Technical Bulletin

SERVICE BULLETIN

Classification:	Reference:	Date:
RS16-013b	NTB17-006b	August 25, 2017

2013 – 2016 ALTIMA AND 2015 – 2016 MURANO; OCCUPANT CLASSIFICATION SYSTEM RETROFIT

> **This bulletin has been amended. Pages 18 and 21 have been revised.**
> **No other changes have been made. Please discard all previous versions of this bulletin.**

APPLIED VEHICLES: 2013 – 2016 Altima (L33)
2015 – 2016 Murano (Z52)
2016 Murano Hybrid (Z52)

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 (R1609 / NTB16-052).

   Completed:

   - Write on the repair order the date it was completed and by which dealer.

   - Go to step 2.

   Not Completed:

   - Complete campaign R1609 / NTB16-052.

   - No further action needed. OCS retrofit does NOT apply.

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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 R1609 / NTB16-052 has been completed.

   - Customer concern has been confirmed and documented.

   - No Airbag or OCS DTCs are stored.

   Then

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.

2. Write down the radio settings.

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

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.

Seatbelt buckle mounting bolt

TP160776

Figure 1

8. Unclip and raise the seat side trim.

9. Disconnect the seatbelt buckle electrical connector.

Seat side trim

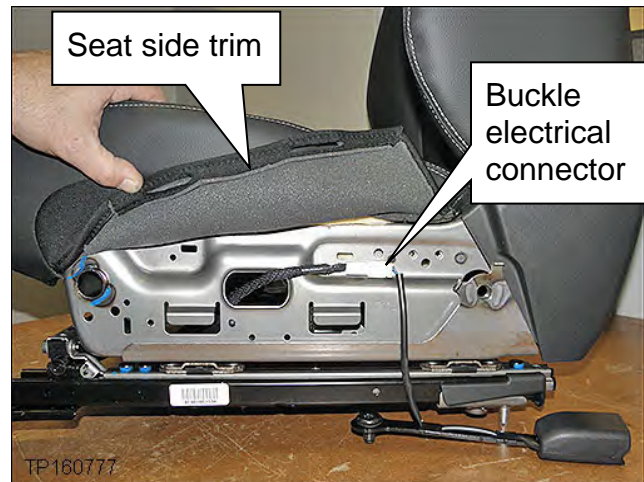Buckle electrical connector

TP160777

Figure 2

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

- The OCS harness consist of the wiring and connectors between the OCS sensors, and OCS control unit.

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.

- 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.

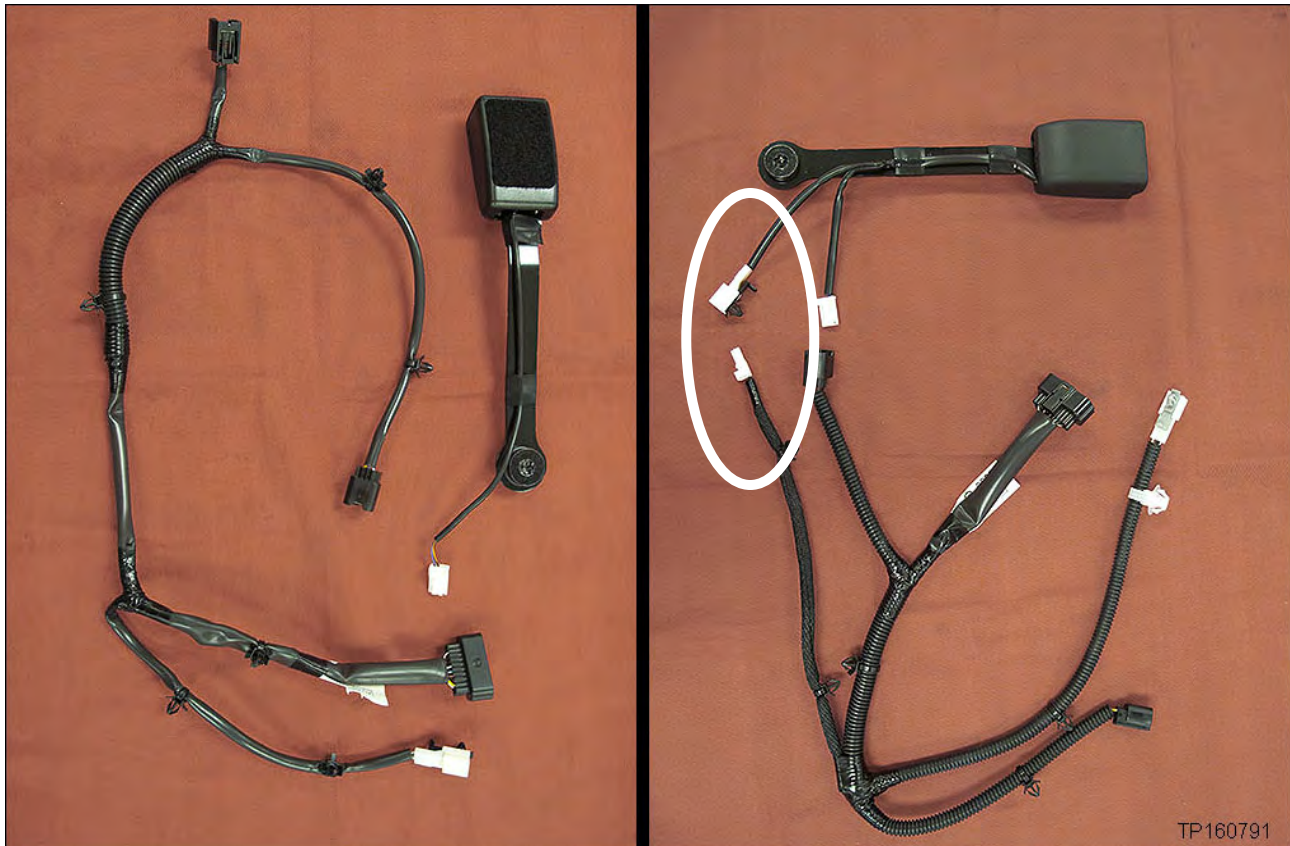| EXAMPLE	EXAMPLE
Old OCS harness and seatbelt buckle are removed.	**New** OCS harness and seatbelt buckle are installed **Notice the new harness and buckle have a new branch with connector**

