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SERVICE BULLETIN

Classification:	Reference:	Date:
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NISSAN; PROCEDURE TO CLEAN CVT TRANSMISSION FLUID COOLERS

This bulletin has been amended. The APPLIED VEHICLES section has been revised. Please discard previous versions of this bulletin.

APPLIED VEHICLES:
2013-2016 Pathfinder (R52) – **V6 only**
2013-2016 Altima (L33) – **4 cylinder and V6**
2015-2016 Murano (Z52) – **V6 only**
2015-2016 Quest (E52)
2016 Maxima (A36)
2014-2016 Rogue (T32)

APPLIED TRANSMISSION: CVT

IMPORTANT: Metal debris and friction material may become trapped in the radiator, cooling hoses, bypass valve or external CVT fluid cooler. This debris can contaminate the newly serviced transmission, control valve or torque converter. In severe cases this debris can block or restrict flow and may cause damage to the newly serviced CVT.

SERVICE INFORMATION

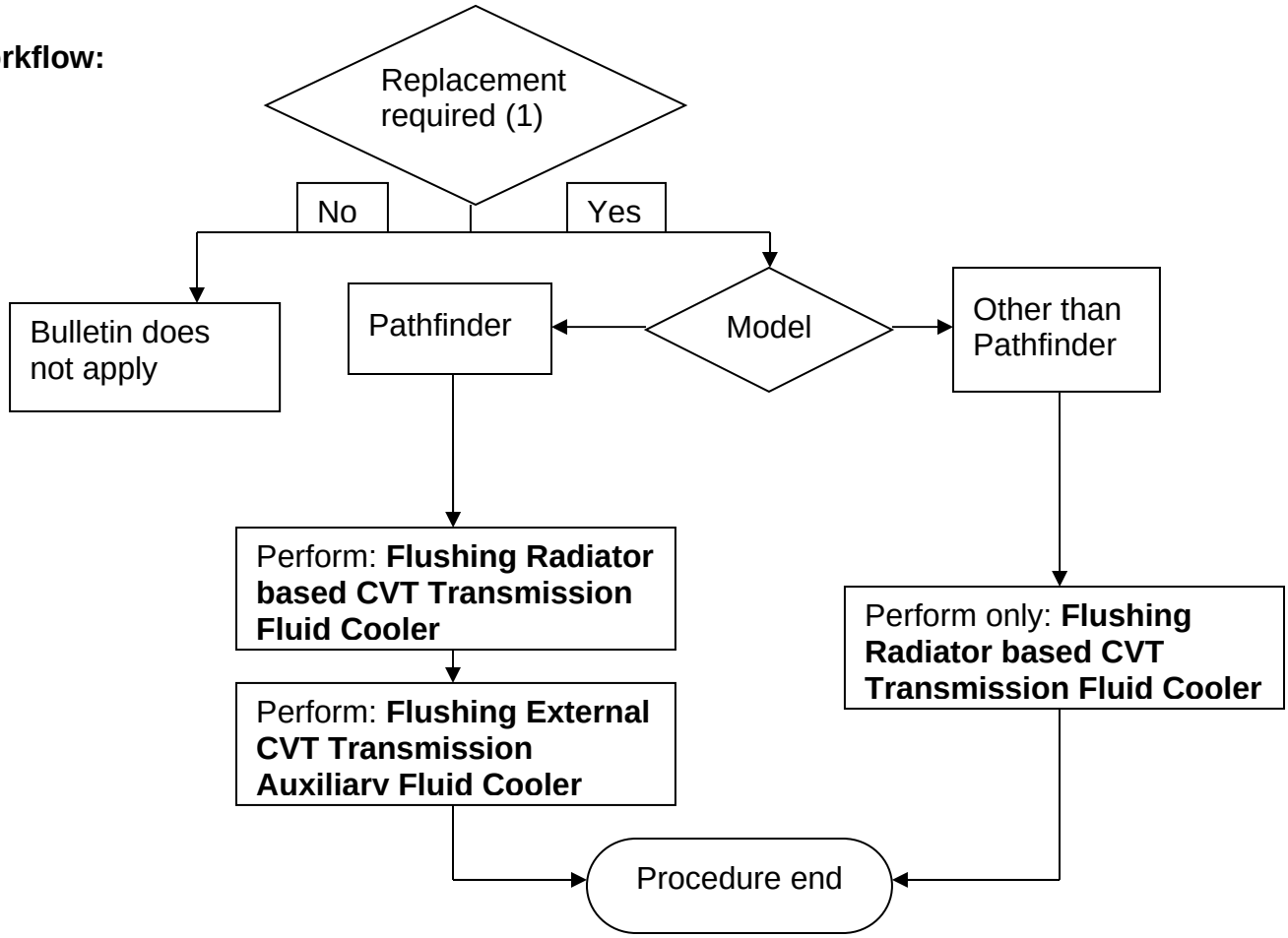
When a CVT, control valve or torque converter replacement is necessary for one of the applied vehicles, the CVT transmission fluid coolers (radiator based fluid cooler and external auxiliary cooler if present) must be flushed.

