Aftersales Retailer Support

2011-2015 Infiniti QX56/QX80 and 2011-2015 M56/Q70 Fuel Pressure Sensor

Voluntary Safety Recall Campaign

Reference: R1417
Date: November 26, 2014

******* Retailer Announcement *******

A STOP SALE CONDITION IS IN EFFECT.

Infiniti is conducting a voluntary safety recall campaign on certain specific 2011-2015 QX56/80 models and 2011-2015 M56/Q70 (V8 engine) to re-tighten the fuel rail pressure sensor to the correct torque specification. On some affected vehicles, the fuel rail pressure sensor may not have been tightened to specification and may gradually loosen over time due to heat and vibration, which could possibly cause a small amount of fuel to leak.

NOTE: Vehicles subject to previous recall 12V-069 (R1202) that have not yet been remedied will be re-notified under this campaign. Vehicles repaired under the R1202 recall campaign require no further action.

A special tool is currently under development and is expected to be available the week of December 8, 2014. A **new**, more efficient repair procedure will be released when the tool becomes available.

IMPORTANT: It is a violation of Federal law for retailers to sell or deliver vehicles in their inventory covered by this notification until the campaign action is performed.

******* What Retailers Should Do *******

1. Verify the subject vehicle is affected by this recall campaign using Service Comm I.D. R1417.
2. **Only repair client vehicles and vehicles in inventory with sold orders** using the attached interim repair procedure. Vehicles in retailer inventory that are not sold should wait for repair using the new procedure.
3. Order parts if necessary as outlined in the attached procedure.

******* Special Service Tool *******

The interim repair procedure outlined below will require special tool to perform this repair (J-50991).

NOTE: A new special tool and revised procedure will be provided the week of Dec. 8, 2014.

******* Repair/Claims Instructions *******

This repair procedure and claims information will be available on ASIST and NNAnet.com.

- ASIST – Go to "Tech Support Info" on the left column of the ASIST opening page. Under "Tech Support Info", select "Inventory Vehicle Actions". A new window will open where you may access the technical procedures.
- NNAnet.com under My Documents in the following categories:
    - Parts>Campaigns>
    - Sales>Campaigns>
    - Service>Campaigns>
        - Hint search on keywords:
            - R1417

******* Retailer Communication *******

The information will be available on ASIST and NNAnet.com on November 26th, 2014.

******* Vehicle Identification *******

There are approximately **37,140 2011-2015 QX56/QX80** and **2011-2015 M56/Q70** vehicles affected by this voluntary safety recall. Approximately **1,640 vehicles are currently in retailer inventory**. Vehicles subject to this action can be identified through:

- **SERVICE COMM** – Beginning November 27th, 2014 service departments can complete an inquiry on SERVICE COMM – **I.D. R1417 -** to determine if a vehicle is subject to this voluntary safety recall.

- **VIN List** – As a courtesy, posted with this announcement is a list of affected retailer inventory VINs by region, district, and Retailer Code.

******* Retailer Responsibility *******

It is the retailer's responsibility to check Service Comm using the appropriate Campaign I.D. 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 retailer inventory. If a VIN subject to this voluntary safety recall was part of a retailer trade, the letter associated with that VIN should be forwarded to the appropriate retailer for repair completion.

******* Owner Notification *******

Infiniti plans to begin notifying owners of potentially affected vehicles on beginning January 5th, 2015 via U.S. Mail.

FAQ:

Q. When will vehicle owners be notified?

A. We plan to begin notifying vehicle owners on January 5th, 2015.

Q. Is this a safety recall? Does the government know about this?

A. Yes, this is a voluntary safety recall. We have informed the National Highway Traffic Safety Administration.

Q. What will be the corrective action?

A. The retailer will tighten the fuel rail pressure sensor to the correct specification.

Q. Is there any charge for this repair?

A. No, the repair is offered free to the client for parts and labor.

Q. I have an Infiniti QX56/QX80, or Infiniti M56/Q70 vehicle but did not receive a letter, how can I tell if my vehicle is affected?

A. Please give me your vehicle identification number (VIN) so that I can check if your vehicle is included in this recall.

Q. What is the reason for this fuel pressure sensor notification?

A. On some affected vehicles, the fuel rail pressure sensor may not have been tightened to specification and may gradually loosen over time due to heat and vibration, which could possibly cause a small amount of fuel to leak.

Q. What is the possible effect of the condition?

A. As a result of this condition, the fuel pressure sensor may gradually loosen over time due to heat and vibration, which could possibly cause a small amount of fuel to leak.

Q. What model year vehicles are involved?

A. Select 2011-2015 Infiniti M56/Q70 (V8 Only) and 2011-2015 Infiniti QX56/QX80 engines built between 11/2011 – 6/2014.

Q. How many vehicles are involved in the campaign?

A.

Model	Number of Vehicles
MY 2011-2015 Infiniti QX56/QX80	Approximately 36,671 vehicles
MY 2011-2015 Infiniti M56/Q70	Approximately 469 vehicles

Approximately 6,000 additional vehicles subject to 12V-069 that have not been remedied will be included in this recall and re-notified.

Model
MY 2011-2012 Nissan Juke
MY 2011-2012 Infiniti M56
MY 2011-2012 Infiniti QX56

Q. Are you experiencing this condition on any other Infiniti (or Nissan) models?

A. Yes. Select MY 2011-2014 Nissan Juke vehicles with engines built between 11/2011 – 6/2014 is also affected.

Q. Can I use my vehicle until the fuel pressure sensor has been retightened?

A. Yes. However, Infiniti recommends that you make the appointment for the repair as soon as possible.

Q. Have there been any injuries or fatalities related to this problem?

A. No.

Q. I have lost confidence in the vehicle. Will Infiniti replace or repurchase the vehicle?

A. The repair will fully correct this condition. As the condition will be corrected, there is no basis for repurchasing or replacing your vehicle.

Q. How long will the corrective action take?

A The repair will take approximately two hours. However, your retailer may require your vehicle for a longer period of time based on his work schedule.

Q. Will I have to take my vehicle back to the selling retailer to have the service performed?

A. No, any authorized Infiniti retailer is able to perform the recall campaign.

REQUIRED SPECIAL TOOL J-50991

- Additional tools can be ordered from TECH-MATE at 1-800-662-2001.

Figure A

SERVICE PROCEDURE – QX56 & QX80 (For M56 Service Procedure, go to page 13).

QX56/80 Service Procedure

WARNING: Never open the cooling system when the engine is hot. Serious burns may occur from hot high pressure engine coolant escaping from the cooling system.

NOTE: During this procedure you will remove several similar size bolts with different lengths. It is important to keep track of which length bolt goes in which location.

1. Write down the radio station presets.

Presets	1	2	3	4	5	6
A						
B						
C						
SAT						

2. Write down the customer settings for the Automatic Temperature Control / Climate Control system. (Refer to the Service Manual as needed.)

3. Release fuel system pressure as follows:
   a. Turn the ignition ON.
   b. Connect CONSULT-III or CONSULT-III plus.
   c. Perform FUEL PRESSURE RELEASE in ENGINE WORK SUPPORT.
   d. Start engine.
   e. After engine stalls, crank it two or three times to release all fuel pressure.
   f. Turn ignition OFF, disconnect CONSULT.

4. Disconnect both battery cables; negative cable first.

5. Remove the engine cover (see Figure 1).
   a. Remove 2 bolts at the front of the cover.
   b. Lift the front of the cover to access and loosen the rear bolts.

Figure 1

6. Disconnect the 2 breather hoses at the points shown in Figure 2.

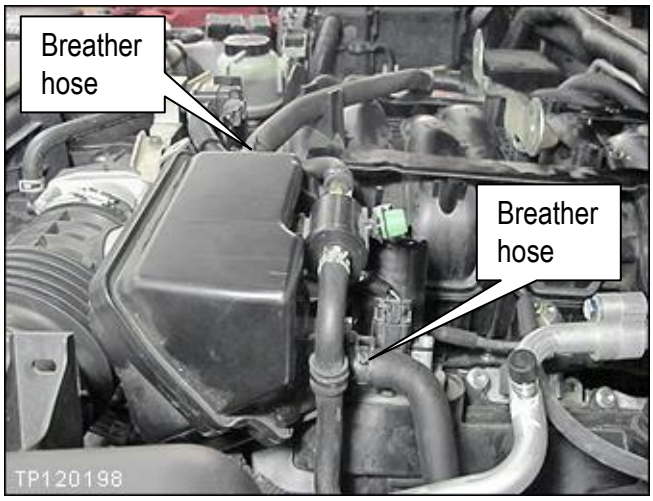

Figure 2

7. Disconnect EVAP solenoid electrical connector (see Figure 3).

8. Disconnect EVAP solenoid harness mount from the intake manifold.

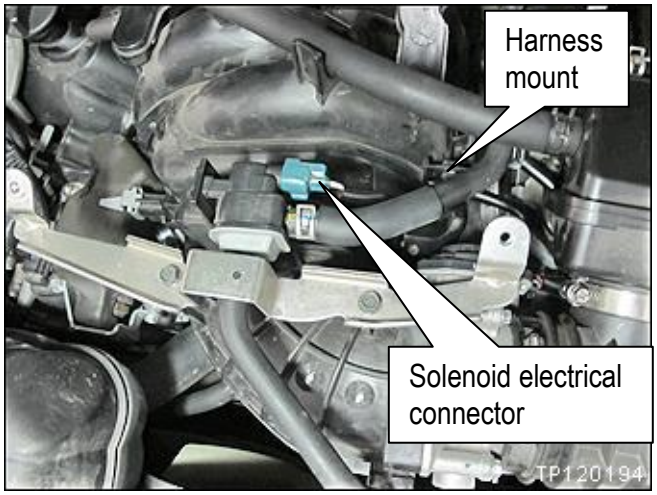

Figure 3

9. Remove the air intake tube as follows:

   a. Loosen band clamps at each end of the air intake tube.

   b. Unclip and loosen the top of the air cleaner housing.

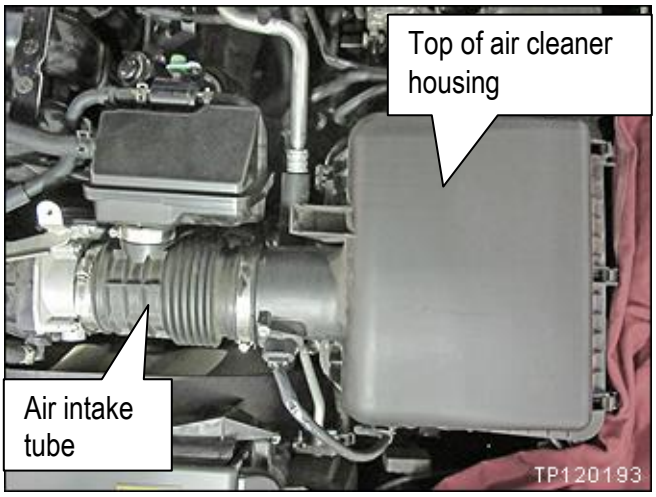

Figure 4

c. Take the air intake tube loose and place it out of the way.

