

Classification:

Reference:

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Date:

EL17-028a ITB18-006a

March 15, 2019

2013 JX35 AND 2014-2017 QX60; VDC WARNING LAMP ON WITH DTC C1116 STORED

This bulletin has been amended. Please see AMENDMENT HISTORY on the last page.

Please discard previous versions of this bulletin.

APPLIED VEHICLES: 2013 JX35 (L50)

2014-2017 QX60 (L50)

APPLIED SYSTEM: Without Intelligent Cruise Control ONLY

IF YOU CONFIRM

A current or past customer concern of the Vehicle Dynamic Control (VDC) warning light being ON with either a current or past DTC C1116 (STOP LAMP SW) stored.

And

Brake lamp switch operation has been confirmed as operating correctly.

ACTION

Install the harness jumper from the **PARTS INFORMATION** on page 26 using the **SERVICE PROCEDURE** starting on page 2.

IMPORTANT: The purpose of ACTION (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the entire SERVICE PROCEDURE as it contains information that is essential to successfully completing this repair.

Infiniti 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 Infiniti retailer to determine if this applies to your vehicle.

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.

- 1. Record (write down) any customer settings that will be lost when the battery is disconnected.
 - For a listing of the systems that may lose settings or memory when disconnecting the 12V battery refer
 to the ESM, Section ELECTRICAL POWER CONTROL > POWER SUPPLY, GROUND CIRCUIT
 ELEMENTS > BASIC INSPECTION > INSPECTION AND ADJUSTMENT > ADDITIONAL SERVICE
 WHEN REMOVING BATTERY NEGATIVE TERMINAL.
 - This list often includes items such as HVAC, power windows, clock, etc.
- 2. Turn the ignition OFF.
- 3. Disconnect the negative terminal of the vehicle 12V battery.
 - For the procedure to disconnect the battery refer to the ESM, section ELECTRICAL POWER
 CONTROL > POWER SUPPLY, GROUND CIRCUIT ELEMENTS > REMOVAL AND INSTALLATION
 > BATTERY > Removal and Installation.

WARNING: In the following steps, exposed sharp metal will be present. Take care to prevent personal injury.

- 4. Remove the Instrument Lower Panel LH.
 - For the procedure to remove the Instrument Lower Panel LH, refer to the ESM section, BODY INTERIOR > INSRUMENT PANEL > REMOVAL AND INSTALLATION > INSTUMENT LOWER PANEL LH > Removal and Installation.



Figure 1

- 5. Completely disconnect and remove the Fuse Block Junction Box (J/B).
 - For additional information refer to the ESM section, ELECTRICAL POWER CONTROL
 POWER SUPPLY, GROUND CIRCUIT ELEMENTS > WIRING DIAGRAM > FUSE BLOCK JUNCTION BOX (J/B).

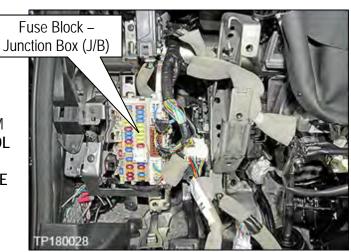


Figure 2

- 6. Unbolt the parking brake pedal assembly.
 - Remove four (4) bolts shown in Figure 3.

NOTE: Do not disconnect the parking brake cable.

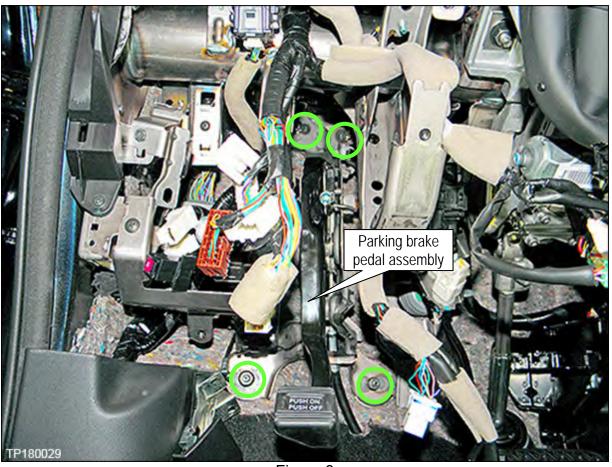


Figure 3

7. Unclip the engine room harness from the parking brake pedal assembly in the two locations shown in Figure 4 and unplug the parking brake switch harness connector.

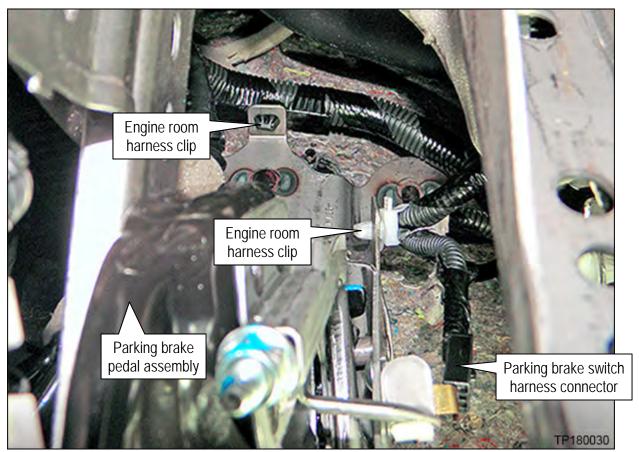


Figure 4

8. Remove the parking brake pedal assembly from under the Instrument Panel and lay it on the floor as shown in Figure 5.

NOTE: Do not disconnect the parking brake cable.



