Installation Guide

Thank you for your purchase of a quality TD REMAN CVT Transmission.
The following instructions are to help with a successful installation.

Last revised 09-28-23

Before Pulling the Transmission

Before pulling your current transmission, please run a full diagnostics scan of the vehicle.

It is important to identify the root cause of the failure. Why is it necessary to do this? Our extensive CVT experience has shown that most installers think just installing and erasing codes is all that is necessary! Nothing is farther from the truth. For example: Engine misfires, mass airflow sensor, ripped air duct hose to the throttle body, crankshaft and cam sensors, ABS, brake lights, brake light switch, brake light assembly, wiring and wrong or defective TCM, can damage your new CVT. At TD REMAN we are here to help you with our dedicated team of tech support, and you can reach us at (954) 543 7724 or via email at techsupport@tdreman.com.

Once the transmission is installed, prefill with the correct CVT fluid, then proceed with the following:

Checking CVT Fluid Level CVT-7

Fluid level should be checked with the fluid warmed up to 50° to 80°C (122° to 176°F).

1. Check for fluid leakage.
2. When the ambient temperature is 20°C (68°F), it takes about 10 minutes for the CVT fluid to warm up to 50 to 80°C (122 to 176°F).
3. Park the vehicle on a level surface and set the parking brake.
4. With engine at idle, while depressing brake pedal, move the selector lever throughout the entire shift range and return it to the "P" position. Leave the engine running.
5. Lift the car and remove the drain plug and let the excess fluid run out until it dribbles. If nothing comes out add the correct CVT fluid until it dribbles out. Replace the drain plug and torque to 25 ft-lbs.

CAUTION: Only use specified NISSAN CVT fluid. If you use, misuse, or mix fluid other than the specified fluid occurs, original performance cannot be obtained, or it may cause serious malfunctions.

CAUTION: CVT fluid is not reusable. Never reuse CVT fluid.

CAUTION: Do not overfill the CVT.

CAUTION: After filling, always perform CVT fluid leakage check.

6. Check all fluid levels.

Nissan Fluid Service Information for the CVT-7 and CVT-8

All CVT-7 and CVT-8 platforms use Nissan NS-3 fluid. The only exception is the 2012 Versa Sedan which has a CVT7 that uses NS-2 fluid.

CAUTION: Do not use Automatic transmission fluid (ATF) or Manual Transmission fluid in a Nissan CVT, as it may damage the CVT. Damage caused using fluids other than as recommended is not covered under the TD REMAN Warranty.

NS-2 Fluid used mostly in 2012 and earlier, some units up to 2015.

I.e., 2015 Rogue Select with CVT 2 and 2012 Versa with CVT-7 Transmissions

NS-3 Fluid used in CVT-7 and CVT-8 Transmissions 2013 and later.

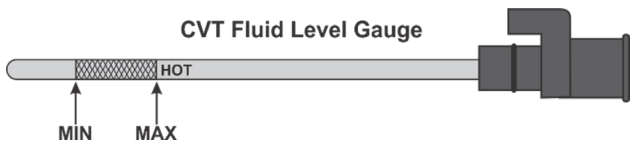
Preliminary Recommended Fill Chart for Nissan CVT

These fluid levels are approximate fill, please follow the fill procedure.

