



RS17-006

NTB17-025

March 3, 2017

Date:

# 2014 – 2016 PATHFINDER OCCUPANT CLASSIFICATION SYSTEM RETROFIT

APPLIED VEHICLES: 2014 – 2016 Pathfinder (R52) 2014 – 2015 Pathfinder Hybrid (R52)

## 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, engine OFF.

Presets	1	2		3	4	5	)	6
AM								
FM 1								
FM 2								
SAT 1								
SAT 2								
SAT 3								
Bass	Tre	eble	Bala	ince	Fade		Spd Sen.	Vol.

2. Write down the radio settings.

- 3. Record (write down) any other customer settings that will be lost when the battery is disconnected.
  - Refer to the Electronic Service Manual (ESM) section PG-Power Supply, Ground, & Circuit Elements, for a listing of systems that may lose settings or memory when disconnecting 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, HVAC, power windows, clock, etc.
- 4. Turn the ignition OFF.

#### 5. Passenger seat removal:

#### Manual seat

- 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.

#### Power seat

- a. Remove the passenger seat from the vehicle.
  - Refer to the ESM, section SE-Seat, for seat removal information.
  - The power seat may need forward/backward movement to access the mounting bolts. Follow the ESM for battery connection/disconnection.
  - Each time the battery is disconnected, wait at least 3 minutes before continuing.
- 6. Set the seat in a clean working area.

- 7. Remove the seatbelt buckle.
  - Buckle is held on with one bolt.



Figure 1

- 8. Unclip and raise the seat side trim.
- 9. Disconnect the seatbelt buckle electrical connector.

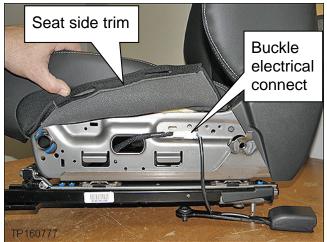


Figure 2

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 of the OCS harness on the next page.
  - Refer to images on pages 7, 8 and 9 for exact harness mounting points.

## EXAMPLE

Old OCS harness and seatbelt buckle are removed.

