



SERVICE BULLETIN

Classification: EL17-002a	Reference: NTB17-031a	Date: November 1, 2017
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2016 – 2017 TITAN XD; COOLANT HEATER (ENGINE BLOCK HEATER) INSTALLATION

This bulletin has been amended. Substantial changes have been made throughout the body of the bulletin. Please discard all previous versions of this bulletin.

APPLIED VEHICLES: 2016 – 2017 Titan XD (A61)
APPLIED ENGINE: Cummins (5.0L V8) Diesel

SERVICE INFORMATION

Some customers may want to use a coolant heater (engine block heater) for their vehicle when ambient temperatures are below 32°F (0°C).

2016 Titan XD:

- Some were not equipped from the factory with a coolant heater or cord.

2016 - 2017 Titan XD:

- Some were equipped from the factory with just a coolant heater (no cord) located on the front cover of the engine. A coolant heater located on the front cover will **not** be used for these installation instructions.

If a customer chooses to purchase the parts and labor for installation of a coolant heater and/or coolant heater cord, use the Service Procedure in this bulletin for installation instructions.

NOTE:

- Refer to the Owner's Manual for coolant heater (engine block heater) operation instructions.
- Coolant heaters (engine block heaters) will operate continuously when plugged into the correct voltage electrical socket. Operate coolant heater only when the ambient temperature is below 32°F (0°C).

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. **NOTE:** If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

SERVICE PROCEDURE

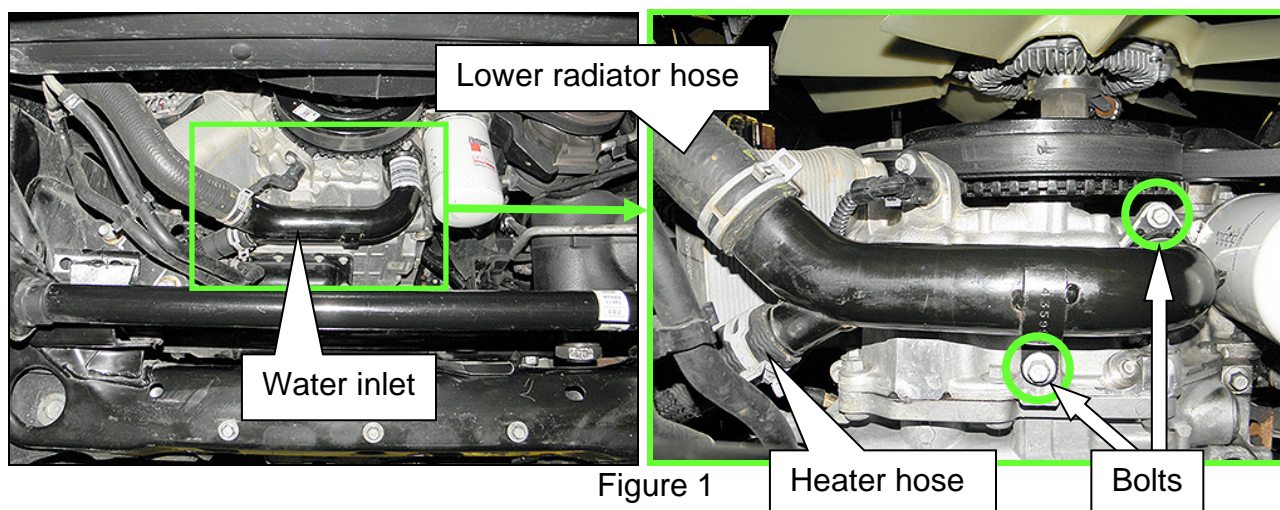
Coolant Heater Installation

1. Record (write down) any 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.
2. Disconnect the negative battery cable from both batteries.
3. Drain the engine coolant (if coolant heater is being installed).
 - Refer to the ESM, section **CO – Engine Cooling System**, for information on draining coolant.
 - Drain the coolant into a clean drain pan. The drained coolant will be reused/reinstalled back into the cooling system.

CAUTION: Do not spill coolant on the drive belt.