Figure 5

9. Disconnect the Super Multiple Junction (SMJ) connectors.

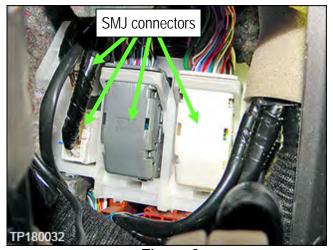


Figure 6

Figure 7

10. Remove bolt that is retaining SMJ.
11. Remove self-tapping bolt from harness ground.
NOTE: Bolt hidden in Figure 7 behind insulation material.

Bolt retaining SMJ

Self-tapping bolt (Hidden)

12. Unclip two (2) white clips of brake switch harness from brake pedal bracket.

Brake switch harness harness from brake pedal bracket.

Figure 8

13. Disconnect both brake switch harness connectors from the brake switches.

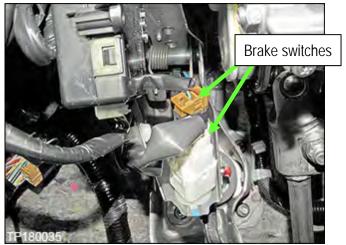


Figure 9

14. Remove the engine room harness completely from the Instrument panel and lay it on the floor.

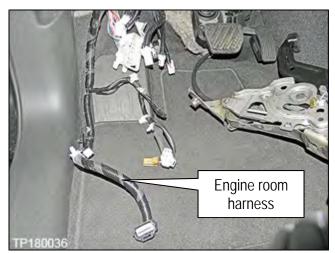


Figure 10

15. Detach harness strap from threaded stud, if not already detached.

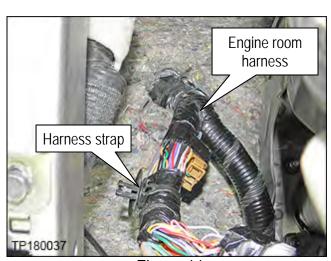


Figure 11

- 16. Remove the wiper arms as follows:
 - a. Remove the nut finisher caps.

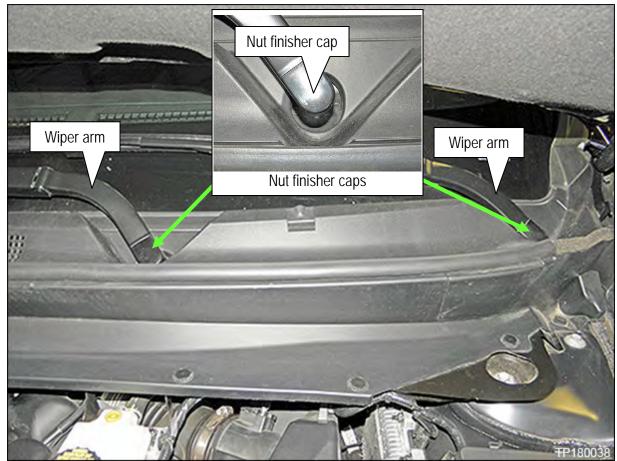


Figure 12

- b. Place masking tape on the windshield directly parallel to the wiper blades as alignment markers for wiper arm re-installation.
- c. Remove the nuts that retain both wiper arms to the wiper motor shafts.
 - **NOTE:** Lay a fender cover or other appropriate material on top of the windshield glass and do not contact the windshield glass with tools to prevent cracking or breaking the glass.
- d. Remove both wiper arms.

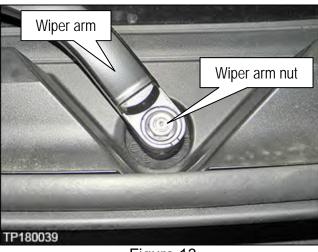


Figure 13

- 17. Remove both left and right side cowl top side trim covers.
- 18. Remove the 9 clips that attach the cowl top cover (Figure 14).

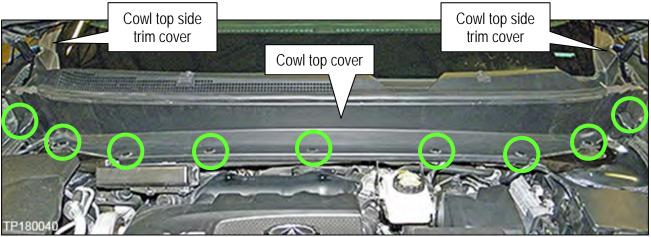
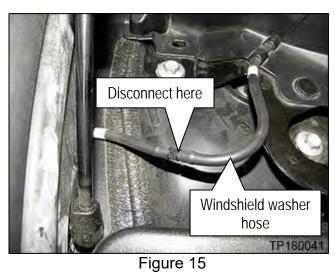


Figure 14

- 19. Disconnect the windshield washer hose.
 - Located on the passenger side of the cowl top cover.
- 20. Remove the cowl top cover.



