

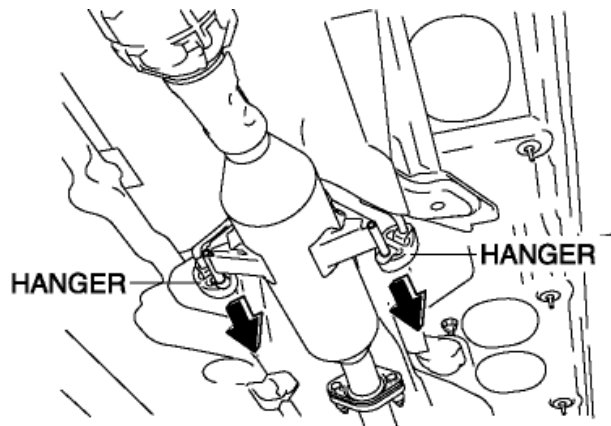
2012 - Mazda6 - Transmission/ Transaxle

CLUTCH UNIT REMOVAL/ INSTALLATION [G66M-R]

CAUTION:

- Secure the steering wheel using tape or a cable to prevent the steering shaft from rotating after disconnecting the steering shaft. If the steering wheel rotates after the steering shaft and the steering gear and linkage are disconnected, the internal parts of the clock spring could be damaged.

1. Disconnect the negative battery cable. (See [BATTERY REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
2. Remove the following parts:
 - a. Battery and battery tray (See [BATTERY REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 - b. Air cleaner component (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 - c. Front tires (See [GENERAL PROCEDURES \(SUSPENSION\)](#).)
 - d. Splash shields (See [SPLASH SHIELD REMOVAL/ INSTALLATION](#).)
 - e. Plug hole plate (See [PLUG HOLE PLATE REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 - f. Aerodynamic undercover No.2 (See [AERODYNAMIC UNDER COVER NO.2 REMOVAL/ INSTALLATION](#).)
 - g. Aerodynamic undercover No.1 (See [AERODYNAMIC UNDER COVER NO.1 REMOVAL/ INSTALLATION](#).)
 - h. Tunnel member (See [EXHAUST SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
3. Remove the hanger on the middle pipe side as shown in the figure and set the hanger aside.



4. Remove the steering shaft cover. (See [STEERING GEAR AND LINKAGE REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
5. Remove the joint bolt for the steering shaft and disconnect the steering shaft from the steering gear and linkage side. (See [STEERING GEAR AND LINKAGE REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
6. Drain the transaxle oil into a suitable container. (See [TRANSAXLE OIL REPLACEMENT \[G66M-R\]](#).)

WARNING:

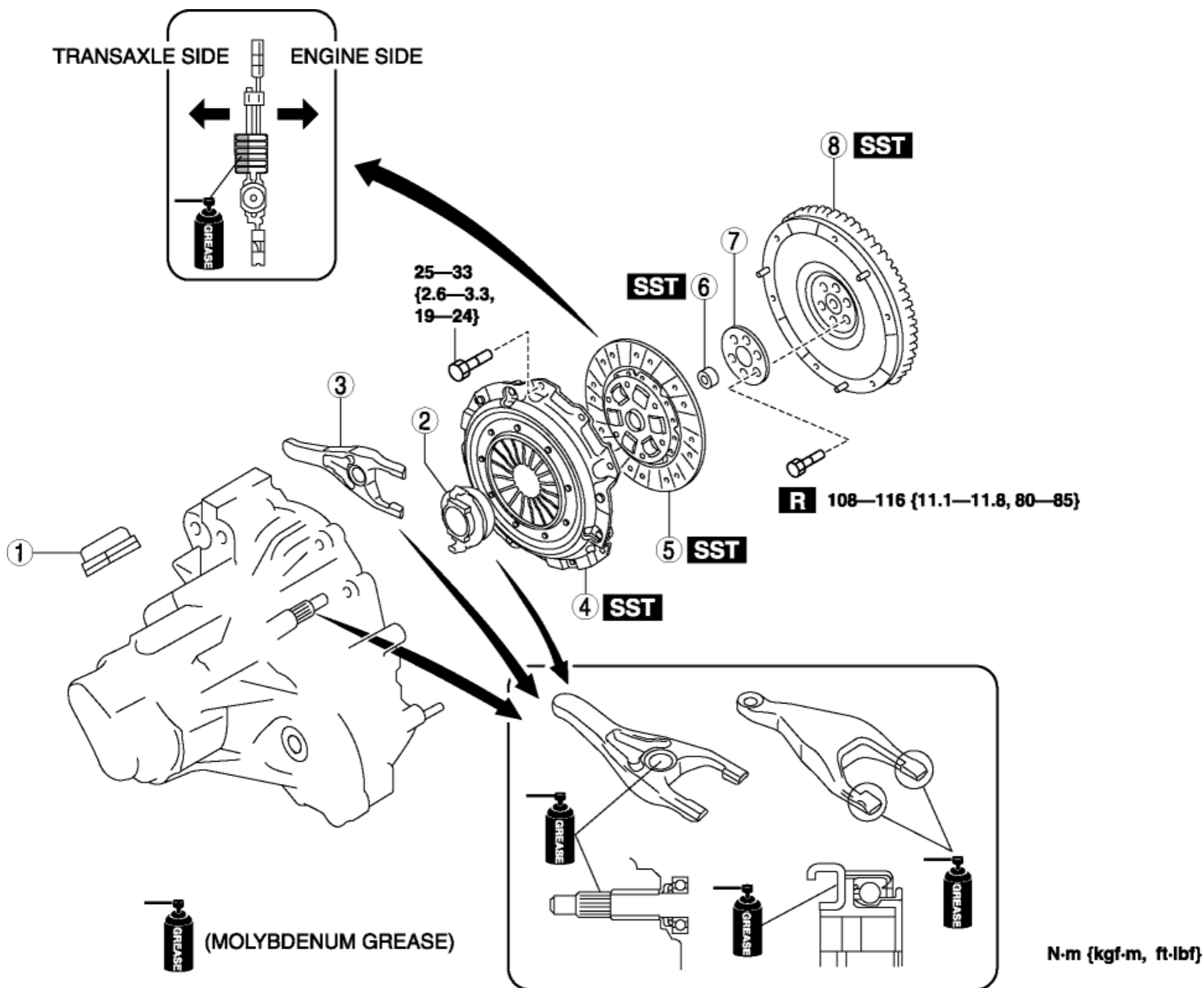
- Improperly jacking a transaxle is dangerous. It can slip off the jack and may cause serious injury.

7. Remove the manual transaxle. (See [MANUAL TRANSAXLE REMOVAL/ INSTALLATION \[G66M-R\]](#).)
8. Remove in the order indicated in the table.
9. Install in the reverse order removal.
10. Add the specified amount of specified transaxle oil. (See [TRANSAXLE OIL REPLACEMENT \[G66M-R\]](#).)

NOTE:

- If the transaxle is overhauled and installed to the vehicle, perform the 'INSPECTION AFTER TRANSAXLE

INSTALLATION' and verify that there is no abnormality. (See [INSPECTION AFTER TRANSAXLE INSTALLATION \[G66M-R\]](#).)



1	Boot
2	Clutch release collar
3	Clutch release fork
4	Clutch cover
	(See Clutch Cover and Disc Removal Note.)
	(See Clutch Cover Installation Note.)
5	Clutch disc
	(See Clutch Cover and Disc Removal Note.)

