### **Technical Bulletin**



# RECALL CAMPAIGN BULLETIN

Reference: Date:

NTB13-034b January 23, 2014

# VOLUNTARY SAFETY RECALL CAMPAIGN 2013 LEAF OCS SENSORS

The SERVICE PROCEDURE has been amended. A Flow Chart on page 5 gives further detail on how to more accurately read the OCS sensor lot code number. The Repair Overview has been edited to follow these changes. Please discard previous versions of this bulletin.

**CAMPAIGN ID #:** PC215 **NHTSA #:** 13V-069

**APPLIED VEHICLES:** 2013 LEAF (ZE0)

Check Service COMM to confirm campaign eligibility.

#### INTRODUCTION

Nissan is conducting a Voluntary Safety Recall Campaign to inspect, and if needed, replace the Occupant Classification System (OCS) sensors on certain specific 2013 LEAF vehicles at no charge for parts or labor.

#### **IDENTIFICATION NUMBER**

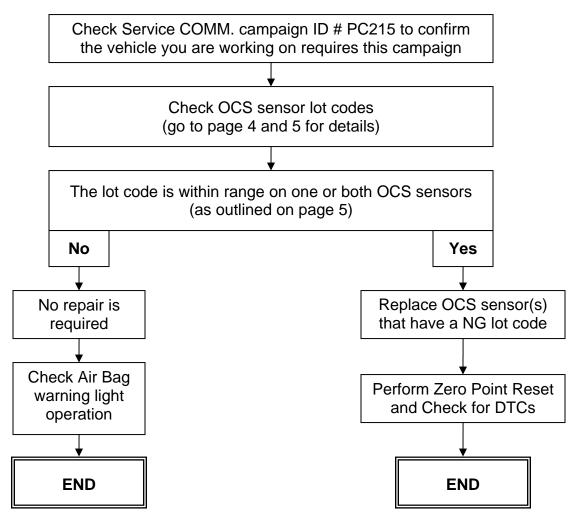
Nissan has assigned identification number PC215 to this campaign. This number must appear on all communications and documentation of any nature dealing with this campaign.

#### **DEALER RESPONSIBILITY**

It is the dealer's responsibility to check Service COMM for the campaign status on each vehicle falling within the range of this voluntary safety recall campaign which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in a dealer's inventory. **Federal law requires that new vehicles in dealer inventory which are the subject of a safety recall must be corrected prior to sale. Failure to do so can result in civil penalties by the National Highway Traffic Safety Administration.** While federal law applies only to new vehicles, Nissan strongly encourages dealers to correct any used vehicles in their inventory before they are retailed.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

# **Repair Overview**



#### **REQUIRED SPECIAL TOOL J-50079**

- Video Borescope J-50079 is an essential tool.
- Each dealer was previously shipped one J-50079.
- Additional tools can be ordered from TECH-MATE at 1-800-662-2001.



Figure ST1

#### **SERVICE PROCEDURE**

**CAUTION:** Handle interior trim carefully to avoid damage. Work with clean hands and clean tools to avoid dirt and stains. Use protective covers as needed.

# **Check OCS Sensor Lot Codes**

1. Slide the front passenger seat to the full forward position.

2. Use borescope (J-50079 or equivalent) to read the lot code on the side of the inboard seat-track.



Figure A

**NOTE:** The seat is removed in the photo below to illustrate the location of the lot code stickers. The <u>seat does not need to be removed</u> to see the stickers with the borescope.

