

# ROAD TEST

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B3E051701074W03

## Warning

- When performing a road test, be aware of other vehicles, people, impediments to avoid an accident.

## Note

- When the legal speed limit must be exceeded, use a chassis dynamometer instead of performing a road test.

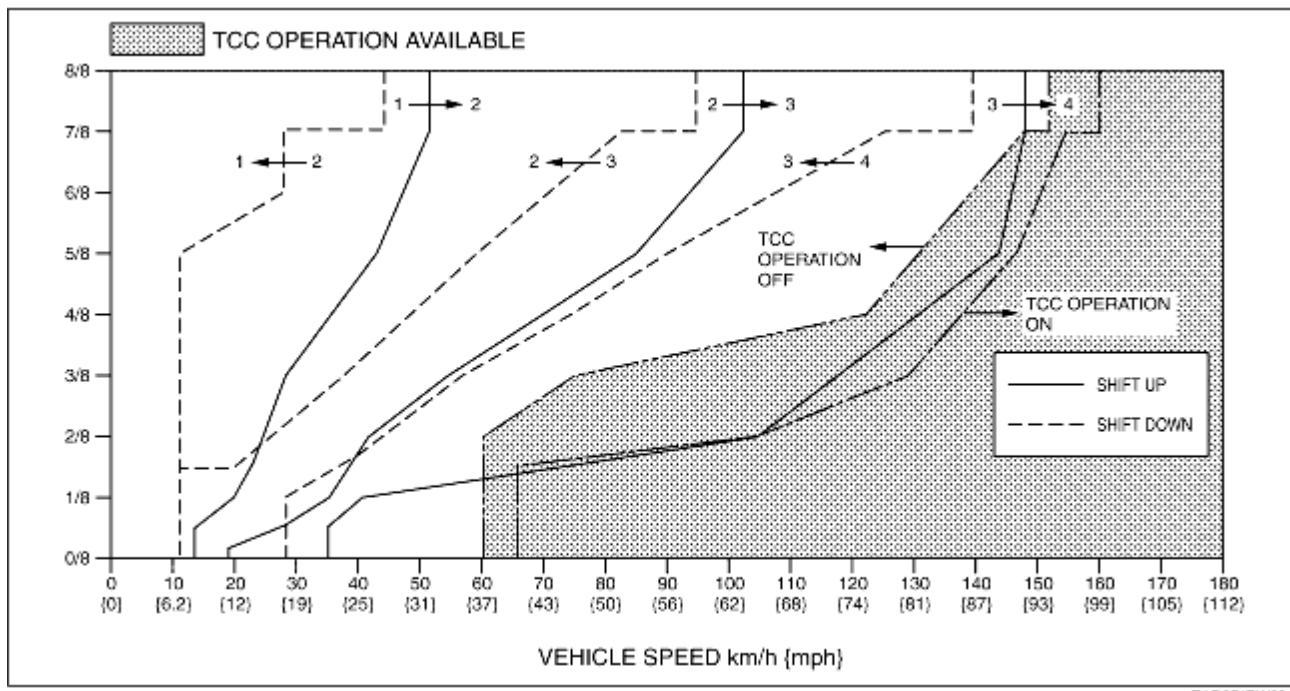
## Road Test Preparation

1. Inspect the engine coolant level. (See [COOLING SYSTEM SERVICE WARNINGS.](#)) (See [ENGINE COOLANT LEVEL INSPECTION.](#))
2. Inspect the engine oil level. (See [ENGINE OIL LEVEL INSPECTION \[ZJ, Z6\].](#)) (See [ENGINE OIL LEVEL INSPECTION \[LF\].](#))
3. Inspect the ATF level. (See [Automatic Transaxle Fluid \(ATF\) Level Inspection.](#))
4. Inspect the ignition timing. (See [Ignition Timing Inspection.](#)) (See [Ignition Timing Inspection.](#))
5. Inspect the idle speed. (See [Idle Speed Inspection.](#)) (See [Idle Speed Inspection.](#))
6. Bring up the engine and transaxle to normal operating temperature.

