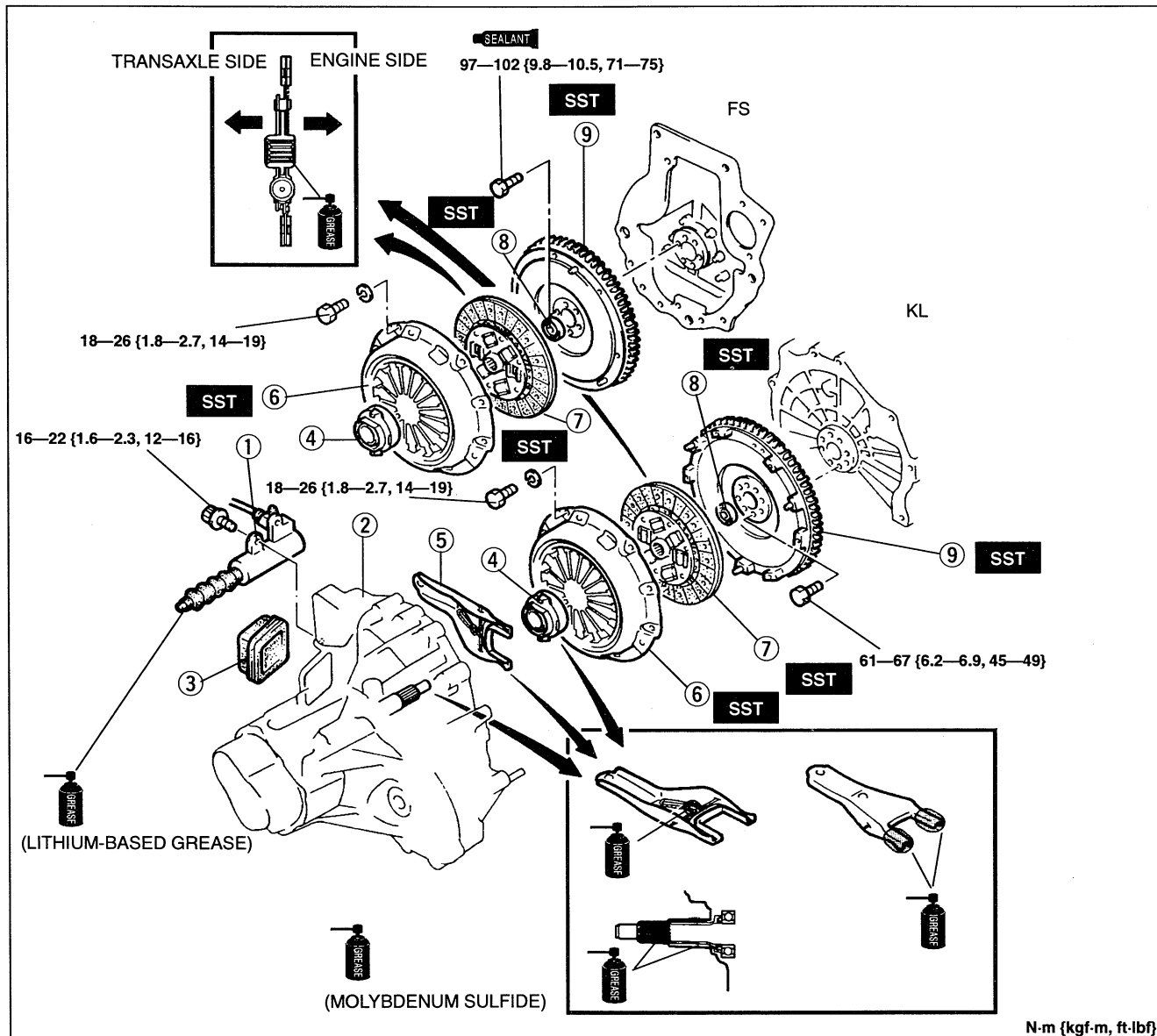


REMOVAL / INSTALLATION

Note

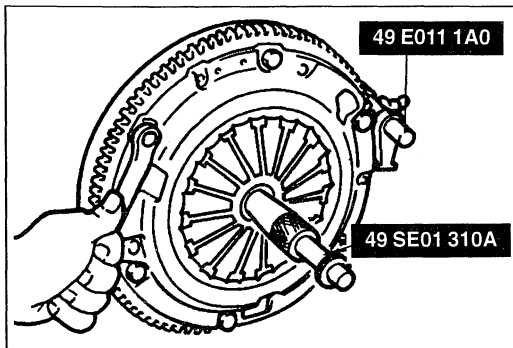
- The clutch release cylinder can be removed from the transaxle with the clutch pipe connected.

