

MANUAL TRANSAXLE

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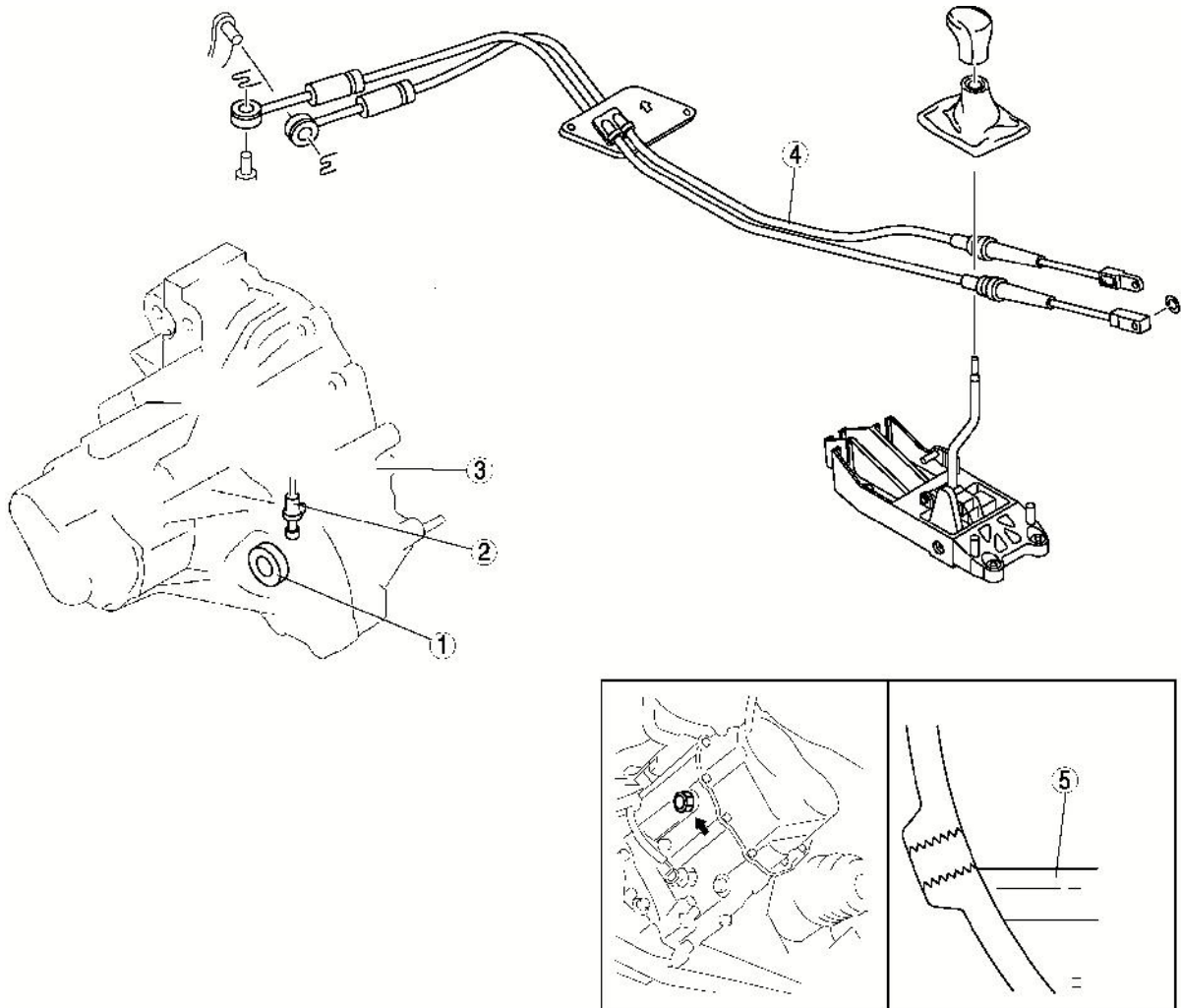
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LOCATION INDEX

