



Technical Bulletin

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SERVICE BULLETIN

Classification: AT10-009a	Reference: NTB11-002a	Date: February 21, 2011
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2010 MAXIMA, MURANO, & V-6 ALTIMA; MIL IS ON AND / OR SLOWER-THAN-NORMAL ACCELERATION

This bulletin has been amended. 2010 V-6 Altima has been applied and P/N 31705-1XE2C has been added. No other changes have been made. Please discard previous copies.

APPLIED VEHICLES: 2010 Maxima (A35)
2010 Murano (Z51)
2010 Altima (C/L32) equipped with VQ35DE engine **ONLY**

IF YOU CONFIRM:

The vehicle has slower-than-normal acceleration from a stop at times

and / or

The customer describes the vehicle has slower-than-normal acceleration from a stop at times

NOTE: The condition of slower-than-normal accelerating from a stop, if it should occur, happens more commonly when the vehicle has been driven for extended periods at highway speeds.

and / or

The MIL is ON with DTC P1778 (STEP MOTOR) stored in CONSULT III (Engine and / or Transmission).

ACTION:

Refer to the **REPAIR FLOW CHART** on Page 3 for repair procedure.

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 **REPAIR FLOW CHART** (on Page 3) and the **SERVICE PROCEDURE** if applicable (starting on Page 4) as they contain 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.

PARTS INFORMATION

VEHICLE	DESCRIPTION	PART #	QTY
2010 Maxima (A35)	Valve Assy - Control	31705-1XE2B	1
2010 Murano (Z51)	Valve Assy - Control	31705-1XE1E	1
2010 Altima (C/L32) w/VQ35DE	Valve Assy - Control	31705-1XE2C	1
ALL	Gasket - Oil Pan	31397-1XE0A	1
ALL	Nissan CVT Fluid (1)	999MP-NS200P	(2)
ALL	Washer - Thrust (lip seal)	31528-1XA01	2
ALL	Bolt (oil pan)	31377-1XD0D	20
ALL	Seal - O Ring (drain plug)	31526-1XA01	1
ALL	Bolt (oil pan)	31377-1XD0D	20

(1) Order Nissan CVT NS-2 Fluid through the Nissan Maintenance Advantage program: Phone: 877-NIS-NMA1 (877-647-6621), Fax 216.881.7923, Website order via link on dealer portal www.NNAnet.com and click on "Tire Advantage" link, or order direct at www.nissantire.com.

(2) Up to eight (8) quarts.