Figure 3

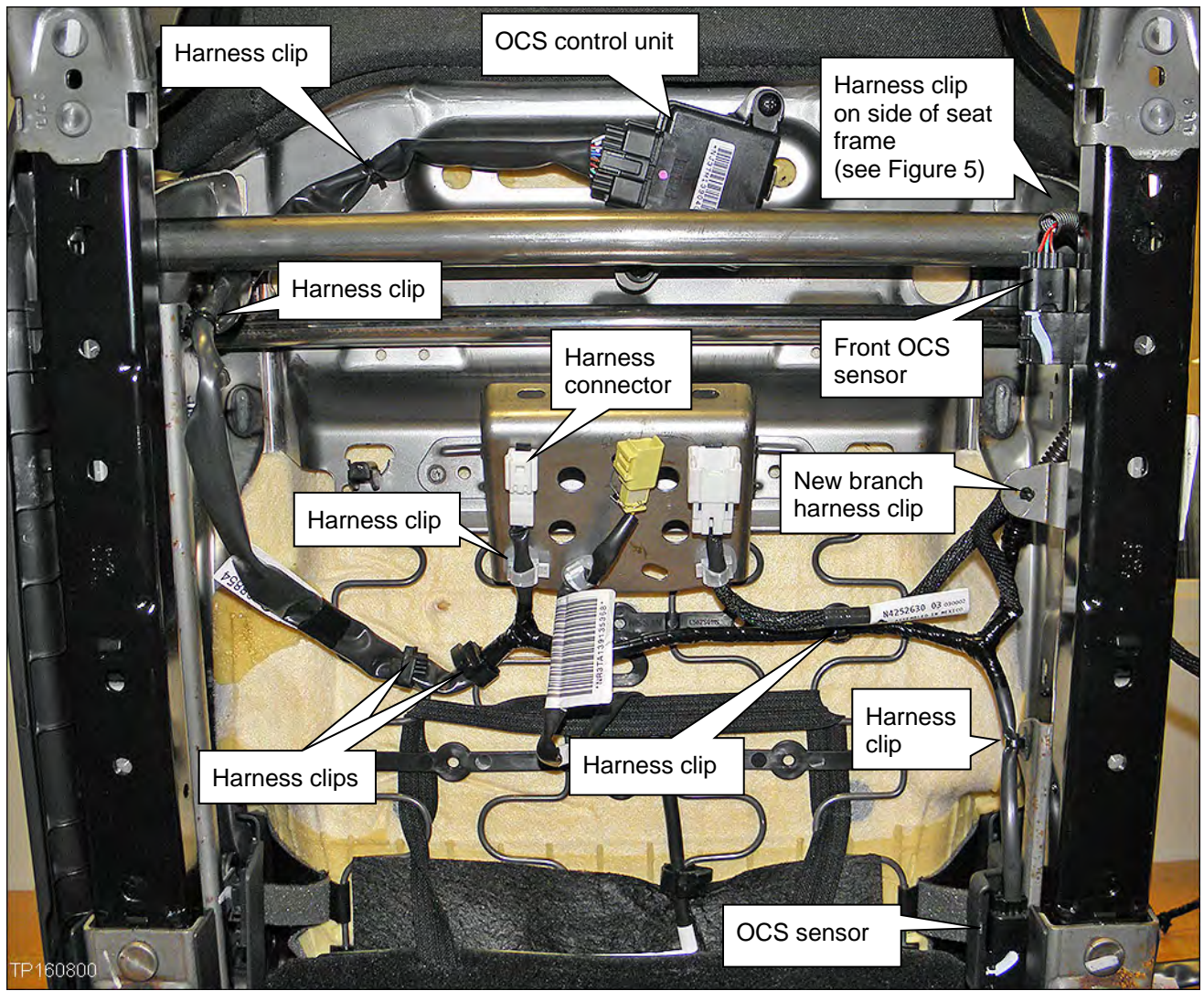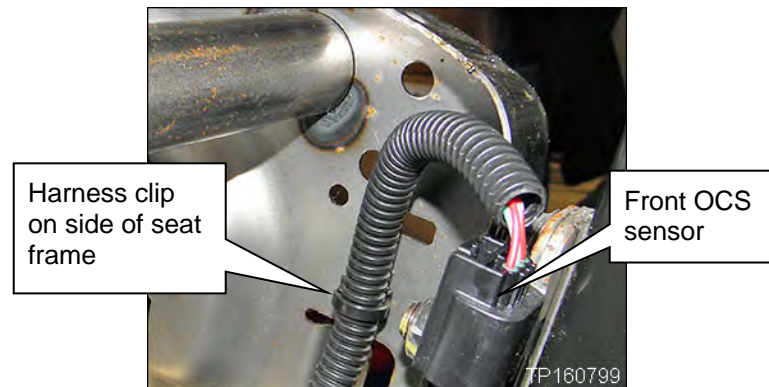## For Manual Seat: OCS Seat Harness Mounting Points

