

## 4. Road Test

### A: INSPECTION

#### 1. GENERAL PRECAUTION

The road test is important in accurately diagnosing the condition of an automatic transmission.

NOTE:

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

#### 2. D RANGE SHIFT FUNCTION

Check shifting between 1st ↔ 2nd ↔ 3rd ↔ 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

- Check the 3rd gear engine brake when shifting down from 4th to 3rd range while driving in 4th gear of manual mode [50 — 60 km/h (31 — 37 MPH)].
- Check the 2nd gear engine brake when shifting down from 3rd to 2nd range while driving in 3rd gear of manual mode [40 — 50 km/h (25 — 31 MPH)].
- Check the 1st gear engine brake when shifting down from 2nd to 1st range while driving in 2nd gear of manual mode [20 — 30 km/h (12 — 19 MPH)].

#### 6. 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.
  - 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. Recheck to see that the DTC has been cleared, then start the slip lock-up check.
- 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.
- When checking on the free roller, the driving resistance will be slightly inadequate. It will be easier to judge if the foot brake is lightly applied while performing the check.

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 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 if the lock-up duty is 5% or less, 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. TRANSFER CLUTCH

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

#### 10. OIL LEAKAGE

After the driving test, inspect for oil leaks.