NOTE: Refer to the Workflow on page 2 to determine the correct Service Procedure for the specific vehicle being serviced.

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

Workflow:



(1) Replacement of CVT, Control valve, or torque converter.

Flushing Radiator based CVT Transmission Fluid Cooler

IMPORTANT: the CVT fluid cooler hoses will be flushed in both directions in the following procedure.

1. Place the vehicle on a lift.

2. Is the vehicle a Pathfinder?
   - **Yes:** Remove the left front wheel and then partially remove the left front fender protector to gain access to the CVT fluid cooler and then proceed to step 3.

     Refer to the Electronic Service Manual (ESM), section **EXT – Exterior** for information.
   - **No:** Proceed to step 5.

3. Place an oil drain pan under the CVT fluid cooler.

4. Unbolt and disconnect the external CVT fluid cooler bypass valve from the external CVT fluid cooler (Figure 1).

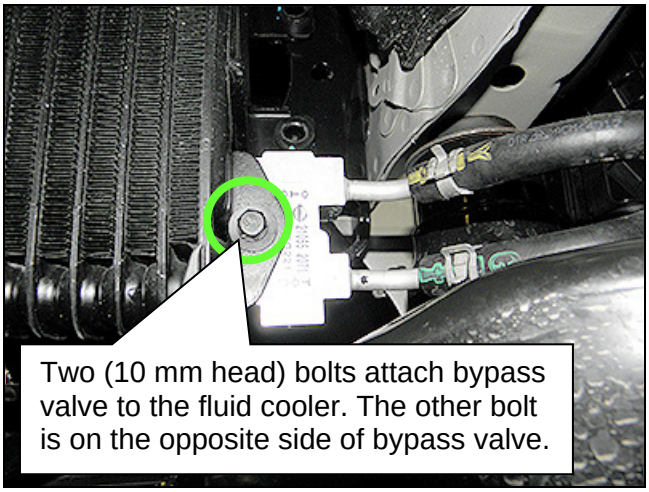


Figure 1

5. Place an oil drain pan under the CVT warmer.

6. Disconnect the CVT fluid cooler inlet and outlet rubber hoses from the CVT Fluid warmer (Figure 2) and discard spring clamps.

   NOTE: If rubber material from a cooler hose remains on the steel tube or fitting, replace the rubber hose and clean steel tube.

