Technical Bulletin



SERVICE BULLETIN Classification: Reference: Date:

AT13-014d NTB13-079d November 25, 2015

2007-2012 ALTIMA; REDUCED PERFORMANCE DUE TO CVT FLUID TEMPERATURE PROTECTION LOGIC

This bulletin has been amended to revise the flow chart on page 2 with additional repair information. Please discard all previous versions.

APPLIED VEHICLE: 2007-2012 Altima (L32)

APPLIED ENGINE: 4 Cylinder **only**

IF YOU CONFIRM

The vehicle speed is, or was, reduced by the CVT fail-safe (reduced vehicle speed) after continuous operation under the following conditions:

- High RPM and/or high speed driving (RPM of 4000+ or speeds of 65 mph (104.6 km/h) for 1.0 – 1.5 hrs or more)
- Driving in ambient temperature of 96 degrees or higher
- Climbing steep or extended hills for 6 miles (9.6 km) or more
- Whine or rattle type noise occurring during reduced engine performance (vehicle speed decrease)

ACTION

- 1. Perform a self diagnosis with CONSULT-III plus (C-III plus).
 - If DTCs are present, refer to the appropriate section of the Electronic Service Manual (ESM) and diagnose the DTCs <u>first</u> before proceeding to step 2 of ACTION.
- 2. Check the number of counts of "CVT-A" and "CVT-B" with C-III plus.
 - ➤ Refer to the Flow Chart on page 2 and the Service Procedure starting on page 3 to confirm if this bulletin applies.

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 the repair.

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.

Flow Chart

Important

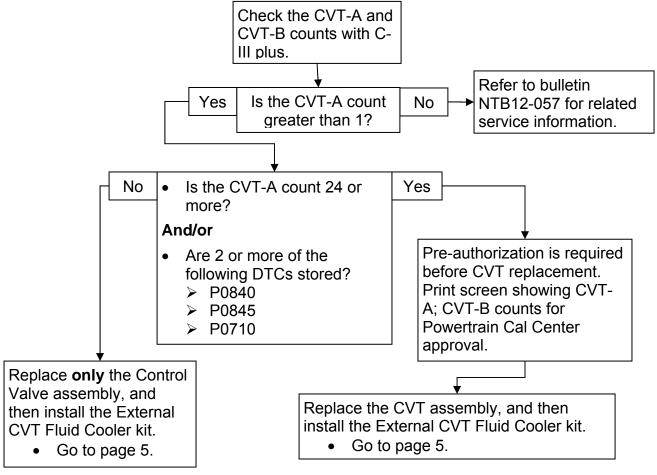
Before applying this bulletin:

- Confirm that the CVT fluid has not been overfilled, and that it contains the proper CVT fluid.
- Confirm that the coolant concentration is not greater than 50%.

Use of incorrect fluid, overfilling the CVT fluid, or coolant concentrations greater than 50% can cause the symptoms in the IF YOU CONFIRM section on page 1.

Refer to NTB12-057 to resolve these conditions <u>first</u> if they should occur.

NOTE: Refer to the ESM for the correct CVT fluid and coolant type for the model and year vehicle that is being worked on.



NOTE:

- If the CVT-A count <u>is not</u> greater than 1 and similar symptoms to those in IF YOU CONFIRM and/or a single DTC is present, refer to the ESM and NTB12-057 for further diagnosis.
- Refer to the ESM section TM Transaxle & Transmission for removal and installation information for the Control Valve or CVT assemblies.