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MANUAL TRANSAXLE LOCATION INDEX

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A6E5100W001

1	Oil seal (differential) (See J-4 OIL SEAL (DIFFERENTIAL) REPLACEMENT)
2	Vehicle speedometer sensor (See J-4 VEHICLE SPEEDOMETER SENSOR REMOVAL/INSTALLATION) (See J-5 VEHICLE SPEEDOMETER SENSOR INSPECTION)

3	Manual transaxle (See J-5 MANUAL TRANSAXLE REMOVAL/INSTALLATION)
4	Shift mechanism (See J-9 SHIFT MECHANISM REMOVAL/INSTALLATION)
5	Transaxle oil (See J-3 TRANSAXLE OIL INSPECTION) (See J-3 TRANSAXLE OIL REPLACEMENT)

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TRANSAXLE OIL INSPECTION

A6E511227001W01

1. Park the vehicle on level ground.
2. Remove the oil level plug and washer.
3. Verify that the oil is near the brim of the plug port.
 - If the oil level is lower than the low level, add the specified amount and type of oil through the oil level plug hole.

Specified oil grade

API Service GL-4 or GL-5

Specified oil viscosity

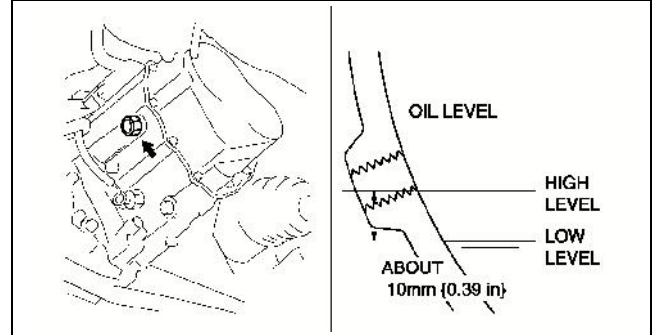
All-season: SAE 75W-90

Above 10 °C {50 °F}: SAE 80W-90

4. Install a new washer and the oil level plug.

Tightening torque

40—58 N·m {4.0—6.0 kgf·m, 29—43 ft·lbf}



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TRANSAXLE OIL REPLACEMENT

A6E511227001W02

1. Remove the drain plug with the washer.
2. Drain the oil into a suitable container.
3. Install a new washer and the drain plug.

Tightening torque

40—58 N·m {4.0—6.0 kgf·m, 29—43 ft·lbf}

4. Remove the oil level plug with washer and add the specified amount and type of oil through the oil level plug hole until the level reaches the bottom of the oil level plug hole.

Specified oil viscosity

All-season: SAE 75W-90

Above 10 °C {50 °F}: SAE 80W-90

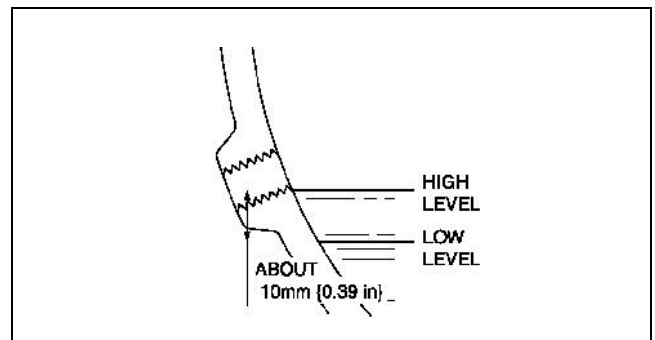
Capacity (approximate quantity)