### OCS sensor lot code example – your vehicles lot code numbers may be different.

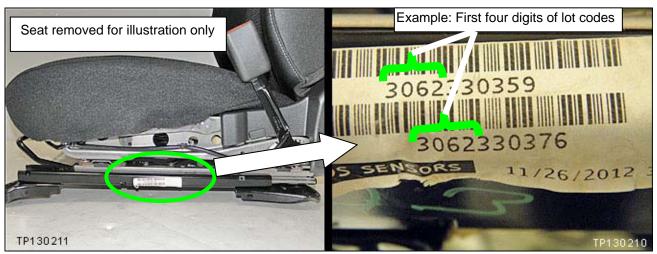
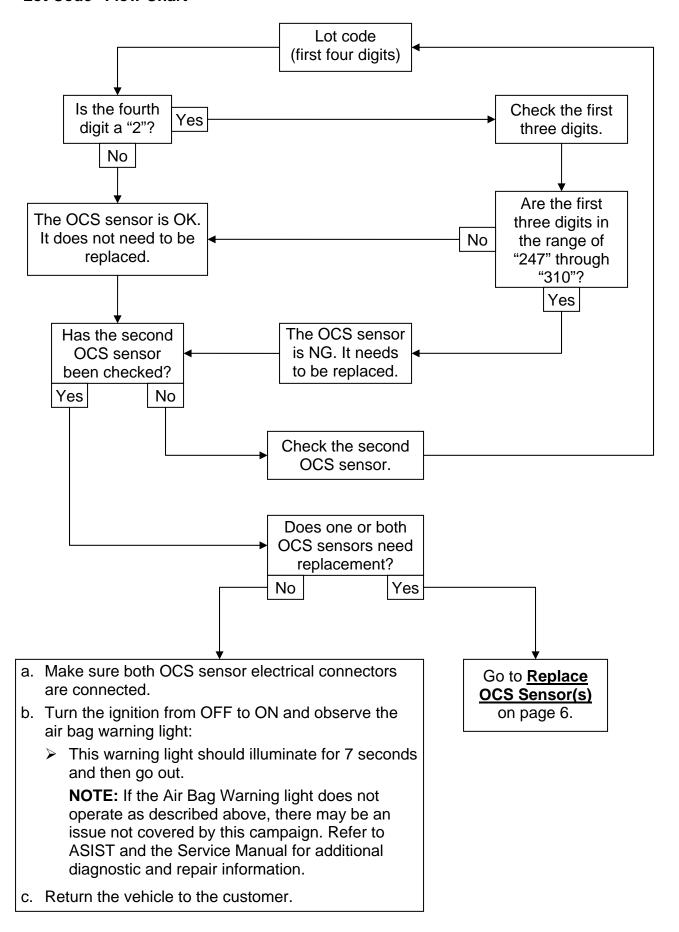


Figure B

- 3. Write the first four digits of the lot code for each sensor on the repair order.
  - In the **example** above, the first four digits are "3062" for both sensors.
- 4. Use the flow chart on the next page to determine if the OCS sensors are NG or OK.
  - Both sensors must be checked.

#### "Lot Code" Flow Chart



### Replace OCS Sensor(s)

**IMPORTANT:** Follow all cautions, warnings, and notes in the Electronic Service Manual (ESM) when working on or near a Supplemental Restraint System (SRS), such as an air bag).

**CAUTION**: Handle interior trim carefully to avoid damage. Work in a clean area with clean hands and clean tools to avoid dirt and stains. Use protective covers as needed.

**WARNING:** This procedure involves working with the passenger seat frame. The metal seat frame has sharp edges.

NOTE: Make sure to follow this procedure exactly as specified (<u>including torque specifications</u>) to ensure proper operation of the Occupant Classification System.

1. Write down the radio settings.

Presets	1	2	3	4	5	6
AM						
FM 1						
FM 2						
SAT 1						
SAT 2						
SAT 3						
Bass	Trebl	e E	Balance	Fade	Speed Vol.	Sen.

- 2. **If equipped**; Write down the customer preferred setting for the Automatic Air Conditioning System.
  - If needed, refer to System Settings in the HAC section of the Service Manual.
- 3. Turn the ignition OFF.
- 4. Disconnect both battery cables from the 12 volt battery, negative cable first.

**CAUTION**: Wait at least 3 minutes before disconnecting any air bag electrical connectors.

- 5. Remove the recline lever finisher from the front passenger seat as follows:
  - a. Position the seatback to the full upright/full forward position.

#### NOTE:

- With the seatback full forward, the recline lever will be in an UP position as shown.
- The recline lever is easier to remove in this UP position.

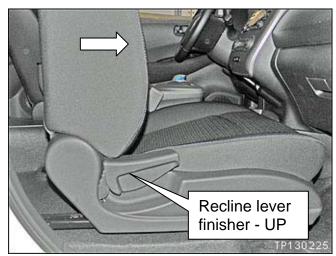


Figure 1

- b. At the same time:
  - Push down on the tip, and
  - Pull forward (toward the front of the vehicle).

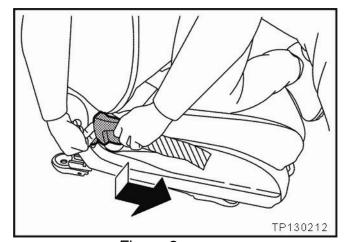


Figure 2

6. Use a plastic trim tool to remove the seat cushion outer finisher (RH).

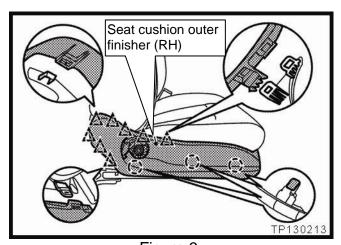


Figure 3

WARNING: This procedure involves working with the passenger seat frame. The metal seat frame has sharp edges.