SERVICE PROCEDURE

Check CVT-A and CVT-B count with C-III plus

1. Open C-III plus and select **Diagnosis (All Systems)**.

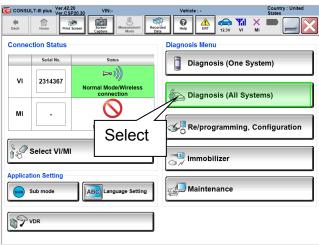


Figure 1

2. Select TRANSMISSION.

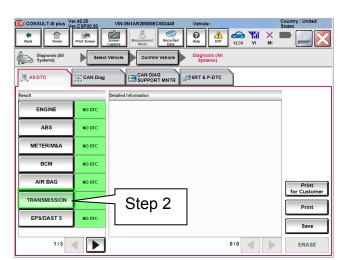
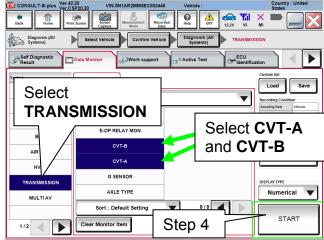


Figure 2

 In Data Monitor select TRANSMISSION and then select CVT-A and CVT-B.



4. Select START.

Figure 3

Check both CVT-A and CVT-B counts and refer to the Flow Chart on page 2 to confirm if this bulletin applies.

NOTE: If the CVT-A count <u>is not</u> greater than 1 and similar symptoms to those in IF YOU CONFIRM and/or a DTC is present, refer to the ESM and NTB12-057 for further diagnosis.

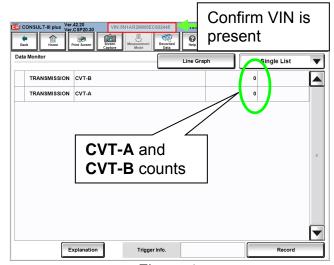


Figure 4

6. If it is confirmed that this bulletin applies, install the SERVICE KIT-COOLER-ASSY listed in the Parts Information.

And

If the CVT count is 24 or greater, replace the CVT assembly.

Or

If the CVT count is less than 24, replace the Control Valve Assembly.

IMPORTANT: Pre-authorization is required before CVT replacement. Print screen showing CVT-A; CVT-B counts for Powertrain Call Center approval.

- > Refer to the **Installation Instructions** beginning on the next page to install the SERVICE KIT-COOLER-ASSY.
- Refer to the ESM section TM Transaxle & Transmission for removal and installation information for the Control Valve or CVT assemblies.

INSTALLATION INSTRUCTIONS

Install External oil cooler kit

- 1. Place the vehicle on a lift and raise as needed to perform the following procedure.
- 2. Attach the COOLER ASSY-AUTO TRANS to the radiator support ahead of the radiator/condenser:
 - Insert 3 bolts (Figure 5 and Figure 6) from the kit through the composite radiator support from the engine compartment side.
 - These holes are pre-existing.
 - Install the COOLER ASSY-AUTO TRANS onto bolts.
 - c. Thread on the nuts and torque to 9.8 N·m (1.0 kg-m, 87 in-lb).

NOTE: Figure 5 is a view of the front of the radiator/condenser, taken from the bottom looking up.

- 3. Route both hoses through the radiator support shown in Figure 6.
- 4. Slide 1 "CLP HOSE SPR PLATE" (spring clamp) onto each hose.
- Attach both of the hoses to the COOLER ASSY-AUTO TRANS.
 - See Figure 8 and Figure 9 on page 6 for correct hose routing.
 - <u>Do not</u> release the CLP HOSE SPR PLATE(s) yet, until the hoses are attached at their other ends.
- Remove the upper radiator to CVT fluid hose from both the radiator and the CVT and discard this hose and its CLP -HOSE SPR PLATE(s).
- 7. Clean both radiator and CVT fittings with brake cleaner.

NOTE: Use genuine Nissan Brake Cleaner or equivalent.

