#### **Technical Bulletin**



## RECALL CAMPAIGN BULLETIN

Reference: Date:

NTB11-100 November 23, 2011

## VOLUNTARY SAFETY RECALL CAMPAIGN 2011 ROGUE EPS CONTROL UNIT

CAMPAIGN ID#: R1112

**APPLIED VEHICLES:** 2011 Rogue (S35)

Check Service COMM to confirm campaign eligibility.

#### INTRODUCTION

Nissan is conducting a Voluntary Safety Recall Campaign on certain Model Year 2011 Rogue vehicles to replace the EPS (Electronic Power Steering) control unit. This service will be performed at no charge for parts or labor.

#### **IDENTIFICATION NUMBER**

Nissan has assigned identification number R1112 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 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.

#### **SERVICE PROCEDURE**

#### **CAUTION:**

- Be careful; do not scratch or damage finishers or other interior surfaces or parts.
- Use protective coverings as needed to protect interior surfaces.
- Place removed parts in a clean safe area.
- 1. Set the front wheels straight ahead (steering wheel to the straight ahead position).
- 2. Write down the radio station presets.

Presets	1	2	3	4	5	6
Α						
В						
С						
SAT						

- 3. If equipped, check and write down the customer settings for the ATC (Automatic Temperature Control) system. (Refer to the Service Manual as needed).
- 4. Disconnect the battery cables negative cable first.

- 5. Remove the instrument side finisher LH.
  - Use a plastic trim tool to snap loose and remove.



Figure 1

- 6. Remove the instrument driver lower cover.
  - a. Remove the screw near the hood release handle.
  - b. Use a plastic trim tool to snap loose the instrument driver lower cover.



Figure 2

- 7. Disconnect the DDL connector and harness from the instrument driver lower cover.
- 8. Disconnect the hood release cable from the instrument driver lower cover.

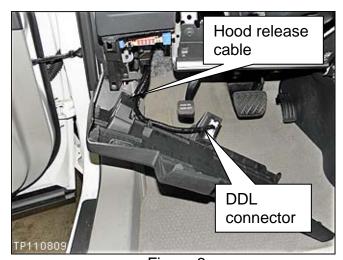


Figure 3

- 9. Remove the knee protector.
  - Knee protector is held on with 4 bolts.

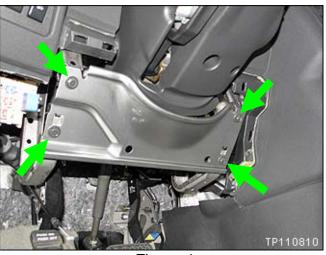


Figure 4

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

#### **WARNING:**

- Before removing the driver's air bag module, wait 3 minutes or more after battery is disconnected.
- Always work from the side of the air bag module, never work in front of it.
- Never use air tools or electric tools for servicing the air bag module.
- 10. Remove the air bag module from the steering wheel.
  - Remove bolt covers and then remove the 2 mounting bolts.
  - Location of left side cover and bolt shown, remove right side also.
  - Do not reuse air bag mounting bolts – replace with new ones.



Figure 5

11. Disconnect the electrical connectors shown in Figure 6.

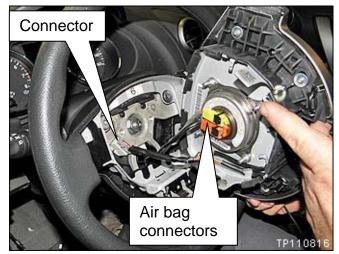


Figure 6

 Unlock and lock air bag connectors as shown in Figure 7.

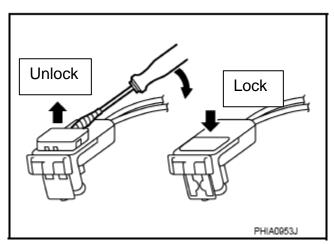


Figure 7

- 12. Remove the steering wheel mounting nut.
- 13. Make sure the steering wheel and steering shaft marks are aligned.
- 14. Remove the steering wheel.
  - Use a steering wheel puller.



Figure 8

## 15. Apply tape to the spiral cable.

 Tape will prevent the spiral cable from moving (turning) while removing the steering column covers.

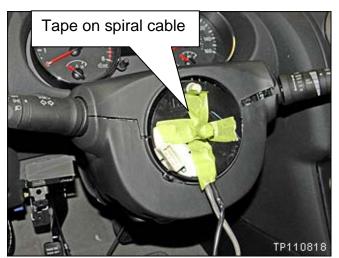


Figure 9

# 16. Remove / pull off the ignition switch escutcheon.

- Use a plastic trim tool.
- Equipped with Intelligent Key shown.
- Non Intelligent Key is slightly different

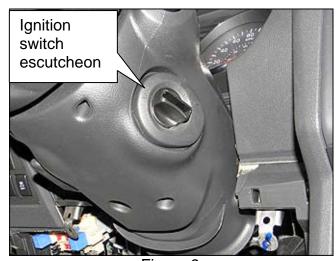


Figure 9a

- 17. Remove 4 screws from the steering column lower cover.
- 18. Remove the steering column lower cover.
- 19. Remove the steering column upper cover.