IMPORTANT: If a coolant heater is present in the front cover, leave it in this location as a non-functional plug.

4. Remove the existing water inlet (Figure 1) as follows:
 - a. Remove the lower radiator hose from the water inlet.
 - b. Remove the heater hose from the water inlet.
 - c. Remove the two bolts that attach the water inlet to the engine front cover.



5. Install new water inlet in the reverse order that the original was removed (Figure 2).

- Torque the two bolts to 18 N•m (1.8 kg-m, **13 ft-lb**).

IMPORTANT:

- Use the new bolts from Parts Information when installing the new water inlet. They are longer.
- The bolt with the thread-locker (SCREW,HEX FLANGE HEAD CAP) must be used in the location shown in Figure 2.

6. Install a new coolant heater into the bottom of the water inlet (Figure 2).

- Torque the coolant heater to 55 N•m (5.6 kg-m, **40 ft-lb**).

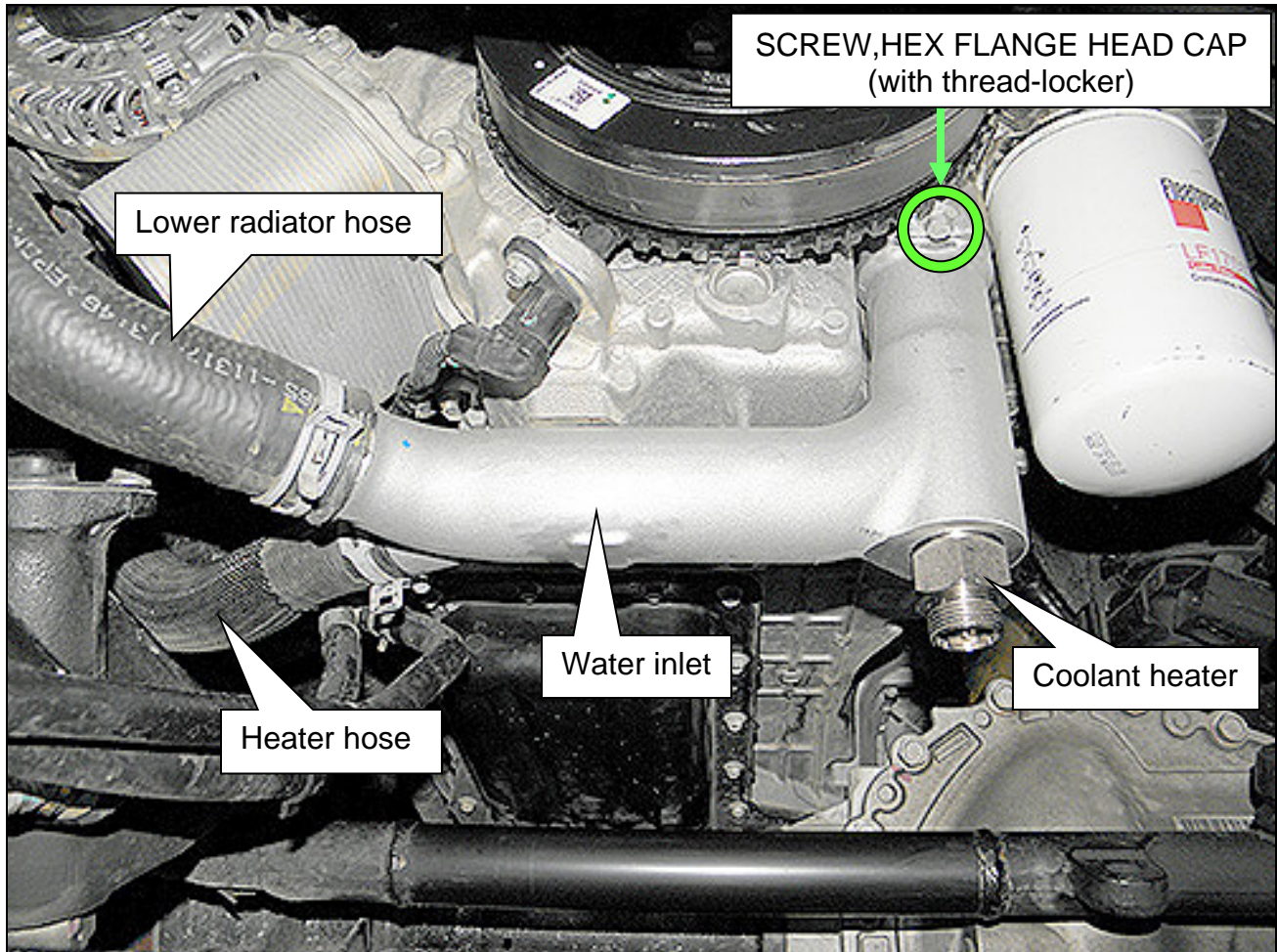


Figure 2

7. Re-fill the engine coolant.

- Refer to the ESM, section **CO – Cooling System**, for coolant refill information.
- Reuse the coolant that was removed from the engine, and then verify that the coolant is at a 50/50 mix in the system using a refractometer.

IMPORTANT:

- Use Nissan long life coolant and distilled water, or equivalent.
- Coolant should be changed every 45,000 miles.

Coolant Heater Cord Installation

1. Prepare the “coolant heater cord” (cord) as follows:

- a. Remove the cord from the package.
- b. Remove the white tape that retains the coiled cord.
- c. Remove the clips circled in green that are shown in Figure 3 from the cord.

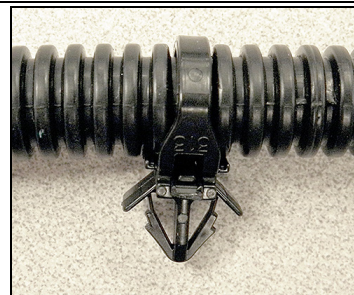
- Do not remove the three (3) clips that are circled in red in Figure 3.

IMPORTANT: These three (3) original clips will be retained for cord installation.

- In Figure 3, two (2) retained clips are hidden in the coiled cord.



Do not remove these two (2) clips



Do not remove this clip. **NOTE:** There are two of these; remove only one (1).