- 7. Disconnect the seat cushion trim J-hooks A (see Figures 4 and 5).
  - J-hooks are located on the sides, front, and front corners.

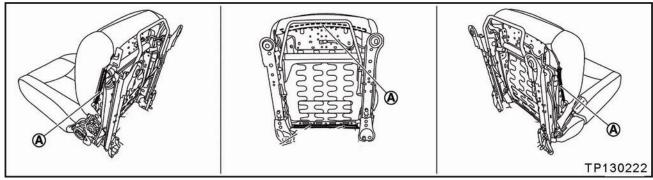


Figure 4

#### NOTE:

- The inboard side J-hook can be released using a hook tool.
  - a. Slide the hook tool between the seat and the center console (see Figure 5A).
  - b. Using the hook tool, push the J-hook down and away from the seat (see Figure 5B).



Figure 5A Figure 5B

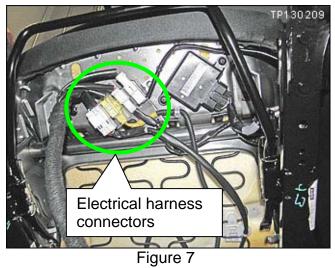
8. Move the passenger seat to the full forward position.

NOTE: Look under the front of the seat for steps 9, 10 and 11.



Figure 6

- 9. Disconnect the electrical harness connectors shown in Figure 7.
  - These connectors are accessed from under the front of the seat.



- 10. Remove the 3 screws shown in Figure 8.
  - These screws are accessed from under the front to the seat.
- 11. Disconnect the electrical connector from the OCS control unit (see Figure 8).
  - The OCS control unit is accessed from under the front to the seat.

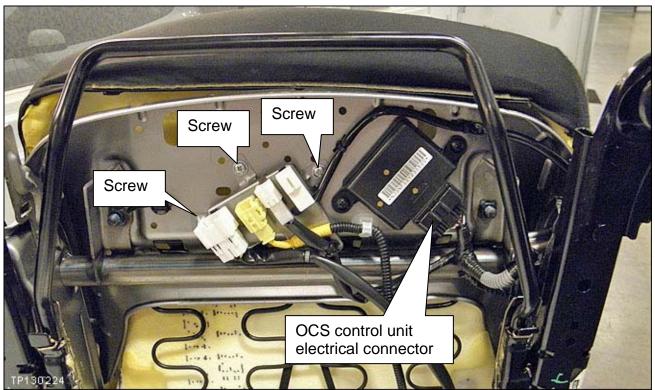


Figure 8

12. Lift the seat cushion and remove the plastic liner.

**NOTE:** Retain this liner for reassembly.



Figure 9

13. Lift the seat cushion to access the seat cushion pan.

NOTE: The Seat cushion will need to be lifted for steps 14 through 19.

- 14. Release/disconnect the 4 harness mounting clips shown in Figure 10.
- 15. Remove the 2 Torx<sup>®</sup> head bolts shown in Figure 10.

**NOTE**: These bolts will <u>not</u> be reused.

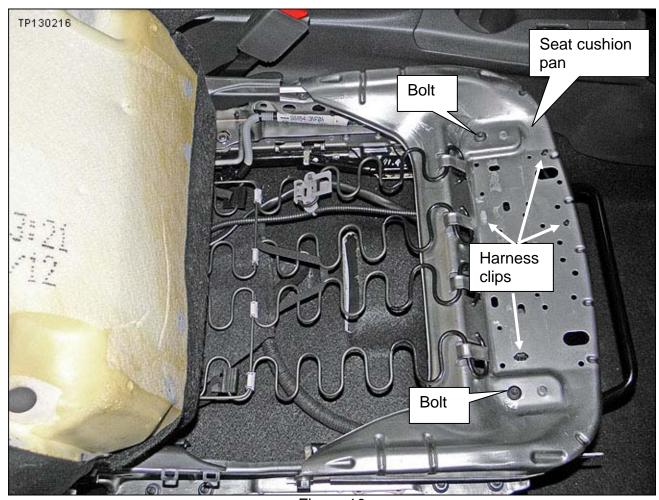


Figure 10

16. Lift the seat cushion pan and disconnect the front OCS sensor electrical connector (see Figure 11).



Figure 11

17. Lift the seat cushion pan and remove the 14 mm nut on the front of the inboard seat-track (see Figure 12).

NOTE: This nut will not be reused.