7. Allow any transmission fluid that remains in the CVT fluid cooler hoses to drain into the oil drain pan.

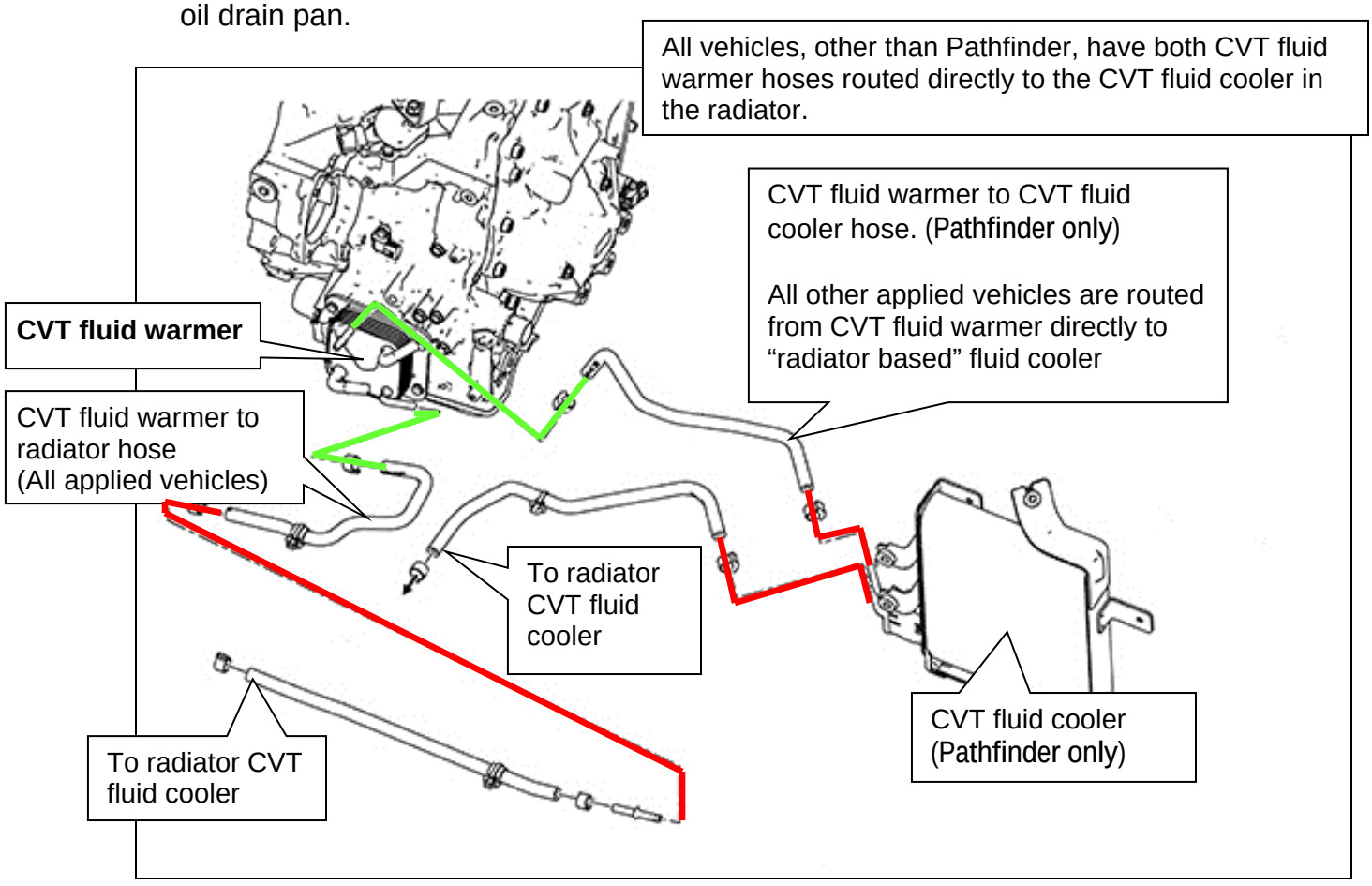


Figure 2

NOTE: The two hoses that have been removed from the CVT fluid warmer will be flushed first in one direction and then the other.

CAUTION:

- Wear safety glasses and rubber gloves when spraying the Transmission Cooler Cleaner.
- Spray Cooler Cleaner only in areas with adequate ventilation.
- Avoid contact with eyes and skin.
- Do not breathe vapors or mist from spray.

8. Insert the “extension adapter hose”, from a can of Transmission Cooler Cleaner (Nissan P/N 999MP-AM006P), into one or the other of the disconnected CVT fluid cooler hoses (Figure 3).
9. Flush CVT fluid cooler (radiator based) and hoses:
   a. Hold the hose and can as high as possible.
      - For Pathfinder block the CVT fluid cooler bypass valve fluid passage (Figure 3) with thumb.
   b. Spray Transmission Cooler Cleaner, in a continuous stream, into the CVT fluid cooler inlet hose.
   c. Spray fluid until it flows out of the other hose for 5 seconds.
10. Slide a piece of 5/8 inch hose (16 mm) over the end of the CVT fluid cooler hose (Figure 4) that was used as the flush inlet.
11. Insert the tip of an air gun into the end of 5/8 inch (16 mm) hose (Figure 4).
      - For Pathfinder block the CVT fluid cooler bypass valve fluid passage (Figure 3) with thumb.
12. Blow compressed air, regulated to 5-9 kg/cm2 (70 – 130 PSI), through the CVT fluid cooler hose for 10 seconds to force out any remaining fluid.

