



SERVICE BULLETIN

Classification:

AT12-005

Reference:

NTB12-057

Date:

July 6, 2012

ALTIMA/SENTRA/ROGUE; CVT FAIL-SAFE CONDITION SERVICE INFORMATION

APPLIED VEHICLES: 2007-2011 Altima (L32)
2008-2011 Altima Coupe (CL32)
2007-2011 Sentra (B16)
2008-2011 Rogue (S35)

APPLIED TRANSMISSION: Vehicles equipped with CVT **ONLY**

NOTE: This bulletin does not apply to Altima Hybrid.

SERVICE INFORMATION

A Continuously Variable Transmission (CVT) is designed to go into fluid temperature protection logic mode ("fail-safe mode") if the CVT fluid temperature rises above a certain threshold. When the CVT goes into fail-safe mode, engine performance is reduced. Customers may report this condition as "low power" or "reduced engine performance".

While the CVT is designed to go into fail safe mode if the fluid temperature rises above the threshold, the following conditions may cause the CVT to go into fail-safe mode prematurely during normal vehicle operation:

1. Overfilled CVT fluid level.
2. Incorrect type of transmission fluid – **Use Genuine Nissan NS-2 CVT fluid.**
3. Incorrect coolant/water mix.

See this bulletin (starting on page 2) for more detail on each of the above conditions.

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.

1. Fluid level check/adjust procedure

- a. Park the vehicle on a level surface.
- b. Apply the parking brake firmly.
- c. Move the A/T shift lever to "P" (Park) position.
- d. With the engine idling, depress brake pedal, move the shift selector throughout the entire shift range, and then back to "P".
- e. Using CONSULT III plus, verify CVT fluid temperature is 70 - 80°C, and CVTF (CVT Fluid) count is 158 -161.

NOTE: If CVT fluid temperature is below 70°C, drive the vehicle for 5 -10 minutes until the required temperature is reached.

IMPORTANT: CVTF count must be 158 to 161.

- f. Adjust the CVT fluid level between the marks shown in Figure 1.

NOTE: Refer to NTB09-044 to verify the vehicle you are working on has the correct CVT oil level gauge by part number. If not, install the correct fluid level gauge before performing the fluid level check/adjust procedure.

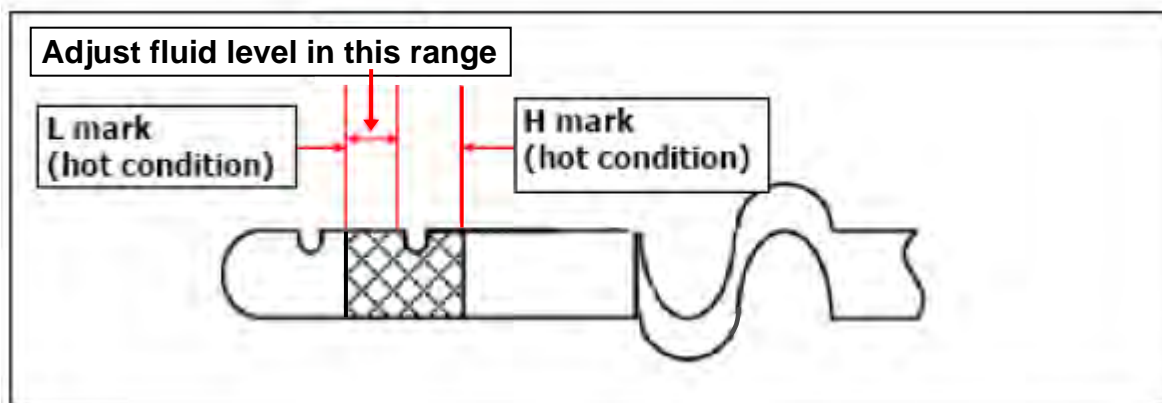


Figure 1

2. Incorrect CVT fluid type

NOTE: Any damage caused by the use of any fluid other than as specified in the vehicle owner's manual is excluded from coverage under the New Vehicle Limited Warranty.

a. To check fluid type, draw a sample by using a syringe or suitable tool through the oil level gauge charge pipe, or drain from the oil pan (see Figure 2).

OK: The fluid sample is **green** in color. It may have a greenish/brown tint.

NG: The fluid sample is red in color, or any color other than a greenish/brown tint.

b. If incorrect fluid is found:

- Perform the following two times: Drain, refill with genuine NS-2 CVT fluid **only**, and then let the engine idle in Drive (with the vehicle lifted off the ground).

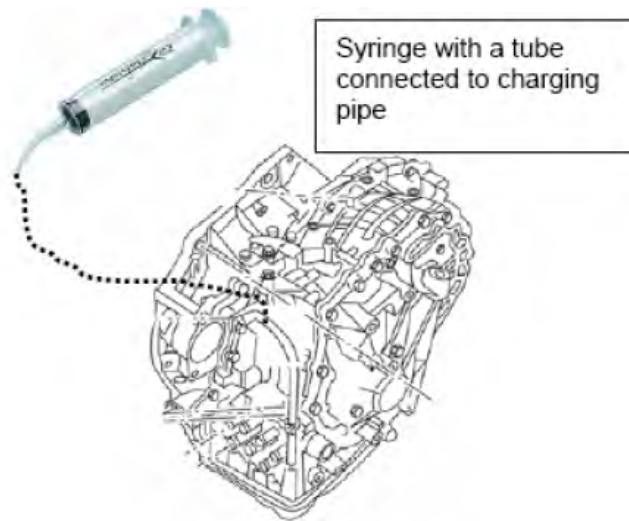


Figure 2

3. Incorrect ethylene glycol-to-water mixture in the engine's cooling system

The vehicle's cooling system capacity is reduced when the concentration (percentage) of ethylene glycol is greater than 60%.

To check ethylene glycol concentration, use a refractometer.

- For details on refractometer use, refer to bulletin NTB02-047.

Nissan recommends a 50/50 mix of ethylene glycol and water for optimum performance. A percentage greater than 60% ethylene glycol will reduce CVT fluid cooling capacity.