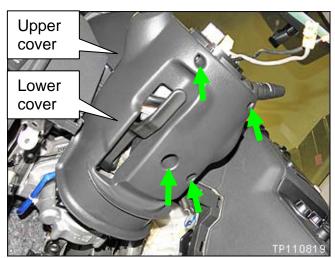


Figure 10

- 20. Apply additional tape across the top of the spiral cable.
  - Additional tape will prevent the spiral cable from moving (turning) during the remainder of the procedure.

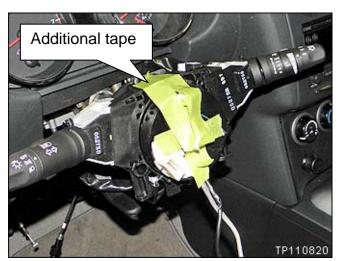


Figure 11

- 21. Remove the headlamp combination switch.
  - Release lock taps and pull out
- 22. Remove the wiper combination switch.
  - Release lock taps and pull out
  - Disconnect the electrical connector for the wiper combination switch.

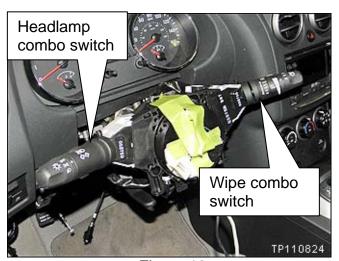


Figure 12

- 23. Disconnect the harness connectors and harness mounts for the upper column harness.
- 24. Position the upper harness out of the way.



Figure 13

25. Remove the 2 spiral cable mounting screws.

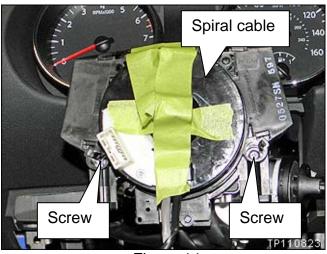


Figure 14

26. Remove the spiral cable and disconnect the 3 electrical connectors.

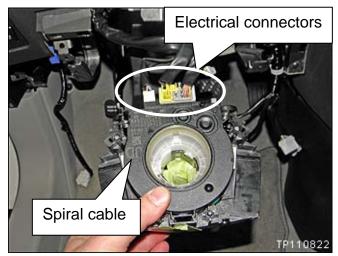


Figure 15

- 27. Disconnect the harness connectors and harness mounts for the lower column harness.
- 28. Position the lower harness out of the way.

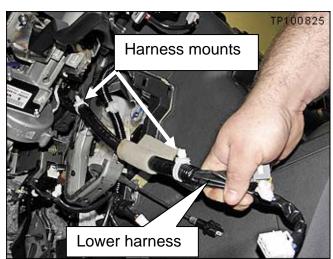


Figure 16

- 29. Disconnect the shift interlock cable from the ignition.
  - a. Push down on the locking clip to remove it.
  - b. Pull out on the interlock cable.

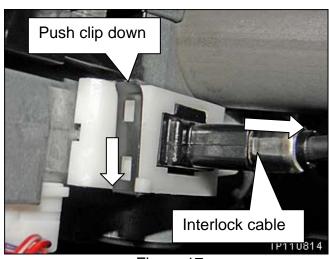


Figure 17

- 30. Snap loose and remove cluster lid A.
  - Use a plastic trim tool as needed.

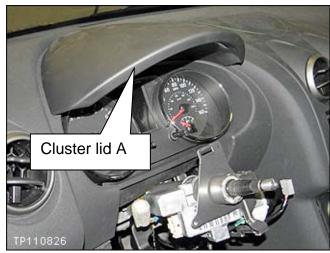


Figure 18

- 31. Remove the 2 combination meter mounting screws.
- 32. Remove the combination meter.

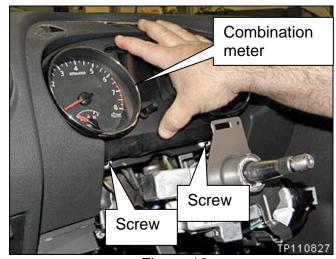


Figure 19

33. Place a protective cover on the driver side floor.



#### NOTE:

- In the next steps you will be removing the steering column assembly and placing it on the driver side floor.
- CAUTION: The steering column assembly is heavy.
- There is an electrical harness still connected to the assembly. This harness will be disconnected after the assembly is resting on the driver side floor.
- When the mounting bolts are removed, the steering column assembly will be supported by the hook shown in Figure 21.
- The mounting bolts can be removed without concern for the column assembly falling.