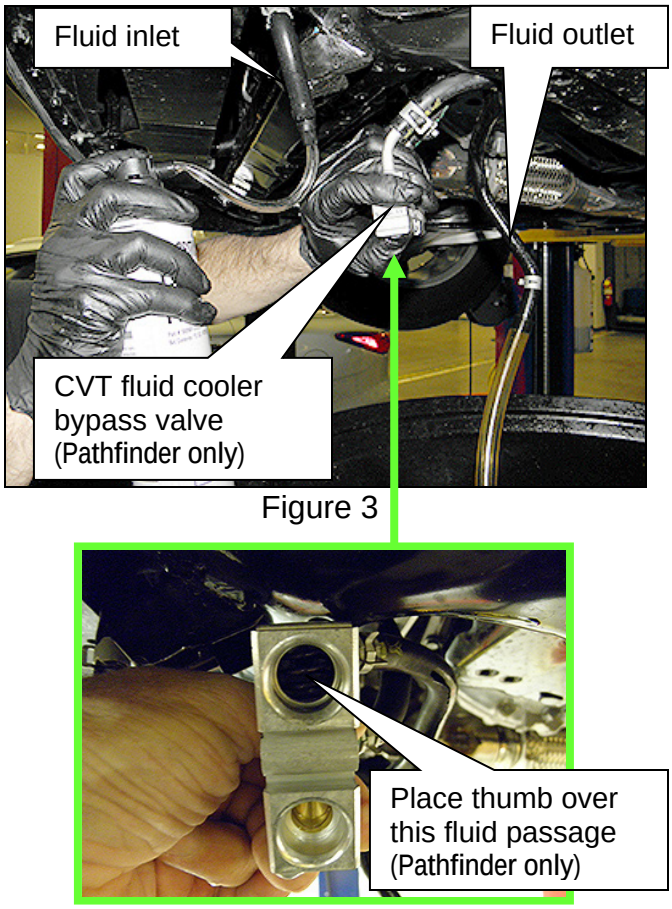


Figure 3

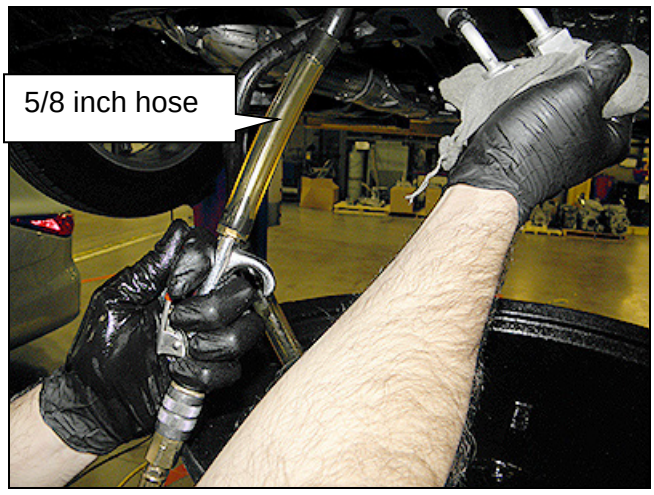


Figure 4

13. Repeat steps 8 through 12 one additional time and then proceed to step 14.

14. Now reverse the direction that the hoses are being flushed (Figure 3) and repeat steps 8 through 12 twice.
    - When complete proceed to step 15.

15. Reassemble the CVT fluid cooler hoses to the CVT warmer with new spring clamps from **PARTS INFORMATION** in the reverse order of disassembly.

    Refer to the Electronic Service Manual (ESM), section **TM – Transaxle & Transmission** for correct hose assembly and alignment.

16. If the vehicle is a Pathfinder proceed to **Flushing External auxiliary oil cooler**.

Flushing External CVT Transmission Auxiliary Fluid Cooler (Pathfinder only)

1. Remove the CVT fluid cooler (auxiliary fluid cooler) from vehicle.

   Refer to the Electronic Service Manual (ESM), section **TM – Transaxle & Transmission** for information.

