5. Road Test

A: INSPECTION

1. GENERAL PRECAUTION

Road tests should be conducted to properly diagnose the condition of CVT.

CAUTION:

Always observe the local traffic laws when performing the test.

2. D RANGE SHIFT FUNCTION

Make sure that the engine speed is 950 — 1,400 r/min while driving on the level road at 50 km/h (31 MPH) after accelerating from halting up to 1/4 of accelerator opening angle. Then stop the vehicle. Check normal gear change has occurred while the vehicle speed changes from a constant speed to zero.

3. KICK-DOWN FUNCTION

Check if engine speed will rise by operating the accelerator opening angle to the full from a constant speed of 50 km/h (31 MPH) or more.

4. ENGINE BRAKE OPERATION

- Drive in "6th speed of manual mode" [70 80 km/h (43 50 MPH)], and shift down from 6th to 5th. Check if the indicator of combination meter switches "6" \rightarrow "5". At the same time, check the engine brake in 5th gear.
- Drive in "5th speed of manual mode" [60 70 km/h (37 43 MPH)], and shift down from 5th to 4th. Check if the indicator of combination meter switches " $5" \rightarrow "4"$. At the same time, check the engine brake in 4th gear.
- Drive in "4th speed of manual mode" [50 60 km/h (31 37 MPH)], and shift down from 4th to 3rd. Check if the indicator of combination meter switches "4" \rightarrow "3". At the same time, check the engine brake in 3rd gear.
- Drive in "3rd speed of manual mode" [40 50 km/h (25 31 MPH)], and shift down from 3rd to 2nd. Check if the indicator of combination meter switches "3" \rightarrow "2". At the same time, check the engine brake in 2nd gear.
- Drive in "2nd speed of manual mode" [20 30 km/h (12 19 MPH)], and shift down from 2nd to 1st. Check if the indicator of combination meter switches "2" \rightarrow "1". At the same time, check the engine brake in 1st gear.

5. LOCK-UP FUNCTION

When the accelerator is lightly depressed while driving on a flat road in "D" range, check that rpm does not change abruptly.

6. P RANGE OPERATION

Stop the vehicle on an uphill grade of 5% or more and shift to the "P" range and apply the parking brake. Check that the vehicle does not move when the parking brake is released.

7. NOISE AND VIBRATION

Check for noise and vibration during driving at a constant speed, accelerating, decelerating and manual shift operation.

8. OIL LEAKAGE

After the driving test, inspect for leakage of CVTF and differential gear oil from the transmission body.

9. Auto Start Stop

NOTE:

- Perform inspection without using a lift and with the wheels in full contact with the ground.
- Measurement should be performed at CVTF temperature of 60°C (140°F) or more.
- 1) Start the engine.
- 2) Using the Subaru Select Monitor, check that Auto Start Stop cooperation prohibition demand is ON. <Ref. to CVT(HEV)(diag)-15, OPERATION, Subaru Select Monitor.>

NOTE:

- If "Auto Start Stop cooperation prohibition demand" is "OFF", turn it to "ON".
 - (1) Start the engine.
 - (2) Check that no DTCs are recorded in TCM, ECM, VDCCM, BECM, DMCM and HPCM.
 - (3) Check that ATF OIL TEMP or AWD light is not blinking or illuminating.
 - (4) Check that the CVTF temperature reaches 60 90°C (140 194°F). <Ref. to CVT(HEV)(diag)-15, OPERATION, Subaru Select Monitor.>
 - (5) Drive in D range at [20 30 km/h (12 19 MPH)], and slowly depress the brake pedal to decelerate the vehicle.
 - (6) Check that «Auto Start Stop cooperation prohibition demand» is "ON". <Ref. to CVT(HEV)(diag)-15, OPERATION. Subaru Select Monitor.>
 - When the cooperation prohibition demand is "OFF", repeat the procedure from step (1).
- 3) Shift the select lever to "D" range.
- 4) Set the vehicle to Auto Start Stop condition, and keep the condition for 5 seconds or more.
- 5) Release the brake pedal, depress the accelerator pedal firmly and start the engine to accelerate.
- 6) Stop the vehicle by depressing the brake pedal, and set the vehicle to Auto Start Stop condition.
- 7) Shift the select lever to "N" range.
- 8) Repeat steps from 3) to 7) five times.
- 9) Check that no shift shock occurs during engine starting.

If any shift shock occurred, repeat the steps five more times.