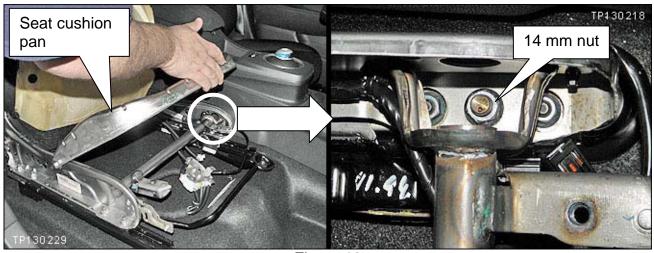


Figure 12

- 18. Disconnect the rear OCS sensor electrical connector (see Figure 13).
- 19. Remove the 14 mm nut and washer on the rear of the inboard seat-track (see Figure 13).

NOTE: This nut will not be reused.

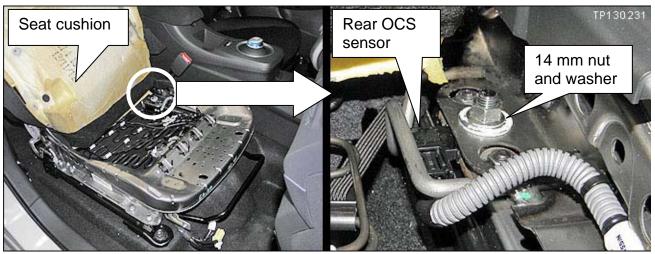


Figure 13

20. Remove all 4 of the 12 mm nuts from the outboard seat-track (see Figure 14).

**NOTE**: These nuts will <u>not</u> be reused.

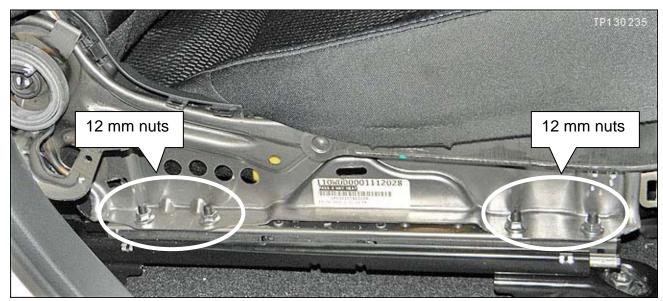


Figure 14

21. Lift the seat from the seat-tracks and set it to the rear as shown in Figure 15.



Figure 15

- 22. Remove the old OCS sensor(s) from the inboard seat-track and install new OCS sensor(s).
  - Use <u>new</u> 12 mm OCS mounting nuts.
  - Torque nuts to 22 N•m (3.04 kg-m, 16 ft-lb).



Figure 16

- 23. Use a permanent marker to mark through the lot code stickers shown in Figure 17.
  - There is one sticker on the side of the seat cushion pan and one sticker on the side of the inboard seat-track.



Figure 17

### **Reassmeble the Seat**

- 24. Place the seat onto the seat-tracks.
  - Make sure the studs are located correctly in the seat frame.



Figure 18

- 25. Install all 4 of the 12 mm nuts on the outboard seat-track **finger tight only** (see Figure 19).
  - Use new nuts.

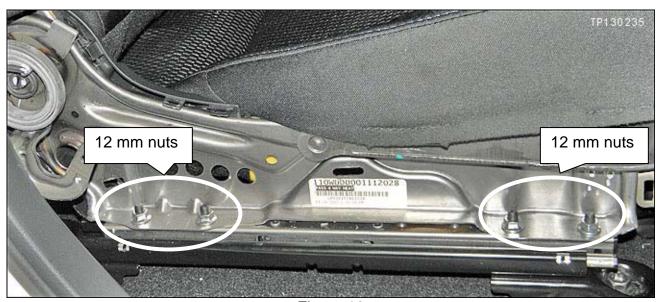


Figure 19

26. Lift the seat cushion and reconnect the rear OCS sensor electrical connector (see Figure 20).

**NOTE:** The seat cushion must be lifted for steps 27 though 30, and steps 32 and 33.

- 27. Install the 14 mm **nut and washer** on the rear of the inboard seat-track **finger tight only** (see Figure 20).
  - Use a new washer.
  - Use a new nut.