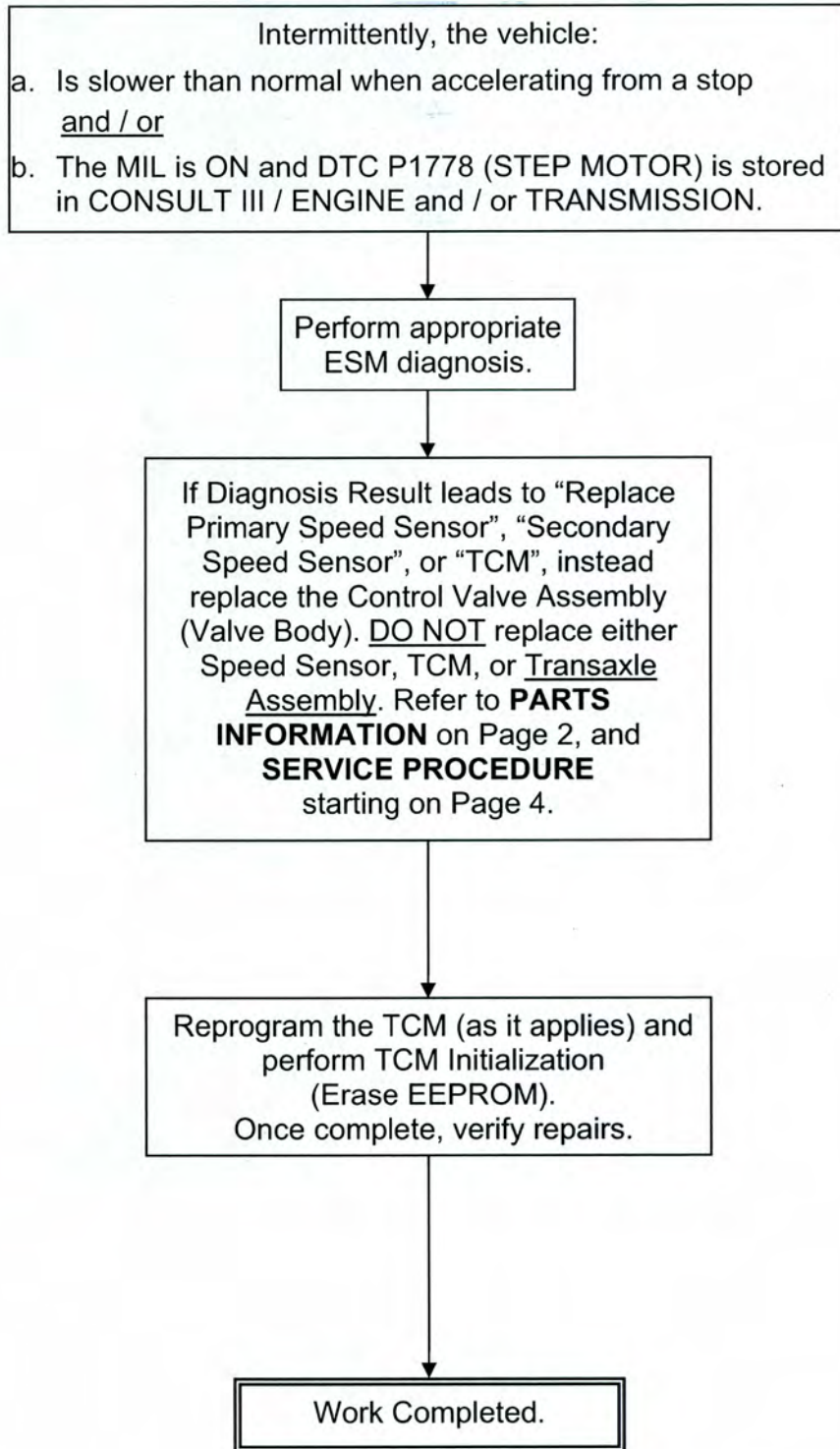
CLAIMS INFORMATION

Submit a Primary Failed Part (PP) line claim using the following claims coding.

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL CONTROL VALVE ASSY	(1)	JD48AA	ZE	32	(2)
REPROGRAM TCM		JE99AA			(2) (3)

- (1) Reference the Parts Information Table and use the applicable Control Valve Assy P/N as the PFP.
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated flat rate time.
- (3) FRT allows adequate time to access DTCs and reprogram TCM. No other diagnostic procedures subsequently required. Do NOT claim any Diagnostic Op Codes with this claim.

REPAIR FLOW CHART



SERVICE PROCEDURE

Remove Control Valve Assembly

PRECAUTIONS WHEN REPLACING CONTROL VALVE ASSEMBLY

Transmissions are vulnerable to particles (dust, metal, lint, etc.)

- When replacing a valve body, make sure your work environment (shop, workbench, etc.), the transmission area (sub-frame, oil pan, harness connector, etc.), and your hands are free of contamination.
- Make sure all parts are clean prior to installing on the vehicle. Unpack Service Parts just before installation.

NOTE: The transmission does not need to be removed for this procedure.

1. Write down all radio station presets.

Presets	1	2	3	4	5	6
A						
B						
C						
SAT						

2. Set the vehicle on a hoist, but do not raise it.
3. Disconnect both battery cables, negative cable first.
4. Remove the CVT dipstick, and then raise the vehicle on the hoist.
5. Remove the undercover from underneath the front bumper.
6. Remove the transmission pan drain plug and drain the CVT fluid.

WARNING: CVT Fluid may be hot.