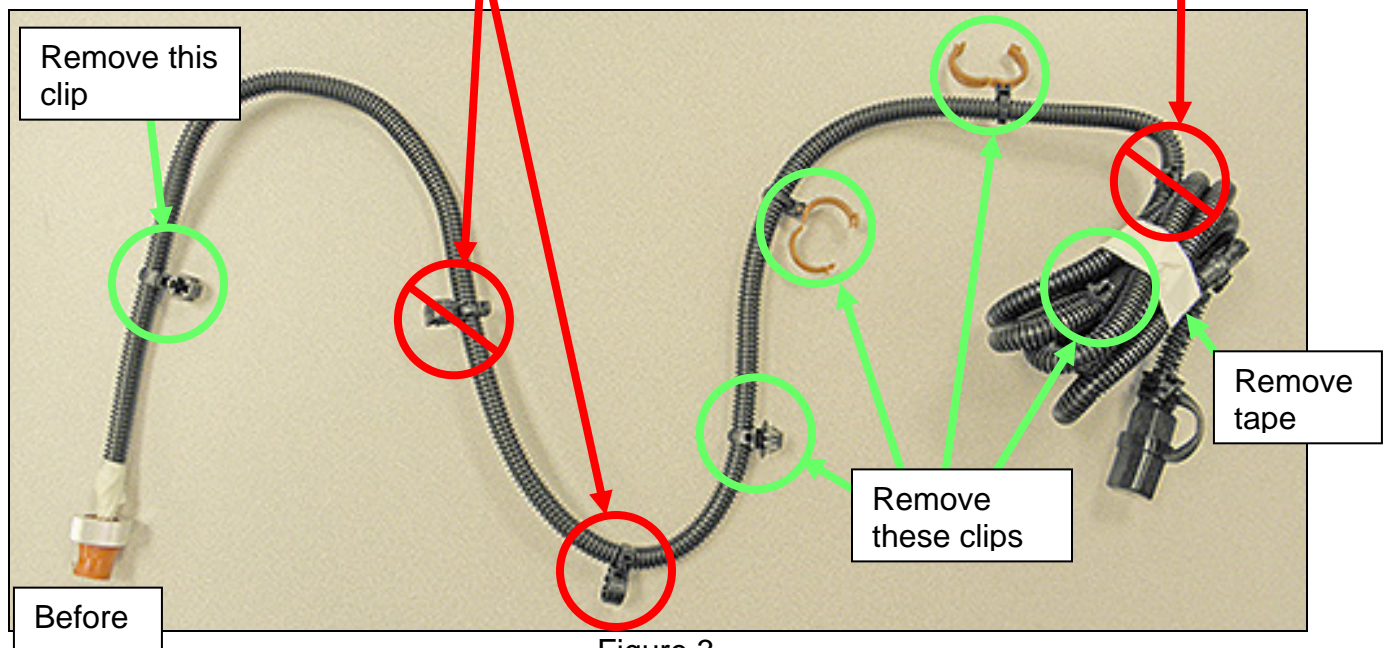


Figure 3

- d. Slide the three (3) remaining harness clips to the locations shown in Figures 4, 5 and 6.