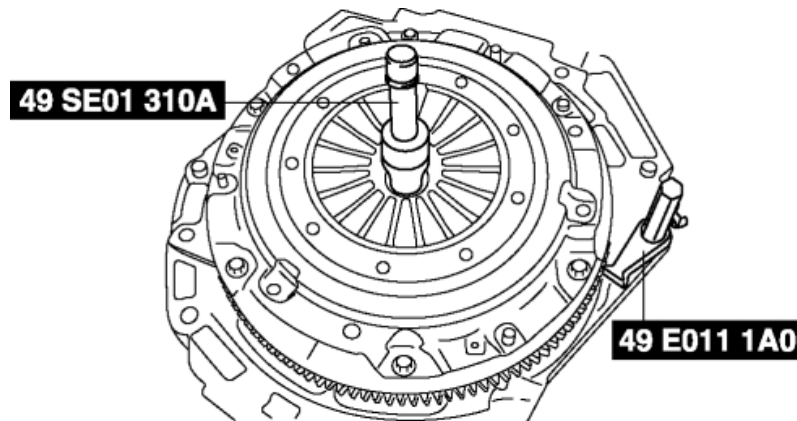
	(See Clutch Disc Installation Note.)
6	Pilot bearing (See Pilot Bearing Removal Note.) (See Pilot Bearing Installation Note.)
7	Plate
8	Flywheel (See Flywheel Removal Note.) (See Flywheel Installation Note.)

Clutch Cover and Disc Removal Note

CAUTION:

- When newly replacing the clutch disc or the clutch cover, always replace the clutch disc and the clutch cover at the same time.
- Due to the automatic adjustment function of clutch cover, if the old cover assembly is reused, it must be installed together with its original clutch disc.

1. Install the **SSTs**.



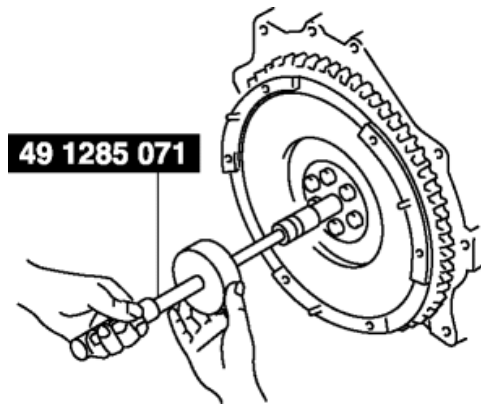
2. Loosen each bolt one turn at a time in a crisscross pattern until spring tension is released.
3. Remove the clutch cover and disc.

Pilot Bearing Removal Note

NOTE:

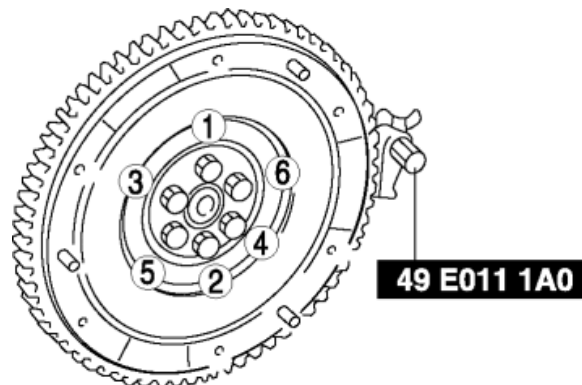
- The pilot bearing does not need to be removed unless you are replacing it.

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



Flywheel Removal Note

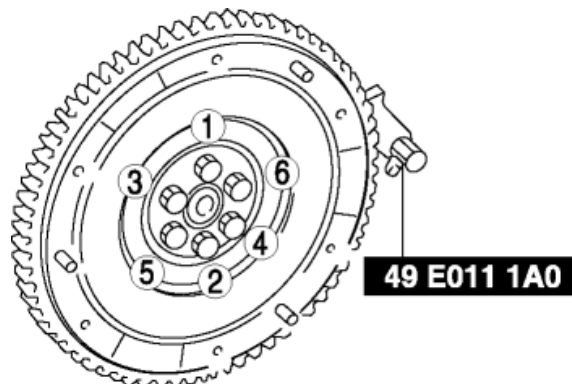
1. Hold the flywheel using the **SST**.



2. Loosen the lock bolts uniformly in the order of the numbers shown in the figure and remove the flywheel.

Flywheel Installation Note

1. Clean the crankshaft thread holes.
2. Install the flywheel to the crankshaft.
3. Hand-tighten the new flywheel lock bolts.
4. Install the **SST** to the flywheel.