NOTE: The EVAP hose can remain attached to the air intake tube.

d. Cover air breather openings with clean rags to prevent debris entry.

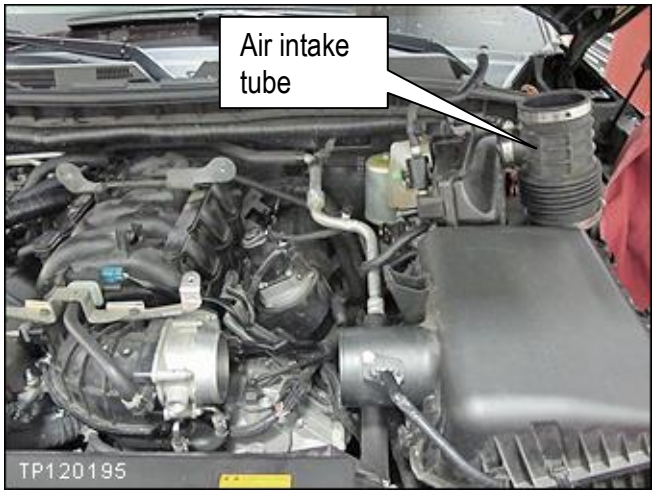

Figure 4a

10. Remove the throttle body:

- Leave coolant hoses connected to the throttle body.

  WARNING: Do not loosen or remove spring clamps on coolant hoses. Hot coolant may come out if the engine is hot.

a. Disconnect electrical connector from the throttle body.

b. Remove the 4 mounting bolts.

c. Pull the throttle body away from the intake manifold and place it to the side, away from the manifold.

d. Cover the intake manifold openings with clean rags to prevent debris entry.

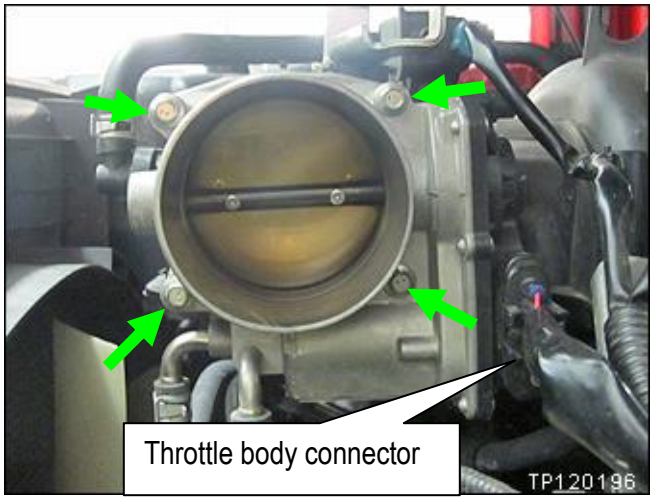

Figure 5

11. By hand, remove the fuel pump foam insulator.

12. Remove the harness bracket mounting bolt (passenger side of engine) shown in Figure 6.

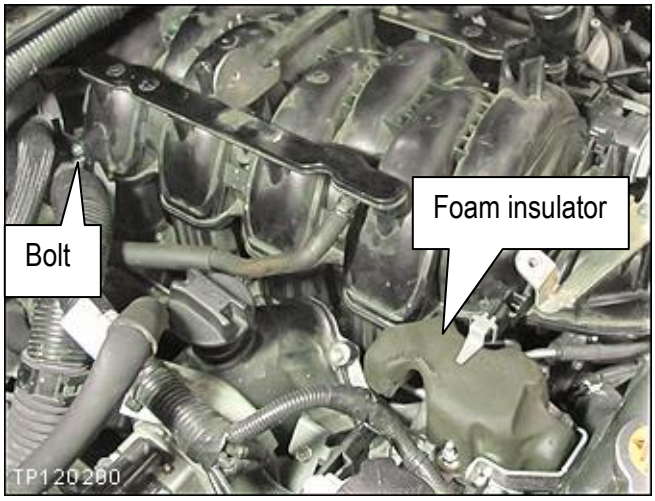

Figure 6

13. Disconnect the positive crankcase ventilation (PCV) hoses from the intake manifold; both sides.

    a. Loosen spring clamps.

    b. Disconnect hoses and position them out of the way.

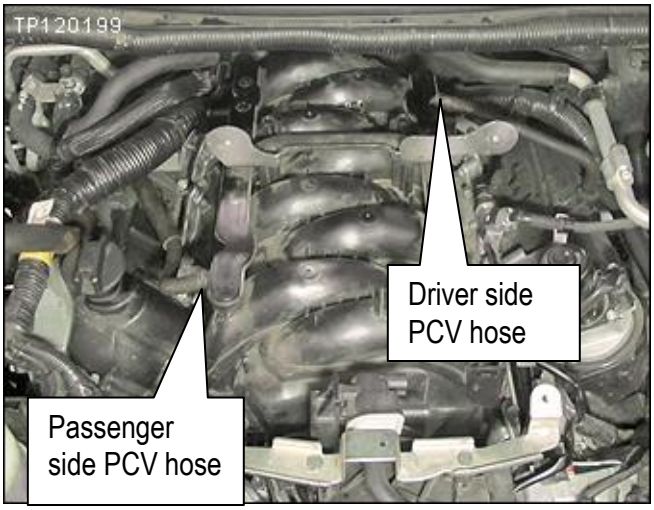

Figure 7

14. Disconnect the manifold absolute pressure sensor electrical connector (see Figure 8).

NOTE: The manifold absolute pressure sensor is mounted on the rear of the intake manifold. It can be accessed and disconnected from the passenger side of the intake manifold.

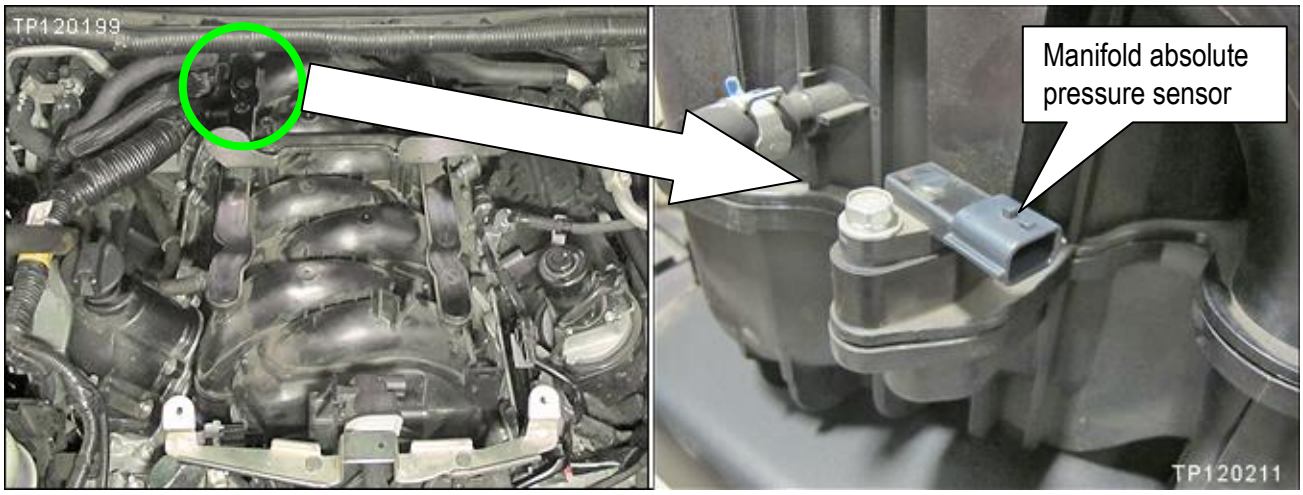

Figure 8

15. Remove 10 bolts securing the intake manifold to the engine (see Figure 9).

16. Remove the intake manifold from the engine and place clean rags over the intake ports to prevent debris from entering the engine.

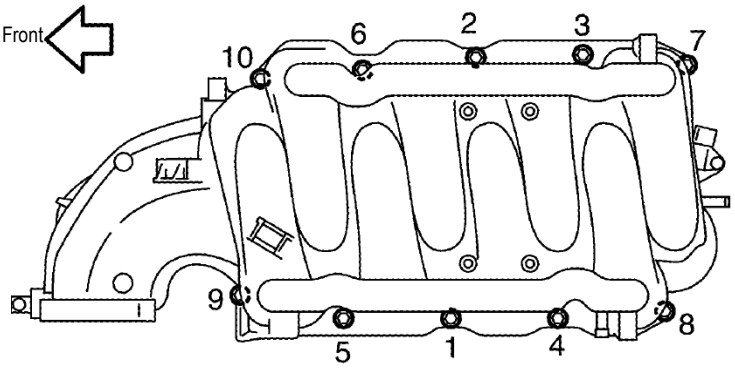

Figure 9

17. Remove insulators covering the fuel rails.

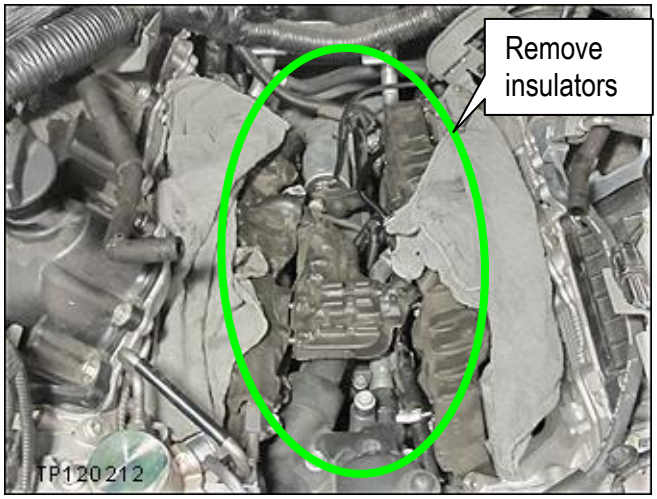

Figure 10

18. Disconnect the fuel rail pressure sensor electrical connector.

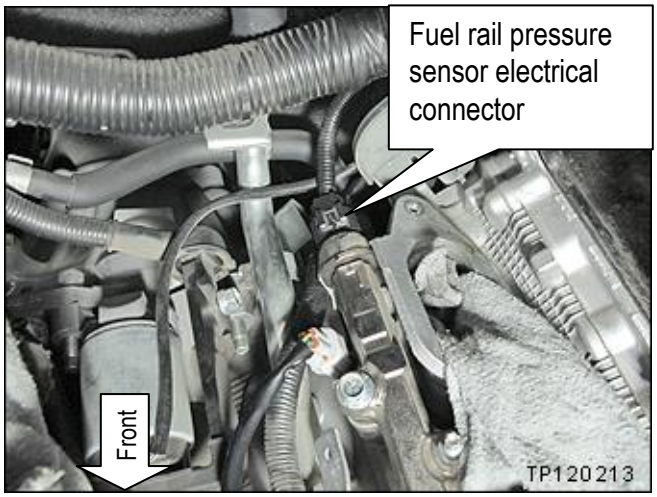

Figure 11

Note: For this procedure it is <u>NOT</u> necessary to replace the fuel pressure sensor sealing washer.