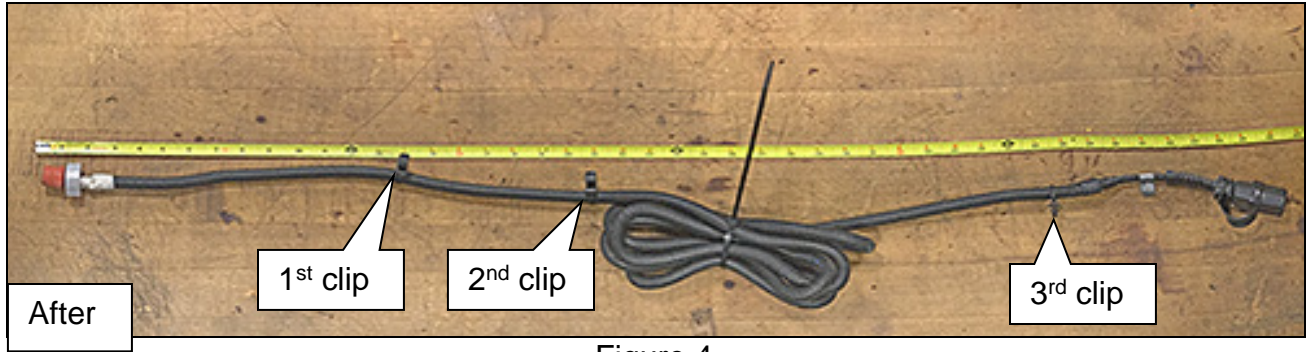


Figure 4

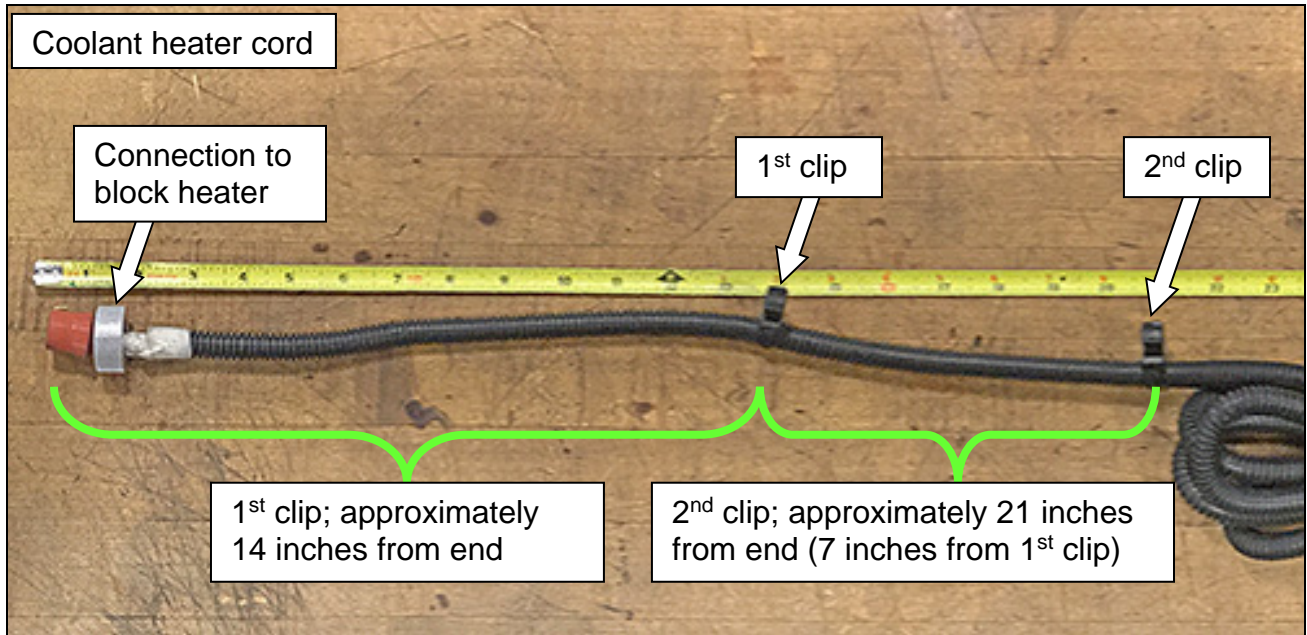


Figure 5

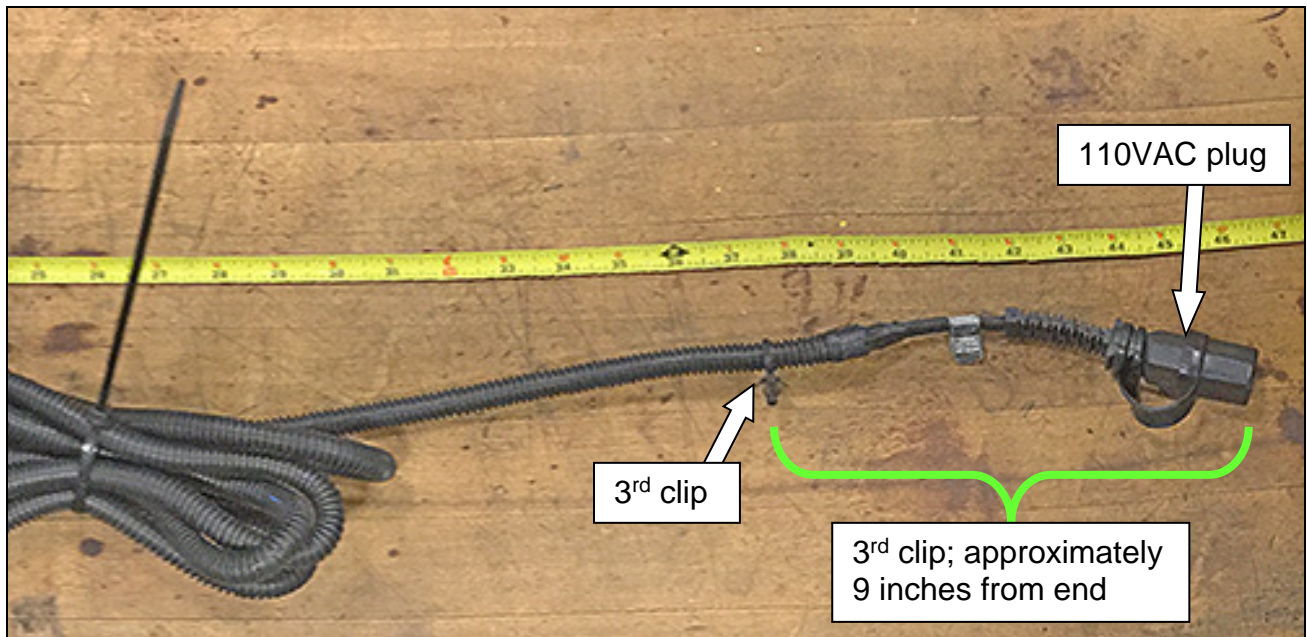


