



### **Important Documents Enclosed**

## PLEASE OPEN THE POD AND INSPECT THIS UNIT FOR DAMAGES PRIOR TO SIGNING FOR THE SHIPMENT

In order to obtain a warranty certificate, you must register your transmission at <u>www.transtarcts.com/warranty-center</u>



#### TRANSMAXX - JF011E CVT FOR 2007-2012 ALTIMA, 2007-2013 ROGUE, 2007-2011 SENTRA, AND 2007-2016 CHRYSLER CVT MODELS

#### CVT Cooler Overview

The CVT oil warmer/cooler has two closed loops to exchange heat between the CVT and the engine. After starting the vehicle, the engine helps warm the CVT fluid to operating temperature. During extended operation, the exchange provides a cooling effect as heat from the CVT is exchanged into the engine coolant.

To prevent the CVT from overheating, inspect the engine coolant and replace the engine coolant if it is degraded. Per the Nissan service manual engine coolant must be replaced at 105,000 miles or 84 months, whichever comes earlier. Make sure the engine coolant lines are not obstructed and coolant can freely flow into the CVT warmer/cooler. It is also important to inspect the engine air filter and replace it if dirty or obstructed. Excess engine temperature will overheat the CVT fluid and may cause premature failure.

#### CVT Warmer/Cooler Flushing

Whenever an automatic transaxle is repaired, overhauled, or replaced, the CVT fluid cooler mounted in the radiator must be inspected and cleaned.

Metal debris and friction material, if present, can be trapped or become deposit in the CVT fluid cooler. This debris can contaminate the newly serviced CVT or, in severe cases, can block or restrict the flow of CVT fluid. In either case, malfunction of the newly serviced CVT may occur.

Debris, if present, may deposit as CVT fluid enters the cooler inlet. It will be necessary to back flush the cooler through the cooler outlet in order to flush out any built up debris.

#### CVT FLUID COOLER CLEANING PROCEDURE

- 1. Position an oil pan under the transaxle's inlet and outlet cooler hoses.
- 2. Identify the inlet and outlet fluid cooler hoses.
- 3. Disconnect the fluid cooler inlet and outlet rubber hoses from the steel cooler tubes or bypass valve.
- 4. Allow any CVT fluid that remains in the cooler hoses to drain into the oil pan.

5. Insert the extension adapter hose of a can of Transmission Cooler Cleaner (Nissan P/N 999MP-AM006) into the cooler outlet hose.

6. Hold the hose and can as high as possible and spray Transmission Cooler Cleaner in a continuous stream into the cooler outlet hose until CVT fluid flows out of the cooler inlet hose for 5 seconds.

7. Insert the tip of an air gun into the end of the cooler outlet ho

8. Wrap a shop rag around the air gun tip and end of the cooler outlet hose.

9. Blow compressed air regulated to 5 to 9 kg/cm2 (70 to 130 psi) through the cooler outlet hose for 10 seconds to force out any remaining CVT fluid.

10. Repeat steps 5 through 9 three additional times.

11. Position an oil pan under the banjo bolts that connect the CVT fluid cooler steel lines to the transaxle.

12. Remove the banjo bolts.

13. Flush each steel line from the cooler side back toward the transaxle by spraying Transmission Cooler Cleaner in a continuous stream for 5 seconds.

14. Blow compressed air regulated to 5 to 9 kg/cm2 (70 to 130 psi) through each steel line from the cooler side back toward the transaxle for 10 seconds to force out any remaining CVT fluid.

15. Ensure all debris is removed from the steel cooler lines.

16. Ensure all debris is removed from the banjo bolts and fittings.

#### CVT FLUID

- Approximate capacity is 10.2 liters (10 ¼ quarts)
- Transmaxx's reman CVT will already contain approx 3 quarts from the testing machine
- Use only Nissan NS-2 or NS-2 rated CVT fluid
- Use the CVT fluid dipstick to determine the correct fluid level
- Fill CVT fluid from CVT fluid charging pipe to the specified level on the CVT fluid dipstick.

- Adjust CVT fluid level temperature is 50° to 80°C (122° to 176°F). The vehicle needs to warm up for approximately 10 minutes of idle or light driving

- If fluid level is too high, drain the excess fluid from the drain plug on the oil pan
- The CVT fluid should also be inspected every 30,000 miles and replaced if burnt,

contaminated, or otherwise degraded. Replace CVT fluid with NS-2 rated fluid only.