2.87 L {3.03 US qt, 2.53 Imp qt}

5. Install a new washer and the oil level plug.

Tightening torque

40—58 N·m {4.0—6.0 kgf·m, 29—43 ft·lbf}



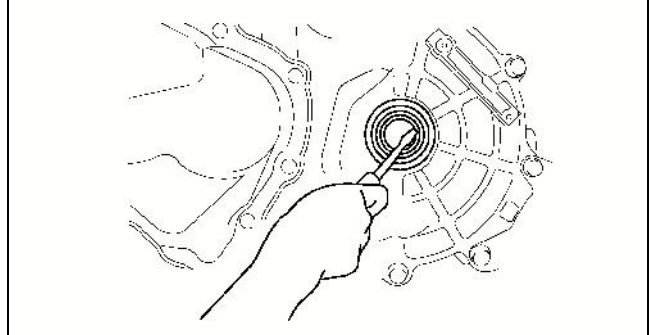
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MANUAL TRANSAXLE

OIL SEAL (DIFFERENTIAL) REPLACEMENT

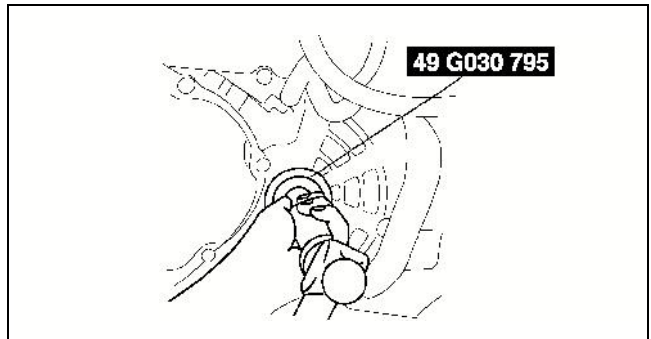
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1. On level ground, jack up the vehicle and support it evenly on safety stands.
2. Drain the oil from the transaxle.
3. Remove the front wheels and splash shields.
4. Separate the drive shaft and joint shaft from the transaxle. (See [M-17 DRIVE SHAFT REMOVAL/INSTALLATION.](#)) (See [M-12 JOINT SHAFT REMOVAL/INSTALLATION.](#))
5. Remove the oil seals using a screwdriver.



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6. Using the **SST** and a hammer, tap each new oil seal in evenly until the **SST** contacts the transaxle case.
7. Coat the lip of each oil seal with transaxle oil.
8. Insert the drive shaft and joint shaft to the transaxle. (See [M-17 DRIVE SHAFT REMOVAL/INSTALLATION.](#)) (See [M-12 JOINT SHAFT REMOVAL/INSTALLATION.](#))
9. Install the wheels and splash shields.
10. Add the specified amount and type of oil. (See [J-3 TRANSAXLE OIL REPLACEMENT.](#))



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VEHICLE SPEEDOMETER SENSOR REMOVAL/INSTALLATION

A6E511217400W01

Without ABS

1. Disconnect the negative battery cable.
2. Remove the battery and battery tray.
3. Remove the air cleaner component. (See [F-10 INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.](#))
4. Disconnect the vehicle speedometer sensor connector.
5. Remove the vehicle speedometer sensor.
6. Apply transmission oil to a new O-ring and install it on a vehicle speedometer sensor.
7. Install the vehicle speedometer sensor.

Tightening torque

7.8—11.3 N·m

{80—115 kgf·cm, 57.6—83.3 in·lbf}

8. Connect the vehicle speedometer sensor connector.
9. Install the air cleaner component. (See [F-10 INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.](#))
10. Install the battery and battery tray.
11. Connect the negative battery cable.

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VEHICLE SPEEDOMETER SENSOR INSPECTION

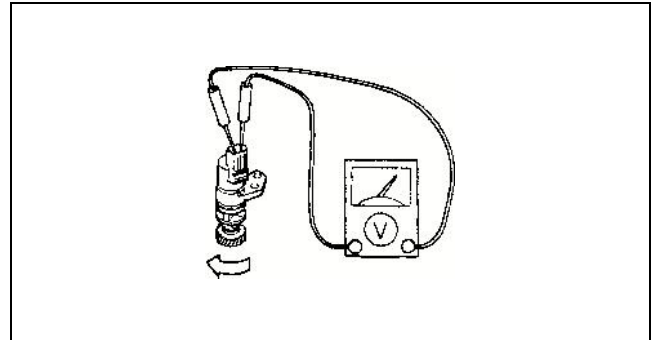
A6E511217400W02

Without ABS

1. Remove the vehicle speedometer sensor.
2. Measure voltage (AC range) between terminals of the vehicle speedometer sensor while the gear is turning.