7. Remove the oil pan bolts to remove the oil pan.

8. Disconnect CVT harness connector F6 by turning it in the direction shown in Figure 1.

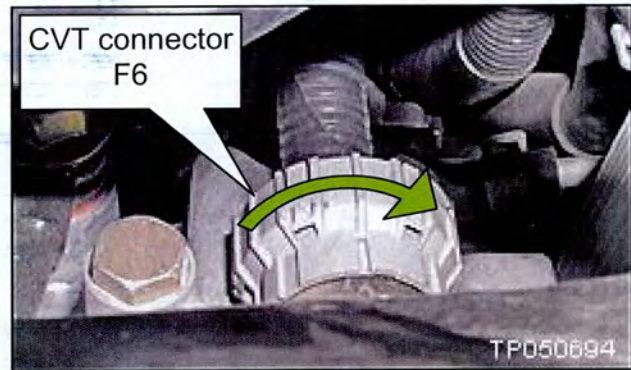


Figure 1

9. Remove the nut and lock nut to remove the manual plate (see Figure 2).

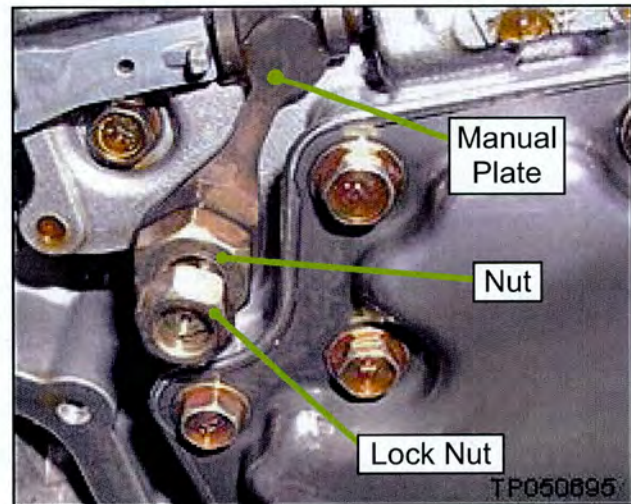


Figure 2

10. Remove the collar from the manual shaft (see Figure 3).

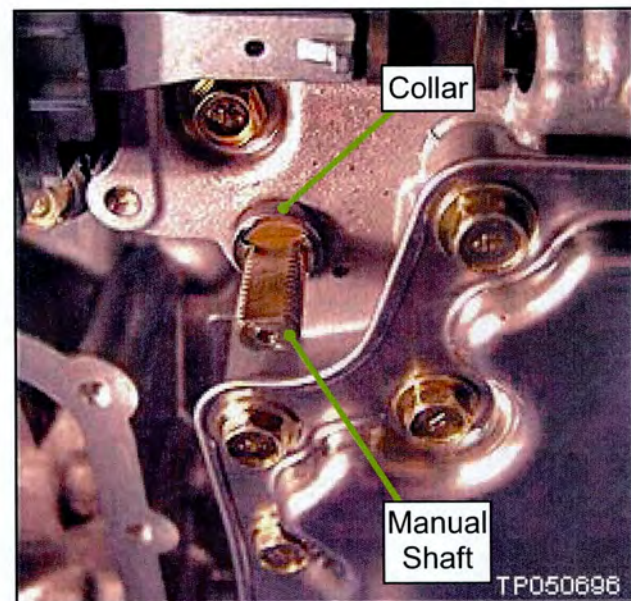


Figure 3

11. Remove the large lock ring holding the black CVT connector to the transmission case (see Figure 4).

- Push the black CVT connector down inside the transmission case to remove it.