- 21. Remove the three nuts retaining the wiper motor.
- 22. Disconnect the wiper motor harness connector.

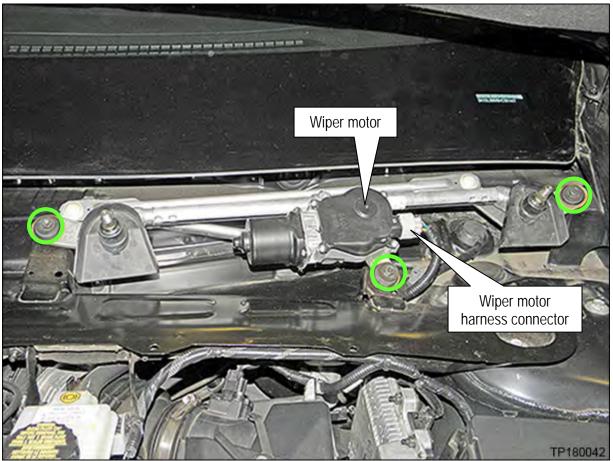
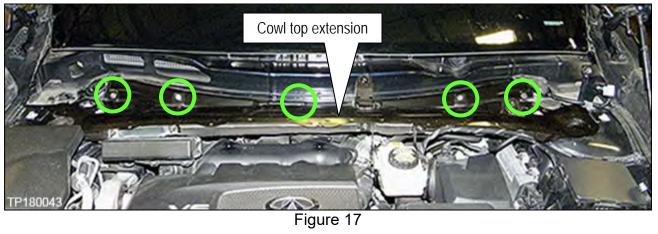


Figure 16

- 23. Remove the cowl top extension as follows:
 - a. Remove four (4) bolts and one (1) nut along the rear edge of the cowl top extension.



- b. Remove the six (6) bolts that attach the cowl top extension; three (3) at each end.
 - Three (3) bolts shown in Figure 18 are on the driver's side. Three (3) bolts for passenger side are similar, but not shown.

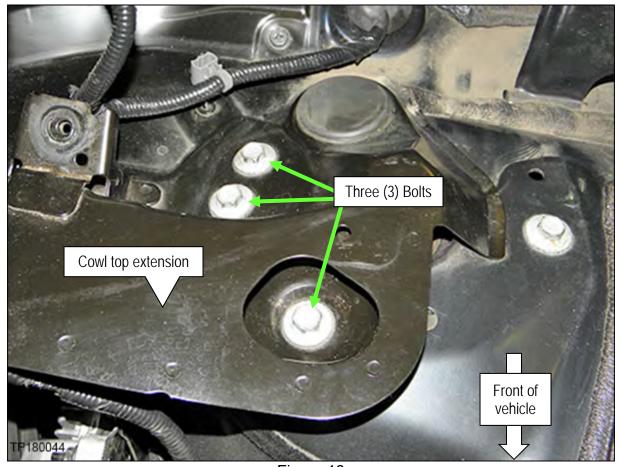


Figure 18

- c. Remove two (2) nuts that attach the brake fluid reservoir to the cowl top extension.
- d. Disconnect brake fluid reservoir harness clips from the cowl top extension.

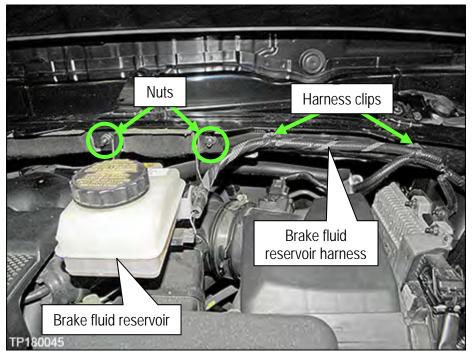


Figure 19

e. Remove two (2) nuts that attach the Fuse and Relay Box 1 to the cowl top extension.

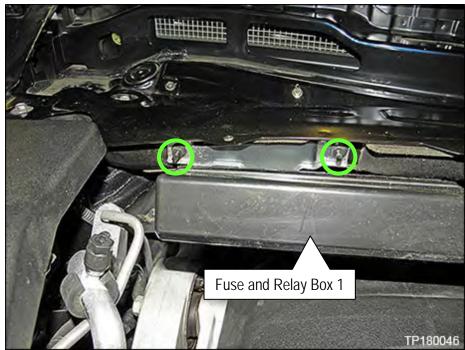


Figure 20

f. Remove cowl top extension from vehicle.

- 24. Remove the front air duct and the air cleaner assembly (Figure 21).
- 25. For 2017 model year vehicles with VQ35DD engine, disconnect and remove the ECM shown in Figure 21.
 - 2013-2017 model year vehicles with VQ35DE engine where ECM is located next to the battery, skip to step 26.
 - For the procedure to remove the ECM refer to the ESM, section ENGINE > VQ35DD > REMOVAL AND INSTALLATION > ECM > Removal and Installation.