- Remove in the order shown in the figure, referring to **Removal Note**.
- Install in the reverse order of removal, referring to **Installation Note**.



- Clutch release cylinder
- Transaxle
Service section J
- Boot
- Clutch release collar
Inspection page H-20
- Clutch release fork
- Clutch cover
Removal Note page H-17
Inspection page H-18
Installation Note page H-18

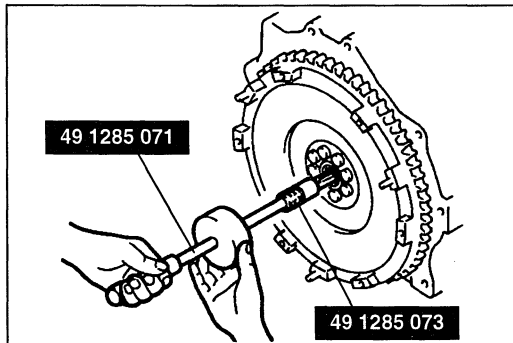
- Clutch disc
Removal Note page H-17
Inspection page H-19
Installation Note page H-18
- Pilot bearing
Inspection page H-20
Removal Note page H-17
Installation Note page H-18
- Flywheel
Removal Note page H-17
Inspection page H-20
Installation Note page H-17



Removal Note

Clutch cover and clutch disc

1. Install the **SST**.
2. Loosen each bolt one turn at a time in a crisscross pattern until the spring tension is released.
3. Remove the clutch cover and disc.

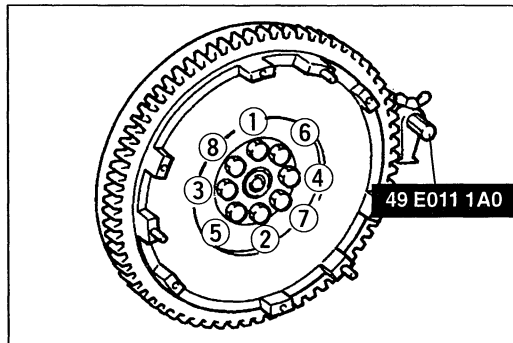


Pilot bearing

Note

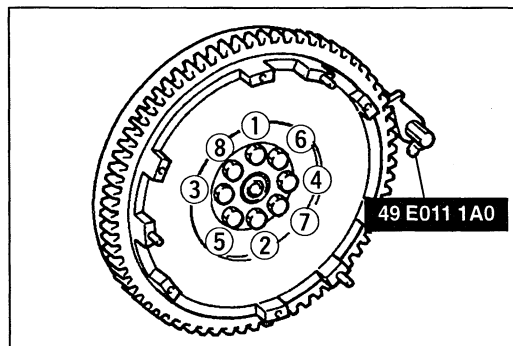
- The pilot bearing does not need to be removed unless you are replacing it.

Use the **SST** to remove the pilot bearing.



Flywheel

1. Hold the flywheel by using the **SST** or equivalent tool.
2. Remove the bolts evenly and gradually in the pattern shown.
3. Remove the flywheel.
4. Inspect for oil leakage from the crankshaft rear oil seal. If there is any such leakage or if the oil seal is damaged, refer to section B and replace the crankshaft oil seal.