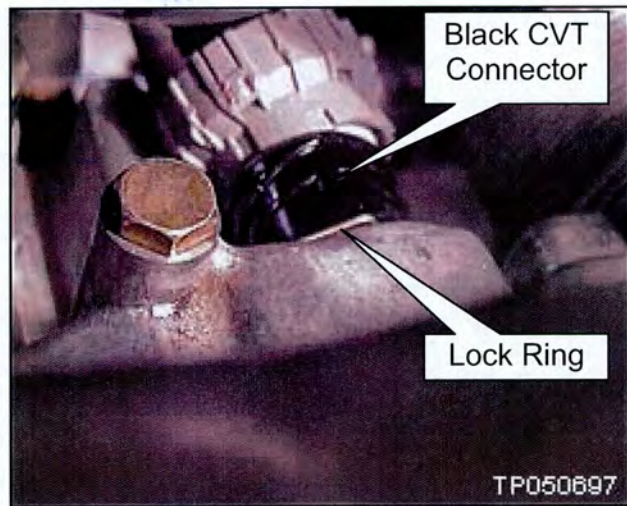


Figure 4

- Black CVT harness connector and lock ring shown removed from the transmission case (see Figure 5).



Figure 5

12. Disconnect the harness from the Primary oil pressure sensor assembly (see Figure 6).

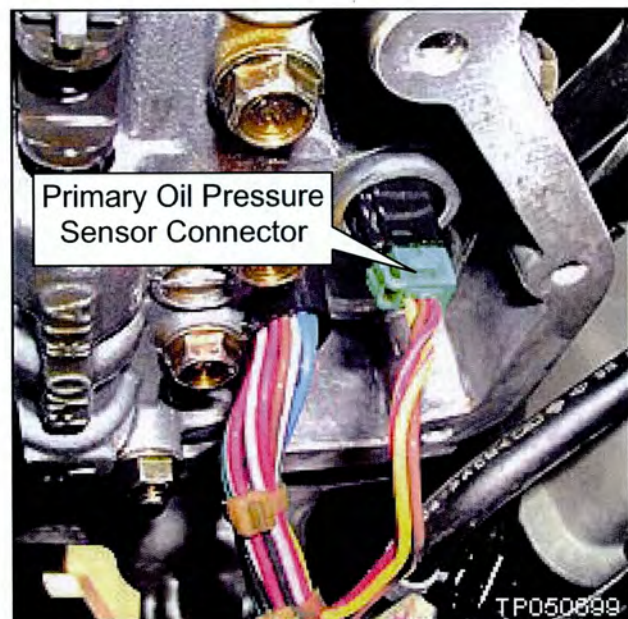


Figure 6

13. Remove the bolts attaching the valve body to the transmission (see Figure 7).

- There are eleven (11) bolts shown and numbered for convenience.
- There are three (3) different length bolts which are identified by:
S-short
M-medium
L-long