Figure 21

34. Remove the 4 steering column assembly mounting bolts shown in Figure 22.

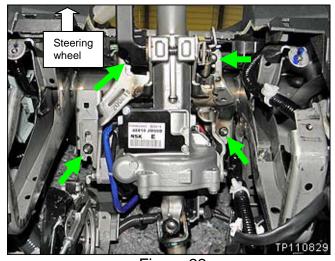


Figure 22

- 35. Carefully unhook the steering column assembly and set it on the floor.
  - CAUTION; the assembly is heavy.
  - Let the steering shaft rest on top of the brake pedal.

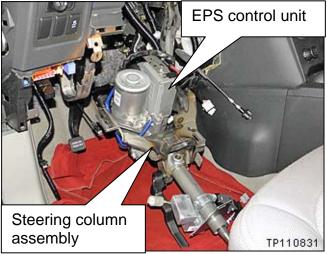


Figure 23

- 36. Disconnect the 2 electrical connectors shown in Figure 24.
  - See Figure 25 for releasing connector A.
- 37. Remove the bolt shown in Figure 24.
  - Discard the bolt, use a new bolt for reassembly.

**NOTE:** Some vehicles may not have this bolt or the bracket that it holds.

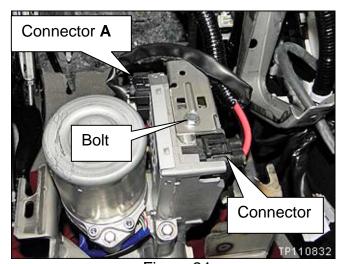


Figure 24

#### **NOTE:** To release connector A:

- Insert a small flat blade screwdriver between the connector and the metal body of the EPS control unit.
- Then push the connector away from the EPS control unit.

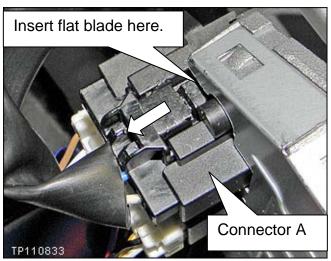


Figure 25

38. Disconnect the electrical connectors shown in Figure 26.

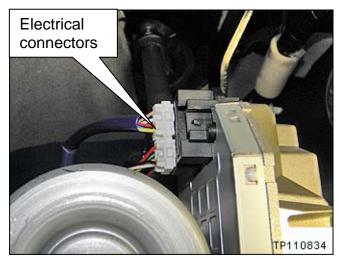


Figure 26

39. Carefully rotate the column assembly 180 degrees so it is upside down.

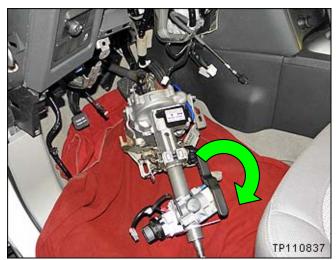


Figure 27

- 40. Locate and remove the plastic motor terminal cover shown in Figure 28.
  - This covers 3 electrical terminals.
  - The cover just snaps loose.
  - Discard the cover; use a new cover for reassembly.

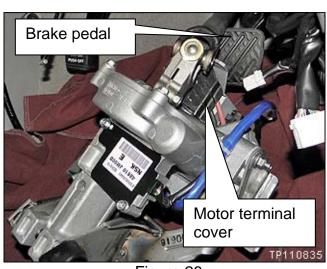


Figure 28

- 41. Remove the 3 motor terminal bolts.
  - Discard the bolts; use new bolts for reassembly.

**NOTE:** These wires are stiff and will likely stay in position. During reassembly, make sure they have not moved.

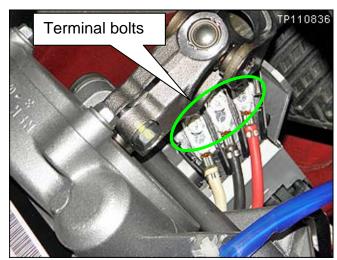


Figure 29

42. Carefully rotate the column assembly 180 degrees so it is right-side up (back to its original position).

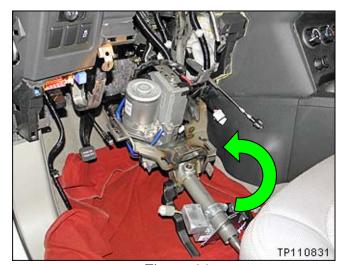


Figure 30

- 43. Remove the 2 EPS control unit mounting bolts.
  - Discard the bolts; use new bolts for reassembly.