Model	Detail	Year	Engine	Platform	Transmission	Total fill	Service fill	Fluid
Altima		09-12	2.5L	CVT2	RE0F10A	7.7qts	N/A	NS-2
		07-12	3.5L	CVT3	RE0F09B	10.7qts	N/A	NS-2
		13-17	2.5L	CVT2	RE0F10D	7.8 qts	N/A	NS-3
		13-18	3.5L	CVT8	RE0F10E/RE0F10H	8.6 qts	N/A	NS-3
		19-20	2.0 /2.5L	CVT8	RE0F10D	8.7 qts	N/A	NS-3
	Hybrid	07-11	2.5L	CVT8	RE0F01H Hybrid	4.3 qts	N/A	NISSAN MATIC-W
Cube		09-14	1.8L	CVT1	RE0F08B	7.8 qts	N/A	NS-2
Juke		11-17	1.6T	CVT2	RE0F10B	9.1 qts	N/A	NS-2
	Nismo	15-17	1.6T	CVT8	RE0F10D	8.4 qts	N/A	NS-3
Maxima		08-14	3.5L	CVT3	RE0F09B	10.7 qts	N/A	NS-2
		16-21	3.5L	CVT8	RE0F10H	8.6 qts	N/A	NS-3
Murano		03-08	3.5L	CVT3	RE0F09A	10.7 qts	N/A	NS-2
		09-15	3.5L	CVT3	RE0F09B	10.7 qts	N/A	NS-2
		15-19	3.5L	CVT8	RE0F10J	9.3 qts	N/A	NS-3
NV200		11-14	2.0L	CVT2	RE0F10A	8.6 qts	N/A	NS-2
		15-21	2.0L	CVT8	RE0F10D	8.6 qts	N/A	NS-3
Pathfinder		13-14	3.5L	CVT8	RE0F10E	9.3 qts	N/A	NS-3
		15-20	3.5L	CVT8	RE0F10J	9.3 qts	N/A	NS-3
Quest		11-14	3.5L	CVT3	RE0F09B	10.7 qts	N/A	NS-2
		15-17	3.5L	CVT8	RE0F10J	9.3 qts	N/A	NS-3
Rogue		09-15	2.5L	CVT2	RE0F10A	9.1 qts	N/A	NS-2
	AWD	08-15	2.5L	CVT2	RE0F10A	8.5 qts	N/A	NS-2
		14- 20	2.5L	CVT8	RE0F10D	8.4 qts	N/A	NS-3
Sentra		07-12	2.0 /2.5L	CVT2	RE0F10A	7.7 qts	N/A	NS-2
		13-19	1.6L /1.8L	CVT8 /CVT7	RE0F10D / RE0F11A	7.8 qts	N/A	NS-3
Versa		07-11	1.6L /1.8L	CVT1	RE0F08A /B	7.8 qts	N/A	NS-2
		12	1.6L	CVT7	RE0F11A	7.3 qts	N/A	NS-2
	& Note	13-20	1.6L /1.8L	CVT7	RE0F11A	7.3 qts	N/A	NS-3

Service Fill

The recommended Nissan CVT transmission fluid change interval is every 30,000 miles or 24 months, whichever comes first. However, it can vary depending on the make and model of your vehicle. It is important to refer to your owner's manual for specific maintenance recommendations since some vehicles may require a more frequent change interval.



CVT 7 Transmission Fluid Fill

1. Fill with the correct CVT fluid through the charge pipe to the specified level with the engine idling.
2. With engine at idle, while depressing brake pedal, move the selector lever throughout the entire shift range and return it to the "P" position. Leave the engine running.
3. Remove the drain plug and check fluid level by letting the excess fluid drain past the fluid level overfill tube. If nothing comes out add fluid until it dribbles out
4. Check that CVT fluid level is within the specified level verifying the fluid temperature at 50°C to 80°C (122°F to 176°F). Verify fluid temperature with a capable scan tool.
5. Install pan bolt with its washer, torque to 25 ft-lbs,

Service Fill (CVT 7)

1. Select "Data Monitor" in "TRANSMISSION" using CONSULT 3 Plus.
2. Select "FLUID TEMP" and confirm that the CVT fluid temperature is 40°C (104°F) or less.
3. Check that the selector lever is in the "P" position, then engage the parking brake.
4. Lift the vehicle.
5. Remove the drain plug (17mm) and overflow tube (5mm Allen) and drain the CVT fluid from the oil pan.
6. Change the filter, install the pan torque pan bolts to 52 in-lbs, install the overfill tube and torque to 11 ft-lbs, Install the drain plug.
7. Lower the vehicle.
8. Add 3 quarts of the correct CVT fluid.
9. Start the engine.
10. While depressing the brake pedal, shift the selector lever to the from "P" to "L", and shift back to the "P" position.

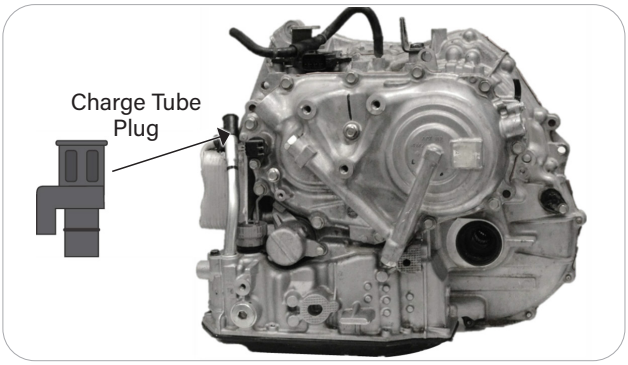
NOTE: Hold the lever at each position for 5 seconds.