Figure 20

28. Lift the seat cushion pan and connect the front OCS sensor electrical connector (see Figure 21).

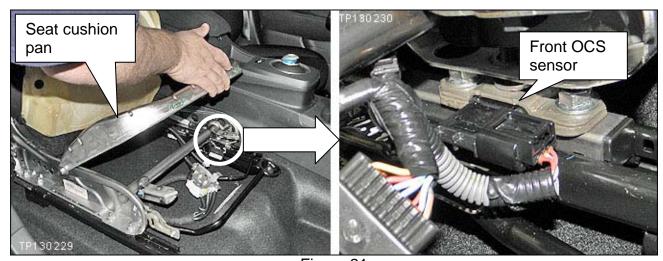


Figure 21

#### **IMPORTANT:**

- The torque specification in steps 29 and 30 is critical.
- Make sure your torque wrench is properly calibrated.
- Make sure to torque these nuts as indicated.
- 29. Lift the seat cushion pan and install the 14 mm nut on the front of the inboard seat-track (see Figure 22).
  - Use a new nut.
  - Torque nut to 45 N•m (4.56 kg-m, 33 ft-lb).

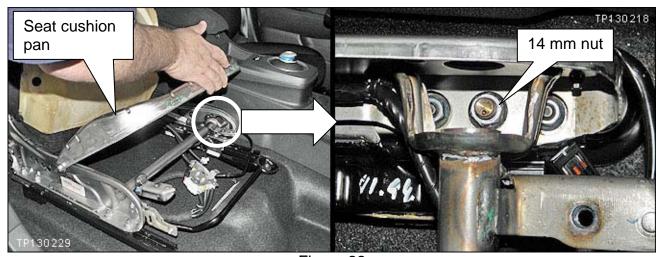


Figure 22

- 30. Torque the 14 mm nut on the rear of the inboard seat track (see Figure 23).
  - Torque nut to 45 N•m (4.56 kg-m, 33 ft-lb).



Figure 23

- 31. Torque the 12 mm nuts on the outboard seat-track (see Figure 24).
  - Torque nuts to 22 N•m (3.04 kg-m, **16 ft-lb**).



Figure 24

- 32. Install <u>new</u> Torx<sup>®</sup> head bolts shown in Figure 25.
  - Make sure locating pins are in place.
  - Use new bolts.
  - Torque bolts to 22 N•m (3.04 kg-m, **16 ft-lb**).
- 33. Connect the 4 harness mounting clips shown in Figure 25.
  - Reach under the front of the seat and push the clips up from underneath.

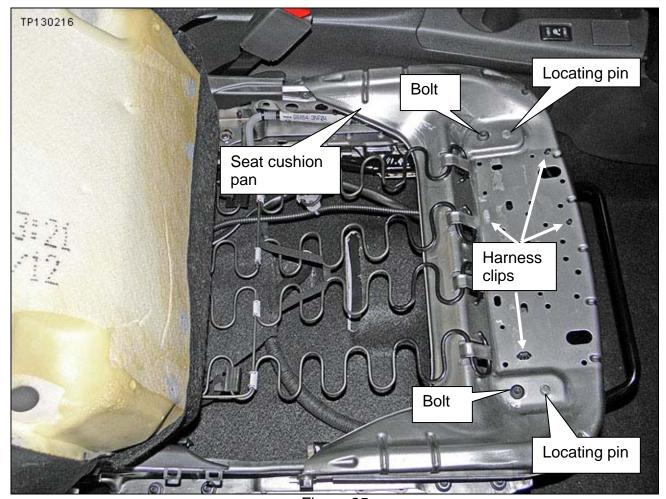


Figure 25

34. Move the passenger seat to the full forward position.

**NOTE**: Look under the front of the seat for steps 35, 36, and 37.

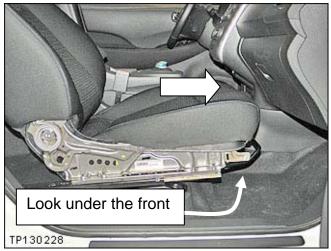


Figure 26

- 35. Reinstall the 3 screws shown in Figure 27.
  - These screws are accessed from under the front to the seat.
- 36. Reconnect the electrical connector to the OCS control unit (see Figure 27).
  - The OCS control unit is accessed from under the front to the seat.

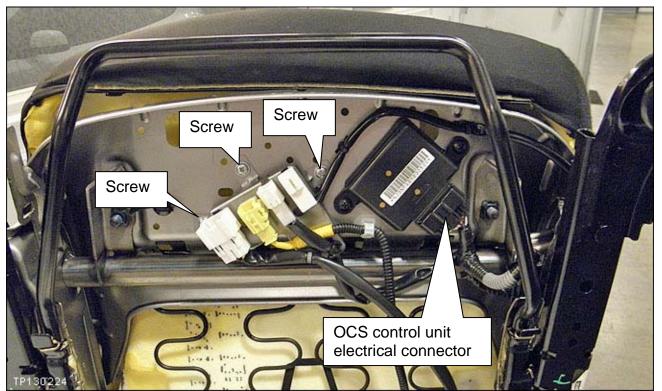
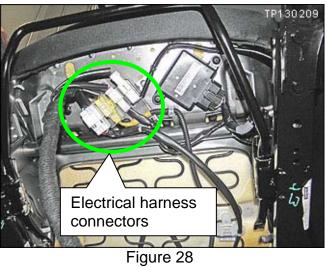


Figure 27

- 37. Reconnect the electrical harness connectors shown in Figure 28.
  - These connectors are accessed from under the front of the seat.