8. Attach the new hose from the COOLER ASSY-AUTO TRANS to the upper radiator CVT fluid fitting.

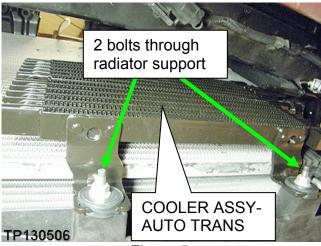


Figure 5

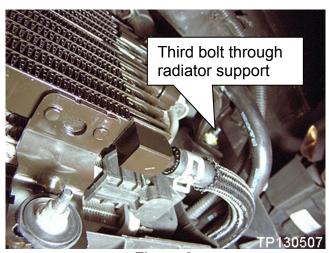


Figure 6

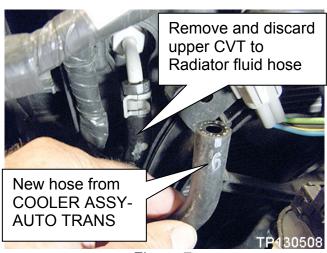


Figure 7

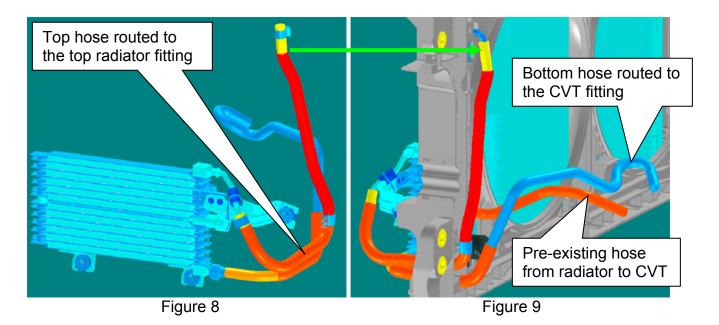


Figure 8 and Figure 9 show hose routing from the COOLER ASSY-AUTO TRANS (external CVT cooler) to the radiator and the CVT.

- Attach the second COOLER ASSY-AUTO TRANS fluid hose to the CVT (Figure 10).
- 10. Position and release all 4 of the CLP HOSE SPR PLATE(s) (spring clamps).
 - Position the CLP HOSE SPR PLATE as close to each fitting bulge as possible and then release them.

NOTE: Confirm that the CLP - HOSE SPR PLATE(s) are not on top of the fitting bulge or on an angle.

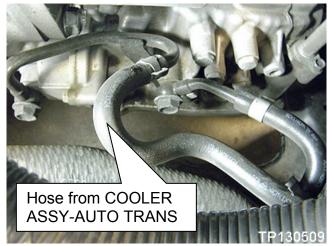


Figure 10

11. Check the level of the CVT Fluid and add as needed.

NOTE: For warranty repairs, Nissan NS-2 CVT Fluid <u>must</u> be used. For customer pay repairs, Nissan NS-2 CVT Fluid or an equivalent is recommended.

PARTS INFORMATION

DESCRIPTION	PART #	QUANTITY
SERVICE KIT-COOLER ASSY	21606-ZX59A	1
NS-2 CVT Fluid (2)	999MP-NS200P (1)	As needed
Control Valve Assembly	(3)	1
CVT Assembly	(3)	1

- (1) For warranty repairs, Nissan NS-2 CVT Fluid <u>must</u> be used. For customer pay repairs, Nissan NS-2 CVT Fluid or an equivalent is recommended.
- (2) 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.
- (3) Use the VIN and the electronic parts catalog (FAST or equivalent) to obtain the applicable part number for the vehicle you are working on.

Table A

PART NAME	QTY PER KIT	
COOLER ASSY-AUTO TRANS	1	
HOSE-AUTO TRANS, UPR	1	
HOSE-AUTO TRANS, LWR	1	
CLP - HOSE SPR PLATE	4	
BOLT-HEX	3	
NUT-HEX	3	

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace Control Valve Assembly	21606-ZX59A	JD48AA	AE	32	(1)
Oil cooler kit installation		JX15AA			0.8

⁽¹⁾ Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

OR

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
R&I Automatic CVT Transaxle Assembly	(2)	JD01AA	ZE	32	(1)
Replace Automatic CVT Transaxle Assembly		JD023A			
CVT TROUBLE DIAGNOSIS		JX22AA			
Oil cooler kit installation		JX15AA			0.8

- (1) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.
- (2) Refer to the electronic parts catalog (FAST) and use the CVT assembly part number as the Primary Failed Part (PFP).