19. Torque the fuel rail pressure sensor as follows:

    a. Measure the length of your torque wrench between the center of the handle and the center of the square drive as shown in Figure 12.

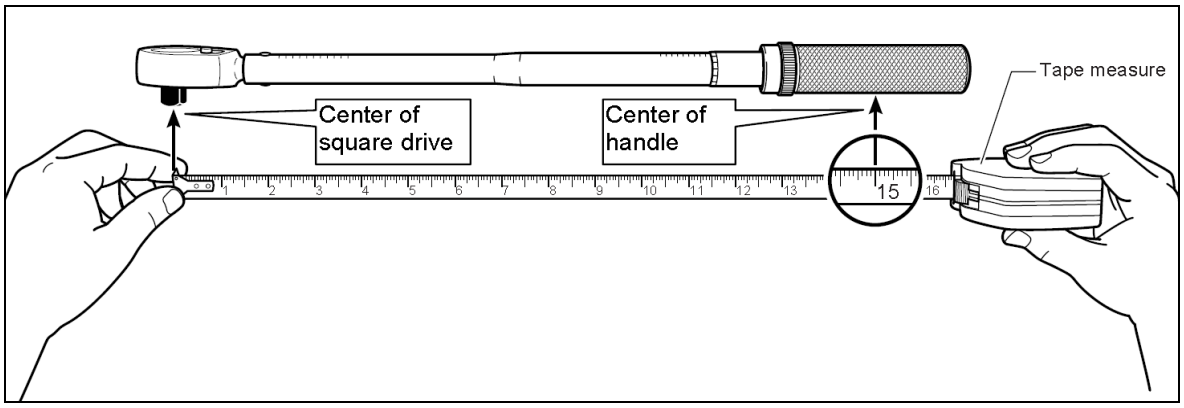

Figure 12

    b. Set your torque wrench using the following table:

Torque Wrench Length-Inches (see Figure 12)	Set Torque Wrench To:	Torque Wrench Length-Inches (see Figure 12)	Set Torque Wrench To:
8	36.4 Nm (3.64 kg-m, **27.0 ft-lb**)	16.5	42.3 Nm (4.23 kg-m, **31.0 ft-lb**)
8.5	36.4 Nm (3.64 kg-m, **27.0 ft-lb**)	17	42.5 Nm (4.25 kg-m, **31.5 ft-lb**)
9	37.5 Nm (3.75 kg-m, **28.0 ft-lb**)	17.5	42.7 Nm (4.27 kg-m, **31.5 ft-lb**)
9.5	38.0 Nm (3.80 kg-m, **28.0 ft-lb**)	18	42.9 Nm (4.29 kg-m, **31.5 ft-lb**)
10	38.5 Nm (3.85 kg-m, **28.5 ft-lb**)	18.5	43.0 Nm (4.30 kg-m, **32.0 ft-lb**)
10.5	38.9 Nm (3.89 kg-m, **29.0 ft-lb**)	19	43.2 Nm (4.32 kg-m, **32.0 ft-lb**)
11	39.3 Nm (3.93 kg-m, **29.0 ft-lb**)	19.5	43.3 Nm (4.33 kg-m, **32.0 ft-lb**)
11.5	39.6 Nm (3.96 kg-m, **29.0 ft-lb**)	20	43.5 Nm (4.35 kg-m, **32.0 ft-lb**)
12	40.0 Nm (4.00 kg-m, **29.5 ft-lb**)	20.5	43.6 Nm (4.36 kg-m, **32.0 ft-lb**)
12.5	40.3 Nm (4.03 kg-m, **30.0 ft-lb)**	21	43.8 Nm (4.38 kg-m, **32.5 ft-lb**)
13	40.6 Nm (4.06 kg-m, **30.0 ft-lb**)	21.5	43.9 Nm (4.39 kg-m, **32.5 ft-lb)**
13.5	40.9 Nm (4.09 kg-m, **30.0 ft-lb**)	22	44.0 Nm (4.40 kg-m, **32.5 ft-lb**)
14	41.2 Nm (4.12 kg-m, **30.5 ft-lb**)	22.5	44.1 Nm (4.41 kg-m, **32.5 ft-lb**)
14.5	41.4 Nm (4.14 kg-m, **30.5 ft-lb**)	23	44.2 Nm (4.42 kg-m, **32.5 ft-lb**)
15	41.7 Nm (4.17 kg-m, **31.0 ft-lb**)	23.5	44.3 Nm (4.43 kg-m, **33.0 ft-lb**)
15.5	41.9 Nm (4.19 kg-m, **31.0 ft-lb**)	24	44.4 Nm (4.44 kg-m, **33.0 ft-lb**)
16	42.1 Nm (4.21 kg-m, **31.0 ft-lb)**	– – – – –	– – – – – – – – – – –

c. Attach special tool J-50991 to your torque wrench – use an extension if needed.

d. Torque the sensor to the specified torque.

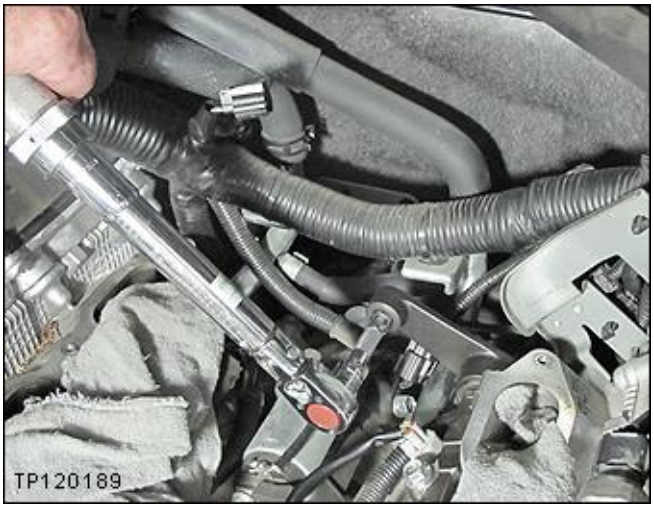

Figure 13

NOTE: Make sure to keep the extension tool (J-50991) straight (in line) with the torque wrench as shown in Figure 14.

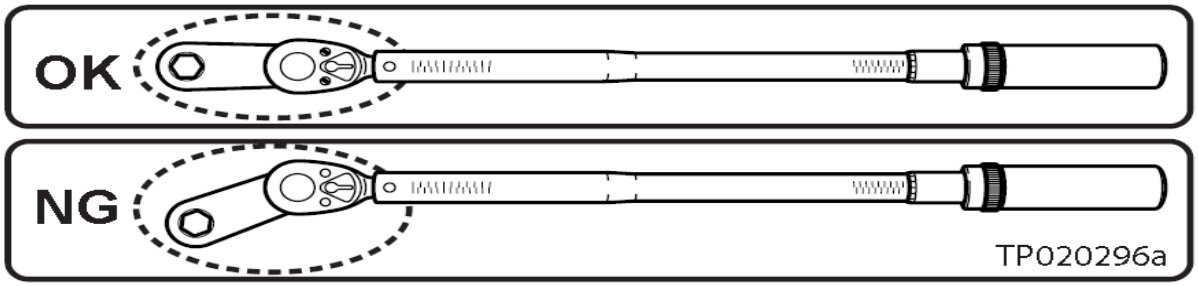

Figure 14

20. Re-connect the fuel rail pressure sensor electrical connector.

IMPORTANT: You cannot connect the sensor after the intake manifold is installed.

Tighten Additional Fuel Rail Connections Before Reassembly

21. Torque the bolts shown in Figure 15:
    11 N•m (1.1 Kg-m, **97 in-lb**)

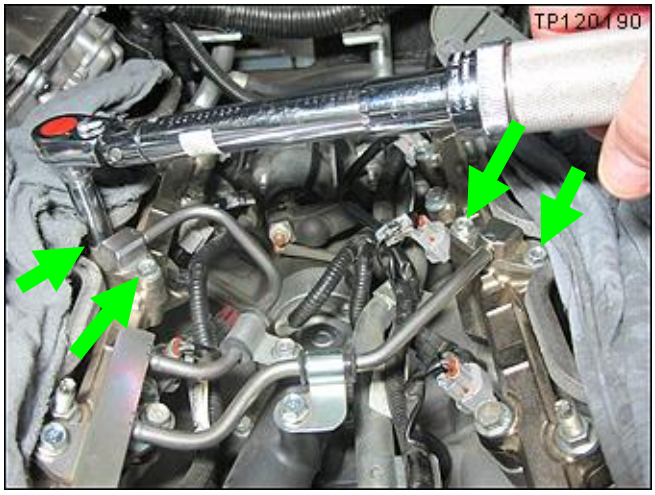

Figure 15

22. Torque the flange nuts shown in Figure 16:
    33.4 N•m (3.4 Kg-m, **25 ft-lb**)

    - Use a short 19 mm crowfoot wrench.