Harness clip

OCS control unit

Harness clip on side of seat frame (see Figure 5)

Harness clip

Harness connector

Front OCS sensor

Harness clip

New branch harness clip

Harness clips

Harness clip

Harness clip

OCS sensor

TP160800

Figure 4

Harness clip on side of seat frame

Front OCS sensor

TP160799

Figure 5

For Power Seat: OCS Seat Harness Mounting Points

Harness clip

OCS control unit

Figure 6
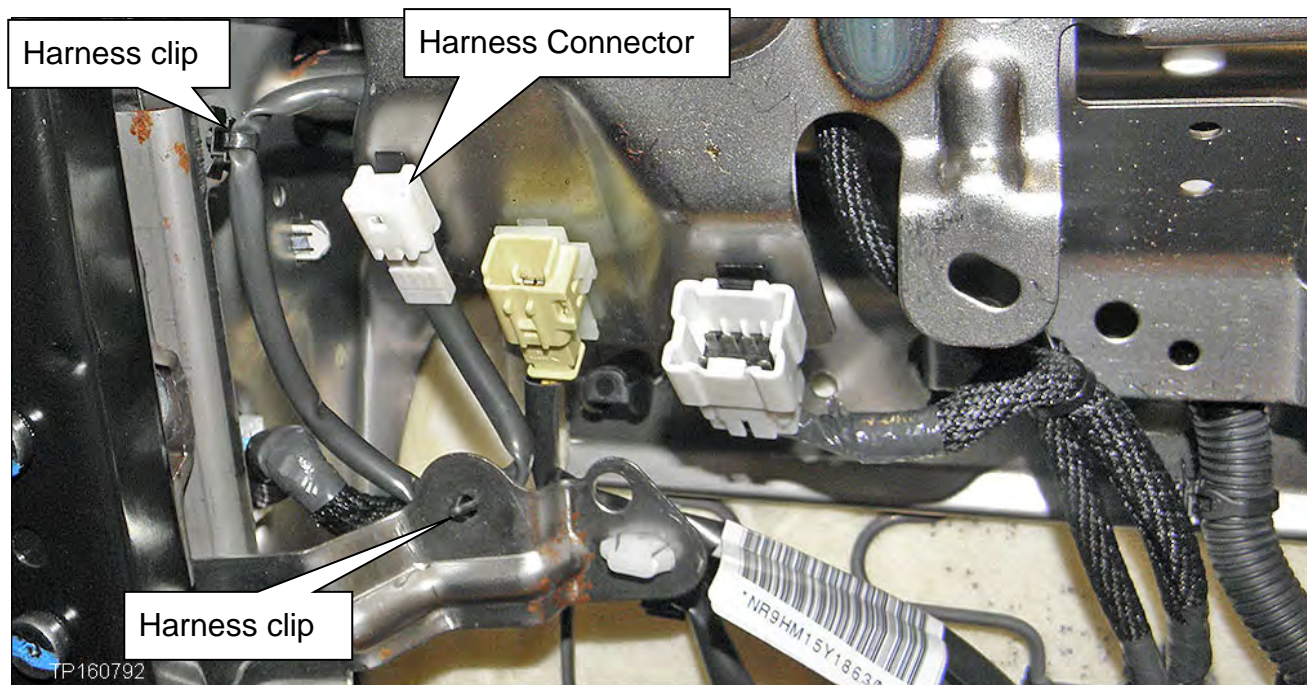
Harness clip

Harness Connector

Harness clip
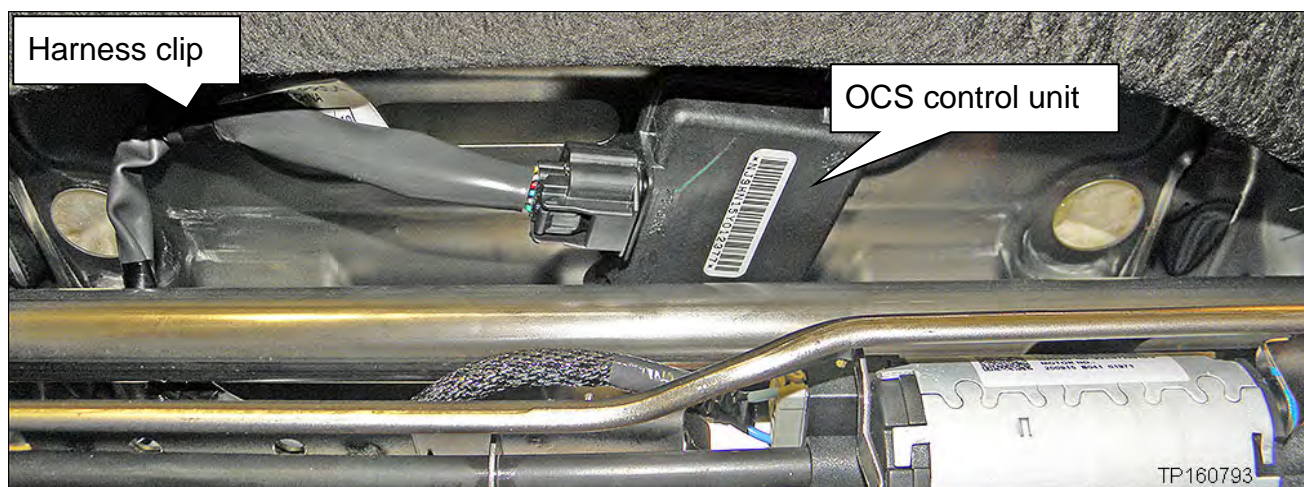
Figure 7

Continued on the next page.

For Power Seat: OCS Seat Harness Mounting Points continued
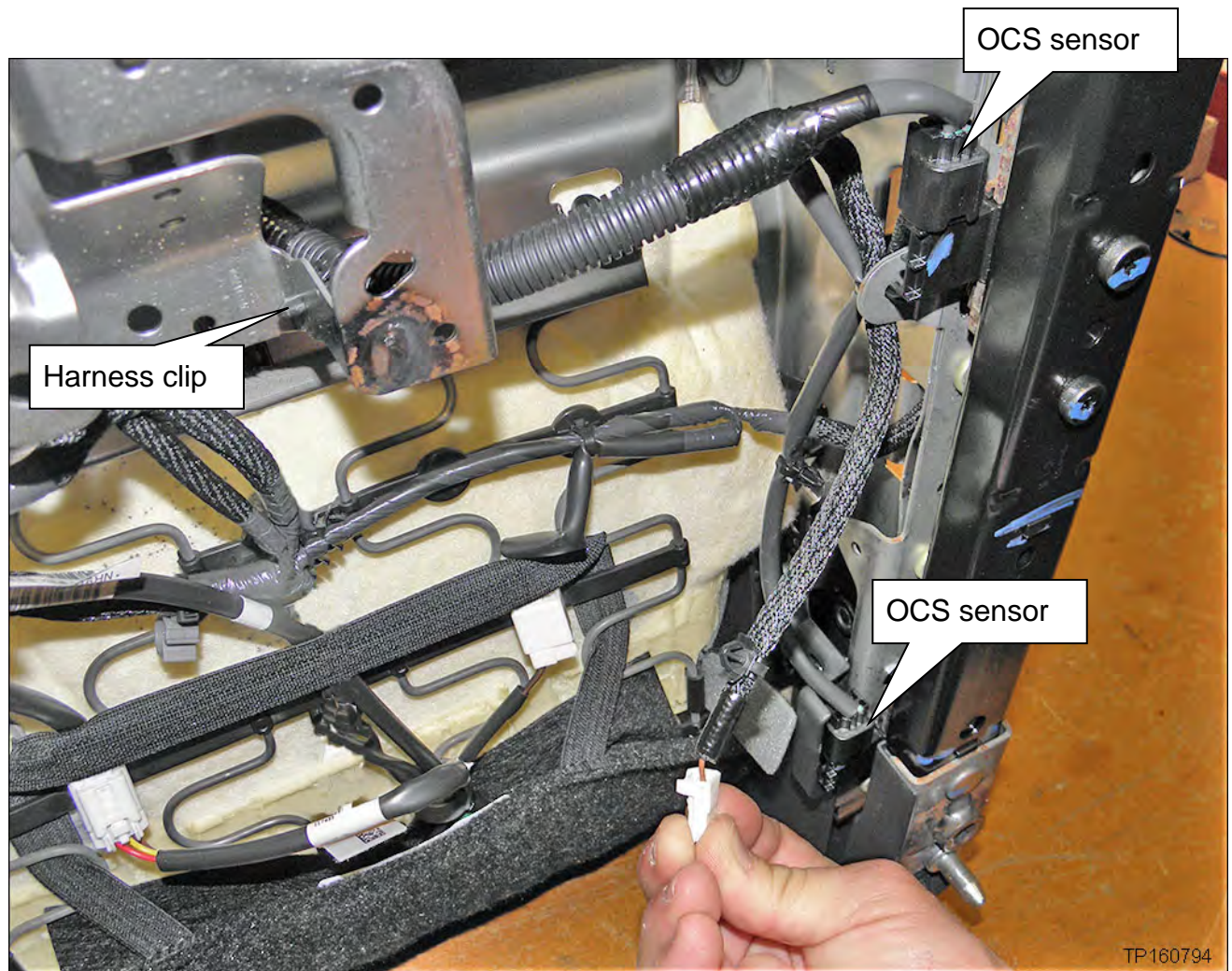

Figure 8

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
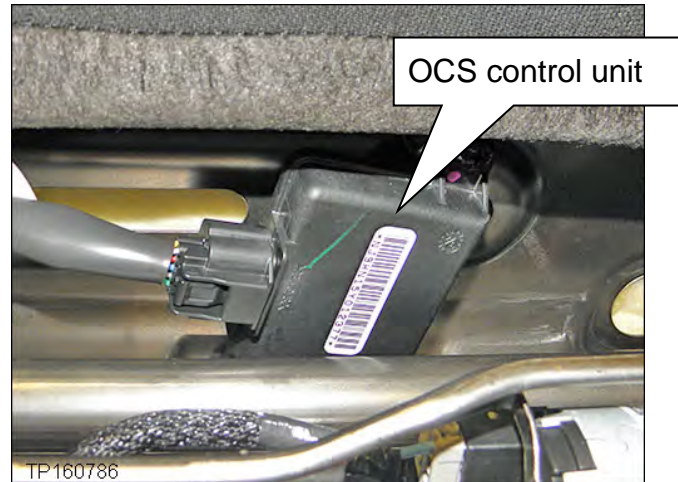   the front edge of the seat.