Installation Note

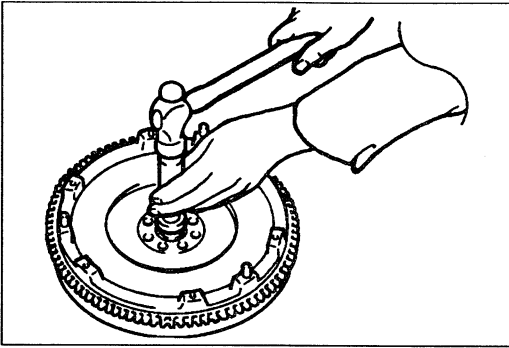
Flywheel

Flywheel bolts on FS-engine models require sealant. New bolts have sealant already applied at the factory. However, when reusing bolts, remove all old sealant and then apply new sealant. Remove the old sealant from the bolt holes in the crankshaft, whether using new or reused bolts. These steps help to ensure that engine oil does not leak from the crankshaft bolt holes.

1. Install the flywheel to the crankshaft.
2. Hand-tighten the flywheel installation bolts.
3. Install the **SST** or equivalent tool to the flywheel.
4. Tighten the flywheel installation bolts evenly and gradually in the pattern shown in the figure.

Tightening torque

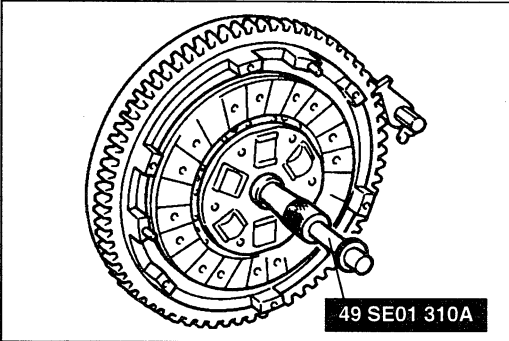
FS: 97—102 N·m {9.8—10.5 kgf·m, 71—75 ft·lbf}
 KL: 61—67 N·m {6.2—6.9 kgf·m, 45—49 ft·lbf}

**Pilot bearing**

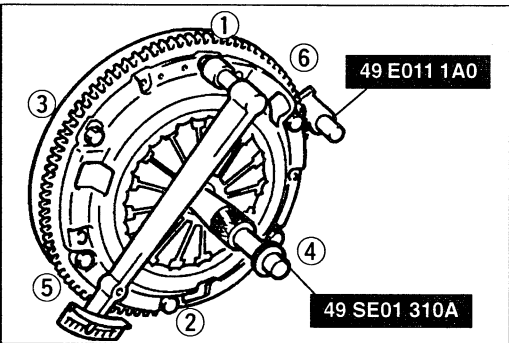
Install a new pilot bearing by using a suitable pipe.

Pipe outer diameter: 35.0 mm {1.378 in}

Bearing installation depth: 0—0.4 mm {0—0.016 in}

**Clutch disc**

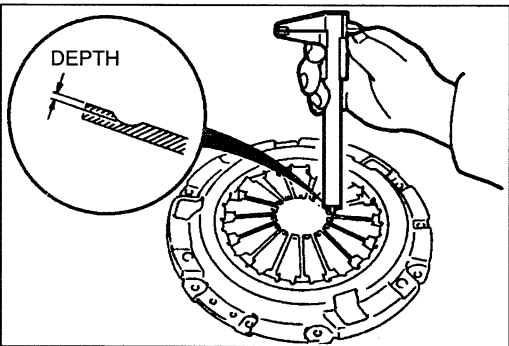
1. Clean the clutch disc splines and main drive gear splines.
2. Apply organic molybdenum sulfide grease to the splines.
3. Hold the clutch disc in position by using the **SST**.

**Clutch cover**

1. Align the dowel holes with the flywheel dowels and install the clutch cover.
2. Install the **SST** or equivalent tool.
3. Tighten the bolts evenly and gradually in the pattern shown.

