Identify all panoramic sunroof system glass service part numbers in the subject vehicles

The individual items were then manually screened to identify those which contained customer concerns related to the subject allegation of glass breakage of the panoramic glass roof that occurs either while the vehicle is parked or being driven.

| Make       | Model Year | Model            | New Vehicle Limited Warranty | Extended Warranty |
|------------|------------|------------------|------------------------------|-------------------|
| Volkswagen | 2011-2014  | Jetta Sportwagen | 3 Years / 36,000 Miles       | N/A               |
| Volkswagen | 2011-2014  | Tiguan           | 3 Years / 36,000 Miles       | N/A               |
| Volkswagen | 2011-2014  | Touareg          | 3 Years / 36,000 Miles       | N/A               |

### Warranty Policies and Procedures - 07/14

#### 3.25 GLASS

- Warrantability must be determined by the QTM Team using the Warranty Repair Acceptance process in WISE, prior to starting the repair (see section 3.66 Warranty Repair Acceptance Process in WISE).
- Glass is covered under the NVLW for manufacturing defects only. Stone chips in the glass are not covered.

Source: VWGoA

Date Gathered: Through the date of the inquiry

Request 7

For each model, model year and panoramic sunroof system design manufactured on the subject peer vehicles, identify the part number, supplier name and a complete street address, contact name, and telephone number.

Response 7

| Model               | Service Part Number | Supplier name                   | Complete street address                                      | Contact name             | Contact Title                  | Contact Phone  |
|---------------------|---------------------|---------------------------------|--|--------------------------|--------------------------------|----------------|
| Touareg             | 7P0 877 055         | Webasto<br>Roof Systems<br>Inc. | 1757 Northfield Drive<br>Rochester Hills, MI<br>48309<br>USA | Mr. Brian<br>Westenberg  | Counsel                        | (248) 267 3220 |
|                     | 1K9 877 056         |                                 |  | Mr. Keith<br>Johnson     | Vice<br>President -<br>Quality | (248) 997-5100 |
|                     | 1K9 877 056 A       |                                 |  |                          |                                |                |
| Tiguan              | 5N0 877 055         | Inteva<br>Products              | 1401 Crooks Road<br>Troy, Michigan<br>48084<br>USA           | Mr. Lance Lis            | Vice<br>President -<br>Quality | (248) 655 8900 |
|                     | 5N0 877 055 B       |                                 |  |                          |                                |                |
|                     | 5N0 877 056         |                                 |  | Mrs. Marsha<br>Fershtman | Senior<br>Counsel              | (248) 655 8328 |
|                     | 5N0 877 056 B       |                                 |  |                          |                                |                |
| Jetta<br>Sportwagen | 1K9 877 055         |                                 |  | Mr. Everado<br>Hernandez | Engineer                       | (248) 655 8286 |
|                     | 1K9 877 056         |                                 |  |                          |                                |                |

## Request 8

For each panoramic sunroof system utilized in the subject peer vehicles, provide the following information:

- a. Marketing or Common item name;
- b. Movable or Fixed glass panel system;
- c. Single or multiple panel design (state no. of panels);
- d. Type of movable glass panel deployment design (i.e., Slide-in-Roof; Tilted and Slide over roof; Titled, Slide and Stacked (for sectioned design), etc.);
- e. Sunshade type (manual or automatic, 1 or 2-piece)
- f. Location of glass panel(s) (i.e., “over 1st-row occupants”, “over 2nd- row occupants”, etc.);
- g. Size of panel(s) (length x width in centimeters);
- h. Thickness of glass panel(s) (millimeters);
- i. Weight of glass panel(s) (kilograms);
- j. Type of glass used as classified in ANSI/SAE Z26.1 (i.e. laminated, tempered, tempered-laminated, etc.);
- k. Certified to ANSI/SAE Z26.1, Item 3/4 Glazing Material Standard (specify all applicable Table 1 Tests);
- l. Provide any impact test results per ANSI/SAE Z26.1 Test No. 6-14 or per other standards if available;
- m. ANSI/SAE Z26.1 certification marking (i.e. AS1, AS2, etc.) if any;
- n. Explain the reasons for selecting the type, thickness and other relevant aspects of the glass used in the subject component in comparison with other types, thickness, and other relevant aspects of glass, which were considered or which could have been used;
- o. Engineering drawings of the panoramic sunroof system, including a depiction and/or description of how it is assembled in the subject vehicle.

## Response 8

Responses to subparagraphs a) through k), m) and n) are provided in a file entitled, “Request Number Eight Data.pdf” in the folder attached hereto as Exhibit to Request 8.

To simplify the correlation between service part numbers (assemblies), drawing numbers, and certification tests/documents for these glass panels, Volkswagen has added three lines, below the response, with the following information:

- 1) Drawing No. (for glass);
- 2) Corresponding service part number;
- 3) Supplier of glass/Supplier of panel.

Response to subparagraph l) will be provided under separate cover by the suppliers of record and under request for confidentiality.

In response to subparagraph o), Volkswagen is providing engineering drawings of the sunroof system, which provide a depiction and description of how it is assembled in the subject vehicle, in a file entitled Exhibit to Request 8o. Volkswagen notes that engineering drawings of the sunroof glass will be provided under separate cover by the suppliers of record and under request for confidentiality.