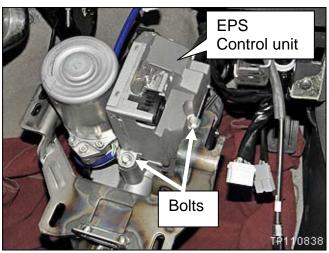


Figure 31

- 44. Remove the EPS control unit.
  - Make the old control unit unusable by breaking an electrical connector.
- 45. Install the **new** EPS control unit in reverse order.
  - Use **new** mounting bolts. Torque to 14 N•m (1.4 kg-m, **10 ft-lb**)
  - Use new terminal bolts. Torque to 3.6 N•m (0.37 kg-m, 32 in-lb)
  - Use a **new** plastic terminal cover.



Figure 32

46. Reinstall all other parts in reverse order.

 Torque for assembly mounting nuts is 16.7 N•m (1.7 kg-m, 12 ft-lb).

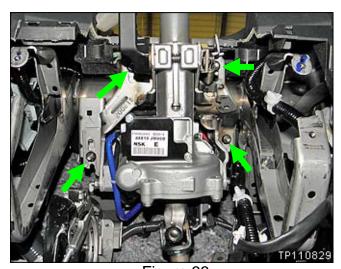


Figure 33

- When installing the steering wheel:
  - Make sure the spiral cable locating tab is correctly in place.

Make sure the steering wheel and steering shaft marks are aligned.



Figure 34

- Torque for steering wheel mounting nut is 34.3 N•m (3.5 kg-m, **25 ft-lb**).
- Use new mounting bolts for the air bag on the steering wheel.
  Torque to 9.3 N•m (0.95 kg-m, 82 in-lb).
- 47. Connect the battery cables positive cable first.
- 48. Perform the following:
  - a. Do not touch the steering wheel.
  - b. Turn the ignition ON.
  - c. Wait 3 seconds.
  - d. Turn the ignition OFF.
  - e. Wait 3 seconds.
  - f. Perform **a** though **e** two more times (total of 3 times).

- 49. With C-III, perform EPS > Self Diagnosis. Make sure no DTCs are stored.
- 50. Start the engine and turn the steering wheel fully left and fully right. Make sure there is no abnormal noise or feel.
- 51. If equipped with VCD; use C-III to perform "Adjustment of Steering Angle Sensor Neutral Position".
  - a. Drive the vehicle a few feet and stop with the front wheels in the straight ahead position.
  - b. Go to ABS > Work Support > ST ANGLE SENSOR ADJUSTMENT.
    - CAUTION: Do not touch the steering wheel while performing Steering Angle Sensor Adjust.
    - Follow the on-screen instructions.
  - c. **CAUTION:** When adjustment is complete, make sure to turn the ignition switch OFF, then turn it ON again.
- 52. Again, drive the vehicle a few feet and stop with the front wheels in the straight ahead position.
- 53. Go to ABS > Data Monitor and make sure STR ANGLE SIG is within 0 ± 2.5°.
- 54. Perform ABS > Self Diagnosis > Erase. Make sure all DTCs are erased.
- 55. Perform ENGINE > Self Diagnosis > Erase. Make sure all DTCs are erased.
- 56. Reset the clock and the radio station presets.
- 57. If equipped; reset customers settings for the ATC (Automatic Temperature Control) system. (Refer to the Service Manual as needed):

- 58. Initialize the driver's power window as follows:
  - a. Turn the ignition ON (keep the transmission in Park and the hand brake applied).
  - b. Close the door.
  - c. Operate the power window switch to fully open the window.
  - d. Pull UP and continue to pull UP on the power window switch to fully close the window.
  - e. Continue pulling the power window switch UP for 3 seconds <u>after</u> glass stops at fully closed position.
  - f. Check that auto-up function operates normally.
- 59. Check operation of headlamps, fog lamps, turn signals, wipers, and shift interlock.
- 60. Make sure the Air Bag warning lamp goes OFF about 7 seconds after ignition is turned ON.

## **PARTS INFORMATION**

DESCRIPTION	PART NUMBER	QTY
Controller Kit – Power Steering	B8E00 – JM00C	1
Kit includes:		
1 - EPS control unit		
1 - Motor terminal cover (plastic)		
3 - Motor terminal bolts		
1 - Bracket bolt		
1 - 48 mm (Long) EPS Control Unit Bolt		
1 - 25 mm (Short) EPS Control Unit Bolt		
2 - Steering Wheel Air bag bolts.		
1 - Lower shaft bolt (not used)		
1 - Lower shaft nut (not used)		

## **CLAIMS INFORMATION**

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

CAMPAIGN (CM) I.D #	DESCRIPTION	OP CODE	FRT
R1112	Replace EPS Control Unit	R11120	1.5 hrs.