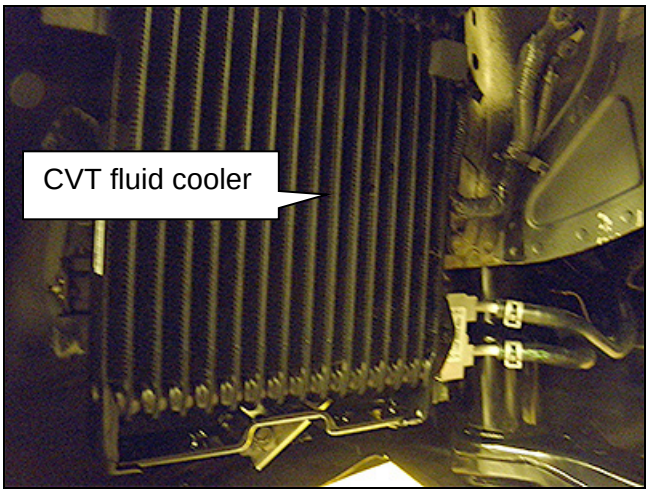


Figure 5

2. Remove O-rings from auxiliary fluid cooler and discard.

3. Install a 4 inch long hose with an inside diameter of 5/8 inch (16 mm) onto the inlet side of the auxiliary fluid cooler.

4. Install a 6 inch long hose with inside diameter of 5/8 inch (16 mm) onto outlet of the auxiliary fluid cooler and place the opposite end into a suitable container to catch used fluid.

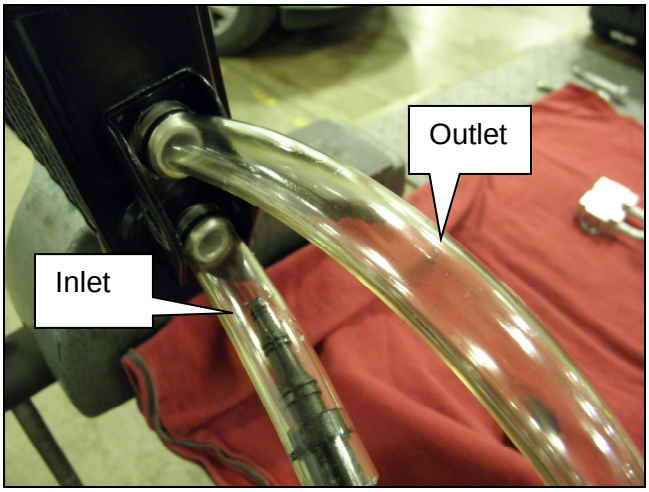


Figure 6

5. Insert the “extension adapter hose” from a can of Transmission Cooler Cleaner (Nissan P/N 999MP-AM006P) into the auxiliary fluid cooler inlet (Figure 7).

6. Spray one full can of Transmission Cooler Cleaner through inlet of auxiliary fluid cooler letting cleaner drain through the outlet and into a container.

7. Allow the remaining fluid in the auxiliary fluid cooler to drain out.

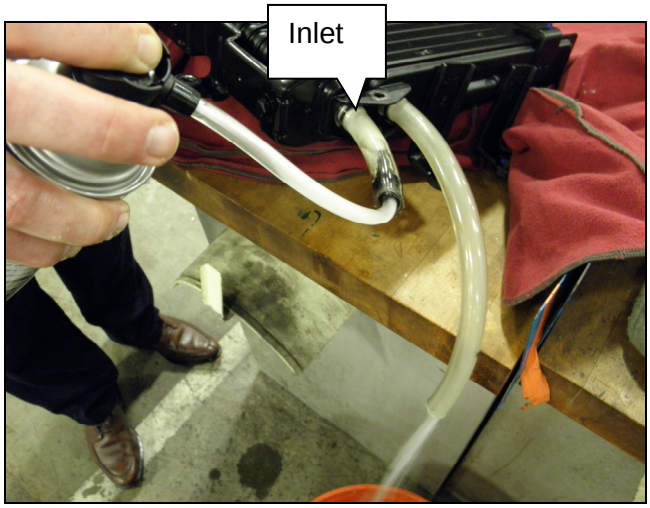


Figure 7

8. Insert the tip of an air gun into the end of the auxiliary fluid cooler inlet (Figure 8).

9. Wrap a shop rag around the air gun tip and end of the cooler inlet (Figure 8) to reduce blowback.

10. Blow compressed air, regulated to 5-9 kg/cm2 (70 – 130 PSI), through the inlet side of the auxiliary fluid cooler for 10 seconds to force out any remaining fluid.