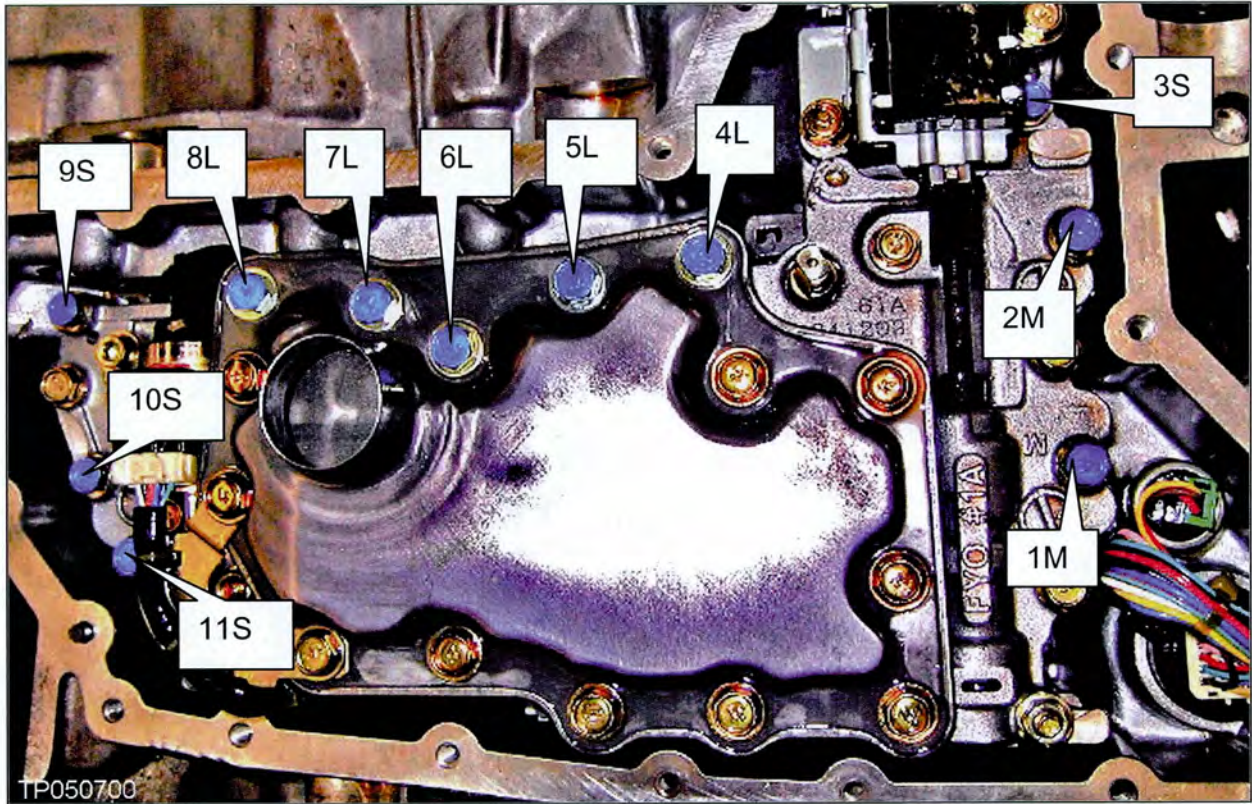


Figure 7

14. Carefully remove the valve body.

- Note the position of the Ratio Control Valve and attached shift link (see Figure 8).
- Be careful not to allow the Ratio Control Valve to fall out.

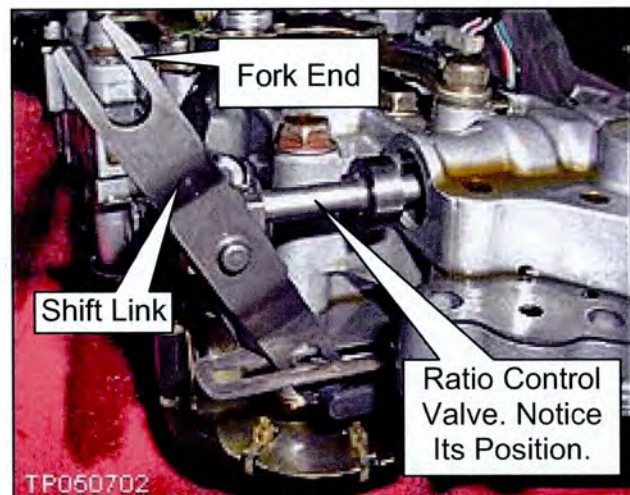


Figure 8

15. Make sure you replace the two (2) lip seals shown in Figure 9.

- Do not reuse the old lip seals.
- Use petroleum jelly or equivalent to keep the new lip seals in place during reassembly.



Figure 9

Install the replacement Control Valve Assembly:

16. Carefully install the new valve body and shift link with the fork end of the shift link around the pin (see Figure 10).

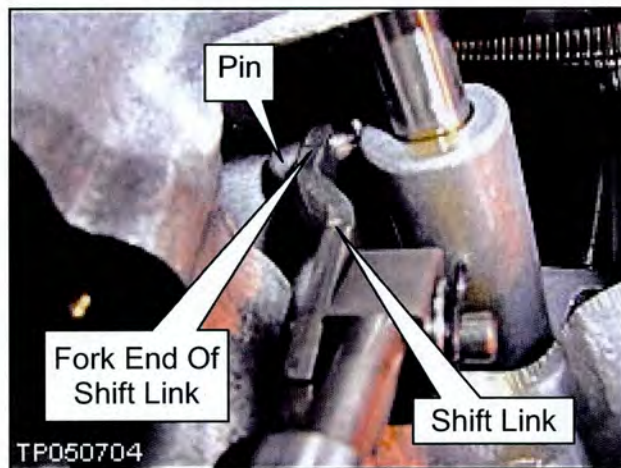


Figure 10

17. While you are doing Step 16 above, the lower end of the shift link must stick through the bottom of the step motor pin as shown in Figure 11.