5. Temporarily tighten the lock bolts uniformly in the order of the numbers shown in the figure and install the flywheel.
6. Tighten the lock bolts in three steps in the order shown in the figure.

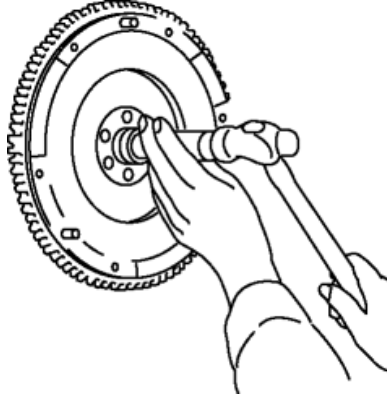
Tightening torque

- Tighten the lock bolts in three steps.

- 1st: 46—54 N·m {4.7—5.5 kgf·m, 34—39 ft·lbf}
- 2nd: 76—84 N·m {7.8—8.5 kgf·m, 57—61 ft·lbf}
- 3rd: 108—116 N·m {11.1—11.8 kgf·m, 80—85 ft·lbf}

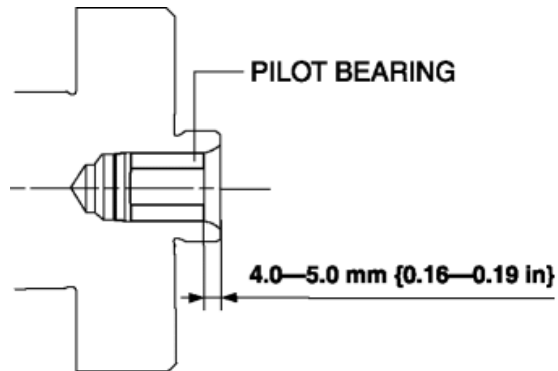
Pilot Bearing Installation Note

1. Install the pilot bearing using the corresponding 20 mm {0.79 in} side of a Snap-on brand millimeter size bushing driver set A160M adapter A160M7 (20—22 mm {0.79—0.86 in}) or substitution tool.



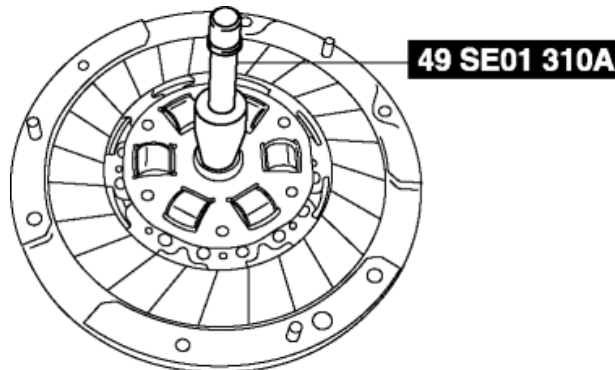
Substitution tool

- Outer diameter: 21 mm {0.83 in}
- Inner diameter: 19 mm {0.75 in}



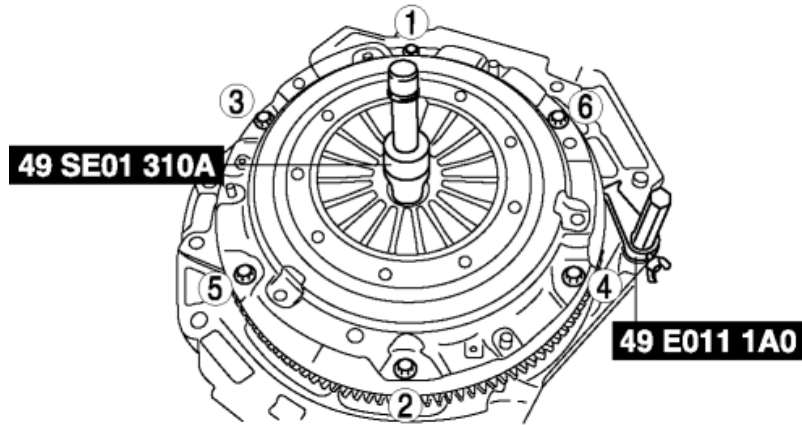
Clutch Disc Installation Note

1. Clean the splines of the clutch disc and the main drive gear with a brush.
2. Spread a thin layer of clutch grease on the splines.
3. Hold the clutch disc position using the **SST**.