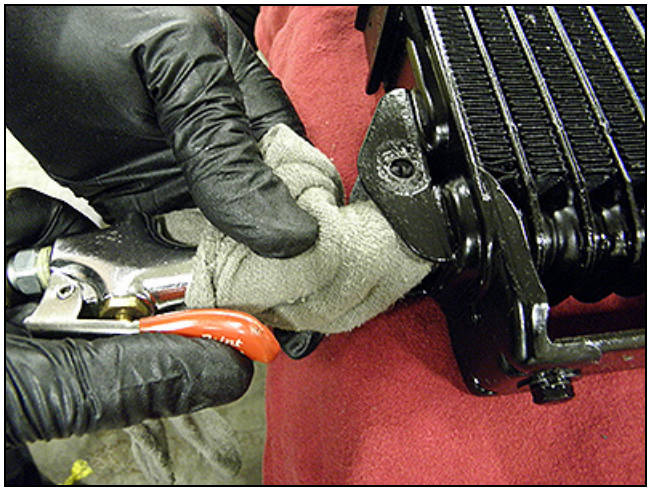


Figure 8

11. While holding the hoses securely to the auxiliary fluid cooler (Figure 9), flush 2 full quarts of NS-3 (or equivalent) with a 1 pint suction gun.
    - Flush from the inlet side of the auxiliary fluid cooler through to the outlet (Figure 9).

12. Allow the remaining fluid in the auxiliary fluid cooler to drain out.

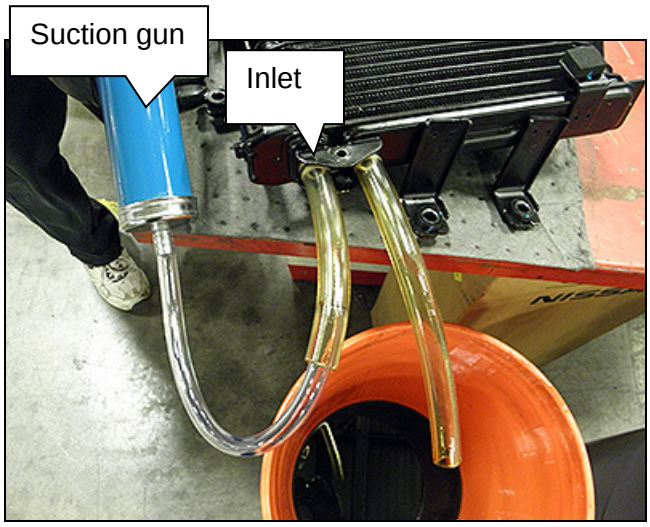


Figure 9

13. To complete the flush, insert the tip of an air gun again into the end of the auxiliary fluid cooler inlet (Figure 8).

14. Wrap a shop rag around the air gun tip and end of the cooler inlet (Figure 8).

15. Blow compressed air, regulated to 5-9 kg/cm2 (70 – 130 PSI), through the inlet of the auxiliary fluid cooler for 10 seconds to force out any remaining NS-3 fluid.

16. Reassemble the auxiliary fluid cooler and CVT fluid cooler bypass valve in the reverse order of disassembly with new O-rings from **PARTS INFORMATION**.

    Refer to the Electronic Service Manual (ESM), section **TM – Transaxle & Transmission** for correct hose assembly and alignment

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
Hose spring clamp	16439-7S01D	2
External CVT Cooler O-Rings (Pathfinder only)	22180-9NB0A	2
Transmission Cooler Cleaner	999MP-AM006P (1)	As needed
NS-3 CVT Fluid	999MP-NS300P (1) (2)	As needed

(1) Order this item through the Nissan Maintenance Advantage program: Phone: 877-NIS-NMA1 (877-647-6621). Website order via link on dealer portal www.NNAnet.com and click on the “Maintenance Advantage” link.

(2) For warranty repairs, Nissan NS-3 CVT Fluid **must** be used. For customer pay repairs, Nissan NS-3 CVT Fluid or an equivalent must be used.

CLAIMS INFORMATION

With CVT Assembly Replacement on same repair line

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

OPERATION	PFP	OP CODE	FRT
Flush CVT Oil Cooler	(1)	JX31AA	0.7

(1) Use the PFP for the repair actually performed.

OR

With Valve body or Torque Converter Replacement on same repair line

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

OPERATION	PFP	OP CODE	FRT
Flush CVT oil cooler with valve body / torque converter replacement	(1)	JX32AA	0.7

(1) Use the PFP for the repair actually performed.