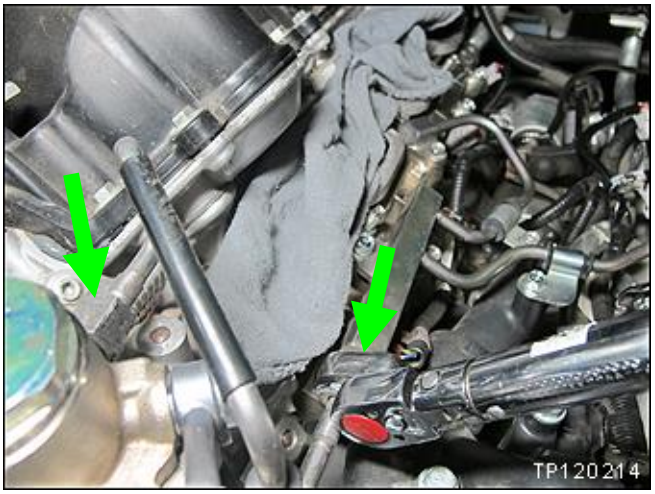

Figure 16

23. Reinstall insulators covering the fuel rails.

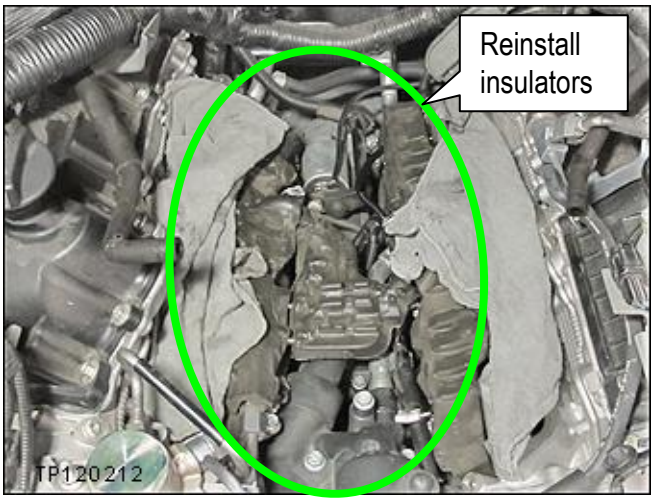

Figure 17

Reassembly

24. Install new intake manifold gaskets.

Figure 18

NOTE:

- For vehicles in dealer inventory (less than 125 miles), new gaskets are not needed.
- Clean and inspect the old gaskets. Make sure gaskets are not torn or cut and they are installed properly.

25. Reinstall all parts removed in reverse order.

Reassembly Information

- Start intake manifold bolts by hand and then tighten in the order shown in Figure 19:

  Torque to 10.8 N•m (1.1 Kg-m, **96 in-lb**).

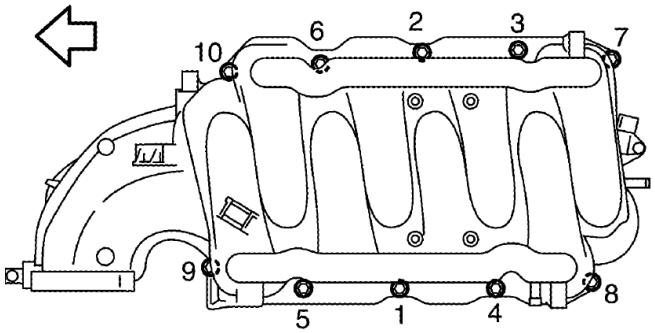

Figure 19

- Install new throttle body gaskets.

  NOTE: For vehicles in dealer inventory (less than 125 miles), new throttle body gaskets are not needed. Clean and inspect the old gaskets. Make sure gaskets are not torn or cut and they are installed properly.

- Start throttle body bolts by hand and then torque to 10 N•m (1.0 Kg-m, **89 in-lb**).

- Before installing the engine cover, check the following items:

  Manifold absolute pressure sensor harness is connected
  Breather hoses installed and spring clamps secured
  Breather Hose aligned with mounting locations (tabs) on intake manifold
  Air intake tube clamps tight
  EVAP hose installed and spring clamp secured
  EVAP solenoid harness connector secured
  Fuel pump foam insulator installed
  Positive crankcase ventilation hoses attached and clamps secured
  Harness bracket (passenger side of intake manifold) secured

26. Reconnect battery cables, positive cable first.

27. Keep foot off of the brake and cycle ignition OFF > ON, wait 3 seconds, > OFF. Repeat 3 times to build pressure in the fuel system.

28. Start the engine and make sure no warning lights are ON, and confirm the engine will rev past 4000 rpm.

29. Reinitialize each auto-up power window as follows:
    a. Turn ignition ON.
    b. Open window all the way DOWN.
    c. Pull all the way UP on the switch and HOLD (close the window completely), continue to HOLD for 4 seconds after window is completely closed.
    d. Confirm auto up/down operates correctly.

30. Reinitialize the automatic back door as follows:
    a. Make sure the back door is fully closed.
    b. Perform automatic back door open/close operation.
    c. Check for noise or malfunctioning during operation.
    d. Check that hazard lamps blink and that warning buzzer operates.

    NOTE: Never touch back door or allow foreign materials to be pinched in door when performing automatic back door open/close operation.

31. Reset the customer's settings for the Automatic Temperature Control / Climate Control system. (Refer to the Service Manual as needed.)

32. Reset the clock and radio station presets.

33. Inform the customer they will need to reset their ADP (Automatic Drive Positioner).

END

M56 Service Procedure

WARNING: Never open the cooling system when the engine is hot. Serious burns may occur from hot high-pressure engine coolant escaping from the cooling system.

NOTE: During this procedure you will remove several similar size bolts with different lengths. It is important to keep track of which length bolt goes in which location.

1. Write down the radio station presets.

Presets	1	2	3	4	5	6
A						
B						
C						
SAT						

2. Release fuel system pressure as follows:
   a. Turn the ignition ON.
   b. Connect CONSULT-III or CONSULT-III plus.
   c. Perform FUEL PRESSURE RELEASE in ENGINE WORK SUPPORT.
   d. Start engine.
   e. After engine stalls, crank it two or three times to release all fuel pressure.
   f. Turn ignition OFF, disconnect CONSULT.

3. Remove the battery cover.

4. Disconnect both battery cables; negative cable first.

5. Remove the engine cover.
   a. Remove 2 bolts.
   b. Use hand pressure to carefully pull UP at the mounting locations shown in Figure 1m.

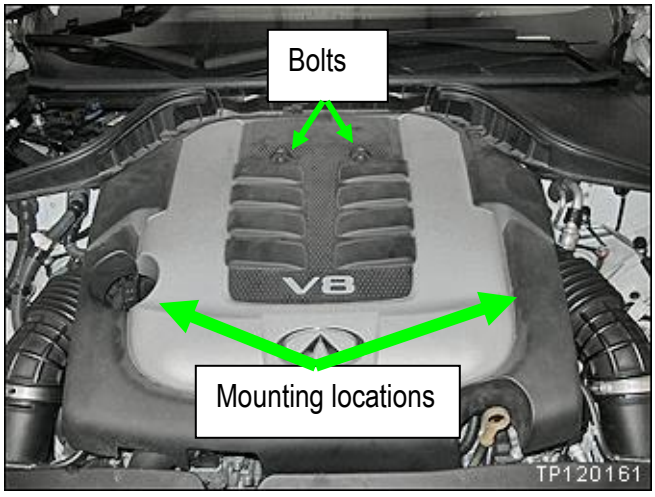

Figure 1m

6. Remove air intake tubes; both sides:

    a. Loosen spring clamps and disconnect hoses from air intake tubes.

    b. Loosen clamps at each end of the air intake tubes.

    c. Remove air intake tubes from the engine.

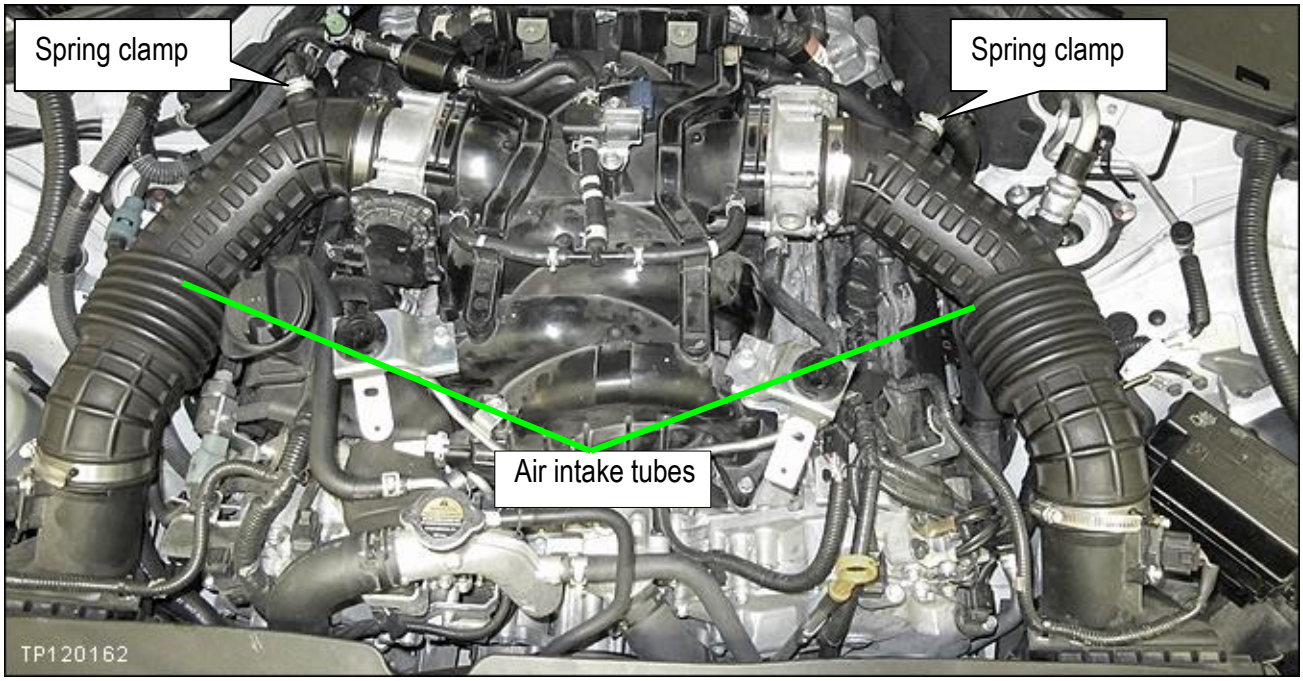

Figure 2m

7. Remove engine cover brackets.

    - Each bracket is held on with 1 bolt.

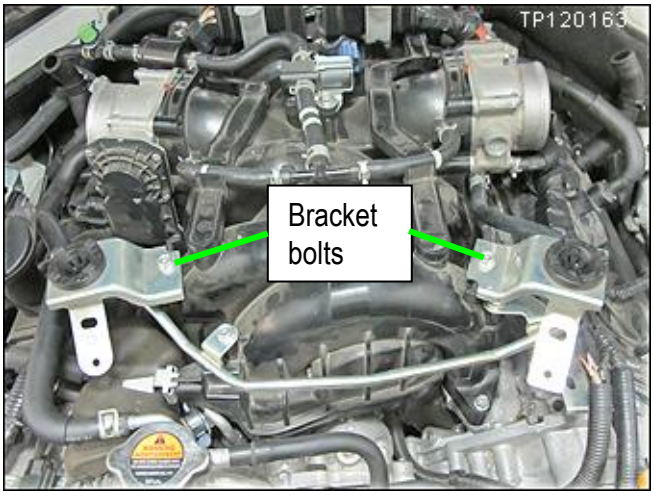

Figure 3m

8. Remove bolts securing coolant pipe.

   WARNING: Do not loosen or remove spring clamps on coolant hoses. Hot coolant may come out if the engine is hot.