Meter needle	Action
Moves slightly under 5 V (AC range)	Repair wiring harness between instrument cluster and vehicle speedometer sensor.
Does not move	Replace vehicle speedometer sensor.

3. Install the vehicle speedometer sensor.



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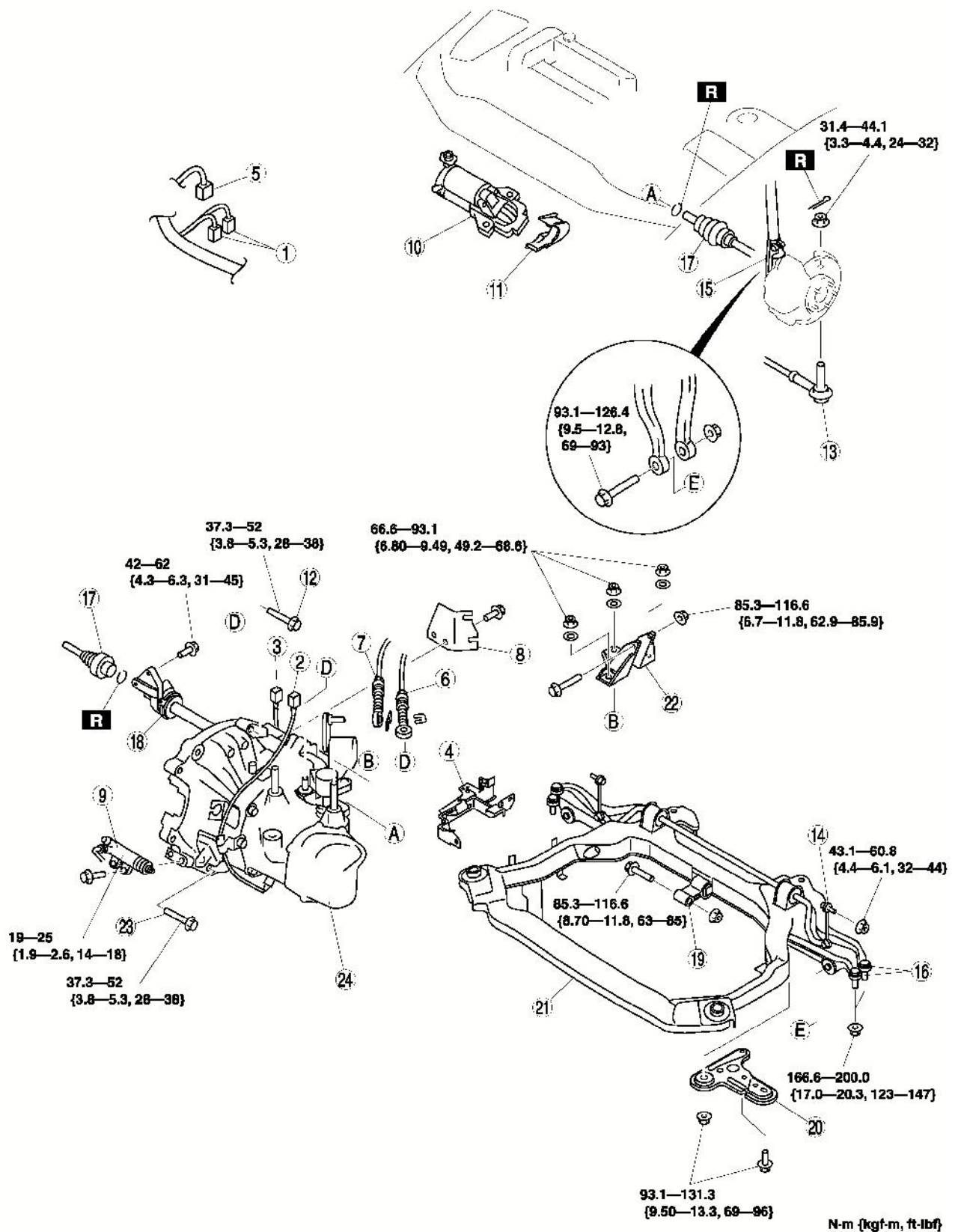
MANUAL TRANSAXLE REMOVAL/INSTALLATION

