

**Warning**

- When performing a road test, always verify the safety of the surrounding area before performing the test.

**Caution**

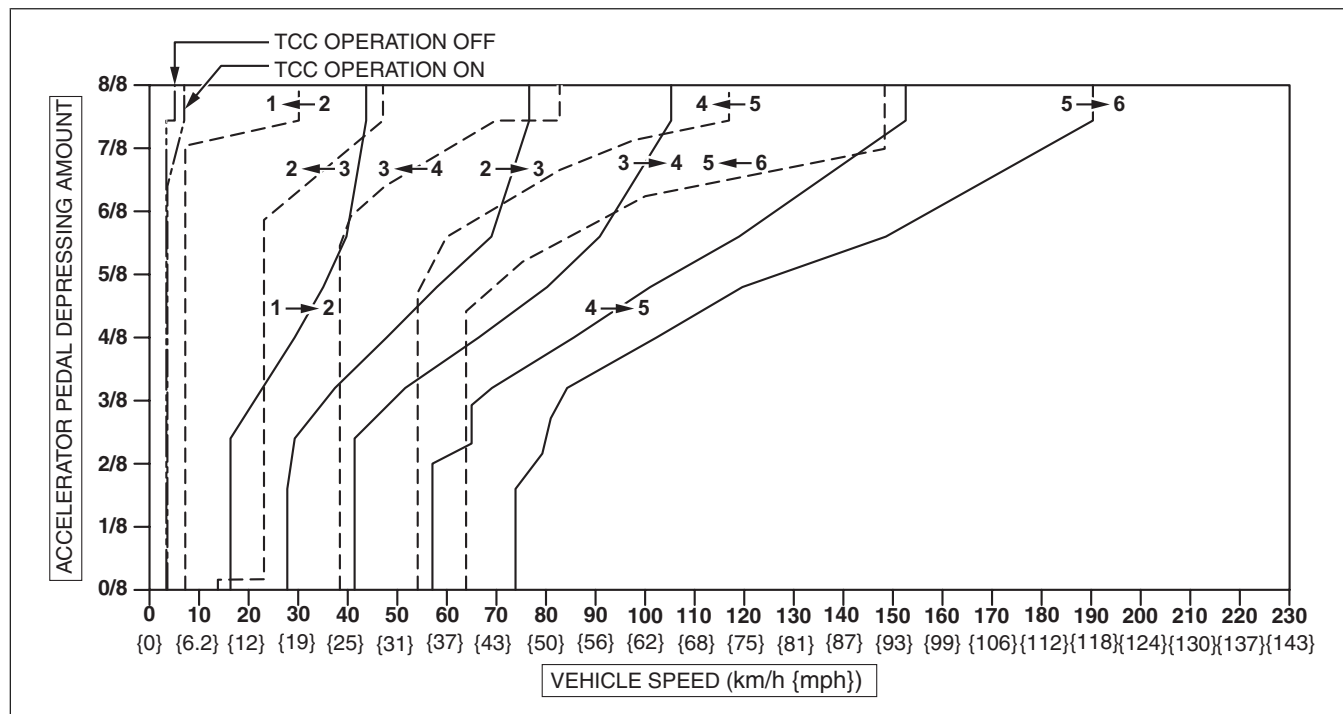
- Vehicle specifications differ depending on the vehicle identification number (VIN).
  - Type A VIN:
    - JM0 KE\*\*\*\*\* 100001—
    - JM6 KE\*\*\*\*\* 100001—
    - JM8 KE\*\*\*\*\* 100001—
    - JMZ KE\*\*\*\*\* 100001—
  - Type B VIN:
    - JM0 KE\*\*\*\*\* 200001—
    - JM6 KE\*\*\*\*\* 200001—
    - JM8 KE\*\*\*\*\* 200001—
    - JMZ KE\*\*\*\*\* 200001—