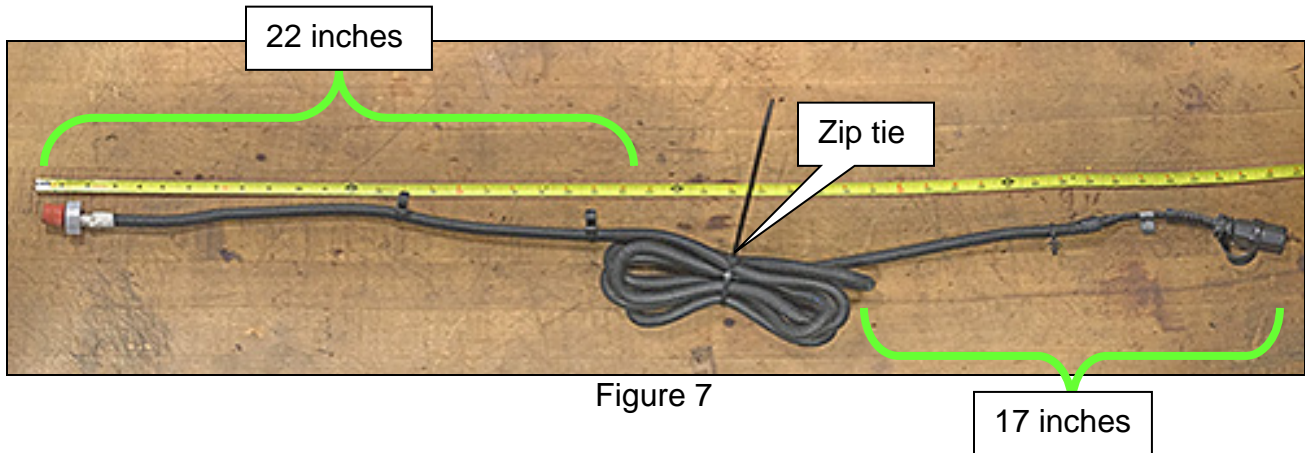
Figure 6

e. Recoil the cord so that:

- The block heater connector to coiled cord is 22 inches.