A6E511201029W01

1. Remove the battery, battery tray and battery bracket.
2. Remove the air cleaner component. (See [F-10 INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.](#))
3. Remove the wheels, tires and splash shields.
4. Remove the under cover.
5. Remove the steering gear and power steering pipe. (See [N-10 STEERING GEAR AND LINKAGE REMOVAL/INSTALLATION.](#))
6. Remove the front auto leveling sensor. (See [T-32 FRONT AUTO LEVELING SENSOR REMOVAL/INSTALLATION.](#))
7. Drain the transaxle oil into a suitable container.
8. Remove in the order indicated in the table.
9. Install in the reverse order of removal.
10. Adjust the headlight zero set. (See [T-31 HEADLIGHT ZEROSET.](#))
11. Add the specified amount of specified transaxle oil.
12. Install the air cleaner component. (See [F-10 INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.](#))
13. Warm up the engine and transaxle, inspect for oil leakage, and inspect the transaxle operation.

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MANUAL TRANSAXLE



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1	O ₂ sensor connector
2	Back-up light switch connector
3	Neutral switch connector

4	Harness bracket
5	Vehicle speedometer sensor connector (GCC specs.)

MANUAL TRANSAXLE

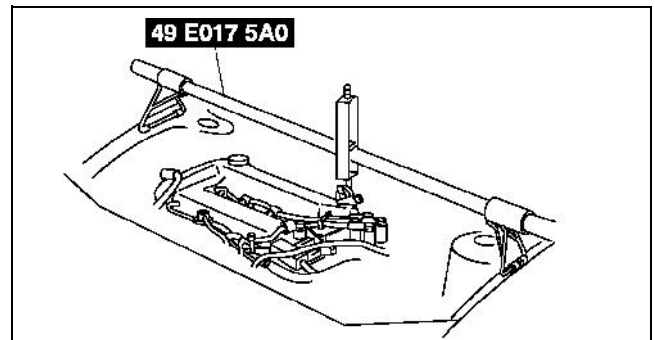
6	Selector cable
7	Shift cable
8	Selector cable bracket
9	Clutch release cylinder
10	Starter
11	Endplate cover
12	Transaxle mounting bolt (upper side)
13	Tie-rod end ball joint (See N-11 Tie-rod End Ball Joint Removal Note)
14	Stabilizer control link
15	Damper fork
16	Lower arm (front, rear) ball joint (See R-19 Front Lower Arm (Rear) Ball Joint Removal Note) (See R-16 Front Lower Arm (Front) Ball Joint Removal Note)
17	Drive shaft (See M-17 DRIVE SHAFT REMOVAL/INSTALLATION.)

18	Joint shaft (See M-12 JOINT SHAFT REMOVAL/INSTALLATION.)
19	No.1 engine mount (See J-7 No.1 Engine Mount Bracket Removal Note) (See J-8 No.1 Engine Mount and No.4 Engine Mount Bracket Installation Note)
20	Crossmember bracket
21	Crossmember component (See R-23 FRONT CROSSMEMBER REMOVAL/INSTALLATION)
22	No.4 engine mount (See J-8 No.1 Engine Mount and No.4 Engine Mount Bracket Installation Note)
23	Transaxle mounting bolt (lower side)
24	Manual transaxle (See J-7 Manual Transaxle Removal Note) (See J-8 Manual Transaxle Installation Note)

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No.1 Engine Mount Bracket Removal Note

