



Reference:

Date:

RS17-025

Classification:

NTB17-035

March 28, 2017

# 2013 – 2016 LEAF **OCCUPANT CLASSIFICATION SYSTEM RETROFIT**

**APPLIED VEHICLES:** 2013 – 2016 LEAF (ZE0)

## SERVICE INFORMATION

The information in this bulletin is provided for customers who have concerns with their Occupant Classification System (OCS) operation after all campaigns have been completed.

Follow the steps in this bulletin to determine if this OCS retrofit procedure is applicable to the vehicle you are working on.

## DETERMINE IF OCS RETROFIT APPLIES

1. Check Service COMM to confirm if OCS reprogramming campaign has been completed (R1607 / NTB16-054).

## **Completed:**

- Write on the repair order the date it was completed and by which dealer.
- Go to step 2.

#### Not Completed:

- Complete campaign R1607 / NTB16-054.
- No further action needed. OCS retrofit does NOT apply.

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.

- 2. Verify and document the customer's concern (have the customer demonstrate the concern).
- 3. Using CONSULT-III plus, check for Airbag or OCS related DTCs.

No Airbag or OCS DTCs: go to step 4.

#### Airbag or OCS DTCs stored:

- Refer to the Electronic Service Manual (ESM), section SRC SRS Airbag Control System, for diagnostic and repair information.
- OCS retrofit does NOT apply.
- 4. If all of the following are confirmed:
  - Campaign R1607 / NTB16-054 has been completed.
  - Customer concern has been confirmed and documented.
  - No Airbag or OCS DTCs are stored.

## <u>Then</u>

5. Perform the Service Procedure in this bulletin.

#### SERVICE PROCEDURE

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

**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.

**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 or OCS components.

1. Turn the ignition ON.

Presets	1	2	3	4	5	6
AM						
FM 1						
FM 2						
SAT 1						
SAT 2						
SAT 3						
Bass	Treb	ole	Balance	Fade	Spd S	Sen. Vol.

2. Write down the radio settings.

- 3. **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 Electronic Service Manual (ESM).
- 4. Check to see if the timer for "charging" or "climate control" is ON. If ON, turn OFF and make sure to turn back ON after the service is completed.
  - For charging timer on vehicles with navigation write down which days are OFF, Timer 1 or Timer 2.
- 5. Turn the ignition OFF.
- 6. Passenger seat removal:
  - a. Disconnect both battery cables, negative cable first.
  - b. Wait at least 3 minutes.
  - c. Remove the passenger seat from the vehicle.
    - Refer to the ESM, section SE-Seat, for seat removal information.
- 7. Set the seat in a clean working area.

# NOTE:

- In the next steps you will be replacing the seatbelt buckle and the OCS harness.
- Figure 1 shows the old and new parts.
- The new seatbelt buckle and OCS harness are listed in the Parts Information.

EXAMPLE	EXAMPLE	
<b>Old</b> OCS harness and seatbelt buckle are removed from the seat.	<b>New</b> OCS harness and seatbelt buckle to be installed	
	Notice the new harness and buckle have a new branch with connector	



Figure 1

- 8. Remove the seatbelt buckle and buckle harness.
  - Buckle is held on with one nut (see Figure 2).
  - Remove the buckle harness clips shown in Figures 2 and 3.
- 9. Install the **new** buckle and harness.
  - Install the new buckle harness clips into the same location as the old clips (see Figures 2 and 3).
  - The new harness branch will be connected later in the procedure.
  - Torque the seat belt buckle mounting nut to: 49 N·m (5.0 kg-m, 36 ft-lb)

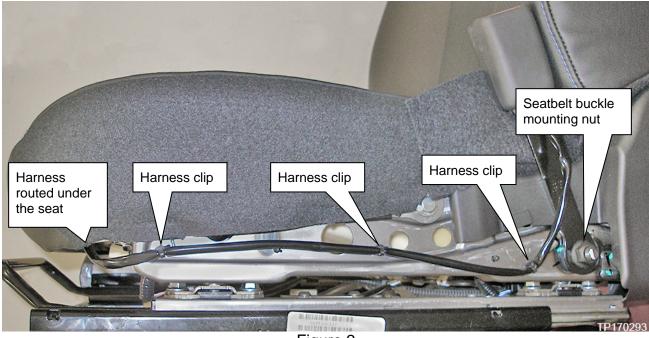
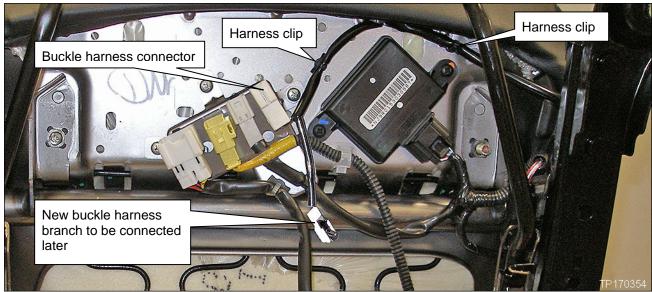