**Note**

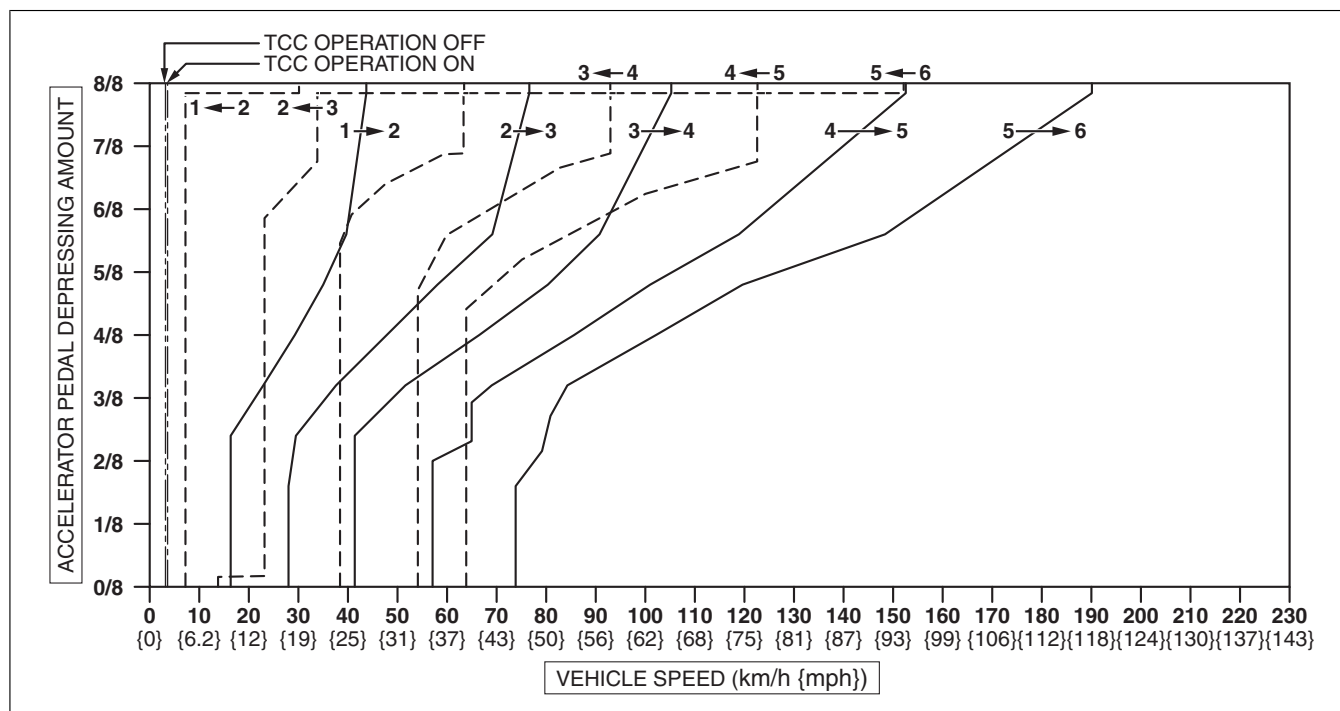
- When performing a road test requiring speeds which exceed the legal speed limit, use a dynamometer.

**Road test preparation**

1. Inspect the engine coolant level. (See ENGINE COOLANT LEVEL INSPECTION [SKYACTIV-D 2.2].)
2. Inspect the engine oil level. (See ENGINE OIL LEVEL INSPECTION [SKYACTIV-D 2.2].)
3. Inspect the ATF level. (See AUTOMATIC TRANSAXLE FLUID (ATF) INSPECTION [GW6A-EL, GW6AX-EL].)
4. Inspect the idle speed. (See ENGINE TUNE-UP [SKYACTIV-D 2.2].)
5. Verify that no DTCs are stored.

**Shift diagram (D position, normal mode)****Type A VIN**

## Type B VIN



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### D position test

1. Perform road test preparations. (See Road test preparation.)
  2. Warm up the transaxle.
  3. Select D position.
  4. Inspect the shift point for the D position in normal mode.
    - If there is any malfunction, refer to symptom troubleshooting and verify the malfunction symptom.
- (1) Depress the accelerator pedal and start the vehicle, and verify that the gears shift from 1st to 2nd, 2nd to 3rd, 3rd to 4th, 4th to 5th, and 5th to 6th. In addition, verify that the vehicle speed corresponds to the shift point when shifting.
  - (2) Release the accelerator pedal while driving in 6th gear, and verify that the gears shift from 6th to 5th, 5th to 4th, 4th to 3rd, 3rd to 2nd, and 2nd to 1st. In addition, verify that the vehicle speed corresponds to the shift point when shifting.

### Note

- When the accelerator pedal is fully released quickly, shifting is not performed according to the shift pattern because the gear being used may be maintained.
  - When decelerating by strongly depressing the brake pedal, shifting is not performed according to the shift pattern because the shift-down point may be at high vehicle speed.
- (3) Kick down while driving in 6th, 5th, 4th, 3rd, and 2nd gears, and verify that the gears shift from 6th to 5th, 5th to 4th, 4th to 3rd, 3rd to 2nd, and 2nd to 1st. In addition, verify that the vehicle speed limit for kicking down corresponds to the shift point.
  - (4) Verify that the shift shock is minimal, shifting is smooth and timely, and there is no abnormal noise or slip.