- The 110VAC plug end to coiled cord is 17 inches.

And then

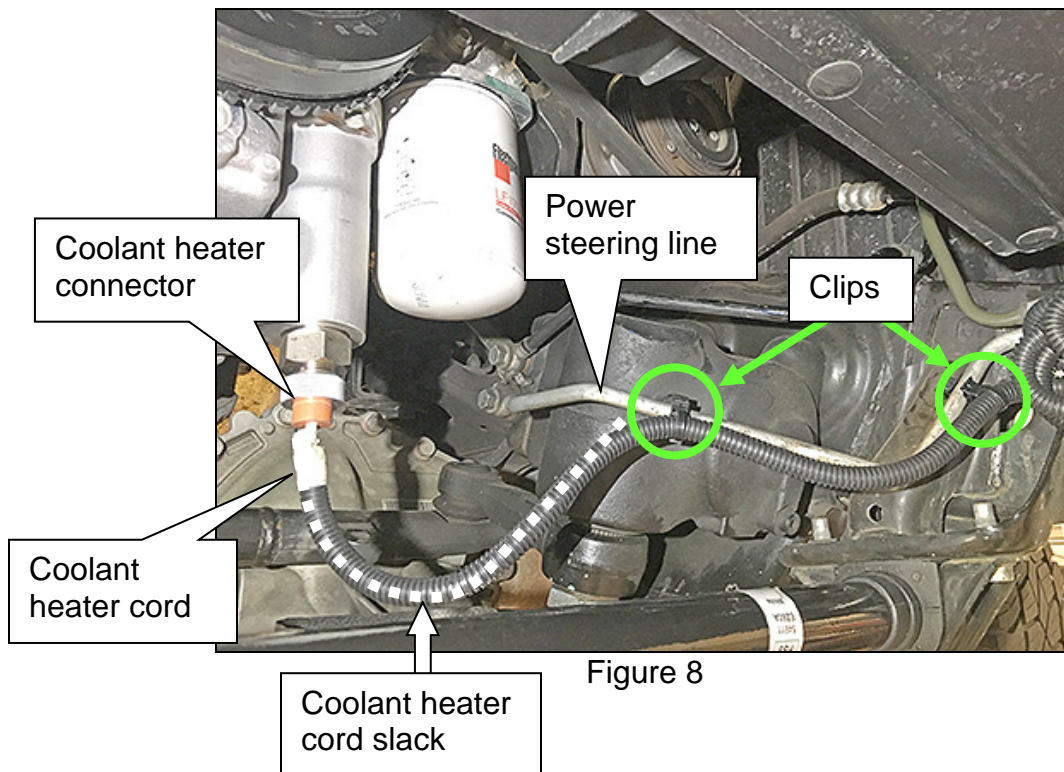
- Retain recoiled cord with a zip tie as shown in Figure 7.