Figure 2



10. From under the seat, remove the old OCS harness and install the new one.

• The OCS harness consists of the wiring and connectors between the OCS sensors, OCS control unit and new seat belt buckle.

## **IMPORTANT:**

- a. Disconnect one OCS harness connector or mounting clip, then
- b. Connect the new OCS harness connector or mounting clip before moving to the next one.
  - Disconnecting/connecting one at a time will ensure that the new harness is connected **exactly** as the old one.
  - Refer to images on the next page for exact harness mounting points.

# **OCS and Seat Buckle Harness, Mounting Points and Component Locations**

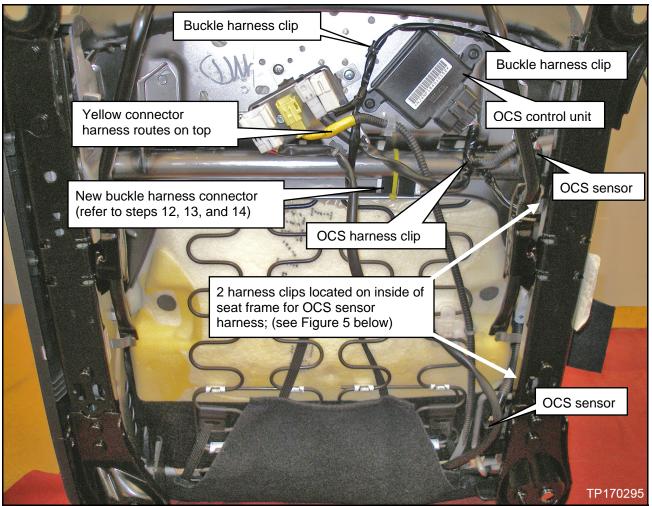
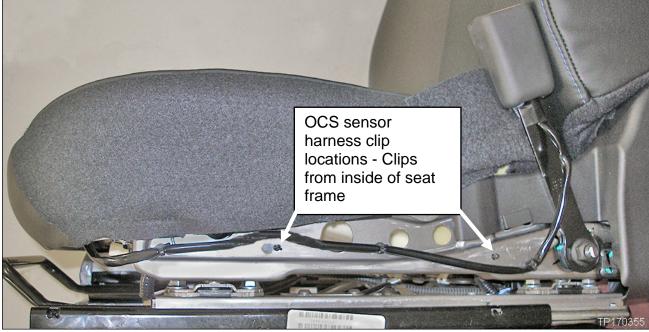


Figure 4



- 11. Replace the OCS control unit with the <u>new</u> one.
  - OCS control unit is held on with 2 screws.
  - The OCS control unit is located under the front edge of the seat.



Figure 6

- 12. Cut 2 strips of flocking tape (J-50397-8); each strip about 5 inches long.
  - Flocking tape is part of the squeak and rattle kit J-50397.



Figure 7

- 13. Connect the new seat belt buckle harness connector to the new OCS harness connector.
  - Wrap 1 strip of flocking tape around each side of the new connector as shown.

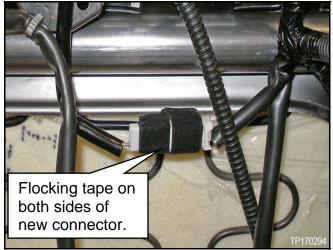


Figure 8

- 14. Secure the new connector to the seat frame support tube in the location shown in Figure 9.
  - Use tie strap listed in Parts Information.
  - Verify harness is routed as shown in Figure 9.