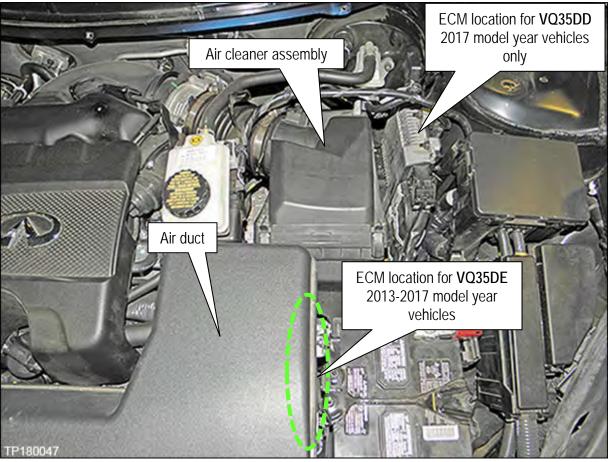
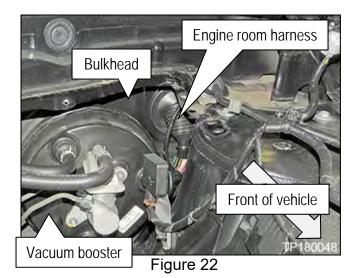


Figure 21

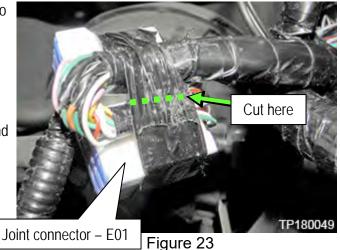
26. Pull the right side engine room harness completely through the Lower Dash Assembly (bulkhead) and into engine room.

IMPORTANT: Take care to not damage the harness or harness connectors on the sharp edges of the bulkhead as it is pulled through.



- 27. Locate "Joint connector E01" that is attached to the engine room harness.
 - This harness connector has blue "shunts" plugged into its terminals.
- 28. Cut the black tape that is attaching Joint connector E01 to the engine room harness, and remove the black tape from Joint connector E01.
 - Figure 24 shown with Joint connector E01 black tape removed.

IMPORTANT: Be careful to not damage the harness.



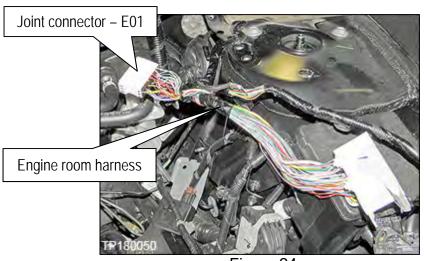


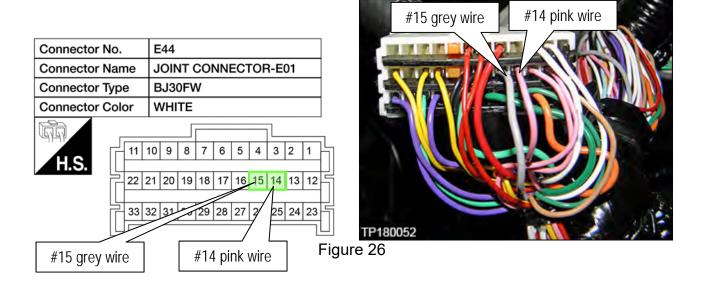
Figure 24



29. Place a fender cover over the driver's side fender and lay out the engine room harness.

Figure 25

- 30. Locate the grey and pink wires shown in Figure 26 in Joint connector E01 (connector number E44).
 - Grey wire in position #15 as viewed from the harness side.
 - Pink wire in position #14 as viewed from the harness side.



31. Separate the grey and pink wires that have been located from the other wires as shown in Figure 27.

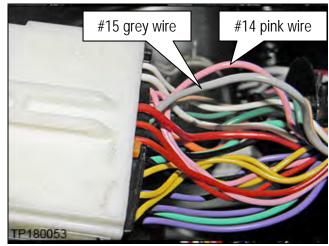


Figure 27

- 32. Cut the grey wire that was located in steps 30 and 31.
 - Measure approximately 40 mm from Joint connector – E01 to point where grey wire is cut.
- 33. Cut the pink wire that was located in steps 30 and 31.
 - Measure approximately 25 mm from Joint connector – E01 to point where pink wire is cut.

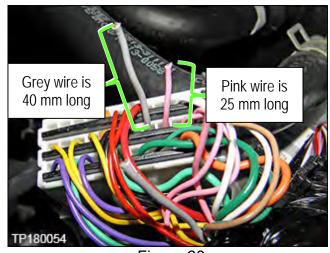


Figure 28

34. Fold over approximately 5 mm of the pink wire that is extending from Joint connector – E01 as shown in Figure 29.

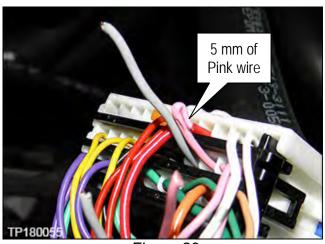


Figure 29

- 35. Wrap pink wire that was folded over in step 34 with black electrical tape.
 - Use 3M/Scotch Professional Grade Vinyl Super 88 Electrical Tape (3/4 inch wide) or equivalent.