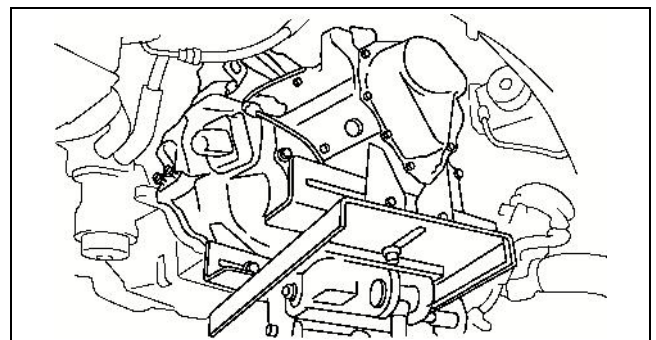
1. Support the engine using the SST before removing the No.1 engine mount.
2. Remove the No.1 engine mount.



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Manual Transaxle Removal Note

1. Loosen the **SST** (49 E017 5A0) and lean the engine toward the transaxle.
2. Support the transaxle on a jack.
3. Remove the transaxle mounting bolts.
4. Remove the transaxle.

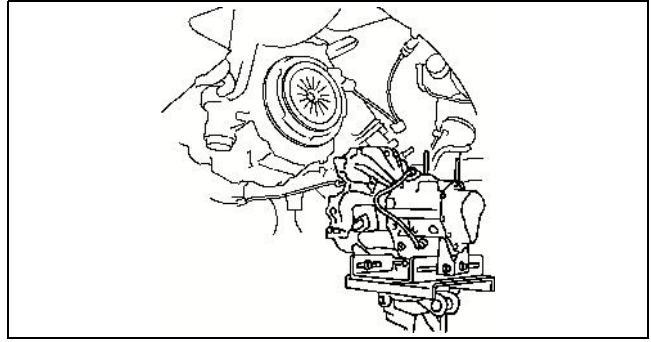


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MANUAL TRANSAXLE

Manual Transaxle Installation Note

1. Set the transaxle on a jack and lift into place.
2. Install the transaxle mounting bolts.
3. Tighten the **SST** (49 E017 5A0) so that the engine is located at the specified position.



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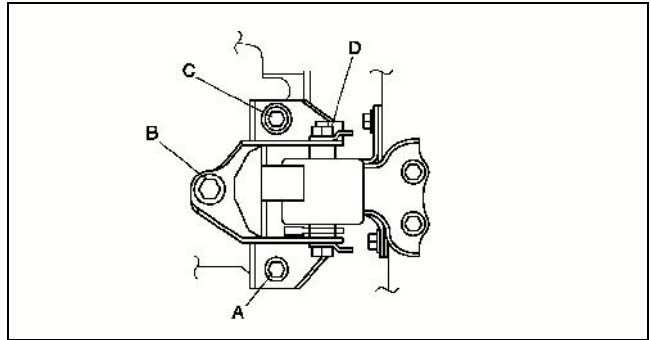
No.1 Engine Mount and No.4 Engine Mount Bracket Installation Note

1. Verify that the engine mount rubbers are installed as shown.
2. By aligning the holes with the stud bolts, install the No.4 engine mount bracket to the transaxle.
3. By aligning the holes with the stud bolts, install the No.1 engine mount to the transaxle.
4. Align the hole of the No.4 engine mount bracket with the No.4 engine mount rubber on vehicle, and temporarily tighten the bolt D.
5. Tighten the nut B,C in order of B→C, then bolt A.
6. Tighten the bolt D.