4. Connect the cord to the coolant heater (Figure 8).

5. Clip the cord to the power steering line as shown in Figure 8.

- Leave slack in the cord between the coolant heater connector and the first clip, to the power steering line, as shown in Figure 8.



6. Attach the coiled section of cord to the power steering lines with two zip ties; one at each end.
 - Insert the zip ties through at least three coils to provide support.

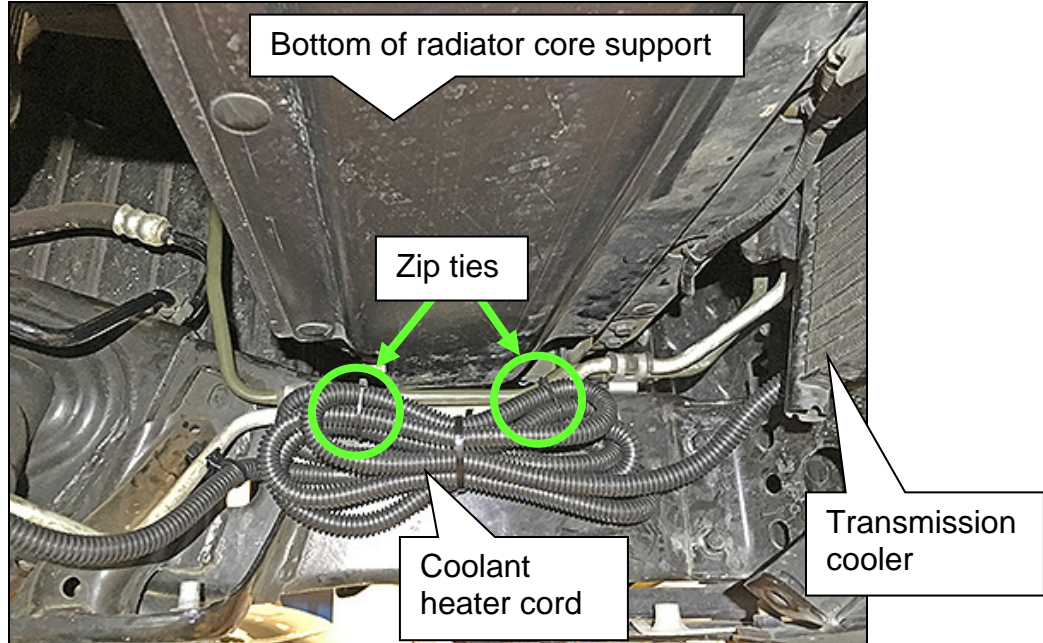


Figure 9

7. Route the 110VAC plug end of the cord over the top of the frame in front of the transmission cooler (Figures 10).
 8. Clip the cord to the frame.
 - Insert from top into the pre-existing hole (Figure 10), with clip relocated in step 1d.
- NOTE:** Figure 10 shows the cord clip inserted through frame.