Clutch Cover Installation Note

1. Install the **SSTs**.



2. Tighten the bolts uniformly in the order of the numbers shown in the figure and install the clutch cover.

Tightening torque

- 25—33 N·m {2.6—3.3 kgf·m, 19—24 ft·lbf}

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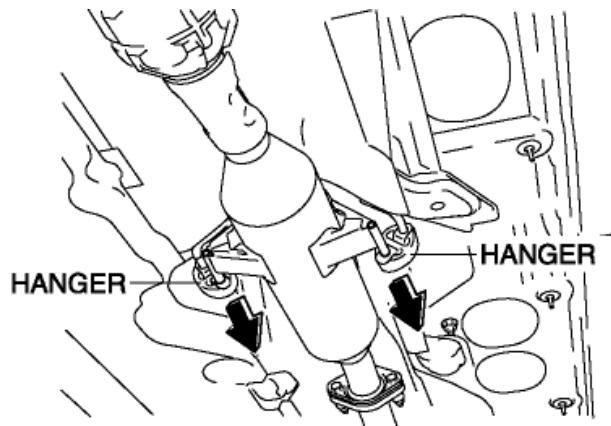
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6. Drain the transaxle oil into a suitable container. (See [TRANSAXLE OIL REPLACEMENT \[G66M-R\]](#).)