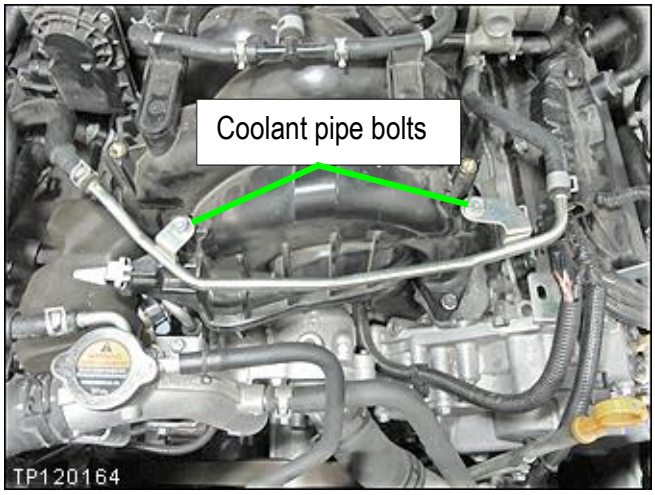

Figure 4m

9. Remove <u>both</u> throttle bodies:
   - Driver side shown; passenger side is a mirror image.
   - Leave coolant hoses connected to the throttle bodies.

     WARNING: Do not loosen or remove spring clamps on coolant hoses. Hot coolant may come out.

   a. Disconnect electrical connectors form the throttle bodies.

   b. Remove the mounting bolts (4 on each throttle body).

   c. Pull the throttle body away from the intake manifold and place it to the side, away from the manifold.

   d. Cover the intake manifold openings with clean rags to prevent debris entry.

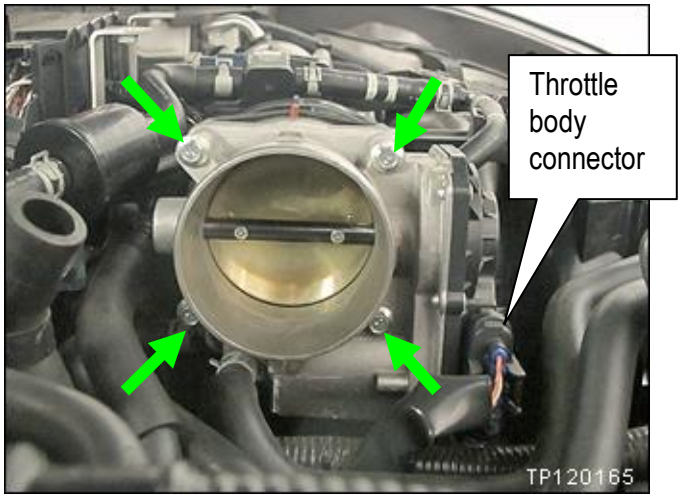

Figure 5m

10. Disconnect EVAP solenoid electrical connector (see Figure 6m).

11. Disconnect EVAP service port hose and position hose out of the way (see Figure 6m):
    a. Loosen spring clamp and disconnect hose from EVAP solenoid.
    b. Use a medium flat blade screwdriver to carefully push UP and remove EVAP valve from its mounting bracket.
    c. Position service port hose out of the way.

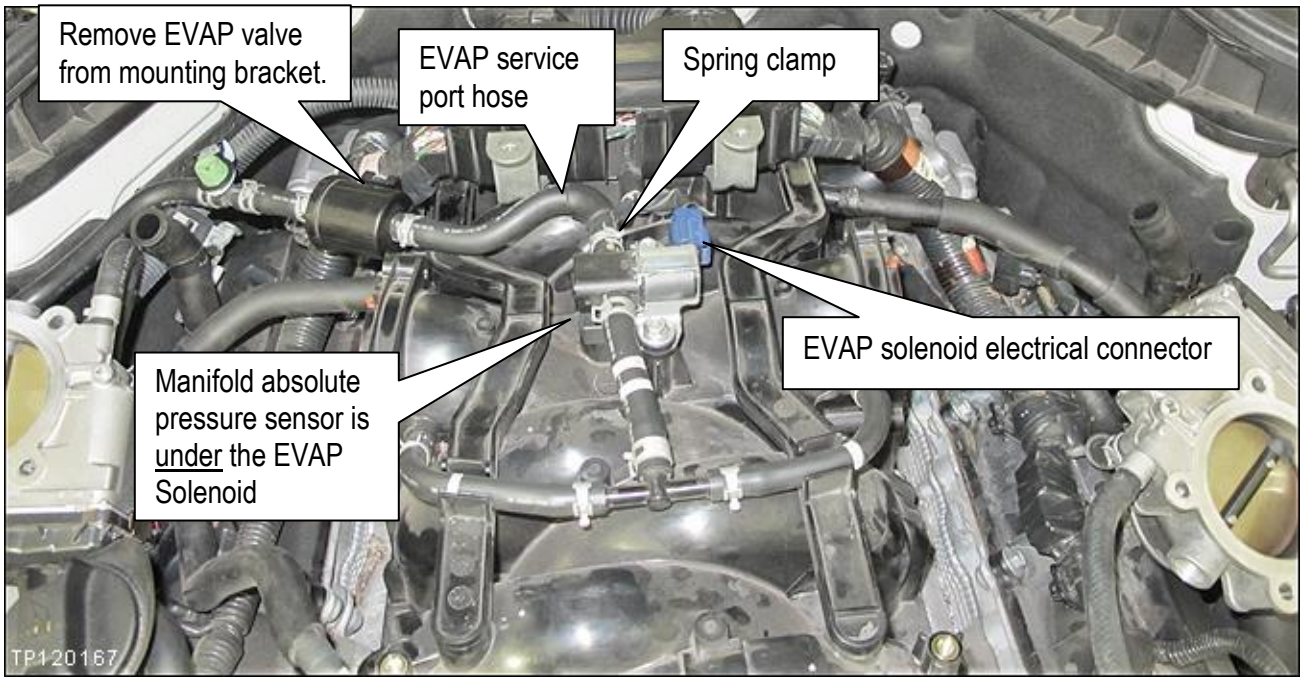

Figure 6m

12. Disconnect manifold absolute pressure sensor electrical connector.

    NOTE: The manifold absolute pressure sensor is under the EVAP Solenoid (see Figures 6m and 7m).

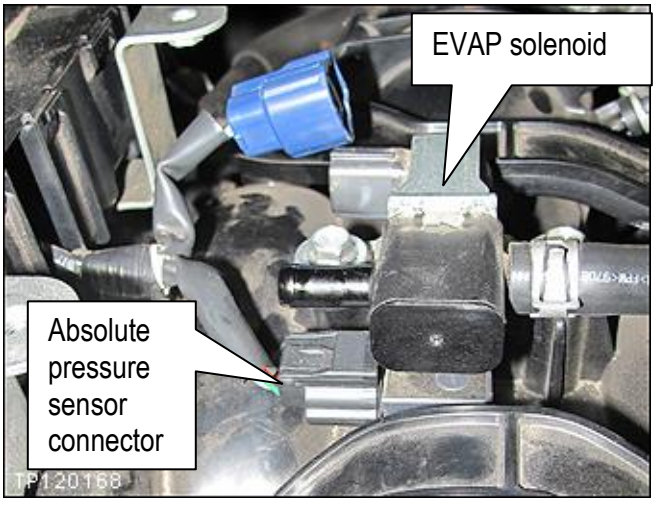

Figure 7m

13. Remove 2 harness bracket mounting bolts shown in Figure 8m; passenger side of engine.

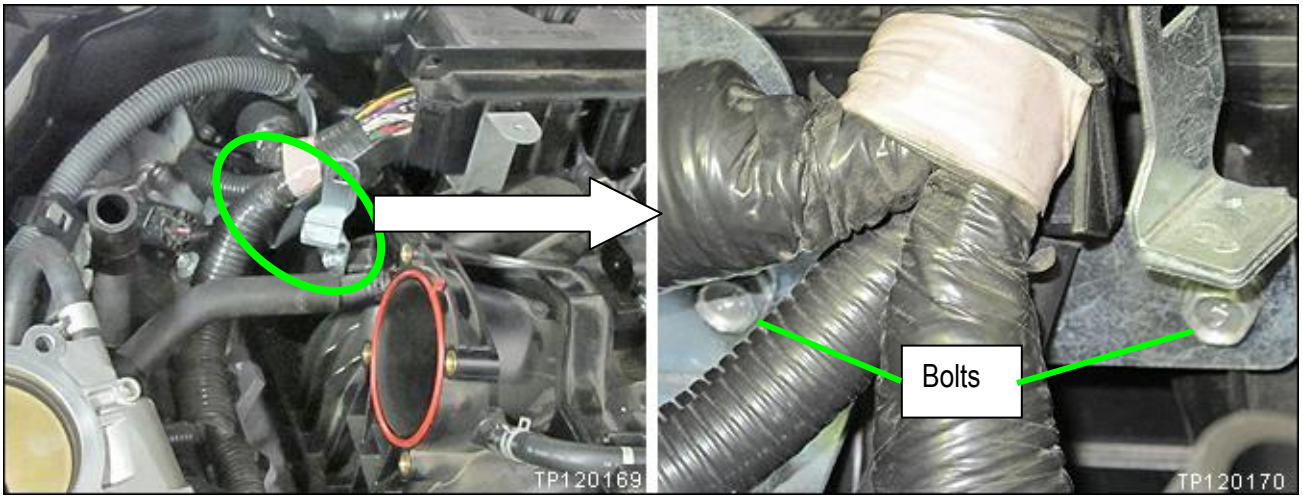

Figure 8m

14. Disconnect the positive crankcase ventilation (PCV) hoses from the intake manifold; both sides (see Figure 9m).

    a. Loosen spring clamps.

    b. Disconnect hoses and position them out of the way.

Figure 9m

15. Disconnect main harness from the intake manifold bracket as follows:

    a. Remove 2 bolts securing main harness to bracket.

