2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van

PERIODIC MAINTENANCE

CVT FLUID

Inspection

CHECKING CVT FLUID

The fluid level should be checked with the fluid warmed up to 50 to 80°C (122 to 176°F). The fluid level check procedure is as follows:

- 1. Check for fluid leakage.
- 2. With the engine warmed up, drive the vehicle in an urban area. When 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.
- 4. Apply parking brake firmly.
- 5. With engine at idle, while depressing brake pedal, move shift selector throughout the entire shift range.

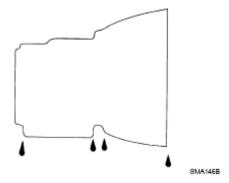


Fig. 81: Checking Fluid Leakage Courtesy of NISSAN NORTH AMERICA, INC.

6. Pull out the CVT fluid level gauge from the CVT fluid charging pipe after pressing the tab on the CVT fluid level gauge to release the lock.

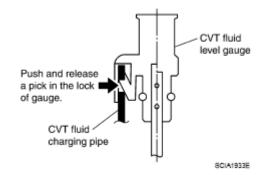


Fig. 82: Releasing CVT Fluid Charging Pipe Lock

2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van

Courtesy of NISSAN NORTH AMERICA, INC.

7. Wipe fluid off the CVT fluid level gauge. Insert the CVT fluid level gauge rotating 180° from the originally installed position, then securely push the CVT fluid level gauge until it meets the top end of the CVT fluid charging pipe.

CAUTION: When wiping away the CVT fluid level gauge, always use lint-free paper, not a cloth rag.

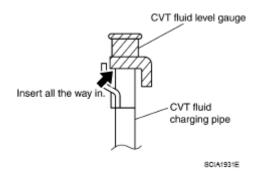


Fig. 83: Locating CVT Fluid Level Gauge Insertion Area Courtesy of NISSAN NORTH AMERICA, INC.

8. Place the selector lever in "P" or "N" and check that the fluid level is within the specified range.

CAUTION: When reinstalling CVT fluid level gauge, insert it into the CVT fluid charging pipe and rotate it to the original installation position until securely locked.

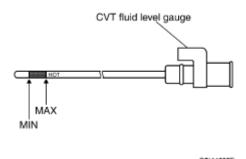


Fig. 84: Identifying Max And Min Marks On CVT Fluid Level Gauge Courtesy of NISSAN NORTH AMERICA, INC.

CVT FLUID CONDITION

Check CVT fluid condition.

• If CVT fluid is very dark or smells burned, check operation of CVT. Flush cooling system after repair of

2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van

CVT.

• If CVT fluid contains frictional material (clutches, brakes, etc.), replace radiator or flush cooler line using cleaning solvent and compressed air after repair of CVT. Refer to "CLEANING".

Fluid status	Conceivable cause	Required operation
	due to high temperatures	Replace the CVT fluid and check the CVT main unit and the vehicle for malfunctions (wire harnesses, cooler pipes, etc.)
Milky white or cloudy		Replace the CVT fluid and check for places where water is getting in.
		Replace the CVT fluid and check for improper operation of the CVT.



Fig. 85: Checking CVT Fluid Courtesy of NISSAN NORTH AMERICA, INC.

Changing

CAUTION: Replace drain plug gasket with new ones at the final stage of the operation when installing.

- 1. Remove drain plug from oil pan.
- 2. Drain CVT fluid into a suitable container.
- 3. Remove drain plug gasket from drain plug.
- 4. Install drain plug gasket to drain plug.

CAUTION: Do not reuse drain plug gasket.

5. Install drain plug to oil pan.

Drain plug - tightening torque: Refer to "EXPLODED VIEW".

2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van

6. Fill CVT fluid from CVT fluid charging pipe to the specified level.

CVT fluid: Refer to "GENERAL SPECIFICATION".

Fluid capacity: Refer to "GENERAL SPECIFICATION".

CAUTION:

- Use only Genuine NISSAN CVT Fluid NS-3. Do not mix with other fluid.
- Using CVT fluid other than Genuine NISSAN CVT Fluid NS-3 will deteriorate in driveability and CVT durability, and may damage the CVT, which is not covered by the warranty.
- When filling CVT fluid, take care not to spill on heat generating parts such as exhaust.
- Sufficiently shake the container of CVT fluid before using.
- 7. With the engine warmed up, drive the vehicle in an urban area.