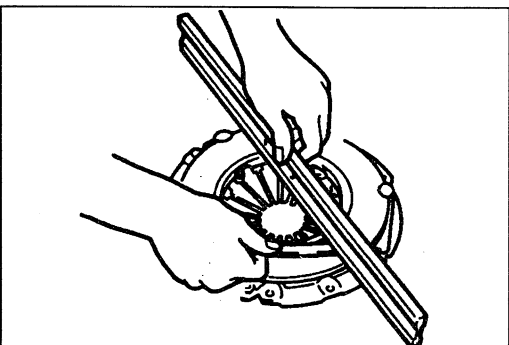
Tightening torque:

18—26 N·m {1.8—2.7 kgf·m, 14—19 ft·lbf}

**CLUTCH COVER****INSPECTION**

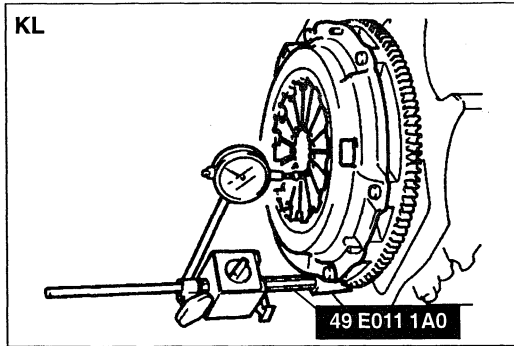
1. Measure the wear of the diaphragm spring fingers.

Depth: 0.5 mm {0.020 in} max.



2. Measure the flatness of the pressure plate surface by using a straightedge and a feeler gauge as shown in the figure.

Maximum clearance: 0.50 mm {0.020 in}

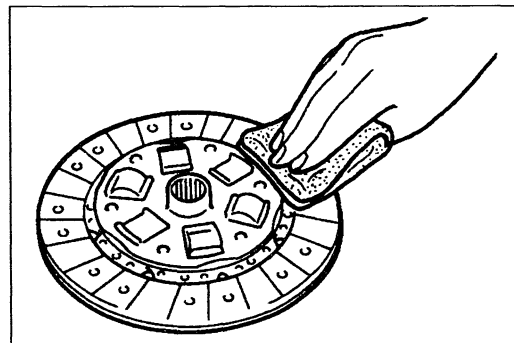
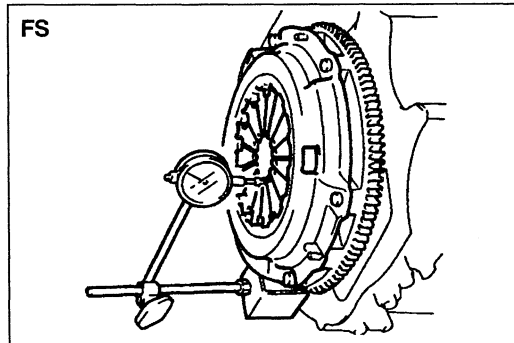


The KL engine is made of aluminum, so the magnet will not hold the dial indicator to the engine block as it would for the FS engine. Therefore, use the **SST** to hold the dial indicator when checking the runout of the diaphragm spring fingers on the KL engine.

3. Rotate the flywheel and check for misaligned diaphragm spring fingers.

Misalignment: 0.600 mm {0.0236 in} max.

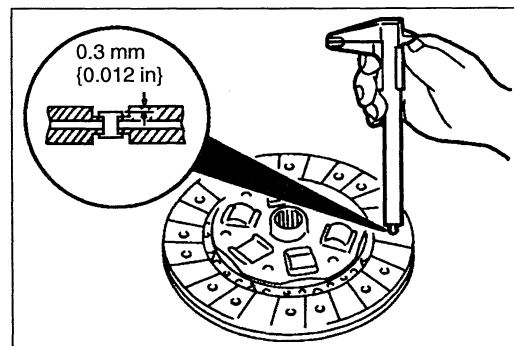
4. Replace the clutch cover if not as specified.



CLUTCH DISC

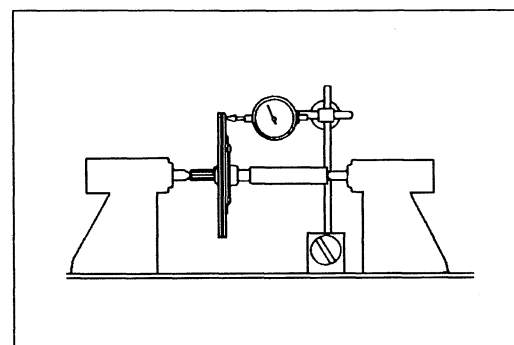
INSPECTION

1. Inspect the contact surface of the clutch disc for scoring, cracks, burning, and oil contamination.
2. Remove minor scoring or burning by using emery paper. Repair if scoring or burning is major. Replace if cracked or oil-soaked.
3. Inspect for loose facing rivets and dampers. Replace the clutch disc if either is loose.