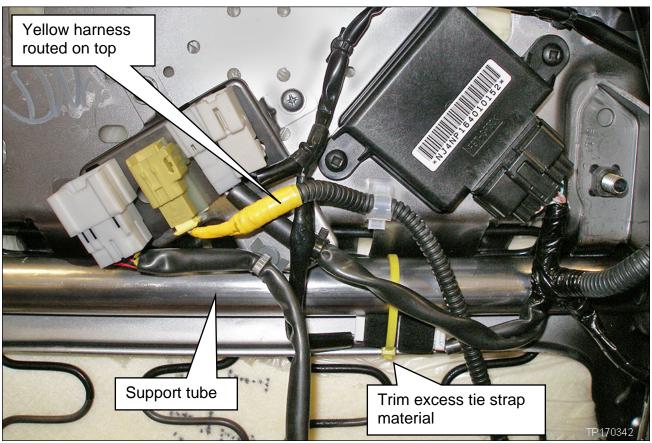


Figure 9

- 15. Reinstall the seat into the vehicle in reverse order of removal.
  - Reconnect all electrical connectors that were disconnected during seat removal.
  - Torque passenger seat mounting bolts to: 40 N•m (4.1 kg-m, 30 ft-lb)
  - Refer to Figure 10 for torque sequence.



Figure 10

- 16. Reconnect the battery cables, positive cable first.
- 17. Reset/reinitialize systems as needed.
  - Refer to the ESM section, PG Power, Supply & Ground Elements for a listing of systems that require reset/initialization after reconnecting the 12V battery.
    - Look in the PG section index for ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL.
    - > This list often includes items such as audio, power windows, clock, etc.
- 18. Perform Zero Point Reset, using CONSULT III plus, on the next page.

## Zero Point Reset

- 1. Prepare the vehicle for OCS zero point reset as follows:
  - Level the vehicle.
  - No objects on the passenger seat or in the storage bin.
  - No occupants in the vehicle including the servicing technician.
  - PC is outside of the vehicle on a suitable support.
    - > Do not set the PC on the vehicle.
  - Do not touch the vehicle during the OCS zero point reset.
  - Minimize vibrations of the vehicle.
- 2. Connect the plus VI to the vehicle.
- 3. Open / start CONSULT-III plus (C-III plus).
- 4. Turn the ignition ON, with engine OFF (engine not running/not in ready mode).
- 5. Wait for the plus VI to be recognized.
  - The Serial No. will display when the plus VI is recognized.
- 6. Select Diagnosis (One System).
- 7. Scroll C-III plus (All systems) and select OCCUPANT DETECTION.

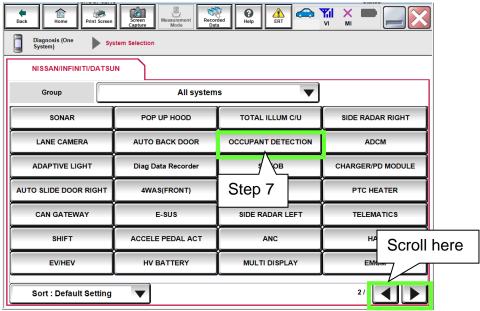
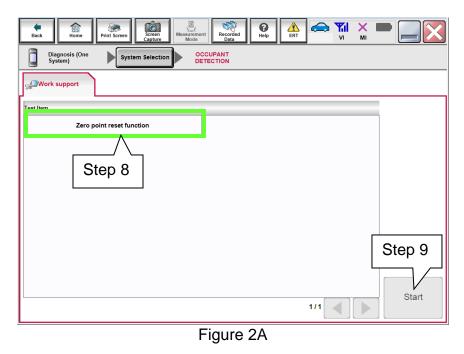


Figure 1A

- 8. Select Zero point reset function.
- 9. Select Start.



10. Select Next.

Back Home Print Screen Sc Diagnosis (One System) System Se	irren pture CCUPANT Detection DCCUPANT	Help	VI MI	
Work support : Zero point reset function				
				Next
Current status		Waiting for your	operation	Step 10
Zero point reset current status				
				End
1	<u> </u>	~ *		

Figure 3A

- 11. Select Start and then proceed to step 12.
  - After selecting **Start**, if Figure 5A is displayed:
    - a. Check the OCS control unit and confirm that harness connector is completely seated.
    - b. Turn the ignition OFF and then restart procedure from step 4 on page 11.