OCS control unit

TP160786

Figure 9

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

New harness
branch

Clip here

TP160788
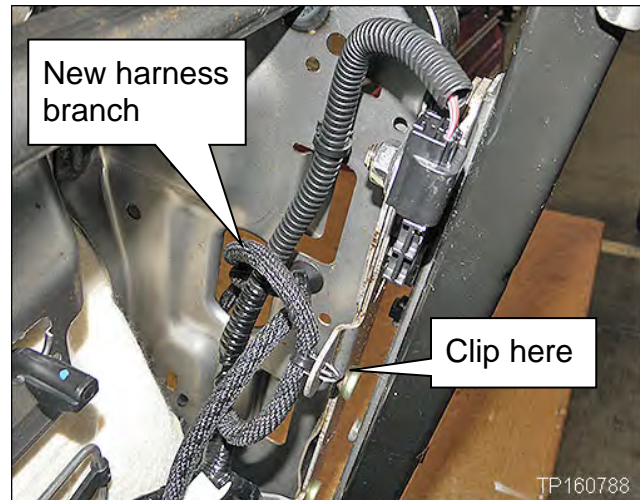
Figure 10

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

New harness
branch

TP160779

Figure 11

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

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.

Figure 14

17. Wrap the flocking tape around the <u>new</u> 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.
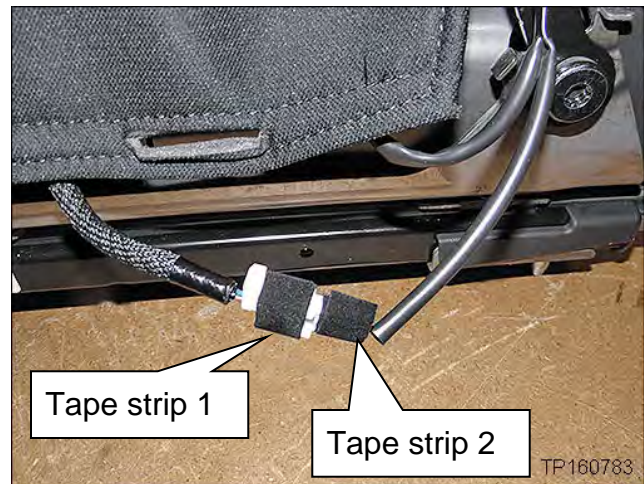

Tape strip 1

Tape strip 2

TP160783

Figure 15

18. Route the tie-strap as shown.

- Tie-strap is listed in the Parts Information.

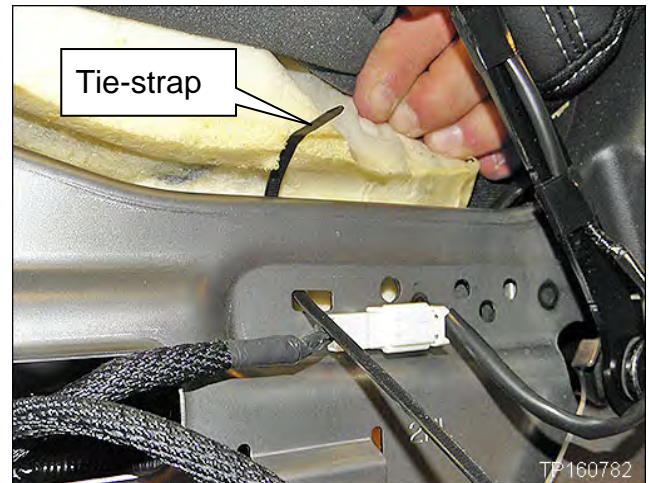- Route the tie-strap though the slot in the seat and then under the seat cushion as shown.

Tie-strap

TP160782

Figure 16

19. Secure the new harness connector with tie-strap as shown.

- Pull the tie-strap tight.

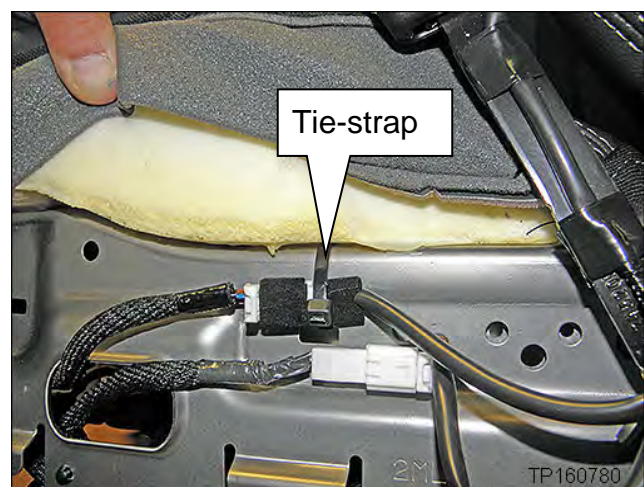- Cut off excess tie-strap.

