

**AA80E AUTOMATIC TRANSMISSION > AUTOMATIC TRANSMISSION SYSTEM > INITIALIZATION**

**PERFORM ROAD TEST TO ALLOW TCM TO LEARN**

**CAUTION:**

- Perform the following procedures while strictly observing all traffic laws and speed limits.
- Do not accelerate or decelerate rapidly.

a. The "Road Test" procedure is as follows:

i. Warm up the engine.

ii. According to the parts replaced, perform the road test shown below.

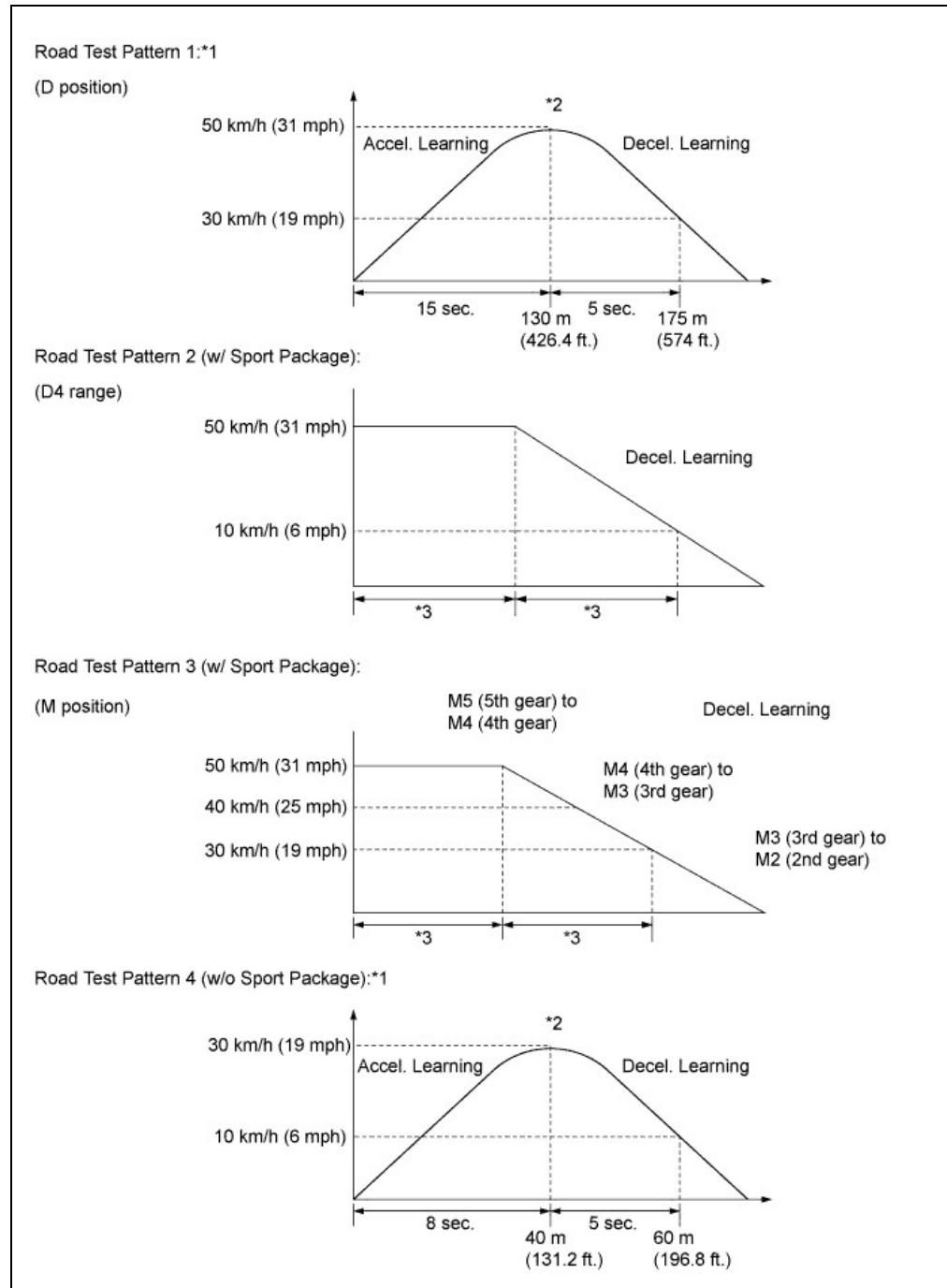
Part Replaced	Road Test (w/ Sport Package)	Road Test (w/o Sport Package)
<ul style="list-style-type: none"> <li>• Automatic transmission assembly</li> <li>• TCM</li> <li>• Valve body assembly</li> <li>• Shift solenoid valve SL3</li> <li>• Engine assembly</li> <li>• ECM</li> </ul>	<p>Perform pattern 1, 2 and 3</p> <p><b>Pattern 1:*1</b> With shift lever in D, after gradually accelerating to 50 km/h (31 mph) or more, gradually decelerate to approx. 30 km/h (19 mph)</p> <p><b>Pattern 2:</b> When driving at approximately 50 km/h (31 mph) with the D4 range selected, release the accelerator pedal to allow the vehicle to decelerate gradually to approximately 10 km/h (6 mph)</p> <p><b>Pattern 3:*2</b> Accelerate to a speed higher than 50 km/h (31</p>	<p>Perform pattern 1 and 4</p> <p><b>Pattern 1:*1</b> With shift lever in D, after gradually accelerating to 50 km/h (31 mph) or more, gradually decelerate to approx. 30 km/h (19 mph)</p> <p><b>Pattern 4:*3</b> With S4 range selected, after gradually accelerating to 30 km/h (19 mph) or more, gradually decelerate to approx. 10 km/h (6 mph)</p>