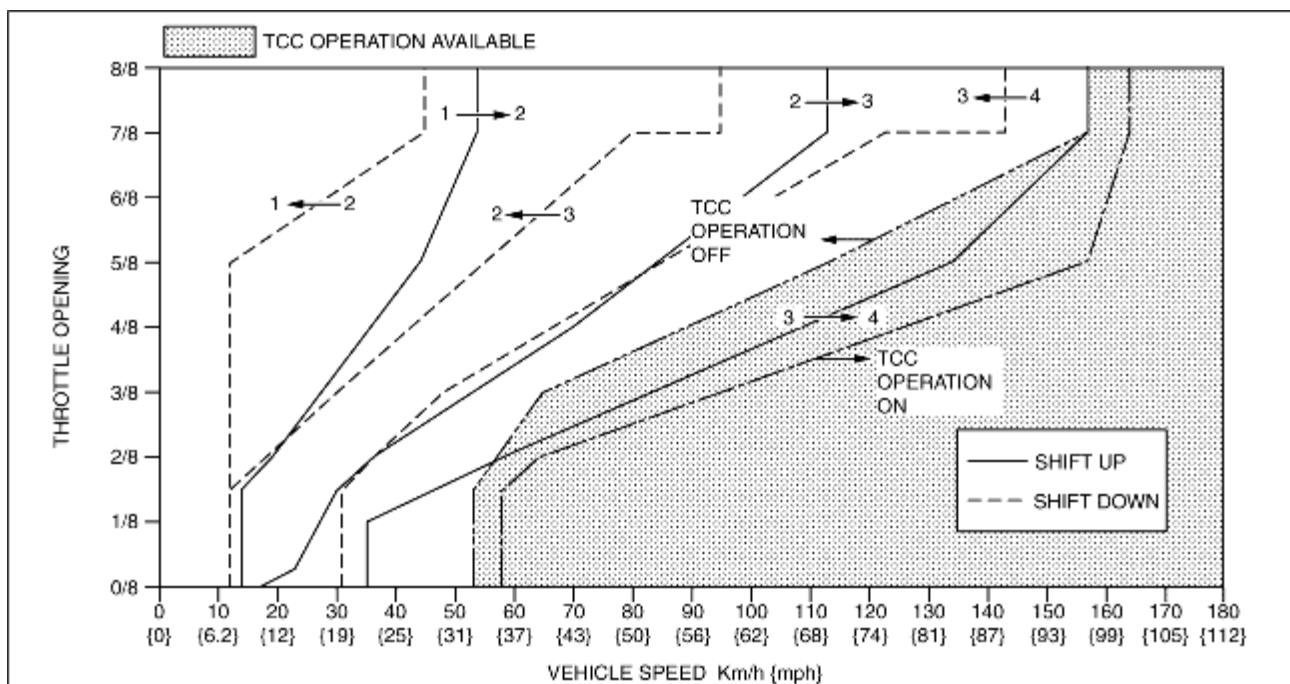
## Shift Diagram

### D range (normal mode)

**Z6**



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## D Range Test

1. Perform road test preparation. (See [Road Test Preparation.](#))
2. Shift the selector lever to D range.
3. Accelerate the vehicle at half and wide open.
4. Verify that 1→2, 2→3, and 3→4 upshifts and downshifts are obtained. The shift points must be as shown in the table below.

• If there is any malfunction, inspect the PCM and ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE.](#))

5. Drive the vehicle in 4GR, 3GR, and 2GR and verify that kickdown occurs for 4→3, 3→2, 2→1 downshifts, and that the shift points are as shown in the table below.

- If there is any malfunction, inspect the PCM and ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE.](#))

6. Decelerate the vehicle and verify that engine braking effect is felt in 2GR, 3GR and 4GR.

- If there is any malfunction, inspect the PCM and ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE.](#))

7. Drive the vehicle and verify that TCC operation is obtained. The operation points must be as shown in the table below.

- If there is any malfunction, inspect the PCM and ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE.](#))