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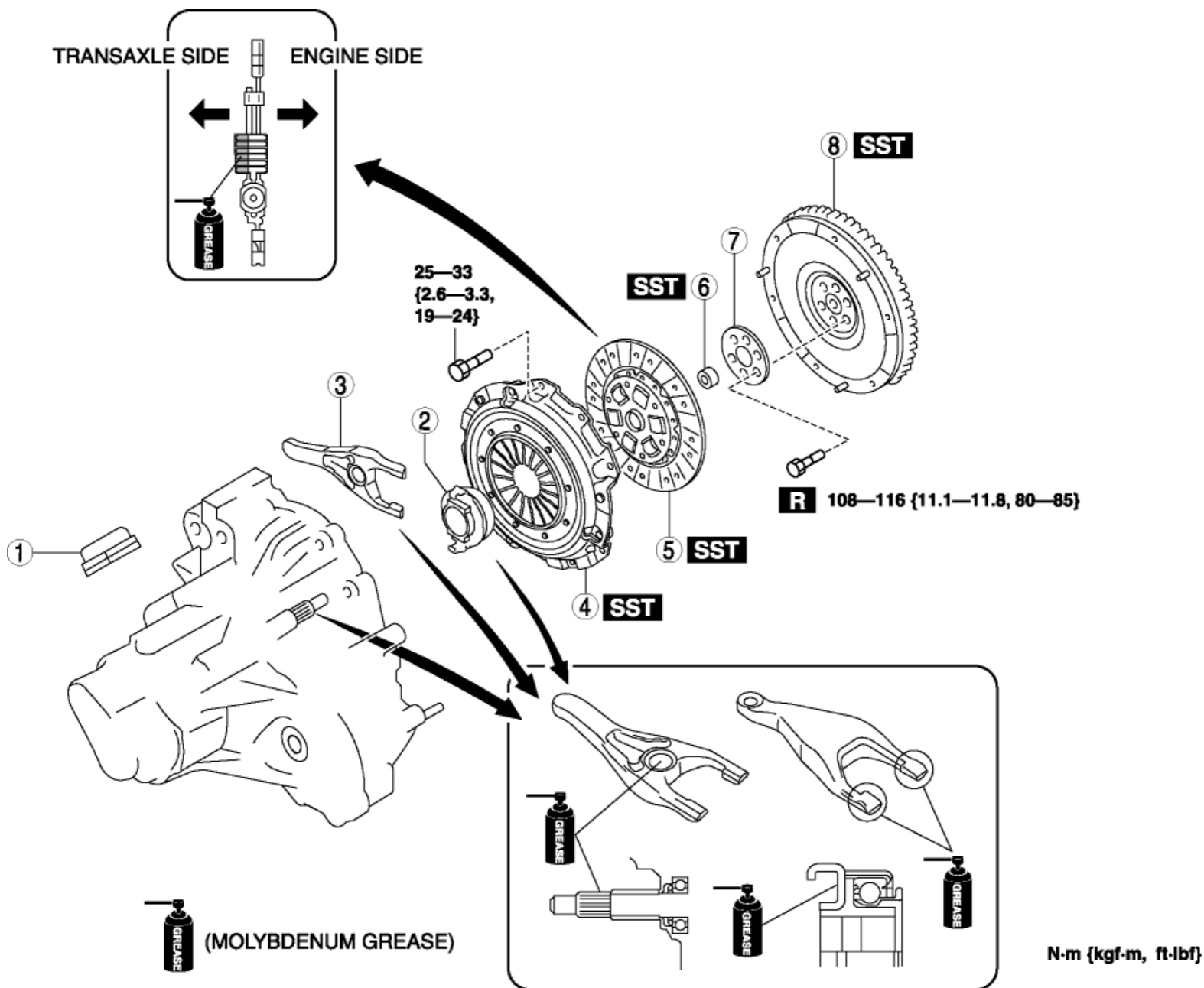
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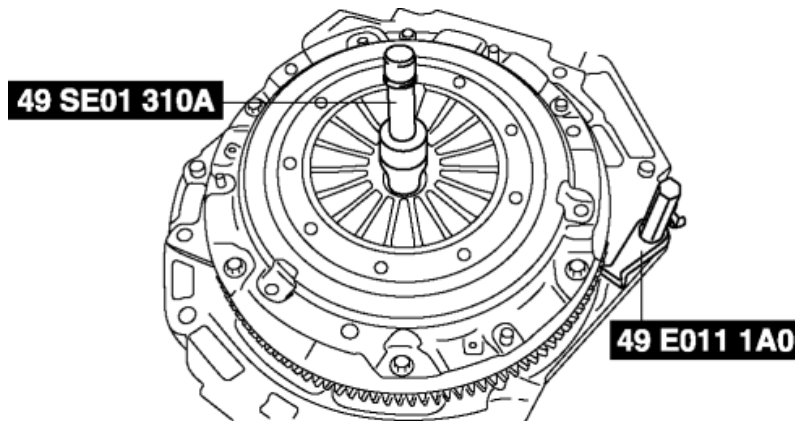
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7	Plate
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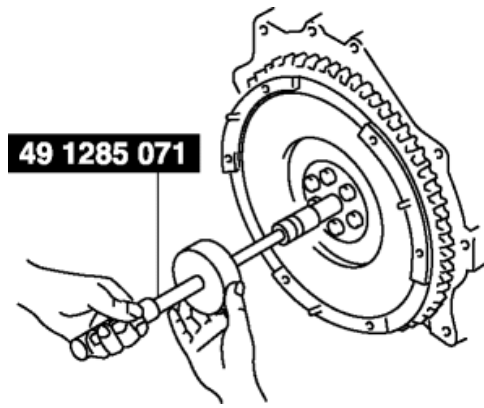
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3. Remove the clutch cover and disc.

Pilot Bearing Removal Note

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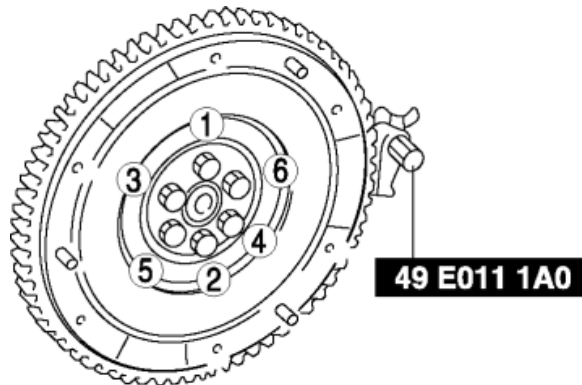
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Flywheel Removal Note