## Response to question 8

| Vehicle  | Touareg   |  | Tiguan   |  | Jetta Sportwagen   |  |
|--|---|--|--|--|--|--|
| a. Marketing or Common item name   | Power tilting/sliding panoramic sunroof   |  | Power tilting/sliding panoramic sunroof              |  | Power tilting/sliding panoramic sunroof  |  |
| b. Movable or Fixed glass panel system   | Panel1 movable  |  | Panel1 movable                                       |  | Panel1 movable   |  |
| c. Single or multiple panel design (state no. of panels)   | 2 panel design  |  | 2 panel design                                       |  | 2 panel design   |  |
| d. Type of movable glass panel deployment design   | Panel 1 tilting and sliding   |  | Panel 1 tilting and sliding                          |  | Panel 1 tilting and sliding  |  |
| e. Sunshade type (manual or automatic, 1 or 2-piece)   | automatic, 1-piece  |  | automatic, 1-piece                                   |  | automatic, 1-piece   |  |
| f. Location of glass panel(s)  | In the roof   |  | In the roof  |  | In the roof  |  |
|  | Panel 1   | Panel 2  | Panel 1  | Panel 2  | Panel 1  | Panel 2  |
| g. Size of panel(s) (length x width in centimeters)  | 68,9 x 96,5   | 72,7x 93,6   | 69 x 84,7  | 64,3 x 82,9  | 68,9 x 84,7  | 64,4 x 82,9  |
| h. Thickness of glass panel(s) (millimeters)   | 5,0mm   | 5,0mm  | 5,0mm  | 5,0mm  | 5,0mm  | 5,0mm  |
| i. Weight of glass panel(s) (kilograms)  | 8,28  | 8,48   | 7,4  | 5,8  | 7,39   | 5,8  |
| j. Type of glass used as classified in ANSI/SAE Z26.1 (i.e. laminated, tempered, tempered-laminated, etc.) | Tempered Glass (according to ANSI)  | Tempered Glass (according to ANSI)                   | Tempered Glass (according to ANSI)                   | Tempered Glass (according to ANSI)                   | Tempered Glass (according to ANSI)   | Tempered Glass (according to ANSI)   |
| k. Certified to ANSI/SAE Z26.1, Item 3/4 Glazing Material Standard (specify all applicable Table 1 Tests)  | FMVSS 205<br>(Tests No. 6,7 and 8 of table 1/item 3)  | FMVSS 205<br>(Tests No. 6,7 and 8 of table 1/item 3) | FMVSS 205<br>(Tests No. 6,7 and 8 of table 1/item 3) | FMVSS 205<br>(Tests No. 6,7 and 8 of table 1/item 3) | FMVSS 205<br>(Tests No. 6,7 and 8 of table 1/item 3)   | FMVSS 205<br>(Tests No. 6,7 and 8 of table 1/item 3)   |
| l. Provide any impact test results per ANSI/SAE Z26.1 Test No. 6-14 or per other standards if available    | <b>See Exhibit to Request 8l</b>  |  |  |  |  |  |
| m. ANSI/SAE Z26.1 certification marking (i.e. AS1, AS2, etc.) if any                                       | DOT865 M1250 AS3  | DOT865 M1250 AS3                                     | DOT682 M5550 AS3                                     | DOT682 M5550 AS3                                     | DOT15 M125 AS3<br>DOT682<br>M5550 AS3*<br>*) at SOP same certification marking as Tiguan. During production period change to DOT 15 M125 | DOT15 M125 AS3<br>DOT682<br>M5550 AS3*<br>*) at SOP same certification marking as Tiguan. During production period change to DOT 15 M125 |
| n. Explain the reasons for selecting the type, thickness and other relevant aspects of the glass used      | <p>All Volkswagen vehicles equipped with a panoramic sunroof system comply with applicable safety certification standards. The design dimension of the panoramic sunroof system is the result of extensive testing to ensure that all applicable standards are met.</p> <p>A major consideration is the lower weight of toughened glazing, which has a higher mechanical strength when compared to laminated glazing. A reduced weight roof structure provides for a lower center of gravity, thus improving vehicle driving dynamic and contributes to improved fuel efficiency.</p> |  |  |  |  |  |
| o. Engineering drawings of the panoramic sunroof system  | <b>See Exhibit to Request 8o</b>  |  |  |  |  |  |
| Drawing No. (for glass)  | 1724732   | 1724745  | 516714130  | 516714230  | 585714130  | 585714230  |
| Corresponding service part number (assembly)   | 7P0 877 055   | 7P0 877 056<br>7P0 877 056 A                         | 5N0 877 055<br>5N0 877 055 B                         | 5N0 877 056<br>5N0 877 056 B                         | 1K9 877 055  | 1K9 877 056  |
| Supplier of glass / Supplier of panel  | FUYAO / Webasto   | FUYAO / Webasto                                      | Pilkington / Inteva                                  | Pilkington / Inteva                                  | Pilkington / Inteva  | Pilkington / Inteva  |