- NOTE: The fluid change interval for the JF011E CVT is every 60,000 miles. If the vehicle has been driven over 60,000 miles on a Transmaxx CVT, maintenance records showing proof of fluid change(s) at 60,000 mile or earlier intervals must be provided in order to ensure warranty coverage.

- NOTE: For Nissan Altima model years 2013 and newer, and for Nissan Rogue 2014 and newer, Nissan NS-3 rated fluid should be used. Nissan NS-3 is NOT interchangeable with NS-2.

The use of the incorrect fluid will lead to premature wear and overheating of the CVT and will invalidate the warranty coverage.

#### TCM Initialization Procedure

- 1. Set the parking brake with the selector lever in "P" (Park).
- 2. Connect scan tool to the vehicle and turn the ignition ON (engine OFF not running).
- 3. Navigate the scan tool to find the TCM Part number
- 4. Select the TCM part number (P/N) and Calibration Data, and then print and save a copy.
- 5. Perform the initialization (EEPROM erase) procedure as follows:
- a. Select Transmission Self Diagnostic Results.
- b. Press and hold the brake pedal.
- c. Shift the selector lever to "R" (Reverse).
- d. Press and hold the accelerator pedal down about one-third, but no more than halfway.

• The purpose of this step is to get both the wide open throttle and closed throttle position signals to read "OFF" at the same time.

e. Press Erase.

IMPORTANT: During the next step, observe the shift selector position display.

- f. Shift the selector lever to "P" (Park).
- If there is a delay with "P" to illuminate, EEPROM has successfully erased.
- If there is no delay, EEPROM has not erased. Perform Step 5 again.

NOTE for Chrysler, Jeep, and Dodge applications of the JF011E, it is recommended to reuse the EEPROM from the original transmission. The EEPROM is located on the side of the transmission valve body and can be accessed by removing the transmission oil pan.



#### TCM Reprogramming

The vehicle does not require programming unless the TCM software is affected by a service bulletin. To check the TCM software see instructions below:

First, find TCM Part Number with Scan Tool. The TCM hardware is a computer chip with identical hardware and the part number represents the software the TCM is programmed with. The TCM part number will start with 31036-XXXX.

If the TCM part number is any of the ones on the table below, the TCM is affected by a service bulletin needs to be reprogrammed with updated software. This can be done either with a Consult 3 scanner and programmer (available at Nissan dealerships), or with the RAP Kit by Drew Technologies.

NOTE: The JF011E transmission or valve body does not come with a programming CD.

NOTE: If there are any diagnostic trouble codes (DTC) the transmission may not program. Clear all DTCs before proceeding with programming. If there are persistent DTCs, these must be addressed and cleared before programming can proceed.

#### NISSAN ALTIMA

2007 Altima	JA00B	2008 Altima	JA02D
2007 Altima	JA00C	2008 Altima	JB22A
2007 Altima	JA00D	2008 Altima	JB28C
2007 Altima	JA00E	2008 Altima	JB28D



JA02B JA02C	2008 Altima	JB28E
JA02C		
	2008 Altima	JA02D
JA06A	2008 Altima	JA02E
JA07B	2008 Altima	JA03A
JA07C	2008 Altima	JA03B
JA02B	2008 Altima	JB25A
JA02C	2008 Altima	JB25B
JA08C	2008 Altima	JB26B
JA08D	2008 Altima	JB26C
JA08E	2008 Altima	JB24A
JA09A	2008 Altima	JB34A
JA09C	2008 Altima	JB35A
JA09D	2008 Altima	JB36A
JA09E	2009 Altima	ZN50A
JA16A	2009 Altima	ZN50B
JA17A	2009 Altima	ZN50C
JB23A	2009 Altima	ZN59A
JB29C	2009 Altima	ZN60A
	JA06A   JA07B   JA07C   JA02B   JA02C   JA08C   JA08D   JA08B   JA09A   JA09A   JA09C   JA09D   JA09E   JA16A   JB23A	JA06A2008 AltimaJA07B2008 AltimaJA07C2008 AltimaJA02B2008 AltimaJA02C2008 AltimaJA08C2008 AltimaJA08D2008 AltimaJA08E2008 AltimaJA09A2008 AltimaJA09C2008 AltimaJA09A2008 AltimaJA09C2008 AltimaJA09D2008 AltimaJA09D2008 AltimaJA09E2009 AltimaJA16A2009 AltimaJB23A2009 Altima