	<p>mph). While gradually decelerating with shift lever in M and 5th gear selected, downshift to 4th gear at approx. 50 km/h (25 mph), to 3rd gear at approx. 40 km/h (25 mph), and to 2nd gear at approx. 30 km/h (19 mph).</p>	
<ul style="list-style-type: none"> <li>• Shift solenoid valve SL1</li> <li>• Shift solenoid valve SL2</li> <li>• Shift solenoid valve SL4</li> <li>• Shift solenoid valve SL5</li> </ul>	<p>Perform pattern 1 and 3</p> <p><b>Pattern 1:*1</b> With shift lever in D, after gradually accelerating to 50 km/h (31 mph) or more, gradually decelerate to approx. 30 km/h (19 mph)</p> <p><b>Pattern 3:*2</b> Accelerate to a speed higher than 50 km/h (31 mph). While gradually decelerating with shift lever in M and 5th gear selected, downshift to 4th gear at approx. 50 km/h (25 mph), to 3rd gear at approx. 40 km/h (25 mph), and to 2nd gear at approx. 30</p>	<p>Perform pattern 1</p> <p><b>Pattern 1:*1</b> With shift lever in D, after gradually accelerating to 50 km/h (31 mph) or more, gradually decelerate to approx. 30 km/h (19 mph)</p>

	km/h (19 mph).	
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**HINT:**

- \*1: After gradually accelerating over a distance of approximately 130 m (426.4 ft.) for a period of approximately 15 seconds, gradually decelerate over a distance of approximately 45 m (147.6 ft.) for a period of approximately 5 seconds.
- \*2: Accelerate the vehicle to a speed slightly higher than 50 km/h (31 mph).  
Move the shift lever to M and select 5th gear.  
Release the accelerator pedal and allow the vehicle to decelerate gradually.  
When the vehicle decelerates to approximately 50 km/h (31 mph), downshift to 4th gear.  
When the vehicle decelerates to approximately 40 km/h (25 mph), downshift to 3rd gear.  
When the vehicle decelerates to approximately 30 km/h (19 mph), downshift to 2nd gear.
- \*3: After gradually accelerating over a distance of approximately 40 m (131.2 ft.) for a period of approximately 8 seconds, gradually decelerate over a distance of approximately 20 m (65.6 ft.) for a period of approximately 5 seconds.
- When decelerating, apply the brakes as necessary to adjust the vehicle speed.

**HINT:**

- \*1: The speed, time and distance values are approximate values.
- \*2: After accelerating, the deceleration does not need to be performed immediately.
- \*3: There is no specified time or distance.

- iii. Repeat the road tests until the shift shock and engine speed overrun (engine speed flare when shifting) reach an acceptable level.

**NOTICE:**

When repeating the acceleration/deceleration cycle of a road test pattern, bring the vehicle to a complete stop before accelerating again.

## RESET MEMORY

### NOTICE:

- Perform Reset Memory (AT initialization) when replacing the engine assembly or ECM.
- Reset Memory can be performed only with the Techstream.
- Reset Memory cannot be completed by only disconnecting the cable from the negative (-) battery terminal.

### HINT:

The TCM memorizes the vehicle conditions when the ECT controls the automatic transmission assembly and engine assembly.

a. The "Reset Memory" procedure is as follows:

- i. Turn the engine switch off.
- ii. Connect the Techstream to the DLC3.
- iii. Turn the engine switch on (IG).
- iv. Turn the Techstream on.
- v. Enter the following menus: Powertrain / ECT / Utility / Reset Memory.

### NOTICE:

After performing Reset Memory, be sure to perform Road Test (Refer to [AA80E AUTOMATIC TRANSMISSION > AUTOMATIC TRANSMISSION SYSTEM > ROAD TEST\(200909 - \)](#)) described previously.