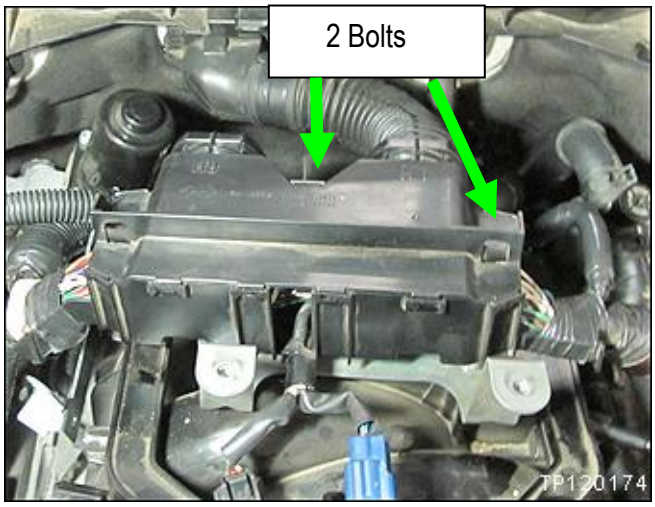

Figure 10m

    b. On the bottom of the main harness, use needle-nose pliers to pinch and release 2 clips.

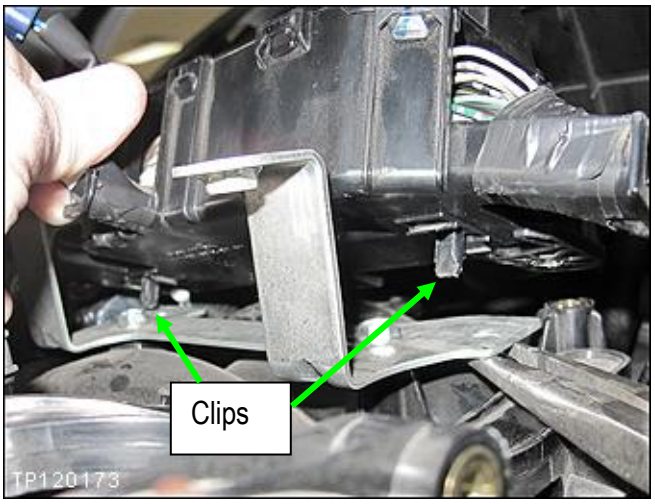

Figure 11m

16. By hand, remove the fuel pump foam insulator shown in Figure 12m.

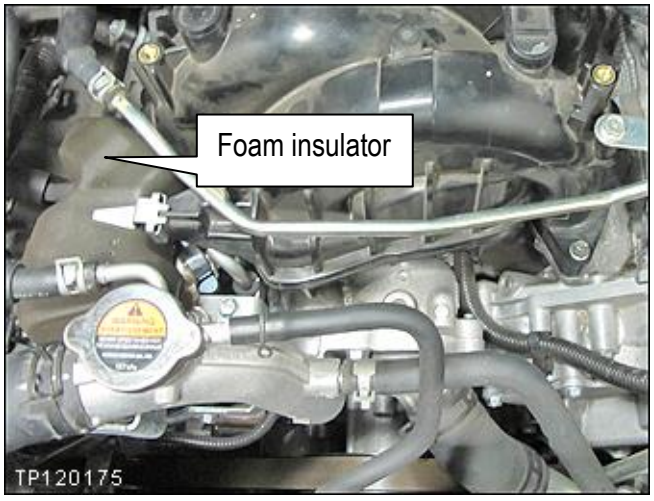

Figure 12m

17. Remove 1 bolt securing coolant pipe to rear of intake manifold; driver side.

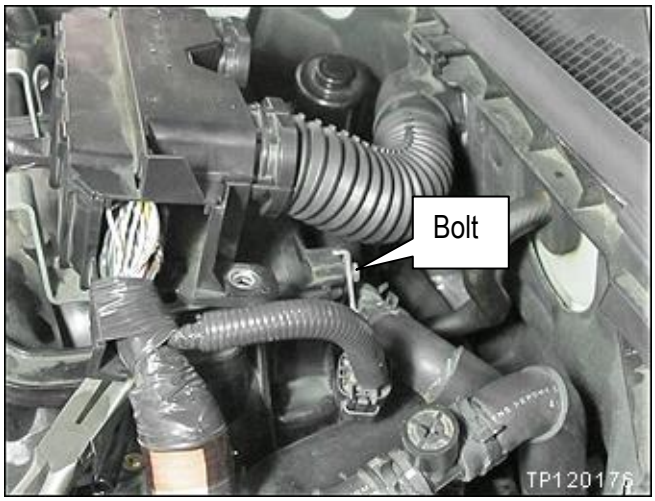

Figure 13m

18. Remove 10 bolts securing the intake manifold to the engine (see Figure 14m).

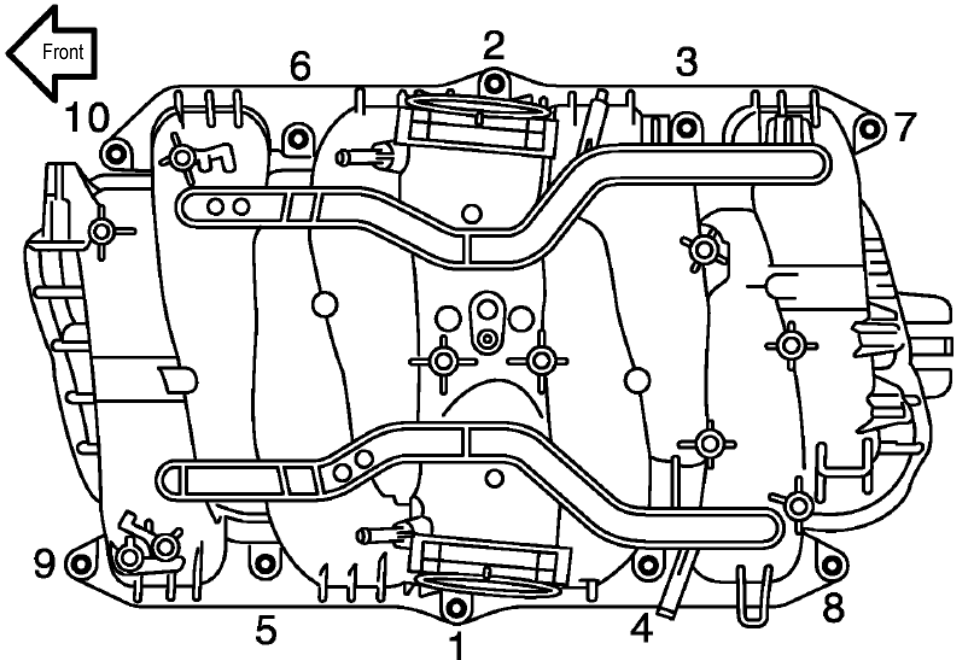

Figure 14m

19. Lift the front of the intake manifold UP and pull it forward approximately 4 inches.

    NOTE: With the manifold in this position you can access the brake booster vacuum hose and harness clip attached to the rear of the manifold.

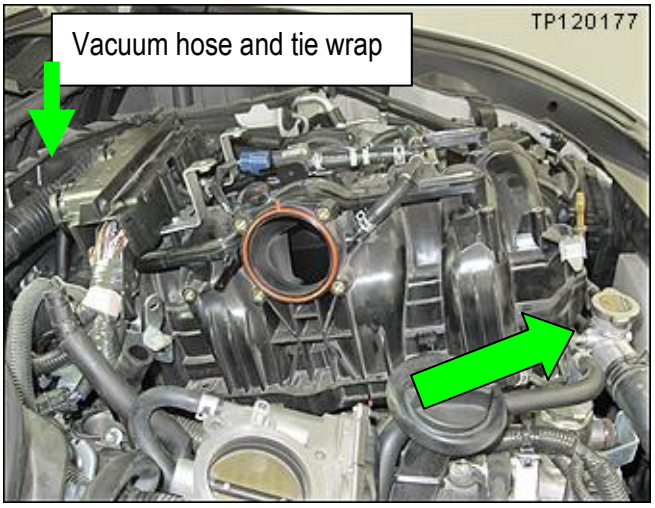

Figure 15m

20. Disconnect the brake booster vacuum hose from the intake manifold:

    a. Look behind the intake manifold (see Figures 15m and 16m) and locate the hose.

    b. Loosen the spring clamp and disconnect the hose.

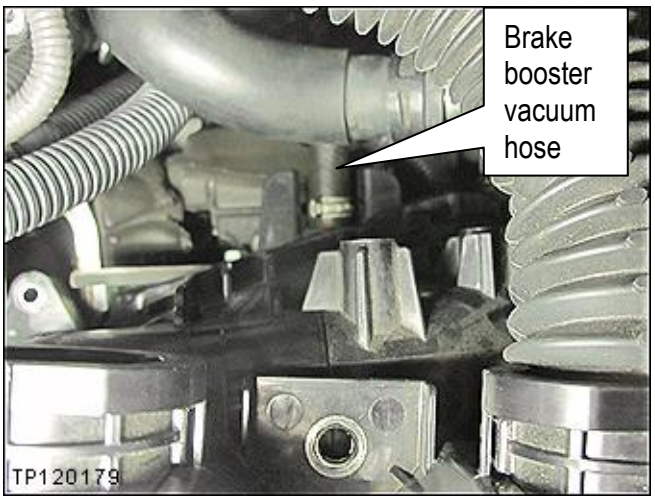

Figure 16m

21. Disconnect or cut the harness tie-clip at the back of the intake manifold:

    a. Look behind the intake manifold (see Figure 15m and 17m) and locate the tie-clip.

    b. Disconnect or cut the tie-clip.

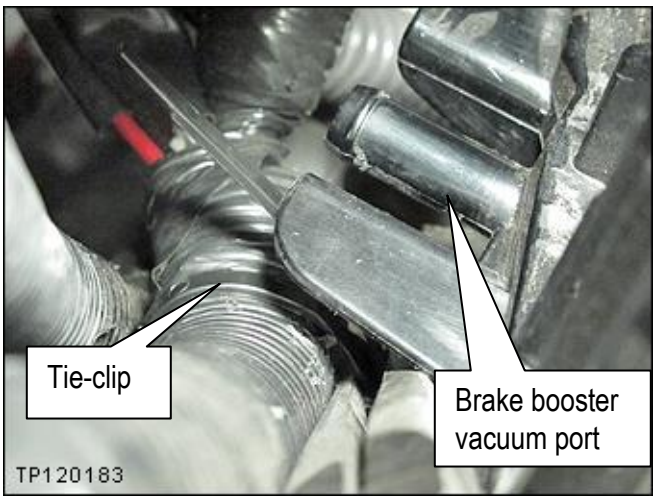

Figure 17m

22. Remove the intake manifold from the engine and place clean rags over the intake ports to prevent debris from entering the engine.

23. At the back of the intake manifold, remove the harness tie-clip.

    NOTE: A new tie wrap will be installed on the harness before installing the intake manifold.