2007 Altima	JB29D	2009 Altima	ZN61A
2007 Altima	JB29E	2009 Altima	ZN61B
		2009 Altima	ZN61C
		2009 Altima	ZN69A
		2010-11 ALTIMA	ZX00A
		2010-11 ALTIMA	ZX00B
		2010-11 ALTIMA	ZX00C

### NISSAN ROGUE

2008 Rogue	JM00A	2010 Rogue	CZ30A
2008 Rogue	JM10A	2010 Rogue	CZ30B
2008 Rogue	JM20A	2010 Rogue	CZ31A
2008 Rogue	JM30A	2010 Rogue	CZ31B
2008 Rogue	JM40A	2010 Rogue	CZ32A
2008 Rogue	JM50A	2010 Rogue	CZ32B
2008 Rogue	JM09B	2010 Rogue	CZ33A
2008 Rogue	JM19B	2010 Rogue	CZ33B
2008 Rogue	JM29B	2010 Rogue	CZ34A



# transmax

2008 Rogue	JM39B	2010 Rogue	CZ34B
2009 Rogue	JM02A	2010 Rogue	CZ35A
2009 Rogue	JM02B	2010 Rogue	CZ35B
2009 Rogue	JM02C	2010 Rogue	CZ36A
2009 Rogue	JM04A	2010 Rogue	CZ36B
2009 Rogue	JM04B	2010 Rogue	CZ37A
2009 Rogue	JM04C	2010 Rogue	CZ37B
2009 Rogue	JM12A	2010 Rogue	CZ38A
2009 Rogue	JM12B	2010 Rogue	CZ38B
2009 Rogue	JM12C	2010 Rogue	CZ39A
2009 Rogue	JM22A	2010 Rogue	CZ39B
2009 Rogue	JM22B	2010 Rogue	CZ48A
2009 Rogue	JM22C	2010 Rogue	CZ48B
2009 Rogue	JM32A	2010 Rogue	CZ49A
2009 Rogue	JM32B	2010 Rogue	CZ49B
2009 Rogue	JM32C		



### NISSAN SENTRA

2007 Sentra	ET100	2010 Sentra	ZT50A
2007 Sentra	ET900	2010 Sentra	ZT50B
2008 Sentra	ZE80A	2010 Sentra	ZT52A
2008 Sentra	ZE82A	2010 Sentra	ZT52B
2007 Sentra	ET80A	2010 Sentra	ZT54A
2008 Sentra	ZE92A	2010 Sentra	ZT54B
2009 Sentra	ZJ60A	2010 Sentra	ZT80A
2009 Sentra	ZJ60B	2010 Sentra	ZT80B
2009 Sentra	ZJ62A	2010 Sentra	ZT82A
2009 Sentra	ZJ62B	2010 Sentra	ZT82B
2009 Sentra	ZJ63A	2010 Sentra	ZT84A
2009 Sentra	ZJ63B	2010 Sentra	ZT84B
2009 Sentra	ZJ64A	2010 Sentra	ZT70A
2009 Sentra	ZJ64B	2010 Sentra	ZT70B
2009 Sentra	ZJ70A		
2009 Sentra	ZJ70B		



### TEST DRIVE AND TRANSMISSION CALIBRATION

After the transmission has been installed use a scan tool to verify the vehicle does not have any diagnostic trouble codes. If there are codes from the previous transmission, clear them with a scan tool and check if they return. If the vehicle does not have any codes, proceed with the clutch point relearn (below), and test drive the vehicle for an additional 15 - 20 minutes to allow the TCM to self-calibrate. Do not drive the vehicle if it has any DTCs that cannot be cleared before the test drive.

The test drive should cover a range of speeds in both forward and reverse. The vehicle may shift abnormally at the beginning of the test drive but should normalize in 20 minutes or less. If the MIL / check engine light illuminates during the test drive, do not continue driving.

Re-scan the vehicle after the test drive to ensure there are no DTCs.

Source material: Nissan CVT manuals and TSBs



#### For JATCO CVT in Jeep and Dodge applications

This transmission comes with an external 4-pipe cooler Some vehicles are configured with a cooler bypass plate (pictured below). If your vehicle is configured with the cooler bypass plate, please use a 10-mm socket remove the bypass plate from the core and replace the 4-pipe cooler on the reman CVT.

To verify fitment, the JATCO stamp code on the top of the transmission is the best reference. Common stamp codes for Jeep and Dodge CVTs are 1XH00, 1XH02, 1XH0D, 1XH01.