## EXAMPLE

**New** OCS harness and seatbelt buckle are installed

Notice the new harness and buckle have a new branch and connector

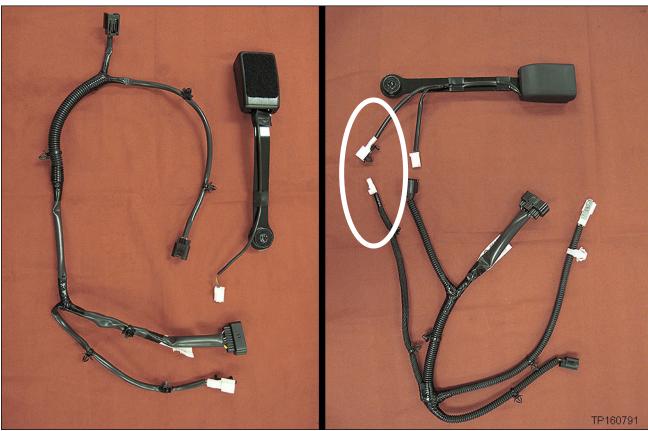


Figure 3

## For Manual Seat: OCS Seat Harness Mounting Points

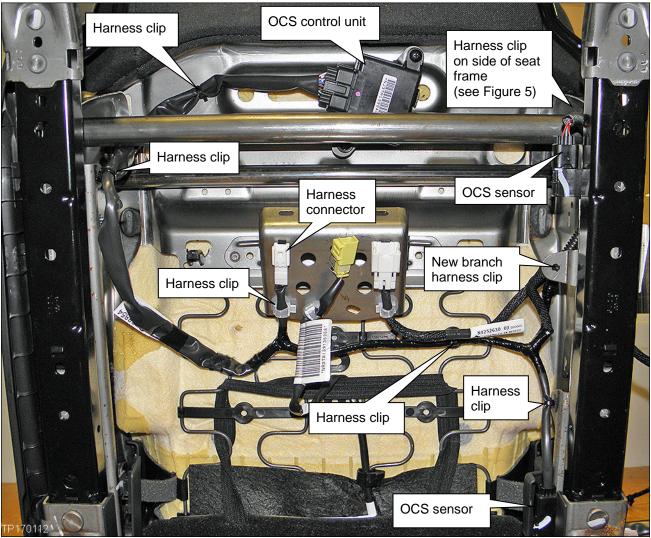


Figure 4

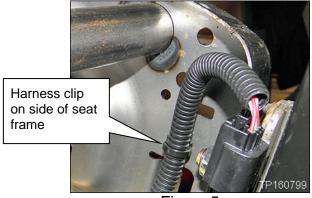


Figure 5

## For Power Seat: OCS Seat Harness Mounting Points

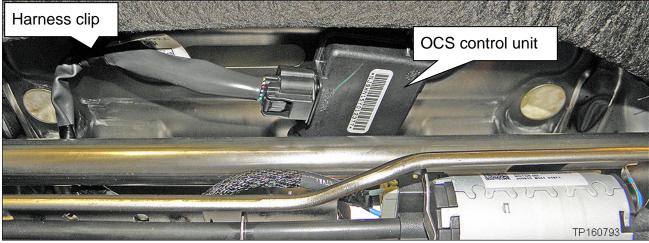


Figure 6

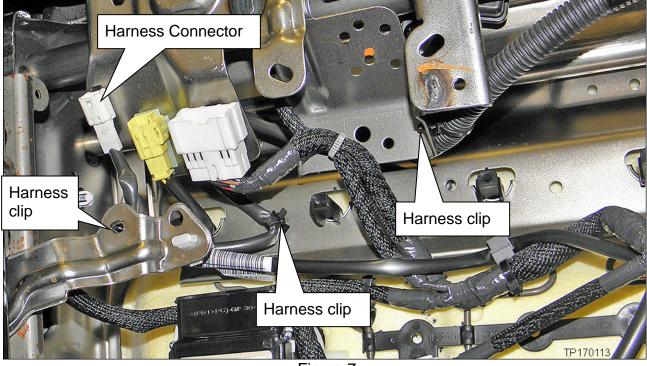


Figure 7

Continued on the next page.

## For Power Seat: OCS Seat Harness Mounting Points continued

**NOTE:** Figure 8 shows a seat without climate control. For a seat with climate control the OCS harness routing and mounting is the same.

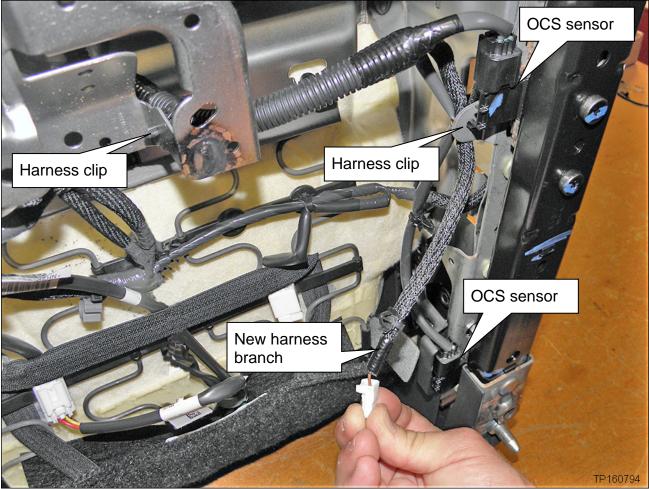


Figure 8

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

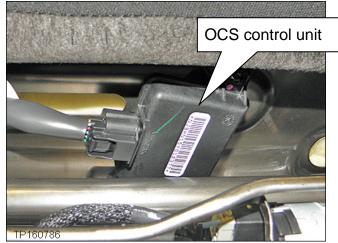


Figure 9

12. For Manual Seat; attach the clip of the new harness branch where shown in Figure 10.

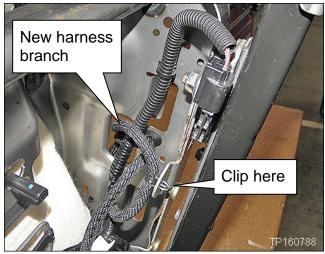


Figure 10



Figure 11

13. Route the new branch/connector of the OCS harness through the seat frame as shown.

- 14. Remove the harness mounting clip from the new seatbelt buckle connector.
  - This clip will <u>not</u> be used.



Figure 12

15. Install the new seatbelt buckle.

- Torque the mounting bolt to: 49 N·m (5.0 kg-m, 36 ft-lb)
- Connect the 2 electrical connectors.

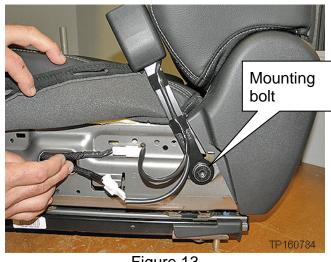


Figure 13



Figure 14

- 16. 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.

- 17. Wrap the flocking tape around the new electrical connector.
  - Wrap 1 strip around each side of the new connector as shown.

