

### 4. Road Test

#### A: INSPECTION

##### 1. GENERAL PRECAUTION

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

NOTE:

When performing the test, do not exceed the posted speed limit.

##### 2. D RANGE SHIFT FUNCTION

Check shifting between 1st  $\leftrightarrow$  2nd  $\leftrightarrow$  3rd  $\leftrightarrow$  4th while driving on normal city streets.

##### 3. D RANGE SHIFT SHOCK

Check the shock level when shifting up during normal driving.

##### 4. KICK-DOWN FUNCTION

Check kick-down for each gear. Check the shock level during kick-down at the same time.

##### 5. ENGINE BRAKE OPERATION

- Drive in 4th gear of D range [50 — 60 km/h (31 — 37 MPH)], and shift down to D  $\leftrightarrow$  3rd range to check the engine brake in 3rd gear.
- Drive in 3rd gear of 3 range [40 — 50 km/h (25 — 31 MPH)], and shift down from 3rd  $\leftrightarrow$  to 2nd range to check the engine brake in 2nd gear.
- Drive in 2nd gear of 2nd range [20 — 30 km/h (12 — 19 MPH)], and shift down from 2nd  $\leftrightarrow$  to 1st range to check the 1st gear engine brake.

##### 6. LOCK-UP FUNCTION

- Check that rpm does not change sharply when the accelerator pedal is lightly depressed while driving in "D" range on flat roads at 60 km/h (37 MPH).

Check slip lock-up with following procedure. Subaru Select Monitor is required for judgment.

Before starting the check, make sure that no DTC is displayed using the Subaru Select Monitor. If there is a DTC, perform the corrective action according to the DTC, and perform the check after reconfirming that there is no DTC.

1) The check is to be performed on a flat and straight road or on a free roller.

NOTE:

- Slip lock-up will not operate when the vehicle is lifted up off of its wheels, since there is no surface resistance.
- Even when checking on the free roller, the driving resistance will be slightly inadequate. It will be easier to check if the foot brake is stepped on lightly while performing the judgment.

2) Connect the Subaru Select Monitor.

3) Check the ATF temperature using the Subaru Select Monitor.

NOTE:

- Make sure that the ATF temperature is between 50 — 100°C (122 — 212°F).
- If the temperature is low, warm-up the ATF by running the vehicle.

4) Start the engine, so that the lock-up duty can be read on the data display of the Subaru Select Monitor.

5) Drive the vehicle at a constant speed of 35 — 40 km/h (22 — 25 MPH).

6) Read the lock-up duty while vehicle is running.

**Specification:**

**25 — 45%**

NOTE:

- The reading may be slightly lower on a free roller.
- Slip lock-up control is not operating when the lock-up duty is less than 5%, or when the lock-up duty goes down immediately after starting to rise. In these cases, improper ATF or deterioration of the ATF may be the cause. Check the amount of ATF or replace the fluid, then recheck.

##### 7. P RANGE OPERATION

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

##### 8. NOISE AND VIBRATION

Check for noise and vibration while driving and during shifting.

##### 9. CLIMBING CONTROL FUNCTION

- Check that the gear remains in 3rd when going uphill.
- Check that the gear remains in 3rd when applying the brakes while going downhill.

##### 10. TRANSFER CLUTCH

Check for tight corner braking phenomenon when the vehicle is moved forward with the steering fully turned.

##### 11. OIL LEAKS

After the driving test, inspect for oil leaks.