

# **Installation Guide**

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

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### **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 <a href="mailto:techsupport@tdreman.com">techsupport@tdreman.com</a>

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

### **Checking CVT Fluid for CVT-1/2/3 platforms**

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.
- 5. Press the tab on the CVT fluid level gauge (dipstick) to release the lock and pull out the CVT fluid level gauge from the CVT fluid charge pipe (filler tube).
- 6. Wipe fluid off the CVT fluid level gauge. Then rotate the CVT fluid level gauge 180° and re-insert it into the CVT charging pipe as far as it will go.
- 7. Remove the CVT fluid level gauge and check that the fluid level is within the specified range as shown below. If the fluid level is at or below the low side of the range, add the necessary specified NISSAN CVT fluid through the CVT charge pipe.



**CAUTION:** Only use specified NISSAN CVT fluid or the recommended fluid provided by TD REMAN. Failure to use, misuse, or mix fluid other than the specified fluid occurs, may cause serious malfunctions, and will void your warranty.

**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.

**CAUTION:** Clear CVT fluid deterioration with CONSULT 3 plus or CAPABLE Scan Tool after filling or changing CVT fluid.

- 8. Install the CVT fluid level gauge to the CVT fluid charging pipe until it locks.
- 9. Check all fluid levels.

#### **Charge Pipe Locations**









# Nissan CVT1 / CVT2 / CVT3 Fluid Service Information

### All CVT1/2/3 platforms use Nissan NS-2 fluid.

Note: The 2012 Versa Sedan is the only exception, it has the CVT-7 platform which uses NS-2 fluid. All 2013 and later CVT-7s' use NS-3 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., Rogue Select with CVT 2



NS-3 Fluid used in 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
1		11-17	1.6T	CVT2	RE0F10B	9.1 qts	N/A	NS-2
Juke	Nismo	15-17	1.6T	CVT8	RE0F10D	8.4 qts	N/A	NS-3
Marrima		08-14	3.5L	CVT3	RE0F09B	10.7 qts	N/A	NS-2
Maxima		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
NVZUU		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
Ougot		11-14	3.5L	CVT3	RE0F09B	10.7 qts	N/A	NS-2
Quest		15-17	3.5L	CVT8	RE0F10J	9.3 qts	N/A	NS-3
		09-15	2.5L	CVT2	RE0F10A	9.1 qts	N/A	NS-2
Rogue	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
Sentia		13-19	1.6L /1.8L	CVT8 /CVT7	REOF10D / REOF11A	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.



### Perform the applicable service when replacing TCM or transaxle assembly:

ТСМ	CVT Assembly	Service Pattern
Replaced with new TCM.	Did not replace the CVT.	"PATTERN A"
Did not replace the TCM.	Replaced with either new or used CVT.	
Replace with used TCM	Did not replace the CVT. Replaced with either new or used CVT.	"PATTERN B"
Replaced with new TCM.	Replaced with either new or used CVT.	"PATTERN C"

#### **Pattern A**

- 1. Shift the selector lever to "P" position after replacing TCM. Turn the ignition switch ON.
- Check that the shift position indicator in the combination meter turns ON.

Note: It indicates approximately 1 or 2 seconds after turning the ignition switch ON.

Check the following items if the shift position indicator does not turn ON. Repair or replace the shift position indicator if necessary.

- The harness between TCM and ROM ASSY in the transaxle assembly is open or short.
- Cable disconnected, loosened, or bent from the connector housing.

#### Pattern B

- 1. Turn ignition switch ON after replacing each part.
- 2. Start engine.

# **CAUTION:** Do not start driving. May cause serious damage to new transmission.

- 3. Select "Data monitor" in "TRANSMISSION".
- Warm up transaxle assembly until "ATFTEMP COUNT" indicates 47 [approximately 20°C (68°F)] or more, and then turn ignition switch OFF.
- 5. Turn ignition switch ON.

### **CAUTION:** Do not start driving. May cause serious damage to new transmission.

- 6. Select "Self Diagnostic Results" in "TRANSMISSION".
- 7. Shift the selector lever to "R" position.
- 8. Depress slightly the accelerator pedal (Pedal angle: 2/8) while depressing the brake pedal.
- 9. Select "Erase".
- 10. Release brake pedal and accelerator pedal.
- 11. Turn ignition switch OFF while keeping the selector lever in "R" position.
- 12. Wait approximately 10 seconds.
- 13. Turn ignition switch ON while keeping the selector lever in "R" position

- 14. Select "Special function" in "TRANSMISSION".
- 15. Verify the value on "CALIB DATA" in CONSULT-III is the same as the data listed in the table below:

# (Restart the procedure from step 3 if the values are not the same)

#### **CALIB DATA**

Item name	Display value
UNIT CLB ID 1 00	00
UNIT CLB ID 2 00	00
UNIT CLB ID 3 00	00
UNIT CLB ID 4 00	00
UNIT CLB ID 5 00	00
UNIT CLB ID 6 00	00

- 16. Shift the selector lever to "P" position.
- 17. Check that the shift position indicator in combination meter turns ON. (It indicates approximately 1 or 2 seconds after shifting the selector lever to "P" position.)

# Check the following items if shift position indicator does not turn ON. Repair or replace accordingly as necessary.

- The harness between TCM and ROM ASSY in transaxle assembly is open or shorted.
- Terminals disconnected, loose, or bent from connector housing.
- Power supply and ground of TCM.

#### Pattern C

- Replace transaxle assembly first, and then replace TCM
- 2. Perform the service of "PATTERN A".

# Note: Perform the service of "PATTERN B" if TCM is replaced first.

Once the Calibration Data has been reset scan all systems for codes and erase, select "Transmission", "Work Support" reset "Oil Degradation" to "0".

Confirm the transmission operates normally.