NOTE: When ambient temperature is 20°C (68°F), it takes about 10 minutes for the CVT fluid to warm up to 50 - 80°C (122 - 176°F).

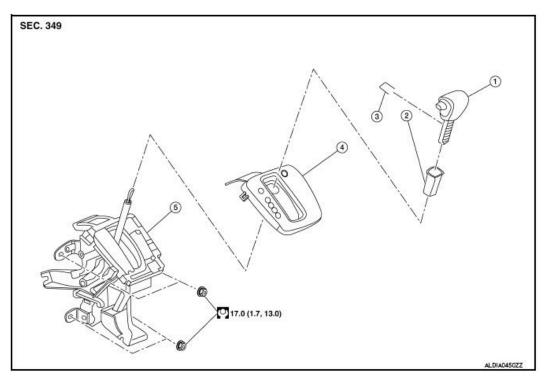
- 8. Check CVT fluid level and condition.
- 9. Repeat steps 1 to 5 if CVT fluid has been contaminated.
- 10. Select "Work Support" in "TRANSMISSION" using CONSULT.
- 11. Select "CONFORM CVTF DETERIORTN".
- 12. Touch "CLEAR".
- 13. Enter the date.
- 14. Touch "START".
- 15 Work end

REMOVAL AND INSTALLATION

CVT SHIFT SELECTOR

Exploded View

2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van



- Selector lever knob
- Position indication panel
- N·m (kg-m, in-lb)
- Knob cover
- 5. CVT shift selector assembly
- Lock pin
- 6. Position indicator bulb

Fig. 86: Exploded View Of CVT Shift Selector With Torque Specifications Courtesy of NISSAN NORTH AMERICA, INC.

Removal and Installation

REMOVAL

CAUTION: Always apply the parking brake before performing removal and installation.

- 1. Disconnect battery cable from negative terminal. Refer to "EXPLODED VIEW".
- 2. Move the shift selector to "N" position.
- 3. Slide the knob cover (1) down.

CAUTION: Do not damage the knob cover (1).

- 4. Pull out the lock pin (2).
- 5. Pull the shift selector knob (3) and knob cover upwards to remove them.

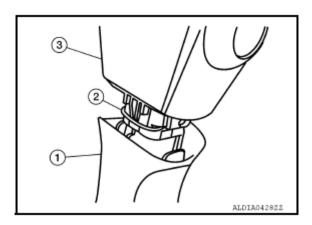


Fig. 87: Identifying Shift Selector, Knob Cover And Lock Pin Courtesy of NISSAN NORTH AMERICA, INC.

- 6. Remove the instrument lower panel. Refer to "INSTRUMENT LOWER PANEL: REMOVAL AND INSTALLATION".
- 7. Disconnect the shift selector harness connector.
- 8. Move the shift selector to "P" position.
- 9. Remove the control cable from the shift selector assembly. Refer to "**REMOVAL AND INSTALLATION**".
- 10. Remove shift selector assembly nuts.
- 11. Remove the shift selector assembly.

INSTALLATION

Installation is in the reverse order of removal.

• When connecting the control cable (1) to the shift selector assembly (2), face the grooved surface of the rib (A) up and insert the control cable until it stops.

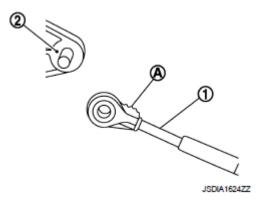


Fig. 88: Identifying Control Cable, CVT Shift Selector Assembly And Rib Courtesy of NISSAN NORTH AMERICA, INC.

2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van

- Follow the procedure below and place the shift selector knob onto the shift selector.
- 1. Install the lock pin (2) onto the shift selector knob (3).
- 2. Install the knob cover (1) onto the selector lever knob.
- 3. Press the shift selector knob onto the shift selector until it clicks.

CAUTION:

- When pressing the shift selector knob onto the shift selector, do not press the shift selector knob button.
- Do not strike the shift selector knob to press it into place.
- 4. After installing shift selector knob, pull up on the shift selector knob to check that it does not become disconnected.

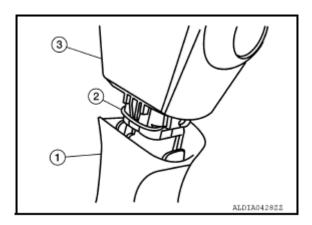


Fig. 89: Identifying Shift Selector, Knob Cover And Lock Pin Courtesy of NISSAN NORTH AMERICA, INC.