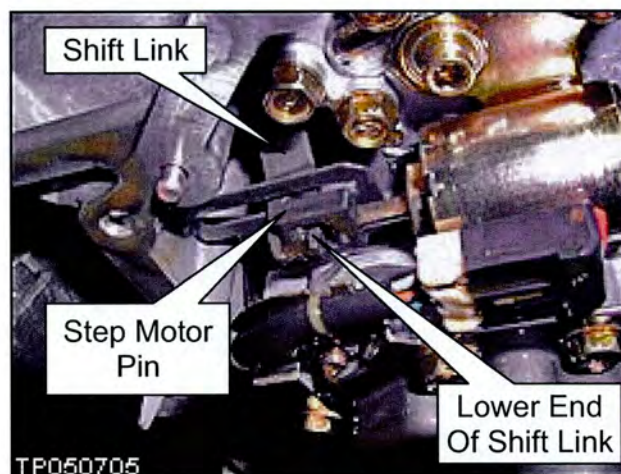


Figure 11

18. Install finger tight the eleven (11) valve body bolts removed on Page 7, Step 13.

- Make sure the different lengths of bolts are installed in the correct holes (see Page 7, Figure 7).

IMPORTANT CHECKS:

- After you install the new valve body, make sure the upper end (fork end) of the shift link is positioned around the pin. Space is very limited in the work area.
- Install the CVT dip stick and make sure there is adequate clearance between the dipstick and the harness.

19. Torque the eleven (11) valve body bolts.

- Tightening torque: 6.9-8.9 N•m (0.7-0.9 kg-m, **61.1-78.8 in-lb**) *.
- Torque sequence as per Figure 7, Page 7: 6-7-5-8-4-9-3-10-2-11-1.
- Refer to Figure 7 for bolt numbering and position.

20. Reinstall the collar on the manual shaft (see Step 10, Figure 3, on Page 5).

21. Align the manual plate with the notch in the manual valve (see Figure 12).

NOTE: First, tighten the nut, and then tighten the lock nut with the specified tightening torque.

- Use a Torque wrench to tighten both the 14 mm and 19 mm nuts; same torque specification for both:

TORQUE: 20.6-23.5 N•m
(2.1-2.3 kg-m, **15.1 - 17.3 ft-lb**) *

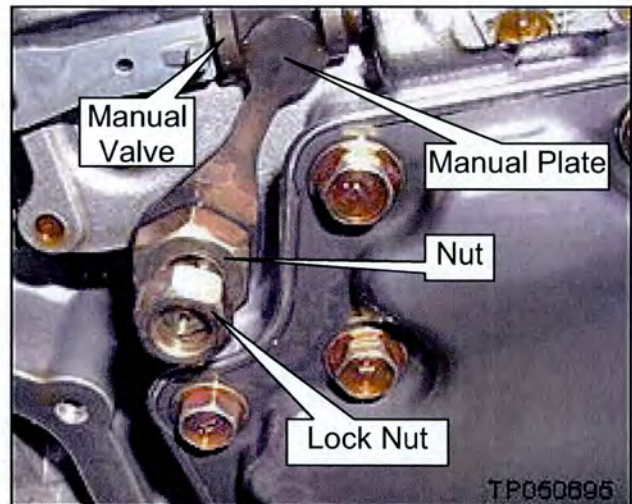



Figure 12

22. Reconnect the harness to the primary oil pressure sensor (see Page 6, Step 12 and Figure 6).

* Do not confuse in-lb with ft lb.