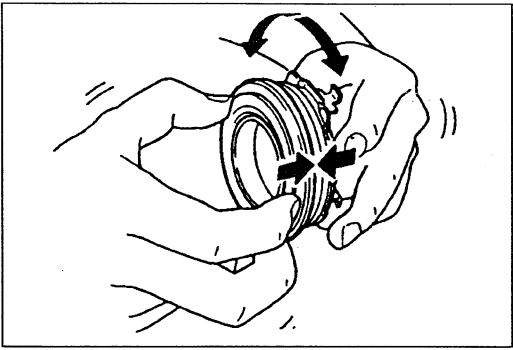
4. Using vernier calipers, measure the thickness of the lining at a rivet head on both sides. Replace the clutch disc if its thickness is less than minimum.

Thickness: 0.3 mm {0.012 in} min.



5. Measure the clutch disc runout by using a dial indicator. Replace the clutch disc if runout is excessive.

Runout: 0.700 mm {0.0276 in} max.



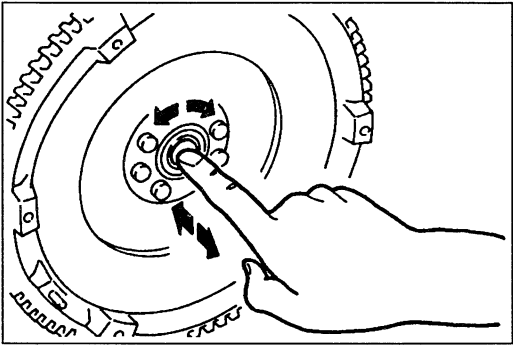
CLUTCH RELEASE COLLAR

INSPECTION

Caution

- Cleaning the clutch release collar with cleaning fluids or a steam cleaner can wash the grease out of the sealed bearing.

1. Turn the collar while applying force in the axial direction.
2. If the collar sticks or has excessive resistance, replace it.



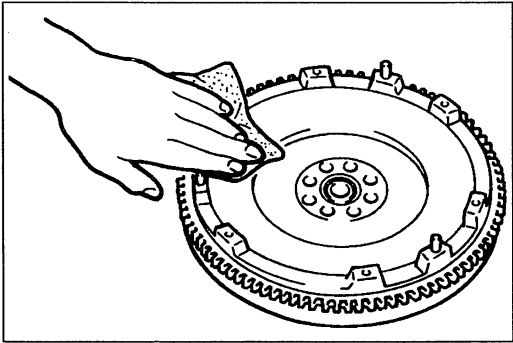
PILOT BEARING

INSPECTION

Note

- The pilot bearing can be inspected while it is in the flywheel.

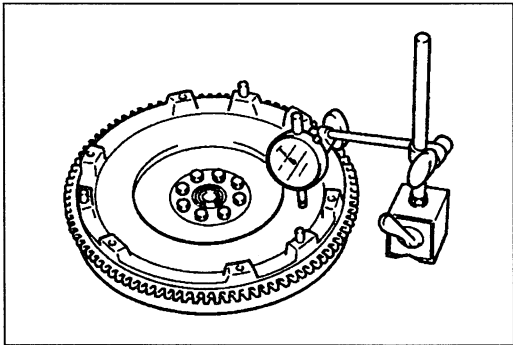
1. Turn the bearing while applying force in the axial direction.
2. If the bearing sticks or has excessive resistance, replace it.



FLYWHEEL

INSPECTION

1. Inspect the contact surface for scoring, cracks, and burning.
2. Remove minor scoring or burning by using emery paper. Repair if scoring or burning is major. Replace if cracked.



3. Inspect the ring gear teeth for wear and damage. If necessary, replace the ring gear.
4. Measure the flywheel runout by using a dial indicator. Replace the flywheel if runout is excessive.

Runout: 0.200 mm {0.0079 in} max.