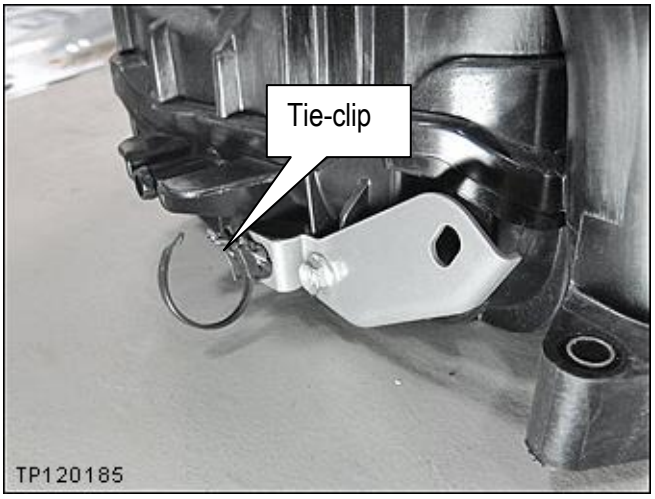

Figure 18m

24. Remove insulators covering the fuel rails.

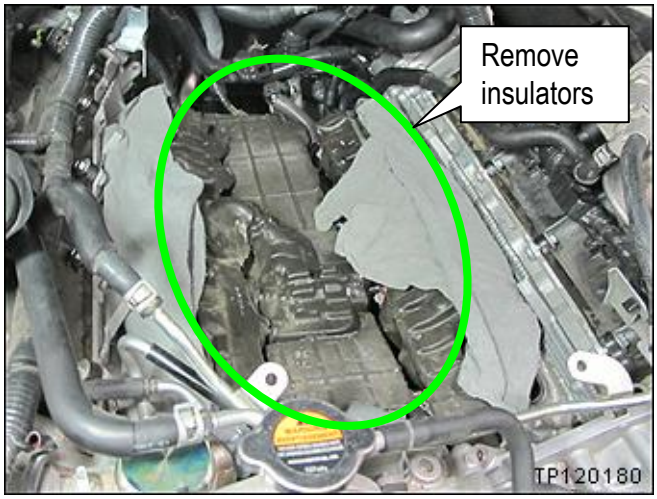

Figure 19m

25. Disconnect fuel rail pressure sensor electrical connector:

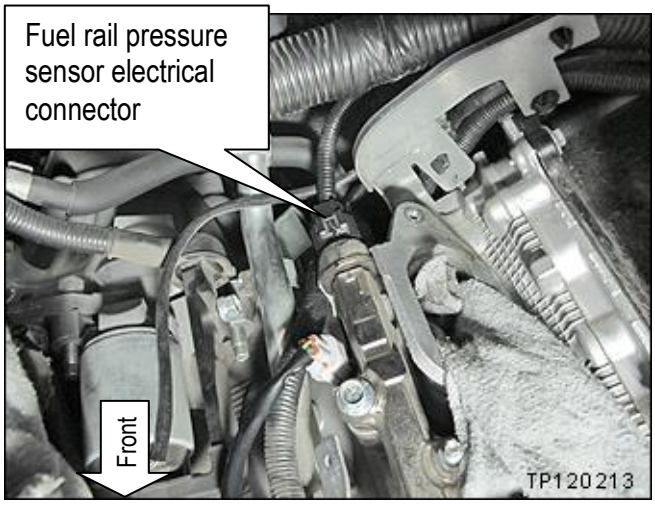

Figure 20m

Note: For this procedure it is <u>NOT</u> necessary to replace the fuel pressure sensor sealing washer.

27. Torque the fuel rail pressure sensor as follows:

    a. Measure the length of your torque wrench between the center of the handle and the center of the square drive as shown in Figure 21m.

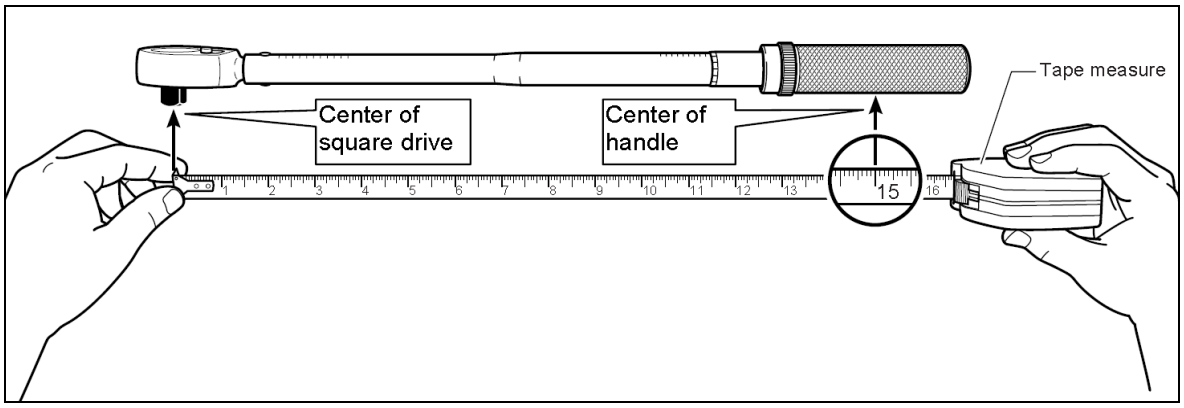

Figure 21m

    b. Set the torque wrench using the following chart.

Torque Wrench Length-Inches (see Figure 21m)	Set Torque Wrench To:	Torque Wrench Length-Inches (see Figure 21m)	Set Torque Wrench To:
8	36.4 Nm (3.64 kg-m, **27.0 ft-lb**)	16.5	42.3 Nm (4.23 kg-m, **31.0 ft-lb**)
8.5	36.4 Nm (3.64 kg-m, **27.0 ft-lb**)	17	42.5 Nm (4.25 kg-m, **31.5 ft-lb**)
9	37.5 Nm (3.75 kg-m, **28.0 ft-lb**)	17.5	42.7 Nm (4.27 kg-m, **31.5 ft-lb**)
9.5	38.0 Nm (3.80 kg-m, **28.0 ft-lb**)	18	42.9 Nm (4.29 kg-m, **31.5 ft-lb**)
10	38.5 Nm (3.85 kg-m, **28.5 ft-lb**)	18.5	43.0 Nm (4.30 kg-m, **32.0 ft-lb**)
10.5	38.9 Nm (3.89 kg-m, **29.0 ft-lb**)	19	43.2 Nm (4.32 kg-m, **32.0 ft-lb**)
11	39.3 Nm (3.93 kg-m, **29.0 ft-lb**)	19.5	43.3 Nm (4.33 kg-m, **32.0 ft-lb**)
11.5	39.6 Nm (3.96 kg-m, **29.0 ft-lb**)	20	43.5 Nm (4.35 kg-m, **32.0 ft-lb**)
12	40.0 Nm (4.00 kg-m, **29.5 ft-lb**)	20.5	43.6 Nm (4.36 kg-m, **32.0 ft-lb**)
12.5	40.3 Nm (4.03 kg-m, **30.0 ft-lb)**	21	43.8 Nm (4.38 kg-m, **32.5 ft-lb**)
13	40.6 Nm (4.06 kg-m, **30.0 ft-lb**)	21.5	43.9 Nm (4.39 kg-m, **32.5 ft-lb)**
13.5	40.9 Nm (4.09 kg-m, **30.0 ft-lb**)	22	44.0 Nm (4.40 kg-m, **32.5 ft-lb**)
14	41.2 Nm (4.12 kg-m, **30.5 ft-lb**)	22.5	44.1 Nm (4.41 kg-m, **32.5 ft-lb**)
14.5	41.4 Nm (4.14 kg-m, **30.5 ft-lb**)	23	44.2 Nm (4.42 kg-m, **32.5 ft-lb**)
15	41.7 Nm (4.17 kg-m, **31.0 ft-lb**)	23.5	44.3 Nm (4.43 kg-m, **33.0 ft-lb**)
15.5	41.9 Nm (4.19 kg-m, **31.0 ft-lb**)	24	44.4 Nm (4.44 kg-m, **33.0 ft-lb**)
16	42.1 Nm (4.21 kg-m, **31.0 ft-lb)**		

c. Attach special tool to J-50991 to your torque wrench – use an extension if needed.

d. Torque the sensor to the specified torque.

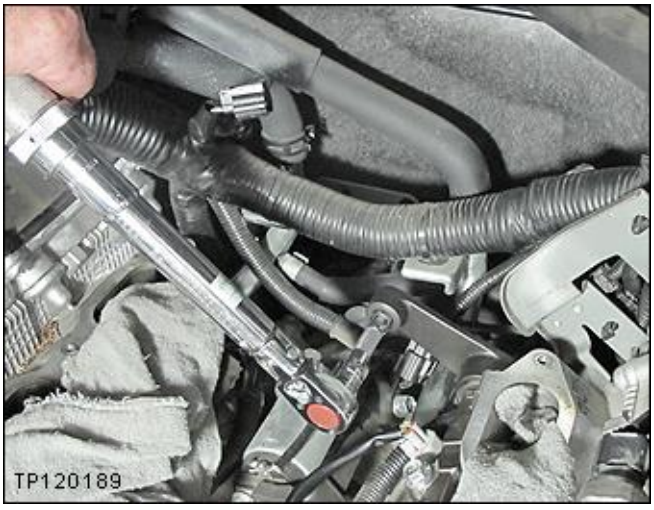

Figure 22m

NOTE: Make sure to keep the extension tool (J-50991) straight (in line) with the torque wrench as shown in Figure 23m.

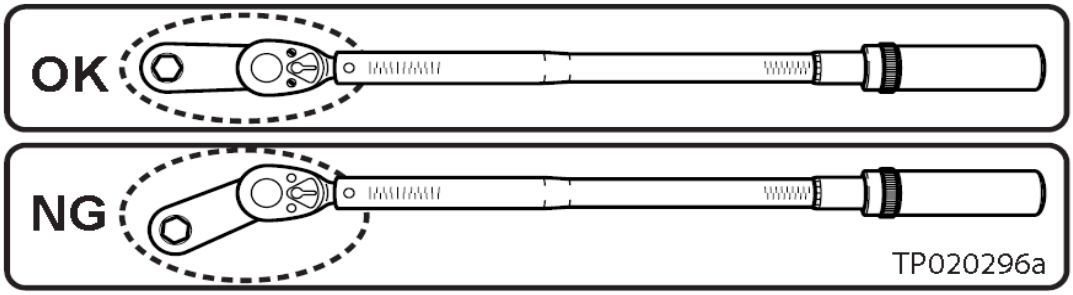

Figure 23m

28. Re-connect the fuel rail pressure sensor electrical connector.

IMPORTANT: You can not see or connect this connector after the intake manifold is installed.