Tie-strap

TP160780

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:

> Altima - 49 N•m (5.0 kg-m, 36 ft-lb)
>
> Murano - 40 N•m (4.1 kg-m, 30 ft-lb)

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)**.

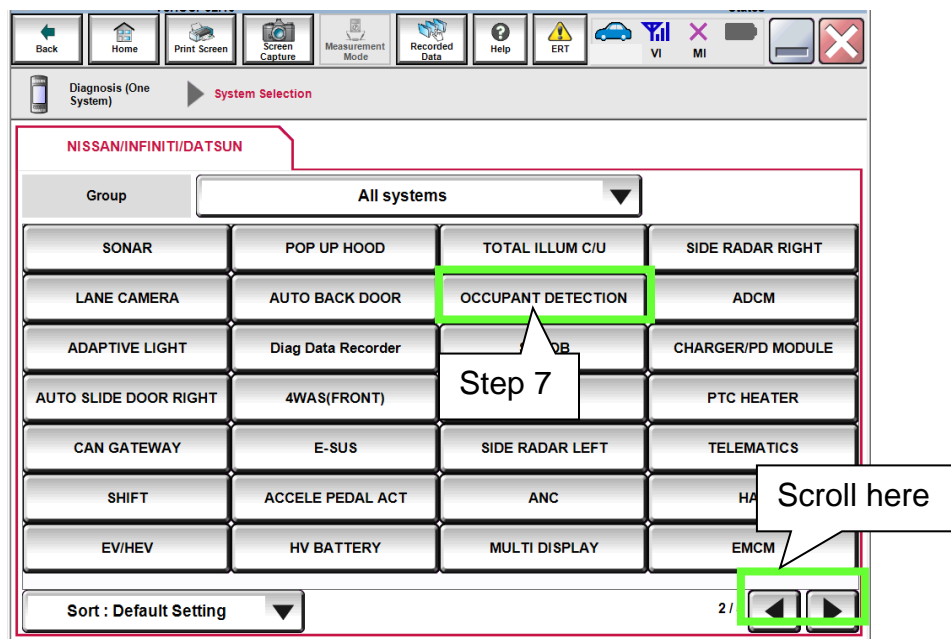7. Scroll C-III plus (All systems) and select **OCCUPANT DETECTION**.

Figure 1A

NTB17-006b

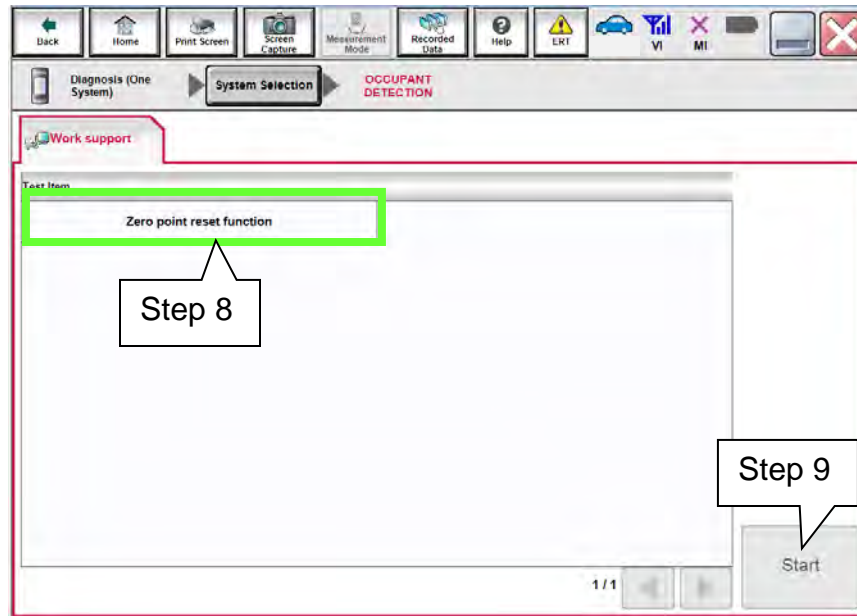8. Select **Zero point reset function**.
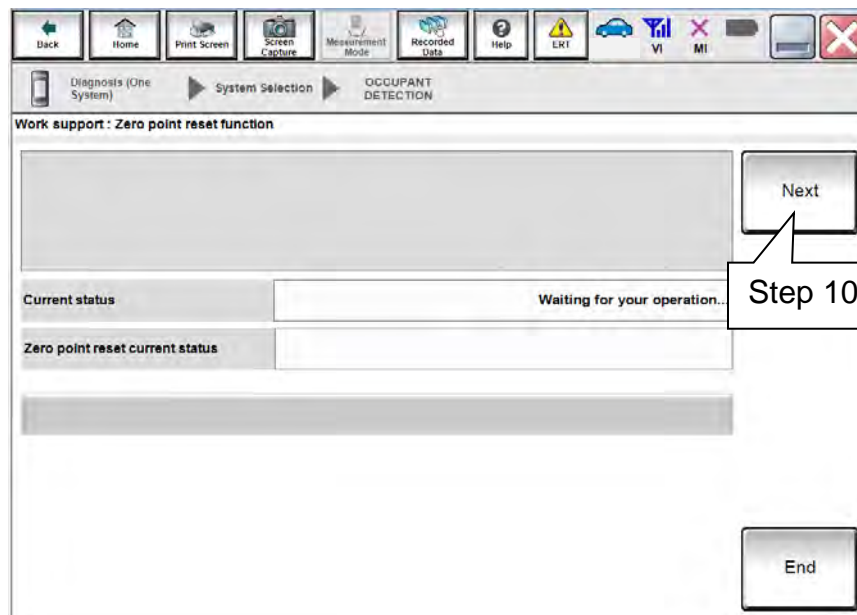
9. Select **Start**.