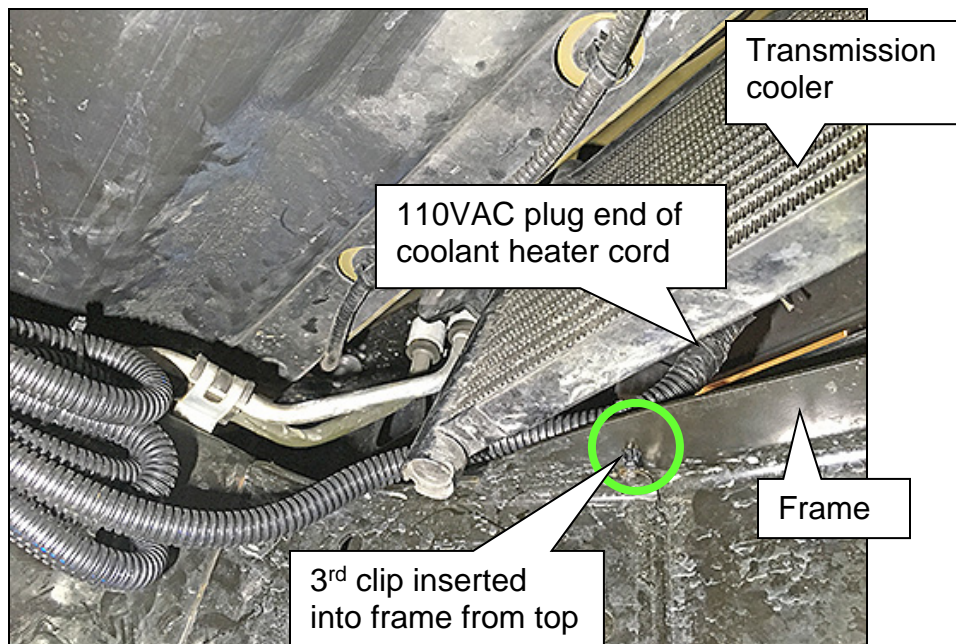


Figure 10

9. Route the coolant heater cord 110VAC plug through the front bumper as shown in Figure 13.

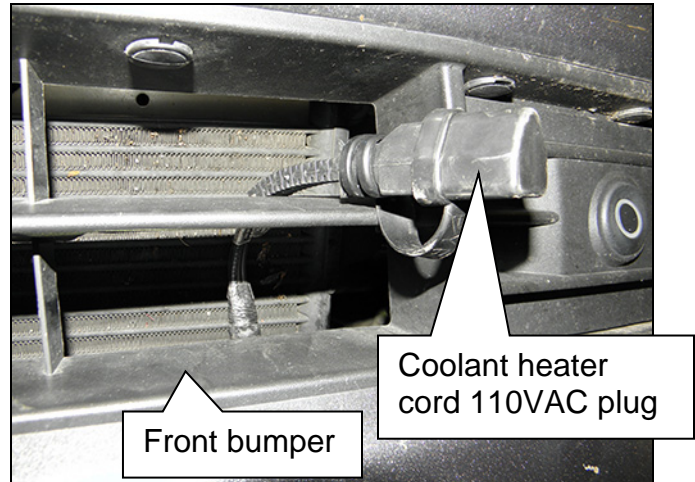


Figure 13

10. Re-install any remaining parts that were removed in reverse order.
- Refer to the ESM as needed for re-assembly.
11. Re-set any customer settings that were lost when the battery was disconnected.
- Refer to the 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.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
HEATER – CYLINDER BLOCK (Coolant Heater)	11001-EZ40A	1
COOLANT HEATER CORD	24076-EZ01A	1
CONNECTION,WATER INLET (Water Inlet)	13048-EZ40B	1
SCREW,HEX FLANGE HEAD CAP (Water inlet mounting bolt with thread-locker)	11035-EZ44D	1
SCREW,STUDDERED FLANGE CAP (Water inlet mounting bolt)	29799-EZ40A	1
CLIP (TIE STRAP)	24224-3VX0B	1