11. Check that the CONSULT 3 plus or capable scan tool "Data monitor" in "FLUID TEMP" is over 50°C (122°F).
12. Lift the vehicle up while idling.
13. Remove the drain plug and confirm that the CVT fluid is drained from the overflow tube. If the fluid does not dribble out of the overfill tube add until it does. Install Drain Plug.
14. Let the vehicle down.
15. Select "Work Support" in "TRANSMISSION" using CONSULT 3 or capable scan tool.
16. Select "CONFORM CVTF DETERIORTN" in WORK SUPPORT or SPECIAL FUNCTIONS.
17. Select "Erase", confirm the counter goes to "0". If not, cycle the key and try again until it goes to "0".
18. Stop the engine.

Note: Always verify fluid capacities with factory information. If the fill specifications are followed correctly after a rebuild there would no need to check fluid level.

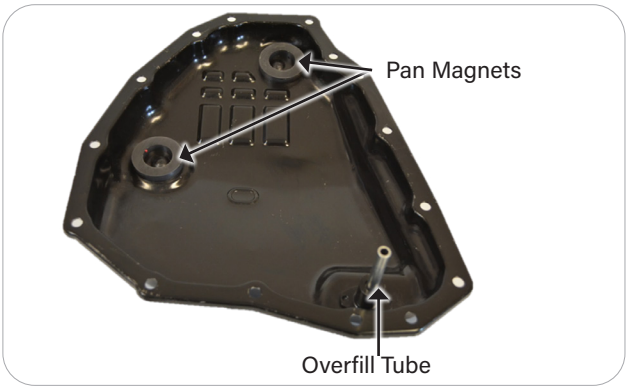
It is recommended to use only genuine Nissan CVT Fluid NS-2 or NS-3 (model dependent) using any other fluid may damage the transmission.

Charge Tube Plug



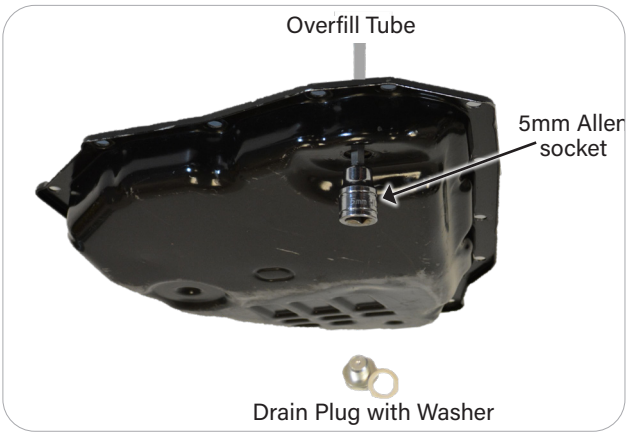
Pan Magnets

Most have 2, some have 3.



Overfill Tube

5mm Allen socket to remove overfill tube for fluid change.



Drain Plug

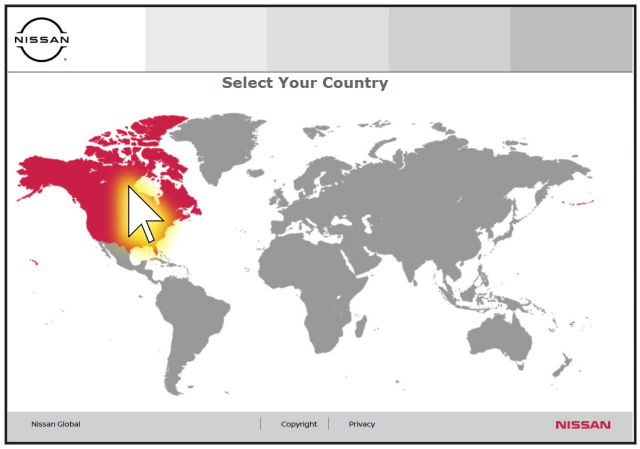
Tighten to 25'ft-lbs torque.

Programming

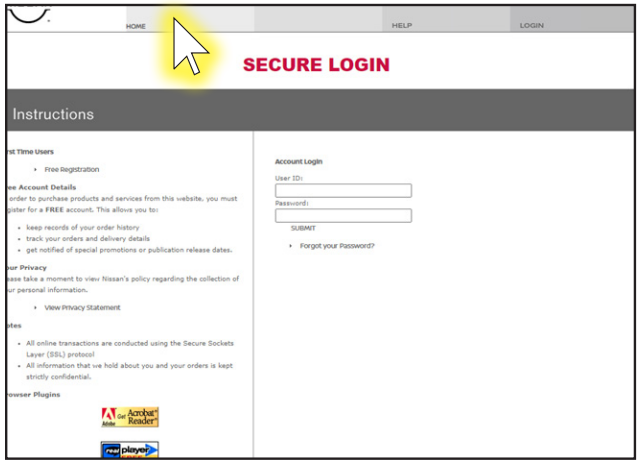
Now that you have your transmission installed and with the correct fluid level we can move on to the following step, which is Programming.