Figure 2A

10. Select **Next**.

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.

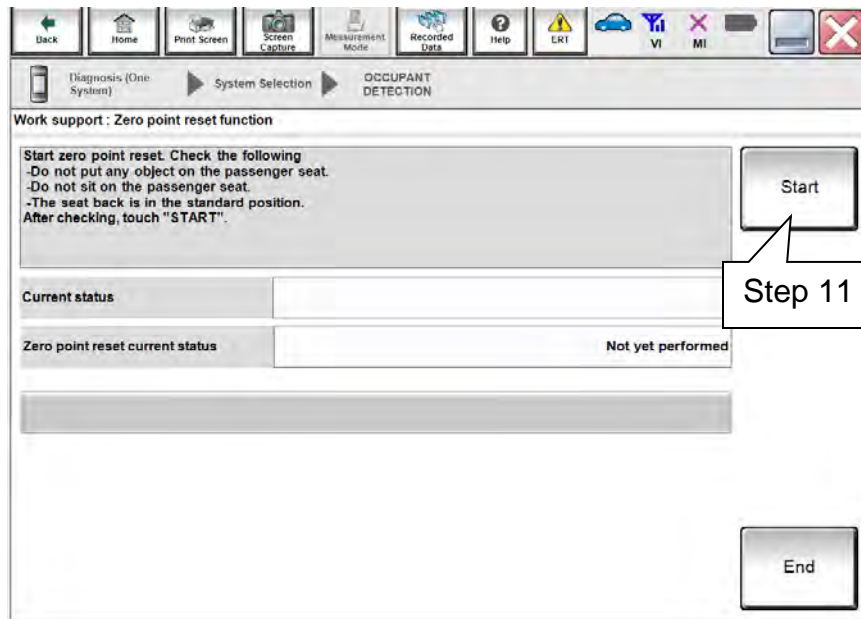b. Turn the ignition OFF and then restart procedure from step 4 on page 14.