**Vehicle speed at shift point table**

Item				Engine			
				Z6		LF	
Range	Mode	Throttle condition	Shift	Vehicle speed (km/h {mph})	Turbine speed (rpm)	Vehicle speed (km/h {mph})	Turbine speed (rpm)
D	NORMAL	Wide open	D <sub>1</sub> →D <sub>2</sub>	51-57 {32-35}	5,550-6,150	53-59 {33-36}	5,400-5,950
			D <sub>2</sub> →D <sub>3</sub>	100-108 {62-66}	5,800-6,200	111-119 {69-73}	6,000-6,400
			D <sub>3</sub> →D <sub>4</sub>	145-155 {90-96}	5,600-5,950	154-164 {90-96}	5,600-5,900
			TCC ON (D <sub>4</sub> )	157-167 {98-103}	4,400-4,650	161-171 {100-106}	4,250-4,450
		Half open	D <sub>1</sub> →D <sub>2</sub>	31-40 {20-24}	3,350-4,350	31-40 {20-24}	3,100-4,100
			D <sub>2</sub> →D <sub>3</sub>	61-79 {38-48}	3,500-4,550	59-79 {37-48}	3,200-4,250
			D <sub>3</sub> →D <sub>4</sub>	119-142 {74-88}	4,550-5,450	94-123 {59-76}	3,400-4,450
			TCC ON (D <sub>4</sub> )	127-148 {79-91}	3,550-4,100	110-142 {69-88}	2,900-3,700
		Closed	D <sub>4</sub> →D <sub>3</sub>	25-31 {16-19}	700-850	28-34 {18-21}	750-850
			D <sub>3</sub> →D <sub>1</sub>	8-14 {5-8}	350-500	9-15 {6-9}	350-500
		Kickdown	D <sub>4</sub> →D <sub>3</sub>	135-145 {84-89}	3,800-4,000	138-148 {86-91}	3,650-3,850
			D <sub>3</sub> →D <sub>2</sub>	90-98 {56-60}	3,500-3,750	91-99 {57-61}	3,300-3,550
			D <sub>2</sub> →D <sub>1</sub>	41-47 {26-29}	2,400-2,700	42-48 {27-29}	2,300-2,550
		Wide open	D <sub>1</sub> →D <sub>2</sub>	51-57 {32-35}	5,550-6,150	53-59 {33-36}	5,400-5,950
			D <sub>2</sub> →D <sub>3</sub>	100-108 {62-66}	5,800-6,200	111-119 {69-73}	6,000-6,400

	POWER		D <sub>3</sub> →D <sub>4</sub>	145-155 {90-96}	5,600-5,950	154-164 {90-96}	5,600-5,900
		Half open	D <sub>1</sub> →D <sub>2</sub>	31-40 {20-24}	3,350-4,350	32-42 {20-26}	3,300-4,250
			D <sub>2</sub> →D <sub>3</sub>	61-79 {38-48}	3,500-4,550	78-95 {49-58}	4,200-5,150
			D <sub>3</sub> →D <sub>4</sub>	119-142 {74-88}	4,550-5,450	116-139 {72-86}	4,200-5,000
		Closed	D <sub>4</sub> →D <sub>3</sub>	25-31 {16-19}	700-850	37-43 {23-26}	1,000-1,100
			D <sub>3</sub> →D <sub>1</sub>	8-14 {5-8}	350-500	9-15 {6-9}	350-500
		Kickdown	D <sub>4</sub> →D <sub>3</sub>	135-145 {84-89}	3,800-4,000	138-148 {86-91}	3,650-3,850
			D <sub>3</sub> →D <sub>2</sub>	90-98 {56-60}	3,500-3,750	91-99 {57-61}	3,300-3,550
			D <sub>2</sub> →D <sub>1</sub>	41-47 {26-29}	2,400-2,700	42-48 {27-29}	2,300-2,550

## M Range Test

1. Perform road test preparation. (See [Road Test Preparation.](#))
2. Shift the selector lever to M range.
3. Verify that 1→2, 2→3, and 3→4 upshifts and 4→3, 3→2, and 2→1 downshifts are obtained by manual shifting of the selector lever forward and back.

• If there is any malfunction, inspect the PCM and ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE.](#))

4. Decelerate the vehicle and verify that 4→3, 3→1 downshifts are obtained. The shift points must be as shown in the table below.

• If there is any malfunction, inspect the PCM and ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE.](#))

5. Decelerate the vehicle and verify that engine braking effect is felt in all gears.

• If there is any malfunction, inspect the PCM and ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE.](#))

**Vehicle speed at shift point table**

Item				Engine			
				Z6		LF	
Range	Mode	Throttle condition	Shift	Vehicle speed km/h {mph}	Turbine speed (rpm)	Vehicle speed km/h {mph}	Turbine speed (rpm)
M	Manual	All round	M <sub>4</sub> →M <sub>3</sub>	28-34 {18-21}	800-900	28-34 {18-21}	750-850
			M <sub>3</sub> →M <sub>1</sub>	5-11 {4-6}	200-400	9-15 {6-9}	350-500

## P Position Test

1. Shift into P position on a gentle slope. Release the brake and verify that the vehicle does not roll.

- If there is any malfunction, inspect the ATX. (See [SYMPTOM TROUBLESHOOTING ITEM TABLE](#).)