38. Lift the seat cushion and reinstall the plastic liner.



Figure 29

- 39. Reconnect the seat cushion trim J-hooks A (see Figure 30).
  - J-hooks are located on sides, front, and front corners.

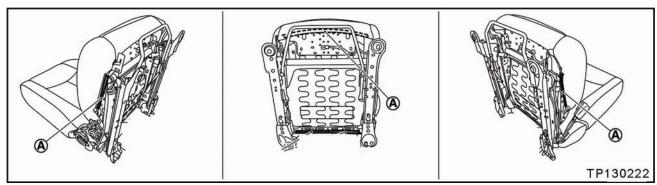


Figure 30

40. Reinstall the seat cushion outer finisher (RH).

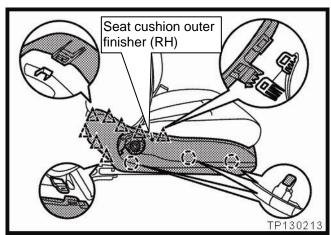


Figure 31

- 41. Reinstall the recline lever finisher.
  - Push the finisher onto the lever until it locks in place.



Figure 32

42. Operate the seat slide and make sure both tracks (left and right side) lock in place at each adjustment point.

- 43. Reconnect both cables for the 12 volt battery positive cable first.
- 44. Reset the clock in the combination meter.
- 45. Reset the radio settings.
- 46. **If equipped**; check/reset the clock in the navigation system.
- 47. **If equipped**; reset the customer preferred settings for the Automatic Air Conditioning System.
  - If needed, refer to System Settings in the HAC section of the Service Manual.

### 48. Inform the customer:

- If equipped; some memory settings in the navigation system may need to be reset.
- If equipped; some charging and climate control timers may need to be reset.
- 49. Reinitialize and check the Anti-Pinch Function for all Auto-UP power windows:

#### Reinitialize:

- a. Turn the ignition ON.
- b. Operate the power window switch to fully open the window (glass all the way down).
- c. Hold the window switch UP until the glass stops at the fully closed position, and then continue holding the switch UP for 2 seconds or more.
- d. Check that AUTO-UP function operates normally.

#### **Check Anti-Pinch Function**

- a. Fully open the door window (glass all the way down).
- b. Hold a piece of wood near the fully closed position.
- c. Close the door window glass using the AUTO-UP switch. Allow the window glass to hit the wood.
- d. Check the following conditions:
  - Check that the glass lowers for approximately 150 mm (5.9 in), without pinching the wood, and stops.
  - Check that the glass does not rise when operating the power window main switch, while the widow is lowering after hitting the wood.

**CAUTION:** Do not check anti-pinch function with hands or other body parts because they may be pinched.

50. Perform Zero Point Reset and Check for DTCs; next page.

#### **Zero Point Reset / Check for DTCs**

- 1. Attach the CONSULT-III plus (C-III plus) VI to the vehicle.
- 2. Prepare the vehicle for Zero Point Reset.
  - Set the parking brake.
  - Place the vehicle in a level area.
  - Minimize vibrations near the vehicle.
  - Remove any objects on the passenger seat.
  - No occupants in the vehicle including the servicing technician.
  - Close all of the vehicle doors.
  - Do not touch the vehicle during zero point reset.
- 3. Place the CONSULT PC outside the vehicle and away from the vehicle.
- 4. Turn the ignition ON and start C-III plus.
- 5. Wait for the plus VI to be recognized.
  - The serial number will display when the VI is recognized.
- 6. Select **Diagnosis (One System)**.