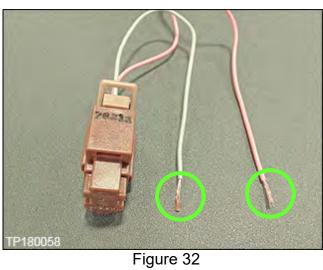
Figure 30

36. Strip approximately 10 mm from the remaining pink wire and the two grey wires.



Figure 31

- 37. Strip approximately 10 mm from the pink and grey wires of the jumper harness.
 - Listed in the PARTS INFORMATION on page 26.



- 38. Slide a red solder sleeve connector over the pink wire of the jumper harness.
 - Refer to the **PARTS INFORMATION** on page 26 for solder sleeve connectors.

39. Twist together the pink wire of the jumper harness with the remaining pink wire stripped in step 36. (See Figures 33 and 34.)

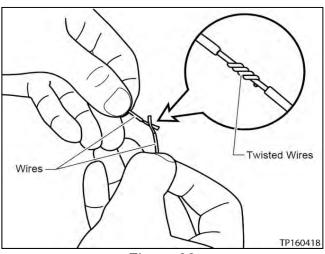


Figure 33

40. Position the solder ring in relation to the twisted wires as shown in Figure 34.

CAUTION: For the next step, <u>do not</u> use an electric type soldering tool. An electric type soldering tool may generate a current that may damage the ECU.

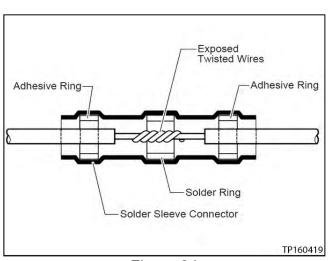


Figure 34

41. "Install" the solder sleeve connector by shrinking it to the wire with essential tool Flameless Heat Gun J-46538 or similar flameless heating tool (see Figures 35 and 36).

"Installing" the solder sleeve connector will:

- Melt the solder (silver ring inside the solder sleeve connector) into the exposed twisted wire area,
- Melt the sealant (red rings inside the solder sleeve connector) onto the wires, and
- Shrink the remainder of the solder sleeve connector to the wire.

NOTE: Tool J-46538 can be purchased from TECH-MATE at 1-800-662-2001.

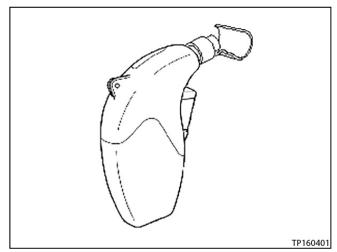


Figure 35

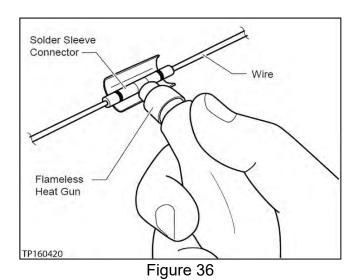


 Figure 37 shown with solder connection of pink wire of jumper harness and pink wire of Joint connector – E01 completed.

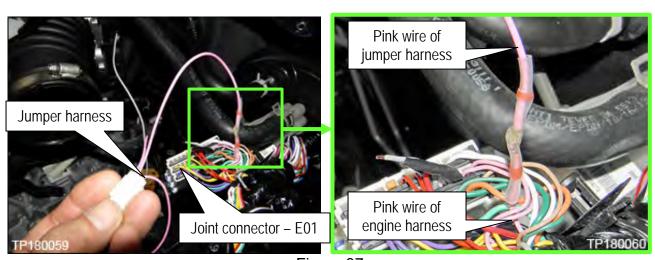
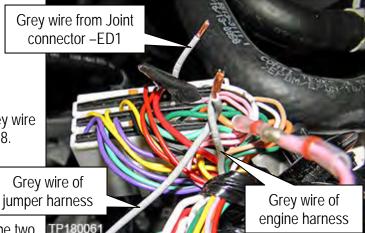


Figure 37



42. Twist together the grey wire of the engine harness that was cut in step 32 with the grey wire of the jumper harness as shown in Figure 38.

43. Slide a blue solder sleeve connector over the two grey wires that were twisted together in step 42.

• Refer to the **PARTS INFORMATION** on page 26 for solder sleeve connectors.

44. Now twist the third grey wire from Joint connector – E01 (Figure 39) that was cut through in step 32 to form a three way connection.

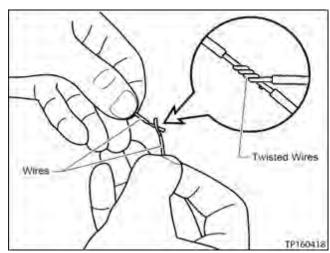


Figure 38

Figure 39

45. Position the blue solder sleeve connector so that the solder ring is in relation to the <u>three</u> twisted wires as shown in Figure 40.

CAUTION: For the next step, <u>do not</u> use an electric type soldering tool. An electric type soldering tool may generate a current that may damage the ECU.