Programming the TCM is critical. First, we need to confirm the software in the TCM. To accomplish this, we need to hook up our Consult 3+ or capable Scan Tool. Read all the codes and save them for reference, clear all codes and see if any come back. Once you have cleared the codes you need to enter the transmission section and go to ECM or TCM part number. They always start with 31036 prefix, once you find the TCM part number you need to go to Nissan Publications www.nissan-techinfo.com and follow the next steps provided.

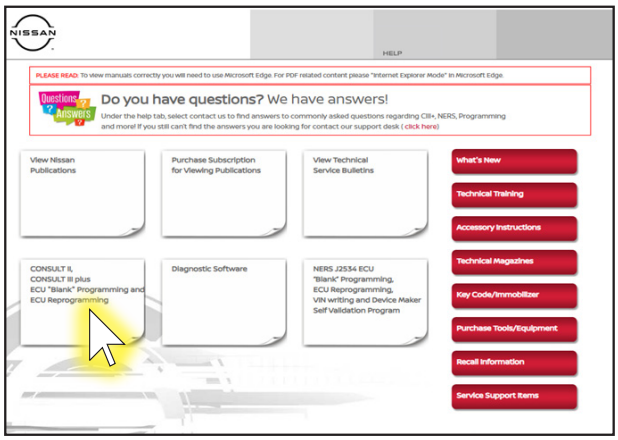
You do not need to register for this website to get the information you need.



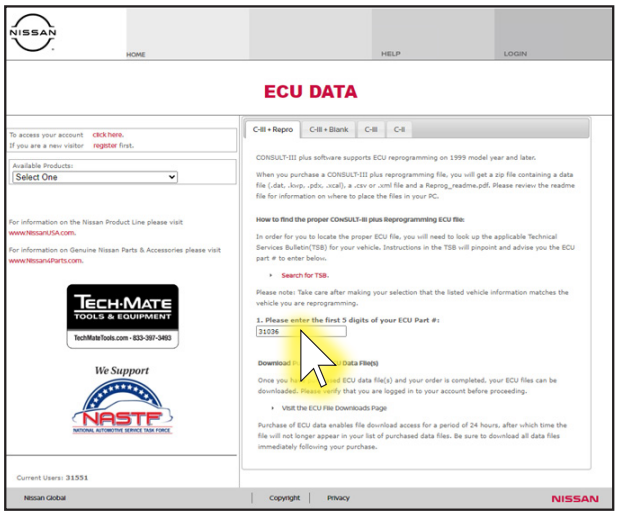
Once you open the Nissan Tech Info page, you need to select your country. Place your cursor on the country. Click to open the next page.



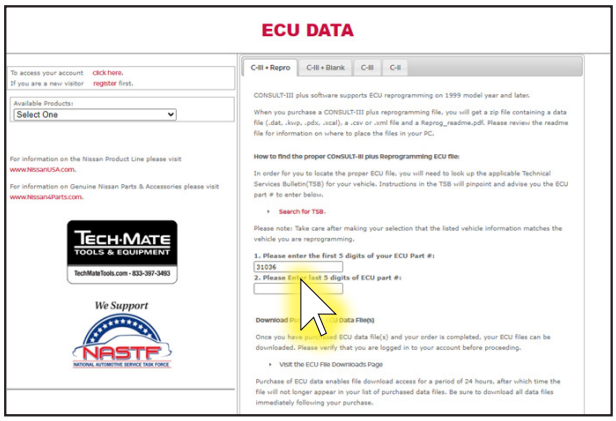
If you have visited the page before and created an account, this page may show up. Just click on the home button as shown above to be directed to the following page.



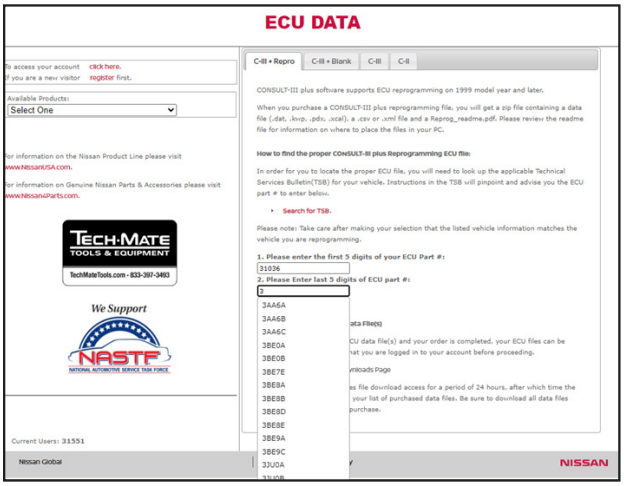
That should bring you to this page, click on the CONSULT II, CONSULT III plus, ECU "Blank" Programming and ECU Reprogramming box highlighted above.