Figure 4A
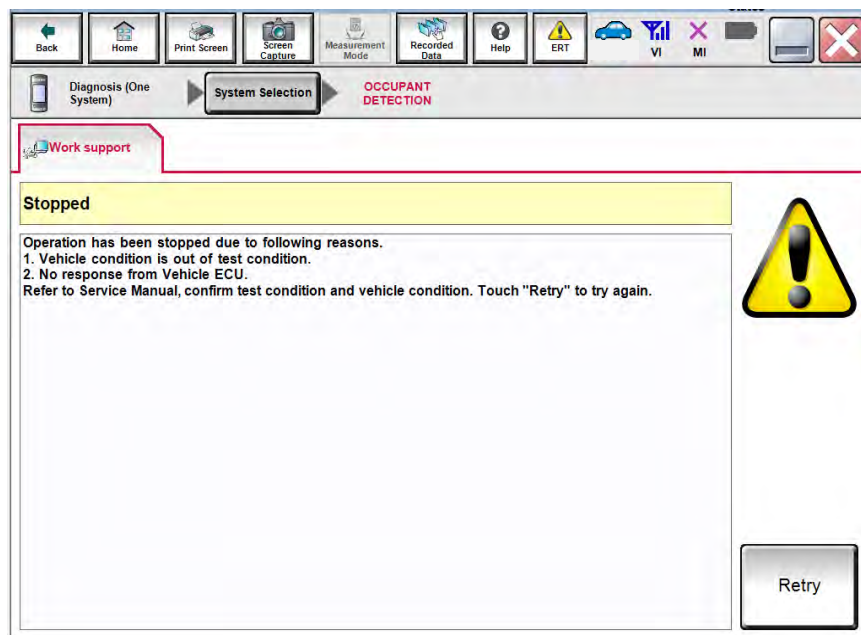

Figure 5A

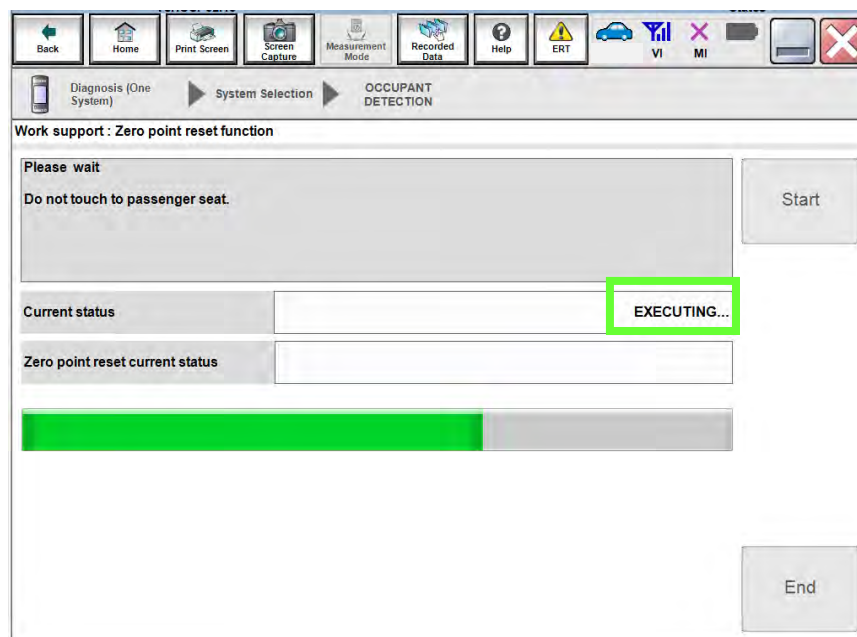NTB17-006b

12. Zero point reset will display "EXECUTING".

Figure 6A

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

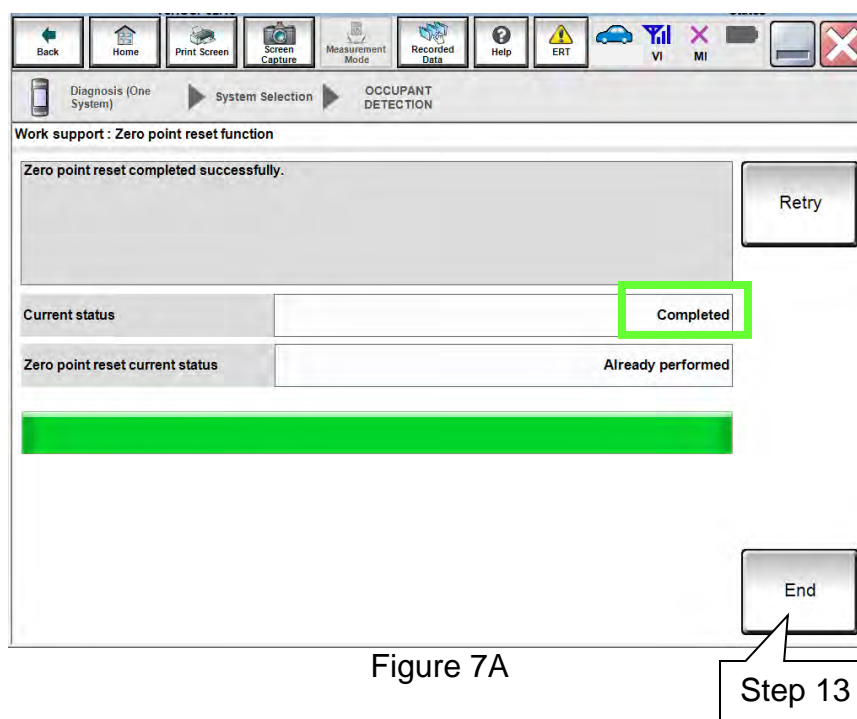- Select **End** and then proceed to step 14.

Figure 7A

Step 13

NTB17-006b

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.

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)	DISABLED
Nobody/Somebody	Bag or Child or Child Restraint or Small Adult in the front passenger seat	ON (illuminated)	DISABLED
Adult	Adult in front passenger seat	OFF (dark)	ENABLED

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

Altima (L33)

DESCRIPTION	PART #	QUANTITY
Controller Assy-Occupant Sensor (OCS Control Unit)	98856-9HS0A	1
Seatbelt Buckle – Black/Charcoal	86842-9HS8B	1
Seatbelt Buckle – Beige/Tan	86842-9HS8A	
OCS Harness (Manual Seat)	98854-9PF5A	1
OCS Harness (Power Seat)	98854-9PF0A	
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.

Murano (Z52)

DESCRIPTION	PART #	QUANTITY
Controller Assy-Occupant Sensor (OCS Control Unit)	98856-9UA0A	1
Seatbelt Buckle – Black/Charcoal	86842-9UA8A	1
Seatbelt Buckle – Beige/Tan	86842-9UA8B	
OCS Harness (Manual Seat)	98854-9PF5A	1
OCS Harness (Power Seat)	98854-9PF0A	
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.

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CLAIMS INFORMATION

Submit a "CM" line claim using the following claims coding:

CM ID	DESCRIPTION	OP CODE	FRT
P7322	Perform OCS Retrofit	P73221	1.0 hrs

EXPENSE CODE

EXPENSE CODE	DESCRIPTION	AMOUNT
041	Flocking Tape	3.00

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FRONT PASSENGER AIR BAG STATUS LIGHT OPERATION

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

OCS SYSTEM OPERATION

The OCS system enables or disables the front passenger air bag depending on the weight applied to the front passenger seat. Front passenger air bag status (Enabled or Disabled) is indicated by the front passenger air bag status lamp pictured here ⟶

- When the front passenger seat is <u>empty</u>, the passenger air bag status lamp should be ON (illuminated) which means the passenger air bag is Disabled.

- When the front passenger seat is <u>occupied by an adult</u>, the passenger air bag status lamp should be OFF (dark) which means the passenger air bag is Enabled.

- When the front passenger seat is <u>occupied by a child, a child restraint, or a small adult</u>, the passenger air bag status lamp should be ON (illuminated) which means the passenger air bag is Disabled.