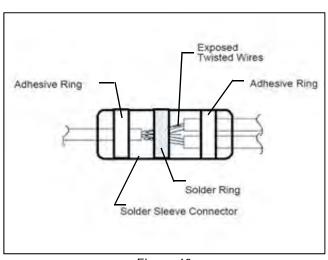


Figure 40

46. "Install" the solder sleeve connector by shrinking it to the wire with essential tool Flameless Heat Gun J-46538 or similar flameless heating tool (see Figures 41 and 42).

"Installing" the solder sleeve connector will:

- Melt the solder (silver ring inside the solder sleeve connector) into the exposed twisted wire area,
- Melt the sealant (blue rings inside the solder sleeve connector) onto the wires, and
- Shrink the remainder of the solder sleeve connector to the wire.

NOTE: Tool J-46538 can be purchased from TECH-MATE at 1-800-662-2001.

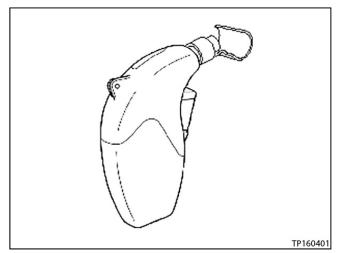


Figure 41

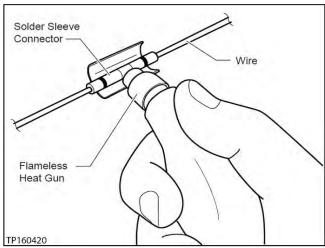


Figure 42

• Figure 43 shown with three way solder connections completed.

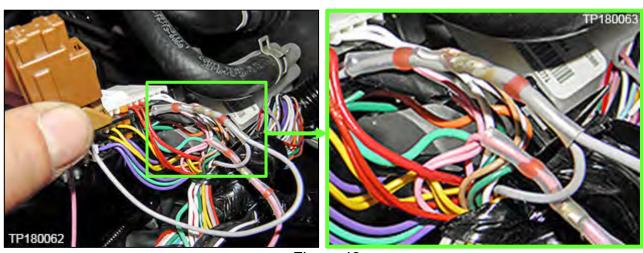


Figure 43

47. Model year 2016-2017 vehicles proceed to step 52.

Steps 48-51 are <u>only</u> for model years 2013-2015 vehicles. For model years 2016-2017 skip to step 52.

- 48. Remove the black harness connector retainer clip from the back of Joint connector E01.
- 49. Remove the plastic harness connector protector from the end of the yellow jumper harness shown in Figure 45.
 - See the PARTS INFORMATION on page 26 for 2013 JX35 and 2014-2015 QX60 VDC RESISTOR JUMPER kit.

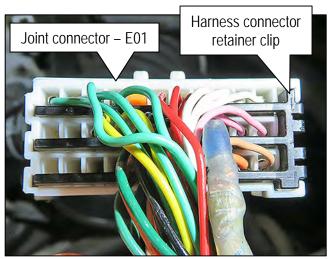


Figure 44

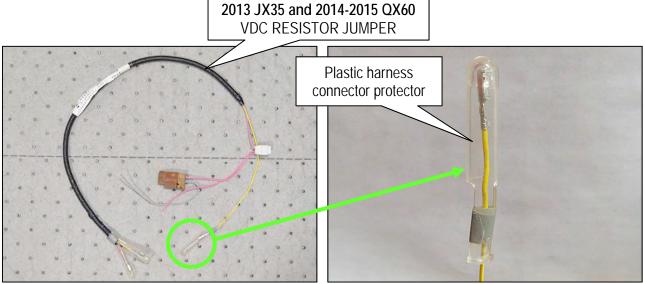


Figure 45

50. Insert the end of the yellow jumper harness into Joint connector – E01, cavity #22.

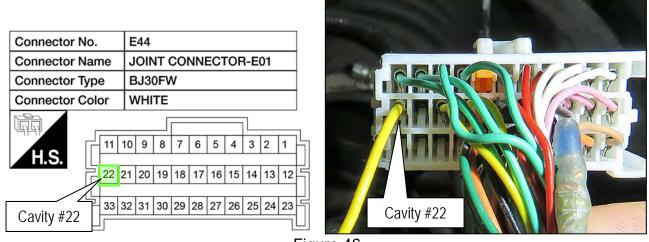


Figure 46

51. Proceed to step 52.

- 52. Route the wires that were just connected to the engine room harness and Joint connector E01, along the harness to the brake switch harness connector.
- 53. Install a new band (clip-on tie band) from the **PARTS INFORMATION** on page 26 to Joint connector E01.

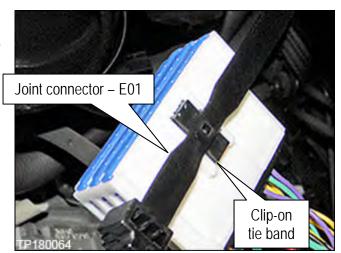


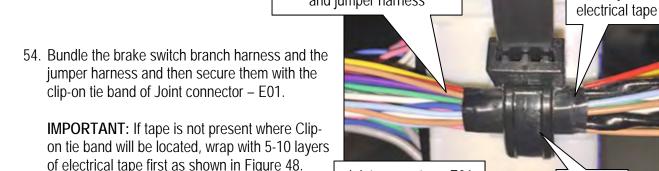
Figure 47

Figure 48

5-10 layers of

Clip-on

tie band



Brake switch branch harness

and jumper harness

Joint connector - E01

TP180065

 Use 3M/Scotch Professional Grade Vinyl Super 88 Electrical Tape (3/4 inch wide) or equivalent.