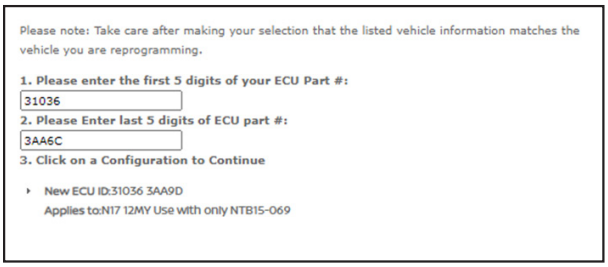
Once you are at the ECU DATA page type in the prefix in the box shown with the cursor to your TCM, it should be 31036. Then click.



Now it should open another box below the first box, this is where you type in the 5 digit suffix.



As you are typing the suffix you will see how many programs there are for your TCM, finish typing your suffix or select your suffix then click enter.



The new ECU ID appears if it needs updating. If your ECU shows it needs updating, it must be done! Verify the model year and download the required NTB (Nissan Technical Bulletin) for additional information if applicable.

Once the TCM is programmed, proceed with the following:

With the Consult 3+ or capable scan tool, read all the codes in all the modules, clear all codes and verify there are no codes.

Go to the Transmission section of the Scan tool and go to "Special Functions" or "Work Support" and execute the following:

- Erase Learning Value. (Follow Instructions on the Scan Tool)
- Reset the Oil Degradation to "0". (Follow Instructions on the Scan Tool)
- Start the engine.
- Warm the Transmission to 122° F (50°C)
- Turn off the A/C.
- Select Auxiliary Gearbox Clutch Point Learning. (Follow Instructions on the Scan Tool)
- When completed, shift into Park, Turn the ignition off. It is necessary to do the Auxiliary Gearbox Clutch Point Learning a total of two times.

Erase any Transmission codes that may have been stored.

Confirm the Transmission operates normally.

Note: It is normal after installation of the Transmission, when you come to a stop you may feel a double bump on take-off. This is the Torque Converter relearning, after a few stop and go cycles it will relearn.

- When completed, shift into Park, Turn the ignition off. It is necessary to do the Auxiliary Gearbox Clutch Point Learning a total of two times.

Erase any Transmission codes that may have been stored.

Confirm the Transmission operates normally.

Note: It is normal after installation of the Transmission, when you come to a stop you may feel a double bump on take-off. This is the Torque Converter relearning, after a few stop and go cycles it will relearn.

Manual Auxiliary Gearbox Clutch Point Learning

CAUTION: If clutch touch point learning is not performed, you may feel shift shock when the auxiliary transmission shifts.

NOTE: This manual procedure is only needed if the auto procedure is not available in C-III plus.

a. Start the engine and warm up the CVT fluid to 50°C (122°F).

NOTE: Confirm the CVT fluid temperature by "FLUID TEMP" in "Data Monitor".

b. Turn the air conditioner OFF.

c. Move the shift selector to P, turn the ignition OFF, and then wait 5 seconds.

d. Start the engine and allow it to idle for 5 seconds.

e. Turn the ignition OFF and then wait 30 seconds.

f. Perform Step "e" to Step "f" two more times (Total: Three times).

g. Start the engine.

h. Allow engine to idle for 30 seconds.

i. Move the shift selector to D.
j. Accelerate the vehicle from 0 km/h (0 MPH) to 65 km/h (40 MPH) at low throttle (0.5/8 – 1/8).
k. Decelerate the vehicle to 30 km/h (18 MPH) or less without using brakes.
l. Stop the vehicle and move the shift selector to P.
m. Turn the ignition OFF and wait 5 seconds or more.
n. Restart the engine.
o. Perform Step “j” to Step “o” four times (Total: Five times).
p. Move the shift selector to D.
q. Accelerate the vehicle from 0 km/h (0 MPH) to 45 km/h (28 MPH) at low throttle (0.5/8 – 1/8).
r. Stop the vehicle and move the shift selector to P.
s. Turn the ignition OFF for 5 seconds or more and then restart the engine.
t. Perform Steps “q” to Step “t” four times (Total: Five times).
u. Drive the vehicle and check that no shock occurs while shifting gears.