23. Install the black CVT connector in its transmission case mounting hole.
 - Secure it by installing its large lock ring.
 - Secure the gray F6 CVT connector to the black CVT connector.
24. Install the oil pan with a new gasket and new bolts.
 - Make sure the oil pan and magnets are clean.
 - Bolts tightening torque: 5.4 – 7.4 N•m (0.5 – 0.7 kg-m, **47.8 – 65.5 in-lb**). * 
25. Install the drain plug with new seal.
 - Drain plug torque: 21.0 N•m (2.14 kg-m, **15.5 ft lb**)
26. Install the undercover.
27. Connect both battery cables, negative cable last.
28. Check the fluid level.
 - Add as necessary.
 - Inspect for fluid leaks.
29. Go to **TCM Reprogramming: Determine And Perform If Needed** on Page 11 to determine if the TCM needs to be reprogrammed.
 - a. If TCM reprogramming applies, reprogram the TCM, and then go to Step 30.
 - b. If TCM reprogramming does not apply, go to Step 30.
30. Perform TCM initialization.
 - Refer to **TCM Initialization Procedure** on Page 14.
31. Reset / initialize all applied systems i.e., radio, power windows, clock, sunroof, etc.
 - Refer to the ESM as needed.
32. Make sure to erase DTCs from all Systems.
33. Test drive the vehicle and make sure it operates correctly, and:
 - The MIL is OFF, and there are no DTCs stored in ENGINE and / or TRANSMISSION.
 - If the MIL comes ON; diagnose, perform repairs, and erase DTCs.
 - Diagnosis and repairs beyond TCM reprogramming / initialization and valve body replacement are not covered by this bulletin.

* Do not confuse in-lb with ft lb.

TCM Reprogramming: Determine And Perform If Needed

1. Connect CONSULT III (C-III) to the vehicle to begin the reprogramming procedure.

- If you are not familiar with the reprogramming procedure, click [here](#). This will link you to the "CONSULT- III (C-III) TCM Reprogramming" general procedure.

CAUTION:

- Connect a battery charger to the vehicle battery.
If the 12V battery voltage drops during reprogramming, the TCM may be damaged.
- Be sure to turn OFF all vehicle electrical loads.
If a vehicle electrical load remains ON, the TCM may be damaged.
- For TCM reprogramming, the C-III MUST be connected to the VI using the USB cable.
- Be sure to connect the AC Adapter.
If the C-III battery voltage drops during reprogramming, the process will be interrupted and the TCM will be damaged.

2. When you get to the TCM Reprogramming screen shown in Figure 13, confirm TCM reprogramming applies as follows:

A. On your C-III screen, look at the **Part Number** column (see Figure 1 example).

- If this column is **blank** (no part number listed), this **TCM reprogramming does not apply**. Go back to Page 10, Step 29.
- If a part number (P/N) is listed, write it on the Repair Order and then go to Step B.