55. Remove any remaining plastic harness connector protector(s) from the jumper harness (Figure 49).

• See the PARTS INFORMATION on page 26 for model year specific VDC RESISTOR JUMPER kit.

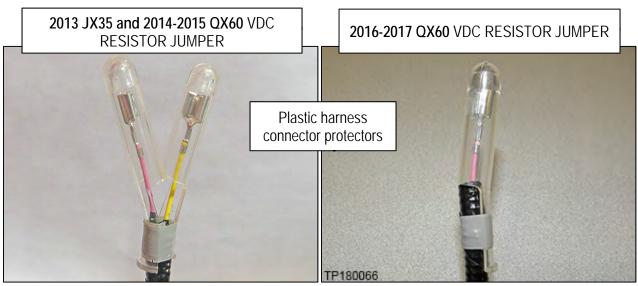


Figure 49

56. Insert the jumper wires as follows:

- For **2013 JX35** and **2014-2015 QX60**: Insert the pink and yellow jumper wire connectors into the open cavities of the harness side of the brake switch harness connector as shown in Figure 50.
- For **2016-2017 QX60**: Insert the single pink jumper wire connector into the open cavity of the harness side of the brake switch harness connector as shown in Figure 51.

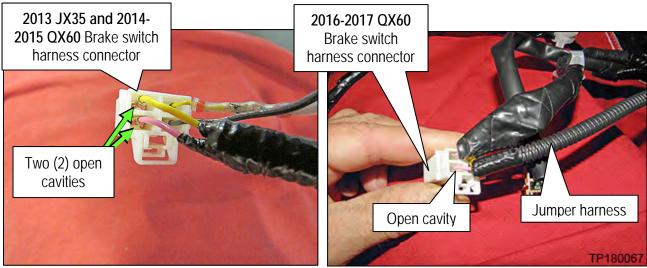
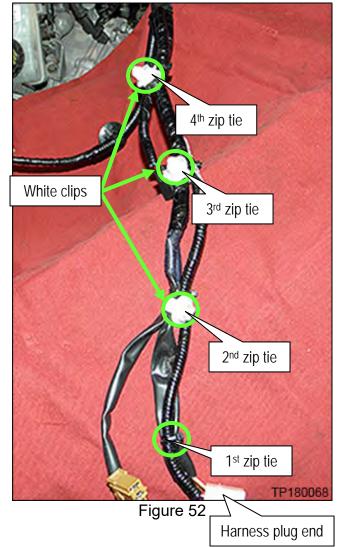


Figure 50 Figure 51

- 57. Attach the jumper harness to the brake switch branch harness as follows:
 - Lay the new jumper harness next to the brake switch branch harness so that there is no slack at the harness plug end.
 - b. Place the first (1st) zip tie approximately 25 mm (1 inch) from the brake switch branch harness connector.
 - c. Place the second (2nd) zip tie next to the first white clip.
 - d. Place the third (3rd) zip tie next to the second white clip.
 - e. Place the fourth (4th) zip tie next to the third white clip.



- 58. Secure the VDC resistor and VDC resistor jumper (both part of jumper harness) to the brake switch branch harness with black electrical tape.
 - Use 3M/Scotch Professional Grade Vinyl Super 88 Electrical Tape (3/4 inch wide) or equivalent.

NOTE: This will hold them in place so that the harness can be wrapped in the next step.

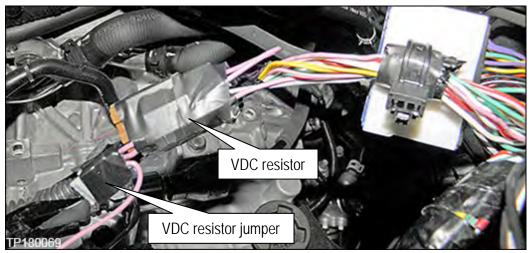
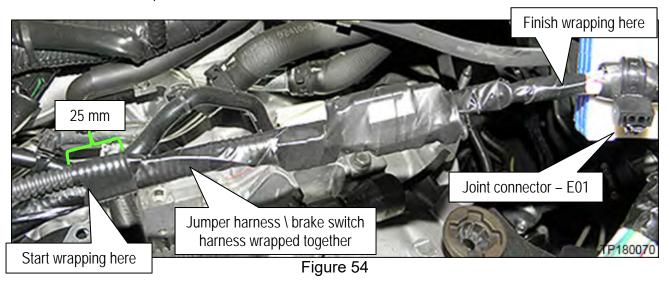


Figure 53

- 59. Starting at the point shown in Figure 54 wrap the jumper harness and brake switch harness together with black electrical tape as follows:
 - Use 3M/Scotch Professional Grade Vinyl Super 88 Electrical Tape (3/4 inch wide) or equivalent.
 - a. Start the wrap approximately 25 mm (1 inch) below where the two (2) corrugated harness protectors of the jumper harness and brake switch harness come together.
 - o Wrap only the jumper harness and brake switch harness together.
 - b. Wrap over the VDC resistor and VDC resistor jumper.
 - **NOTE:** Do not wrap over the end of the black harness clip.
 - c. End the wrap at Joint connector E01.