**NOTE:** This connects the new branch from the seat belt with the new branch from the harness.

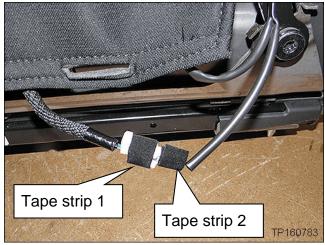


Figure 15

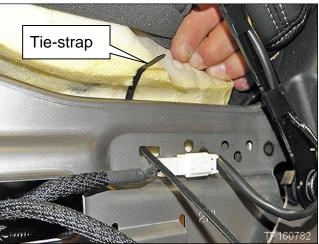


Figure 16

18. Route the tie-strap as shown.

- Tie-strap is listed in the Parts Information.
- Route the tie-strap though the slot in the seat and then under the seat cushion as shown.

- 19. Secure the new harness connector with tie-strap as shown.
  - Pull the tie-strap tight.
  - Cut off excess tie-strap.

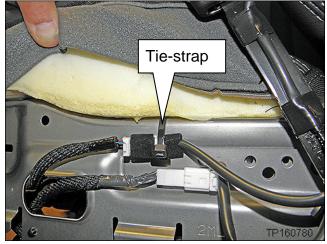


Figure 17

- 20. Reattach the seat side trim.
- 21. Reinstall the seat into the vehicle in reverse order of removal.
  - Torque passenger seat mounting bolts to: 48 N•m (4.9 kg-m, 35 ft-lb)
  - Torque bolts in the order shown.

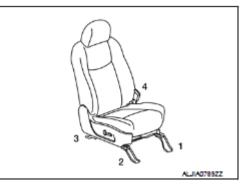


Figure 18

22. If battery cables were not connected as part of the seat installation, reconnect them now, positive cable first.

23. 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.

24. 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.

Image: Back						
Diagnosis (One System) System Selection						
NISSAN/INFINITI/DATSU	И					
Group	All system	s 🔻				
SONAR	POP UP HOOD	TOTAL ILLUM C/U	SIDE RADAR RIGHT			
LANE CAMERA	AUTO BACK DOOR		ADCM			
ADAPTIVE LIGHT	Diag Data Recorder	f ØB	CHARGER/PD MODULE			
AUTO SLIDE DOOR RIGHT	4WAS(FRONT)	Step 7	PTC HEATER			
CAN GATEWAY	E-SUS	SIDE RADAR LEFT	TELEMATICS			
SHIFT	ACCELE PEDAL ACT	ANC	Scroll here			
EV/HEV	HV BATTERY	MULTI DISPLAY	ЕМСМ			
Sort : Default Setting						

Figure 1A

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

Image: Constraint of the second sec	
Diagnosis (One System) System Selection OCCUPANT DETECTION	
See Support	
Test Item	
Zero point reset function	
Step 8	
	Step 9
	Start

Figure 2A

10. Select Next.

Back Rome Print Screen System)	reen pture b	PHEIP ERT VI	× • • • •
Work support : Zero point reset function			
			Next
Current status		Waiting for your oper	ration Step 10
Zero point reset current status			
			End

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 14.

Image: Back <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 performe	Ŀ
	End

Figure 4A

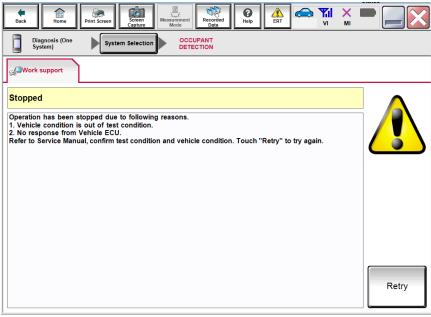


Figure 5A

12. Zero point reset will display "EXECUTING".

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

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

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

Image: Capture Back	
Diagnosis (One System Selection CCUPANT DETECTION	
Work support : Zero point reset function	
Zero point reset completed successfully.	Retry
Current status Completed	8
Zero point reset current status Already performed	8
	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:
  - 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.

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	

- 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 #	QUANTITY
Controller Assy-Occupant Sensor (OCS Control Unit)	98856-9PF0A	1
Seatbelt Buckle – Black/Charcoal	86842-9PF8B	
Seatbelt Buckle – Beige/Tan	86842-9PF8A	1
OCS Harness (Manual Seat)	98854-9PF5A	
OCS Harness (Power Seat)	98854-9PF0A	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	1.0

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

EXPENSE CODE	DESCRIPTION	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  $\bigotimes$  which is located on the instrument panel. After the ignition switch is placed in the "ON" position, the front passenger air bag status light on the instrument panel illuminates 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