Back Print Screen Screen Measurement Mode Print Screen Mint Screen </th <th>-</th>	-
Work support : Zero point reset function	
Start zero point reset. Check the following -Do not put any object on the passenger seat. -Do not sit on the passenger seat. -The seat back is in the standard position. After checking, touch "START".	Start
Current status	Step 11
Zero point reset current status Not yet performed	
	U
	End

Figure 4A

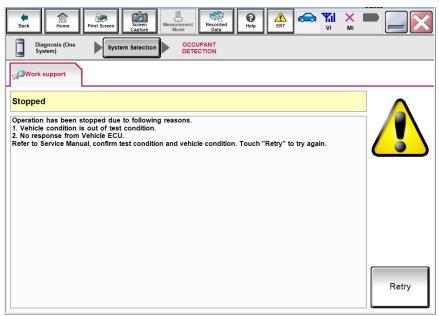


Figure 5A

12. Zero point reset will display "EXECUTING".

Back Image: Content Co					
Diagnosis (One System) System Selection System DETECTION					
Work support : Zero point reset function					
Please wait					
Do not touch to passenger seat.	Start				
Current status EXECUTING					
Zero point reset current status					
End					
Figure 6A					

13. When finished, "Completed" will display next to "Current status".

• Select **End** and then proceed to step 14.

Image: Second Back Image:	
Diagnosis (One System Selection CCCUPANT DETECTION	
Work support : Zero point reset function	
Zero point reset completed successfully.	Retry
Current status Completed	
Zero point reset current status Already performed	
	End
Figure 7A	Step 13

14. Turn the ignition OFF and then back ON and observe the air bag warning light and front passenger airbag status light:

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• The air bag warning light

should illuminate for 7 seconds and then go out.

• The front passenger airbag status light should illuminate for 7 seconds and then either stay illuminated or go out depending on the occupation of the front passenger seat.

#### Front Passenger Airbag Status Light Operation

CONDITION	DESCRIPTION	PASSENGER AIR BAG INDICATOR LIGHT	FRONT PASSENGER AIR BAG STATUS
Empty	Empty front passenger seat	ON (illuminated)	INHIBITED
Nobody/Somebody	Bag or Child or Child Restraint or Small Adult in the front passenger seat	ON (illuminated)	INHIBITED
Adult	Adult in front passenger seat	OFF (dark)	ACTIVATED

**NOTE:** If the air bag warning light or the front passenger airbag status light does not operate as described above there may be an issue not covered by this bulletin. Refer to ASIST and the appropriate Service Manual for additional diagnostic and repair information.

15. Provide the customer with a printed copy of FRONT PASSENGER AIR BAG STATUS LIGHT OPERATION (see last page).

## PARTS INFORMATION

DESCRIPTION	PART NUMBER	QUANTITY
Controller Assy-Occupant Sensor (OCS Control Unit)	98856 - 4NP0A	1
Seatbelt Buckle – Black	86842 - 4NP8B	
Seatbelt Buckle – Beige	86842 - 4NP8A	1
OCS Harness	98854 - 4NP0A	1
Clip (Tie-strap)	24224 - 3VX0B	1
Flocking Tape (1)	J - 50397 - 8 (1)	About 10 inches

(1) Flocking Tape is part of the squeak and rattle kit – J-50397. Additional Flocking Tape can be obtained from Tech-Mate at 1-800-662-2001.

#### **CLAIMS INFORMATION**

#### Submit a Primary Part (PP) type claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Perform OCS Retrofit	(1)	RX5NAA	ZE	32	0.9

(1) Reference the Parts Information Table and use the applicable Occupant Sensor Controller Assembly part number as the Primary Failed Part (PFP).

#### EXPENSE CODE:

EXPENSE CODE	DESCRIPTION	MAX AMOUNT	
041	Flocking Tape	\$3.00	

# FRONT PASSENGER AIR BAG STATUS LIGHT OPERATION

**NOTE:** Please print this page and place a copy in the vehicle.

The front passenger seat is equipped with an occupant classification sensor (weight sensor) that turns the front passenger air bag on or off depending on the weight applied to the front passenger seat. The status of the front passenger air bag (ON or OFF) is indicated by the front passenger air bag status light which is located on the instrument panel. After the ignuori switch is placed in the "ON" position, the front passenger air bag status for about 7 seconds and then turns off or remains illuminated depending on the front passenger seat occupied status. The light operates as follows:



CONDITION	DESCRIPTION	PASSENGER AIR BAG INDICATOR LIGHT	FRONT PASSENGER AIR BAG STATUS
Empty	Empty front passenger seat	ON (illuminated)	INHIBITED
Nobody/Somebody	Bag or Child or Child Restraint or Small Adult in the front passenger seat	ON (illuminated)	INHIBITED
Adult	Adult in front passenger seat	OFF (dark)	ACTIVATED