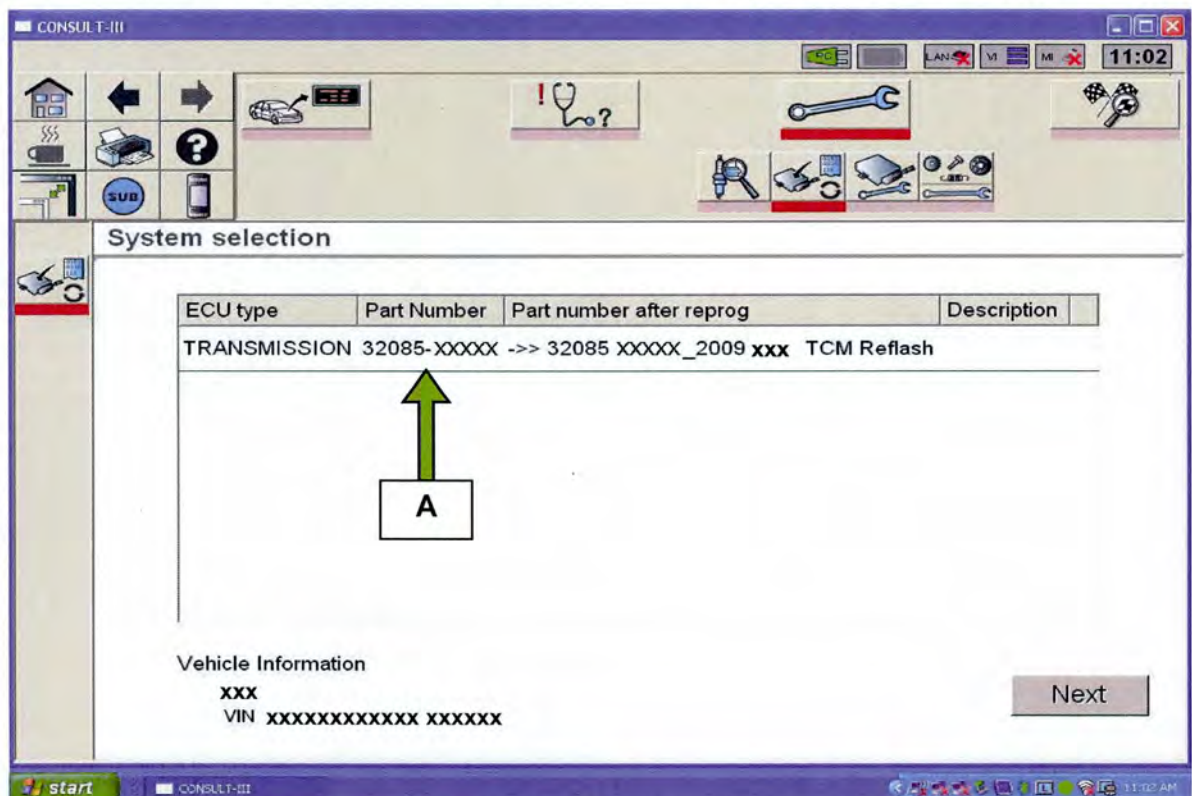


Figure 13

B. Compare the P/N you wrote down to the P/Ns in the **Current TCM P/N** column in **Table A** below.

- If there is a match, TCM reprogramming applies. Continue with the reprogramming procedure.

NOTE: If there are two lines (two reprogramming options) on your C-III screen, use the one that **does not** have the message "Caution! Use ONLY with NTBXX-XXX".

- If there is not a match, TCM reprogramming does not apply. Go back to Page 10, Step 29.

Table A

Model	Current TCM P/N: 31036-
2010 Maxima	9N00C, 9N00D, 9N00E, 9N01A, 9N01B, 9N09A
2010 Murano	1AA0A, 1AA0B, 1AA0C, 1AA0D, 1AA0E, 1AA9A, 1AA1A, 1AA1B, 1AA1C

3. If TCM reprogramming applies and you have performed TCM reprogramming; when reprogramming is complete, the screen in Figure 14 appears.

Print the page from C-III (C-III page example below) and attach it to the Repair Order for Warranty documentation.



Figure 14

4. Leave C-III on, and then go back to Page 10, Step 30.

TCM Initialization Procedure

1. Set the parking brake with the selector lever in "P" (Park).
 2. C-III and the Vehicle Interface (VI) should still be on and connected, and the vehicle ignition turned ON (engine OFF - not running).
 3. Navigate C-III screens to Transmission, then Special Functions.
 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. Shift the selector lever to "R" (Reverse).
 - c. Press and hold the brake pedal.
 - 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.
 - f. Shift the selector lever to "P" (Park).
 - g. Turn the ignition OFF.
 - h. Wait 5 seconds.
 - i. Turn the ignition ON.
 6. Select and print the TCM P/N and Calibration Data again.
 7. Compare the values between the first and second Calibration Data prints.
 - The procedure is complete if the values are different.
 8. Make sure to erase DTCs from all systems.
 9. Return to Page 10, Step 31.
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