Inspection

INSPECTION AFTER INSTALLATION

Check the CVT shift selector position. Refer to "INSPECTION".

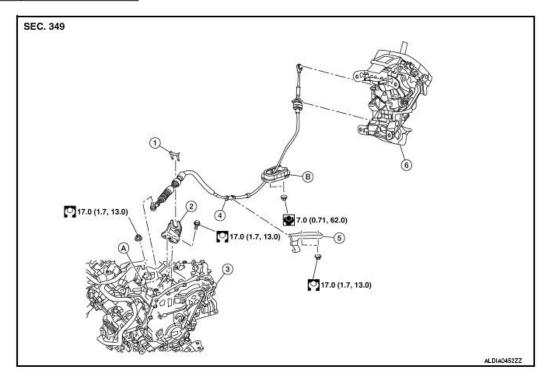
If a malfunction is found, adjust the CVT position. Refer to "ADJUSTMENT".

CONTROL CABLE

Exploded View

2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van

Symbol	Description	
Ó	N·m (kg-m, ft-lb)	
•	N·m (kg-m, in-lb)	
3	Always replace after disassembly.	



- 1. Lock plate
- 4. Control cable
- A: Manual lever

- Bracket
- Bracket
- B: Grommet

- 3. Transaxle assembly
- 6. CVT shift selector assembly

Fig. 90: Exploded View Of Control Cable With Torque Specifications Courtesy of NISSAN NORTH AMERICA, INC.

Removal and Installation

REMOVAL

CAUTION: Always apply the parking brake before performing removal and installation.

- 1. Remove the battery tray. Refer to "REMOVAL AND INSTALLATION (BATTERY TRAY)".
- 2. Remove front air duct and air ducts. Refer to "EXPLODED VIEW".
- 3. Remove the control cable installation nut from the manual lever.
- 4. Remove the lock plate (1).

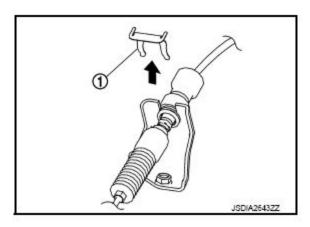


Fig. 91: Removing Lock Plate Courtesy of NISSAN NORTH AMERICA, INC.

- 5. Remove the shift selector finisher. Refer to "EXPLODED VIEW".
- 6. Remove the center console assembly. Refer to "REMOVAL AND INSTALLATION".
- 7. Remove the control cable from the shift selector assembly.
- 8. Remove nuts from grommet (2).

(1) : Control cable : Front

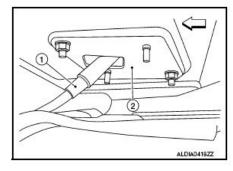


Fig. 92: Identifying Control Cable And Grommet Courtesy of NISSAN NORTH AMERICA, INC.

9. Remove the control cable (1) from the bracket (2).

<□ : Front

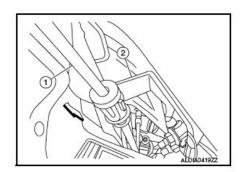


Fig. 93: Identifying Control Cable And Bracket Courtesy of NISSAN NORTH AMERICA, INC.

2014 TRANSMISSION Automatic Transmission (CVT) - NV 200 Compact Cargo Van

- 10. Remove the control cable from the vehicle.
- 11. Remove bracket.

INSTALLATION

Installation is in the reverse order of removal.

• When connecting the control cable (1) to the shift selector assembly (2), face the grooved surface of the rib (A) up and insert the control cable until it stops.

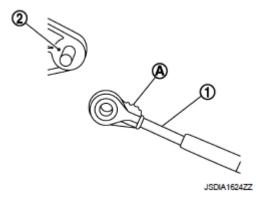


Fig. 94: Identifying Control Cable, CVT Shift Selector Assembly And Rib Courtesy of NISSAN NORTH AMERICA, INC.

• Install the control cable socket (A) onto the shift selector assembly.

CAUTION:

- Place the control cable socket onto the shift selector assembly, then fasten it in place from above.
- Check that the pulling on the control cable socket does not disconnect it.

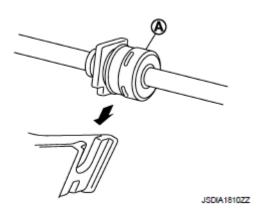


Fig. 95: Installing Socket Onto CVT Shift Selector Courtesy of NISSAN NORTH AMERICA, INC.