# **Technical Bulletin**



# SERVICE BULLETIN Classification: AT16-016 Reference: NTB16-098 Date: October 13, 2016

# 2011-2012 ALTIMA; REDUCED PERFORMANCE DUE TO CVT FLUID TEMPERATURE PROTECTION LOGIC

**APPLIED VEHICLE**: 2011-2012 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 other than P0744, 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" 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**

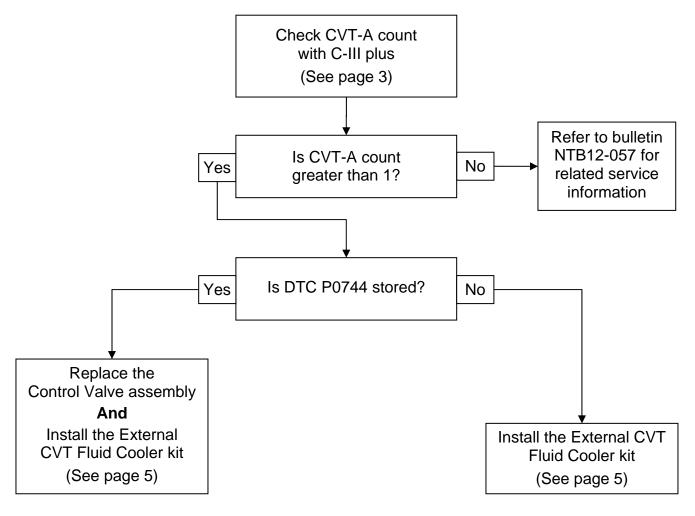
# Before applying this bulletin:

- Confirm the CVT fluid has not been overfilled, and the CVT contains the proper CVT fluid.
- Confirm 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 Control Valve assembly removal and installation information.

# **SERVICE PROCEDURE**

# **Check CVT-A count with C-III plus**

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

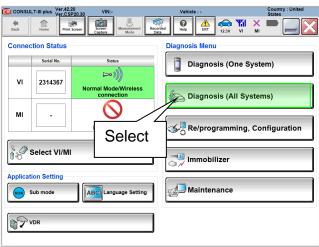


Figure 1

2. Select TRANSMISSION.

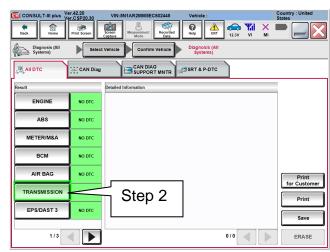


Figure 2

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

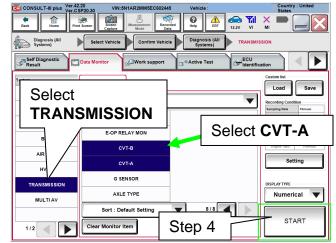


Figure 3

4. Select START.

5. Check the **CVT-A** count 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.

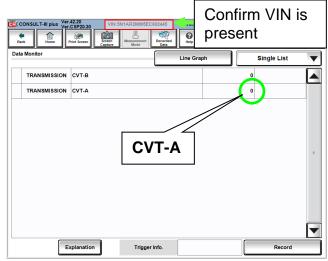


Figure 4

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

#### And

- If DTC P0744 is present, Replace the Control Valve assembly.
  - > 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.

#### 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:
  - a. 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.
  - b. 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.

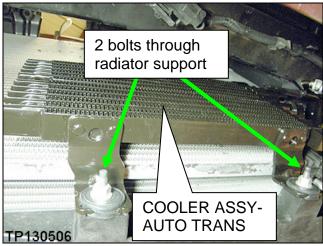


Figure 5

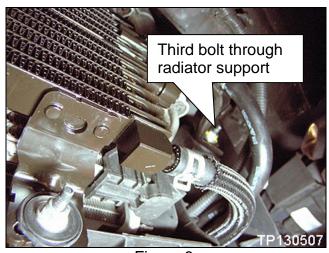


Figure 6

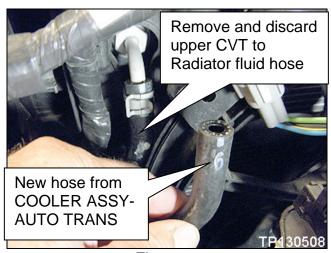


Figure 7

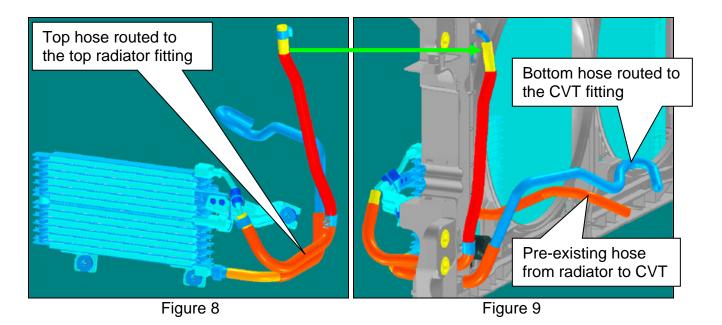


Figure 8 and Figure 9 show hose routing from the COOLER ASSY-AUTO TRANS (external CVT cooler) to the radiator and the CVT.

- 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.

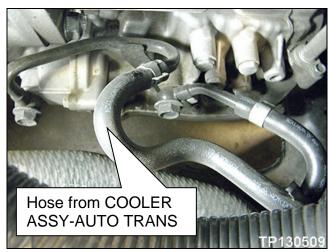


Figure 10

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

- (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 <a href="www.NNAnet.com">www.NNAnet.com</a> 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			8.0

<sup>(1)</sup> 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
CVT TROUBLE DIAGNOSIS	(2)	JX22AA	ZE	32	0.5
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).