Tightening torque

A, B, C: 66.6—93.1 N·m {6.8—9.4 kgf·m, 50—68 ft·lbf}

D: 85.3—116.6 N·m {8.7—11.8 kgf·m, 63—85 ft·lbf}



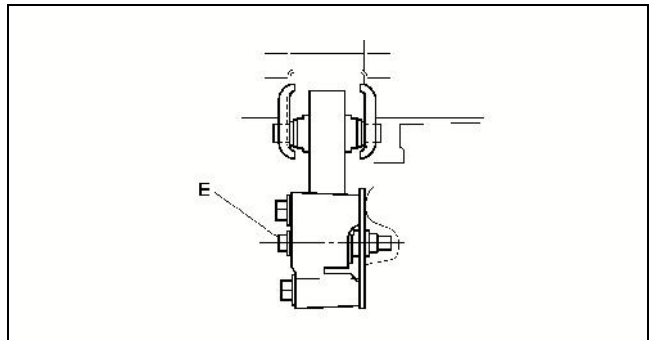
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8. Tighten the bolt D to the No.1 engine mount.

Tightening torque

E: 85.3—116.6 N·m {8.7—11.8 kgf·m, 63—85 ft·lbf}

9. Remove the **SST** (49 E017 5A0).



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SHIFT MECHANISM

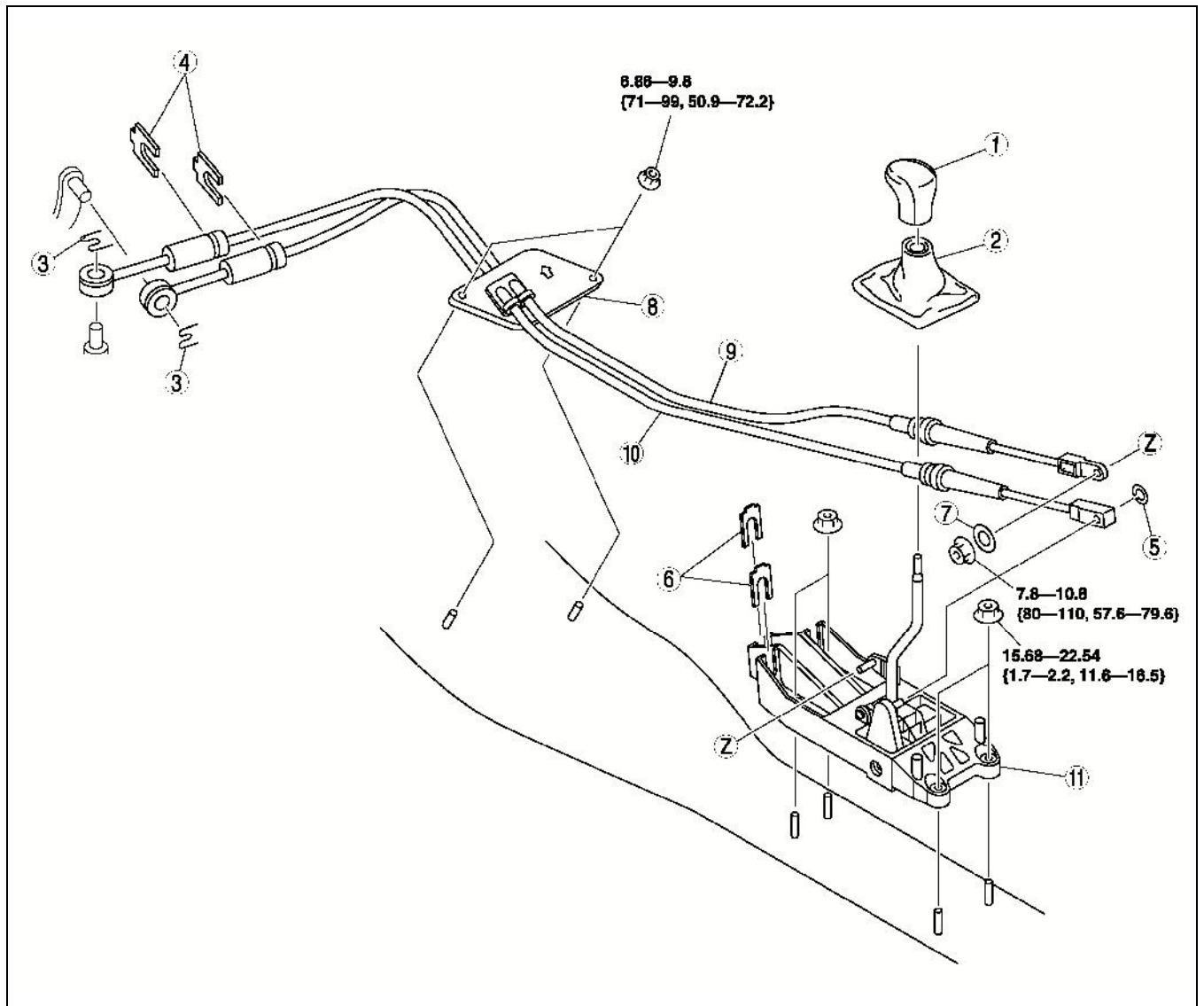
SHIFT MECHANISM

SHIFT MECHANISM REMOVAL/INSTALLATION

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1. Remove the battery, battery tray and battery bracket.
2. Remove the air cleaner component. (See [F-10 INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.](#))
3. Remove the dashboard compleat.
(See [S-82 DASHBOARD REMOVAL/INSTALLATION.](#))
4. Remove the SAS control module.
(See [T-124 SAS UNIT REMOVAL/INSTALLATION.](#))
5. Remove the climate control unit. (See [U-44 CLIMATE CONTROL UNIT REMOVAL.](#)) (See [U-45 CLIMATE CONTROL UNIT INSTALLATION.](#))
6. Remove the rear heat duct. (See [U-23 REAR HEAT DUCT REMOVAL/INSTALLATION.](#))
7. Remove in the order indicated in the table.