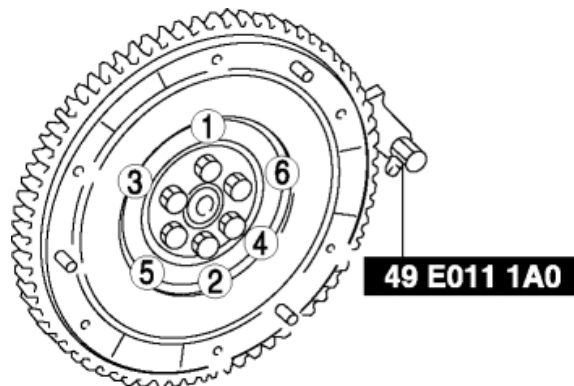
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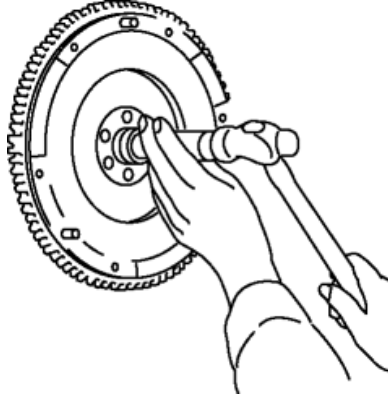
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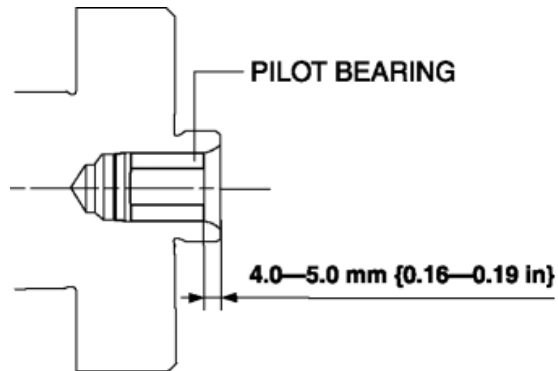
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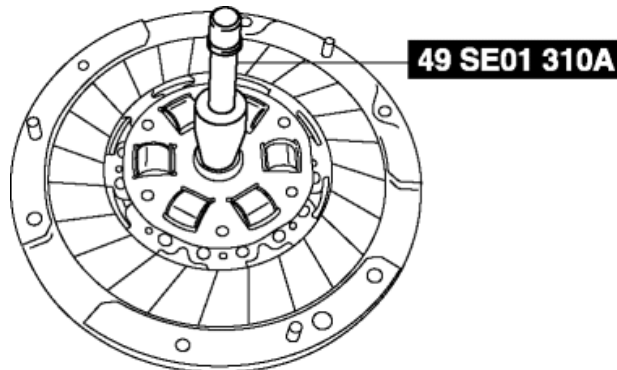
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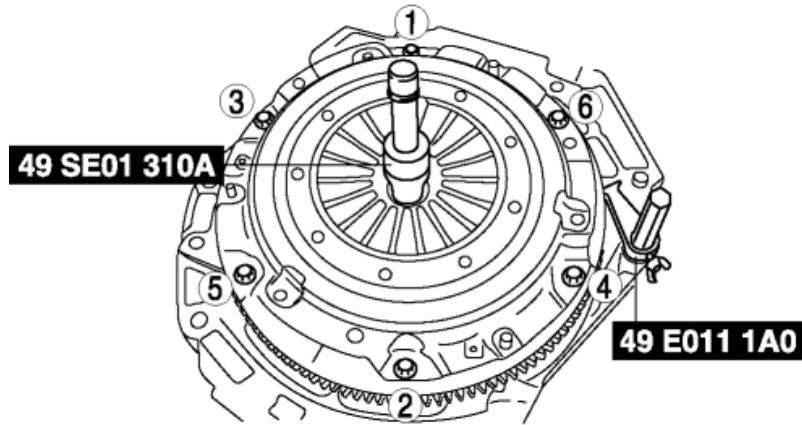
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