Tighten Additional Fuel Rail Connections Before Reassembly

29. Torque the bolts shown in Figure 24m:
    11 N•m (1.1 Kg-m, **97 in-lb**)

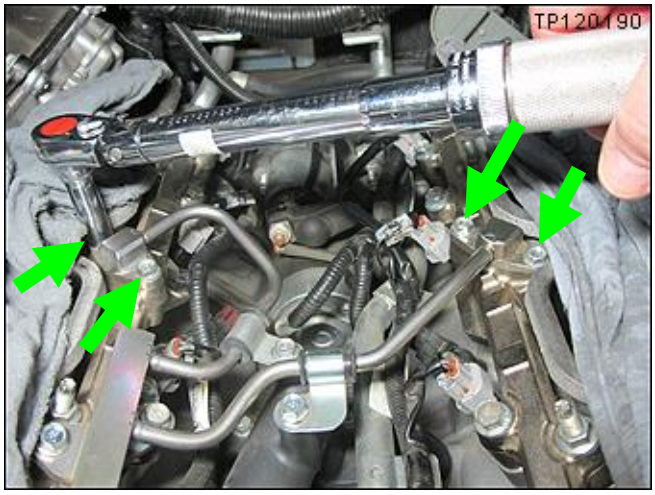

Figure 24m

30. Torque the flange nuts shown in Figure 25m:
    33.4 N•m (3.4 Kg-m, **25 ft-lb**)

    - Use a short 19 mm crowfoot wrench.

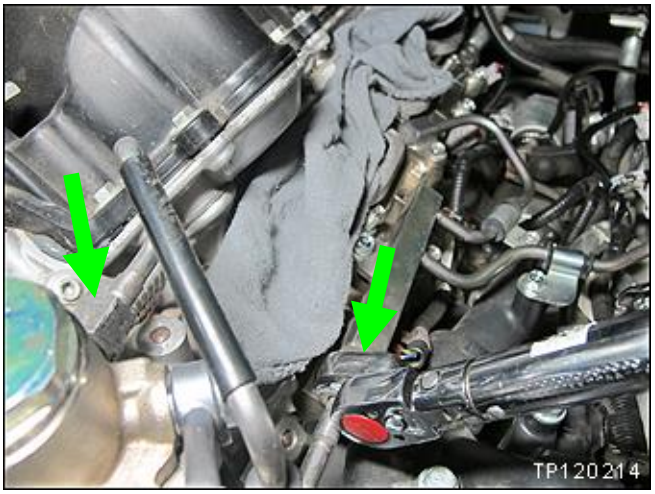

Figure 25m

31. Reinstall insulators covering the fuel rails.

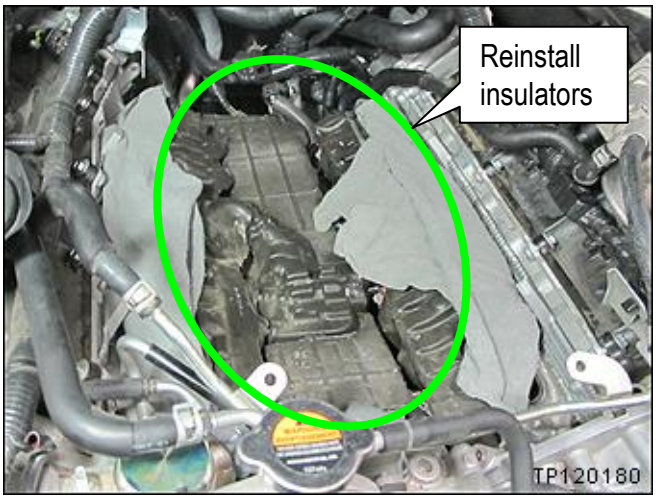

Figure 26m

Reassembly

32. Install a new tie-clip on the harness at the center rear to the engine.
    - Tie-clip P/N 24225-C9901.
    - Look for witness marks on the wiring harness made by the original tie-clip.
    - Make sure the mounting clip is facing toward the intake manifold.

    NOTE: This tie-clip will replace the one that was cut off in step 21, page 21.

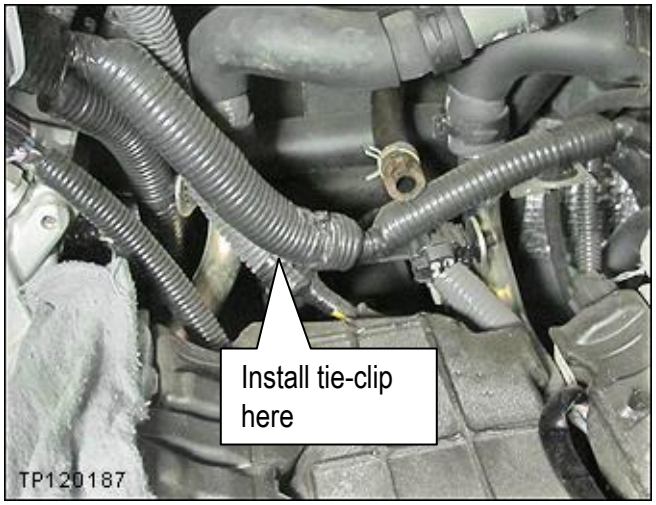

Figure 27m

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33. Install new intake manifold gaskets.

    NOTE:
    - For vehicles in dealer inventory (less than 125 miles), new gaskets are not needed.
    - Clean and inspect the old gaskets. Make sure gaskets are not torn or cut and they are installed properly.

Figure 28m

34. Reinstall all parts removed in reverse order.

Reassembly Tips / Information

- Attach wire harness on passenger side of intake manifold (see Figure 8m, page 18) before installing intake manifold bolts. This will prevent harness from being pinched under the intake manifold.

- Start intake manifold bolts by hand and then tighten in the order shown in Figure 29m:
  Torque to 10.8 N•m (1.1 Kg-m, **96 in-lb**).

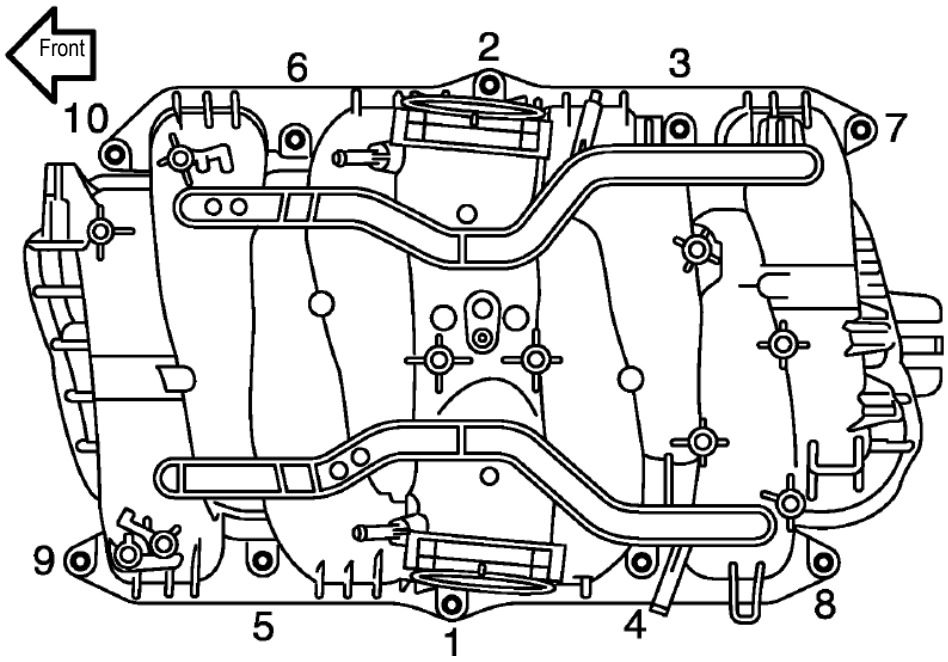

Figure 29m

- Install new throttle body gaskets.

  NOTE: For vehicles in dealer inventory (less than 125 miles), new throttle body gaskets are not needed. Clean and inspect the old gaskets. Make sure gaskets are not torn or cut and they are installed properly.

- Start throttle body bolts by hand and then torque to 10 N•m (1.0 Kg-m, **89 in-lb**).

- Make sure engine cover brackets are installed on the correct side.
  One is marked with an "L" indicating Left side (driver side).
  One is marked with an "R" indicating Right side (passenger side).

- Before installing the engine cover, check the following items:

  Wiring harness tie-clip and brake booster vacuum hose secured
  Main harness secured to intake manifold
  Rear coolant pipe secured to intake manifold
  EVAP hoses, EVAP solenoid connector, and manifold absolute pressure sensor connector secure
  Throttle body harness connectors secured
  Driver side and passenger side Intake air tube clamps secured
  Front coolant pipe secured to intake manifold
  Fuel pump foam insulator installed
  Engine cover brackets secured to intake manifold
  EVAP valve secured

35. Reconnect battery cables, positive cable first, and install the battery cover.

36. Keep foot off of the brake and cycle ignition OFF > ON, wait 3 seconds, > OFF. Repeat 3 times to build pressure in the fuel system.

37. Start the engine and make sure no warning lights are ON, and confirm the engine will rev past 4000 rpm.

38. Reset the clock and radio station presets.

39. Reinitialize each auto-up power window as follows:
    a. Turn ignition ON.
    b. Open window all the way DOWN.
    c. Pull all the way UP on the switch and HOLD (close the window completely), continue to HOLD for 4 seconds after window is completely closed.
    d. Confirm auto up/down operates correctly.

40. Inform the customer they will need to reset their ADP (Automatic Drive Positioner).

END

PARTS INFORMATION

MODEL	DESCRIPTION	PART NUMBER	QTY
QX56/QX80	Manifold Gasket	14035 – 1LA0A	8
	Throttle Body Gasket	16175 – 1LA0A	1
M56/Q70 (V8 only)	Manifold Gasket	A4035 – 1MC0A	1 (set of 8)
	Throttle Body Gasket	16175 – 1CA0A	2
	Wiring harness clip (tie-clip)	24225 – C9901	1

NOTE: For vehicles in dealer inventory (less than 125 miles), new throttle body and intake manifold gaskets are not needed. Clean and inspect the old gaskets. Make sure gaskets are not torn or cut and they are installed properly.

CLAIMS INFORMATION

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

QX56/80

CAMPAIGN (CM) ID #	DESCRIPTION	OP CODE	FRT
R1417	Re-torque Fuel Rail Pressure Sensor	R14177	1.0 hrs

M56/Q70 (V8 engine)

CAMPAIGN (CM) ID #	DESCRIPTION	OP CODE	FRT
R1417	Re-torque Fuel Rail Pressure Sensor	R14178	1.7 hrs