### Shift point

Type A

Position/mode	Accelerator pedal depression amount	Shift	Vehicle speed (km/h {mph})	Turbine rotation speed (rpm)
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D	NORMAL	8/8	D1→D2	43—48 {27—29}	4,700—5,300
			D2→D3	75—82 {47—50}	4,700—5,150
			D3→D4	103—112 {64—69}	4,700—5,100
			D4→D5	150—159 {93—98}	4,750—5,000
		4/8	D1→D2	24—33 {15—20}	2,600—3,650
			D2→D3	39—57 {25—35}	2,450—3,550
			D3→D4	53—79 {33—48}	2,450—3,600
			D4→D5	72—99 {45—61}	2,300—3,100
		0/8	D6→D5	61—66 {38—40}	1,150—1,250
			D5→D4	51—57 {32—35}	1,150—1,250
			D4→D3	36—41 {23—25}	1,150—1,300
			D3→D2	11—16 {7—9}	500—750
			D2→D1	5—10 {4—6}	300—600
		Kickdown (8/8)	D5→D4	112—121 {70—75}	2,500—2,700
			D4→D3	78—87 {49—53}	2,450—2,750
			D3→D2	43—51 {27—31}	2,000—2,300
			D2→D1	27—33 {17—20}	1,700—2,050

### Shift point

Type B

Position/mode		Accelerator pedal depression amount	Shift	Vehicle speed (km/h {mph})	Turbine rotation speed (rpm)
D	NORMAL	8/8	D1→D2	43—48 {27—29}	4,700—5,300
			D2→D3	75—82 {47—50}	4,700—5,150
			D3→D4	103—112 {64—69}	4,700—5,100
			D4→D5	150—159 {93—98}	4,750—5,000
		4/8	D1→D2	24—33 {15—20}	2,600—3,650
			D2→D3	39—57 {25—35}	2,450—3,550
			D3→D4	53—79 {33—48}	2,450—3,600
			D4→D5	72—99 {45—61}	2,300—3,100
		0/8	D6→D5	61—66 {38—40}	1,150—1,250
			D5→D4	51—57 {32—35}	1,150—1,250
			D4→D3	36—41 {23—25}	1,150—1,300
			D3→D2	11—16 {7—9}	500—750
			D2→D1	5—10 {4—6}	300—600
		Kickdown (8/8)	D5→D4	93—122 {58—75}	2,100—2,700
			D4→D3	64—92 {40—57}	2,000—2,900
			D3→D2	34—63 {22—39}	1,550—2,850
			D2→D1	8—30 {5—18}	450—1,850

### M position test

1. Perform road test preparations. (See Road test preparation.)
2. Warm up the transaxle.
3. Select the M position.
4. Inspect the shift point for the M position.
  - If there is any malfunction, refer to symptom troubleshooting and verify the malfunction symptom.
  - (1) Perform the shift operation while driving and verify that the gears can be shifted.
  - (2) Release the accelerator pedal while driving in 6th gear, and verify that the gears shift from 6th to 5th, 5th to 4th, 4th to 3rd, 3rd to 2nd, and 2nd to 1st. In addition, verify that the vehicle speed corresponds to the shift point when shifting.
  - (3) Release the accelerator pedal while driving and verify that the engine braking operates in all gears.
  - (4) Verify that the shift shock is minimal, shifting is smooth and timely, and there is no abnormal noise or slip.

### Shift point

Type A

Position/mode	Accelerator pedal depression amount	Shift	Vehicle speed (km/h {mph})	Turbine rotation speed (rpm)
M	0/8	M <sub>6</sub> →M <sub>5</sub>	61—66 {38—40}	1,150—1,250
		M <sub>5</sub> →M <sub>4</sub>	51—57 {32—35}	1,150—1,250
		M <sub>4</sub> →M <sub>3</sub>	36—41 {23—25}	1,150—1,300
		M <sub>3</sub> →M <sub>2</sub>	11—16 {7—9}	500—750
		M <sub>2</sub> →M <sub>1</sub>	5—10 {4—6}	300—600

### Shift point

Type B

Position/mode	Accelerator pedal depression amount	Shift	Vehicle speed (km/h {mph})	Turbine rotation speed (rpm)
M	0/8	M <sub>6</sub> →M <sub>5</sub>	61—66 {38—40}	1,150—1,250
		M <sub>5</sub> →M <sub>4</sub>	51—57 {32—35}	1,150—1,250
		M <sub>4</sub> →M <sub>3</sub>	36—41 {23—25}	1,150—1,300
		M <sub>3</sub> →M <sub>2</sub>	11—16 {7—9}	500—750
		M <sub>2</sub> →M <sub>1</sub>	5—10 {4—6}	300—600

5. Inspect 2nd gear fixed mode.
  - (1) While the vehicle is stopped or the vehicle speed is **10 km/h {6.2 mph} or less**, operate the selector lever toward + to shift to 2nd gear.
  - (2) Verify that the gear is fixed in 2nd gear.
  - (3) Release the accelerator pedal while driving and verify that the engine braking operates.
  - (4) Perform the shift operation while driving and verify that the gears can be shifted.

### P position test

1. Park the vehicle on a gentle slope and shift the selector lever to the P position.
2. Release the brake and verify that the vehicle does not move.
  - If there is any malfunction, inspect the parking mechanism in the transaxle.