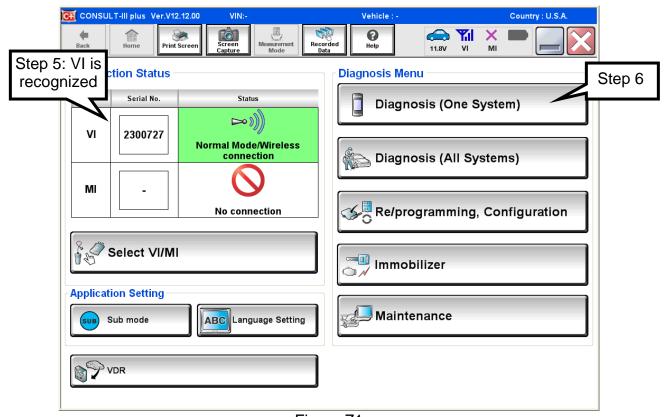


Figure Z1

#### 7. Select OCCUPANT DETECTION.

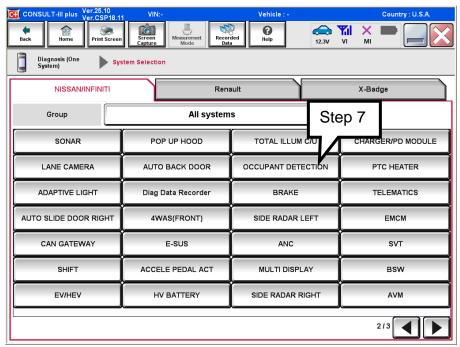


Figure Z2

- 8. Wait for System Call to complete.
- 9. Select Zero point reset function.
- 10. Select Start.

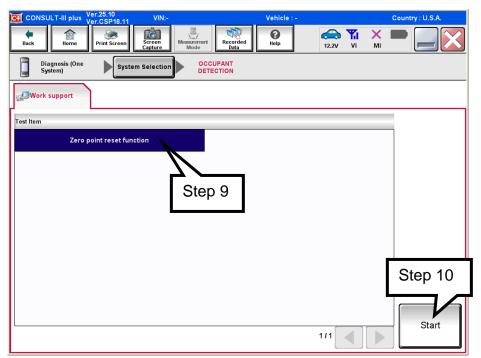


Figure Z3

#### 11. Select Next.

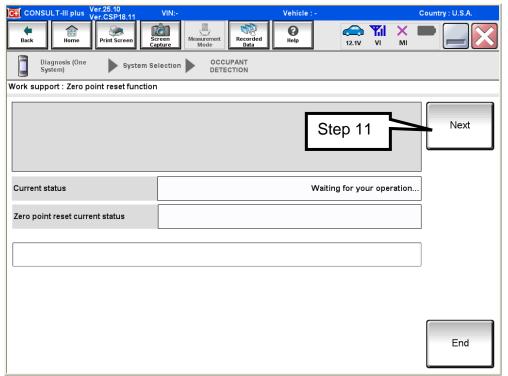


Figure Z4

#### 12. Select Start.

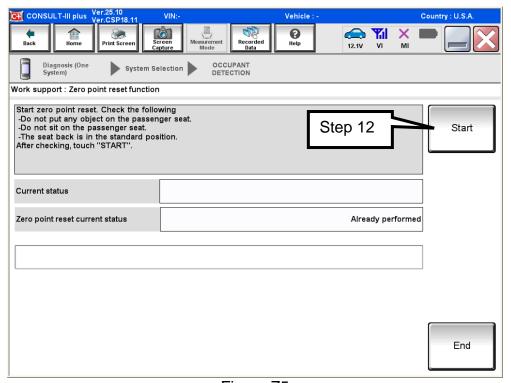


Figure Z5

### NOTE: Zero Point Reset must performed even if:

- "Current status" indicates "Completed", or
- "Zero point reset current status" indicates "Already performed"

13. Wait for Zero Point Reset to complete.

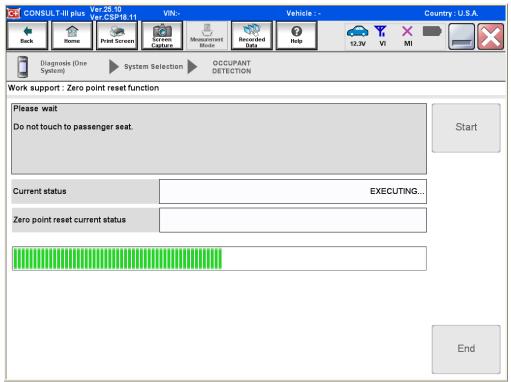


Figure Z6

#### If Zero Point Reset will not complete:

**NOTE:** If Zero Point Reset <u>will not</u> complete, it is likely that something in the Service Procedure <u>was not</u> followed exactly as instructed.

- a. Turn the ignition OFF.
- b. Make sure all electrical connectors under the seat are **securely connected**.
  - Body harness to seat harness.
  - OCS sensors
  - OCS Control Unit.
- c. Try Zero Point Rest again.
- b. If it still will not complete, an installation process or step <u>was not followed</u> exactly as specified.
  - Recheck / re-perform the OCS sensor installation process.
  - Pay special attention to the 14 mm nut torque (steps 29 and 30 on page 17).