- 60. Reinstall the engine room harness though the bulkhead in the reverse order that it was removed.
- 61. Reassemble the remainder of the vehicle in the reverse order of disassembly.
- 62. Connect the battery negative cable.
- 63. Confirm that the brake lights function correctly.
- 64. Reset/reinitialize systems as needed.
 - For a listing of the systems that may lose settings or memory when disconnecting the 12V battery refer
 to the ESM, Section ELECTRICAL POWER CONTROL > POWER SUPPLY, GROUND CIRCUIT
 ELEMENTS > BASIC INSPECTION > INSPECTION AND ADJUSTMENT > ADDITIONAL SERVICE
 WHEN REMOVING BATTERY NEGATIVE TERMINAL.
 - This list often includes items such as, HVAC, power windows, clock, etc.
- 65. Erase DTCs.
- 66. Test drive the vehicle and make sure it operates correctly and the MIL is OFF.
 - This bulletin does not cover any repairs beyond jumper harness installation.
 - If the MIL comes ON, go to ASIST for further diagnostic information.

PARTS INFORMATION

Description		PART NUMBER	Qty			
2013 JX35 and 2014-2015 QX60	RESISTOR SERVICE KIT	24167-9NJ9C	1			
2016-2017 QX60	RESISTOR SERVICE KIT	24167-9NJ9B	1			
Both Resistor Service Kits include:						
VDC RESISTOR JUN	MPER		1			
CLIP (White tie band	d)		1			
CLIP (Black tape on	clip)		1			
CLIP (Black tie band	for threaded stud)		1			
BAND (Black clip-on tie ban	d for Joint connector –E01)		1			
TIE BANDS (Zip Tie	s)		4			
Shop Supplies						
Solder sleeve (red)		J-47003-2 (2)	1			
Solder sleeve (blue)		J-47003-3 (2)	1			
Electrical Tape		Use 3M/Scotch Professional Grade Vinyl Super 88 Electrical Tape (3/4 inch wide) or equivalent (1)	Shop Supply			

⁽¹⁾ This product (or equivalent) is available at many local automotive supply stores, and many local hardware stores.

NOTE: Resistor Service Kit includes some pieces that may not be used, but are supplied if needed.

CLAIMS INFORMATION

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

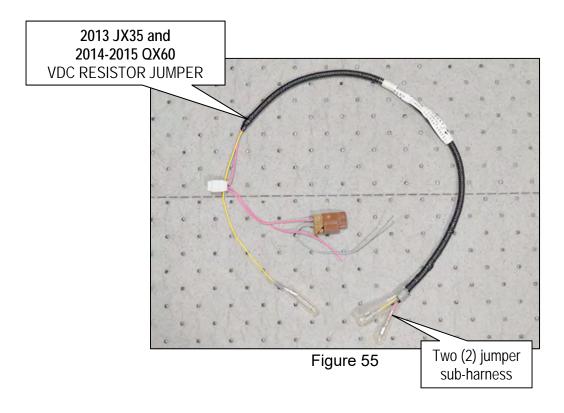
DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Install Jumper Harness MY 13-15	(1)	RX6ABA	ZE	32	2.2
Install Jumper Harness MY16-17		RX6AAA			2.3

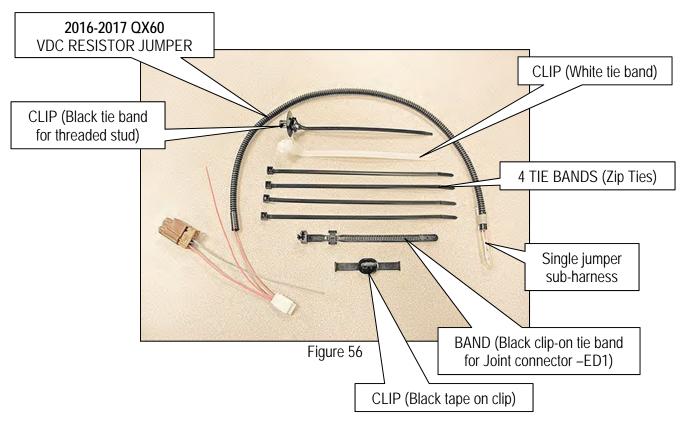
⁽¹⁾ Refer to the Electronic Parts Catalog (EPC) and use the ABS Actuator (47660-*****) Part Number as the Primary Failed Part.

⁽²⁾ Available from Tech•Mate online: www.nissantechmate.com, or by phone: 1-800-662-2001.

HARNESS IDENTIFICATION

NOTE: Figure 56 shows all components that are included in both kits. Figure 55 only shows the differences between the two harnesses.





AMENDMENT HISTORY

DATE	REFERENCE	DESCRIPTION
February 12, 2018	ITB18-006	Original bulletin published
March 15, 2019	ITB18-006a	2013 JX35 and 2014-15 QX60 model years added with additional steps and Parts Information for those years