8. Install in the reverse order of removal.
9. Install the air cleaner component.
10. After installation, verify that the shift lever can be shifted smoothly into each position.

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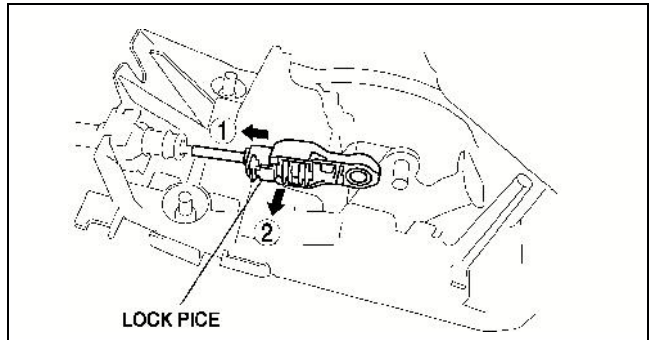
1	Shift lever knob
2	Boot panel
3	Clip
4	Clip
5	Clip
6	Clip

7	Plain Washer
8	Seal plate
9	Main shift cable
10	Main select cable (See J-10 Select Cable Installation Note)
11	Shift lever assembly

SHIFT MECHANISM

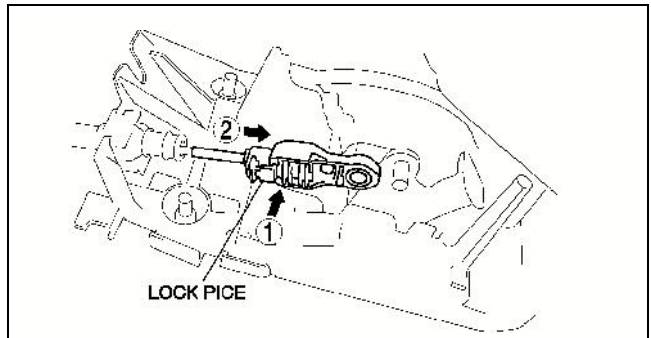
Select Cable Installation Note

1. Remove the center console.
2. Make sure that the shift lever (transaxle side) is in neutral.
3. Unlock the lock pice of the select cable (shift lever side) in the order shown in the figure.
4. Shift the sift lever to neutral.



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5. Lock the lock pice of the selector cable (shift cable side) in the order shown in the figure.
6. Install the center console.
7. Shift the shift lever from neutral to other position, and make sure that there are no other components in that area to interfere with the lever.



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