14. Make sure that "Current status" reads as Completed.

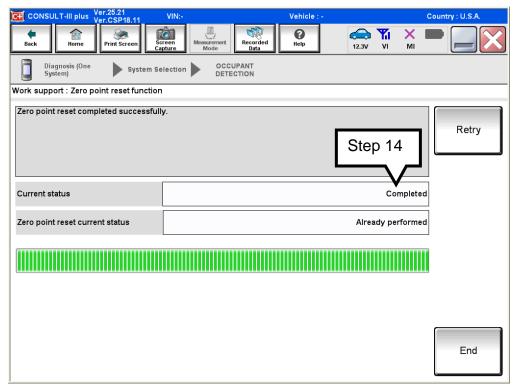


Figure Z7

- 15. Select **Home** on C-III plus.
- 16. Check for Air Bag DTCs.

Navigate C-III plus to:

#### Diagnosis (One System) ⇒ AIR BAG ⇒ Self Diagnostic Results

- No Air Bag DTCs stored go to the next step.
- DTC B00A0 stored (current or past) erase stored code, then go to the next step.
- Other DTCs stored: Refer to ASIST and the Service Manual for additional diagnostic and repair information. Issues other than replacement of the OCS sensors are not coved by this campaign.
- 17. Close C-III plus, turn the ignition OFF, and disconnect from the vehicle.
- 18. Turn the ignition ON and observe the air bag warning light:
  - Light should illuminate for 7 seconds and then go out.

**NOTE:** If the Air Bag Warning light does not operate as described above, there may be an issue not covered by this campaign. Refer to ASIST and the Service Manual for additional diagnostic and repair information.

### **PARTS INFORMATION**

DESCRIPTION	PART#	QUANTITY
Sen-Occupant (OCS Sensor)	98853-3JA0A	If needed, 1 or 2
M10 Nut (14 mm wrench size)	23391-3NF0A	If sensor is replaced; 2
M8 Nut (12 mm wrench size)	23188-3NF0A	If sensor is replaced; 8
Washer	01311-3NF0A	If sensor is replaced; 1
Torx <sup>®</sup> Bolt	01141-3NF0A	If sensor is replaced; 2

# **CLAIMS INFORMATION**

Submit a Campaign (CM) line claim using the following claims coding:

CAMPAIGN ID #	DESCRIPTION	OP CODE	FRT
PC215	Inspect OCS Sensors	PC2150	0.2 hrs.

# <u>OR</u>

CAMPAIGN ID #	DESCRIPTION	OP CODE	FRT
PC215	Inspect and replace One (1) OCS Sensor	PC2151	1.1 hrs.

# <u>OR</u>

CAMPAIGN ID#	DESCRIPTION	OP CODE	FRT
PC215	Inspect and replace Two (2) OCS Sensors	PC2152	1.1 hrs.

#### **OWNER'S LETTER**

Dear Nissan owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Nissan has decided that a defect which relates to motor vehicle safety exists in some vehicles. Our records indicate that you own the Nissan vehicle identified by the Vehicle Identification Number on the inside of this notice.

#### **Reason for Recall**

The Occupant Classification System (a part of the passenger air bag system) in the front passenger seat may have been manufactured out of specification. In some cases, this could deactivate the passenger air bag in your vehicle. If this occurs, the <u>red</u> air bag warning light will illuminate and stay illuminated after the vehicle is started (it is normal for the red air bag warning lamp to flash for about seven seconds when the vehicle is first started). This could result in the passenger air bag not inflating in a crash, potentially increasing the risk of injury.

#### What Nissan Will Do

Your Nissan dealer will inspect the OCS sensors and, if necessary, replace them with new ones. This service, free for parts and labor, can take up to two hours to complete, but your Nissan dealer may require your vehicle for a longer period of time based upon their work schedule, or parts availability.

#### What You Should Do

Contact your Nissan dealer at your earliest convenience in order to arrange an appointment to have your vehicle inspected and, if necessary, repaired. Please bring this notice with you to your service appointment. Instructions have been sent to your Nissan dealer.

If the red air bag warning light in your vehicle continuously illuminates after the vehicle is started, please take your vehicle to the dealership as soon as possible. In the interim do not allow passengers to ride in the passenger seat. If the dealer fails, or is unable to make the necessary repairs free of charge, you may contact the National Consumer Affairs Department, Nissan North America, Inc., P.O. Box 685003, Franklin, TN 37068-5003. The toll free number is 1-800-NISSAN1 (1-800-647-7261). You may also contact the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Thank you for your cooperation. We are indeed sorry for any inconvenience this may cause you.