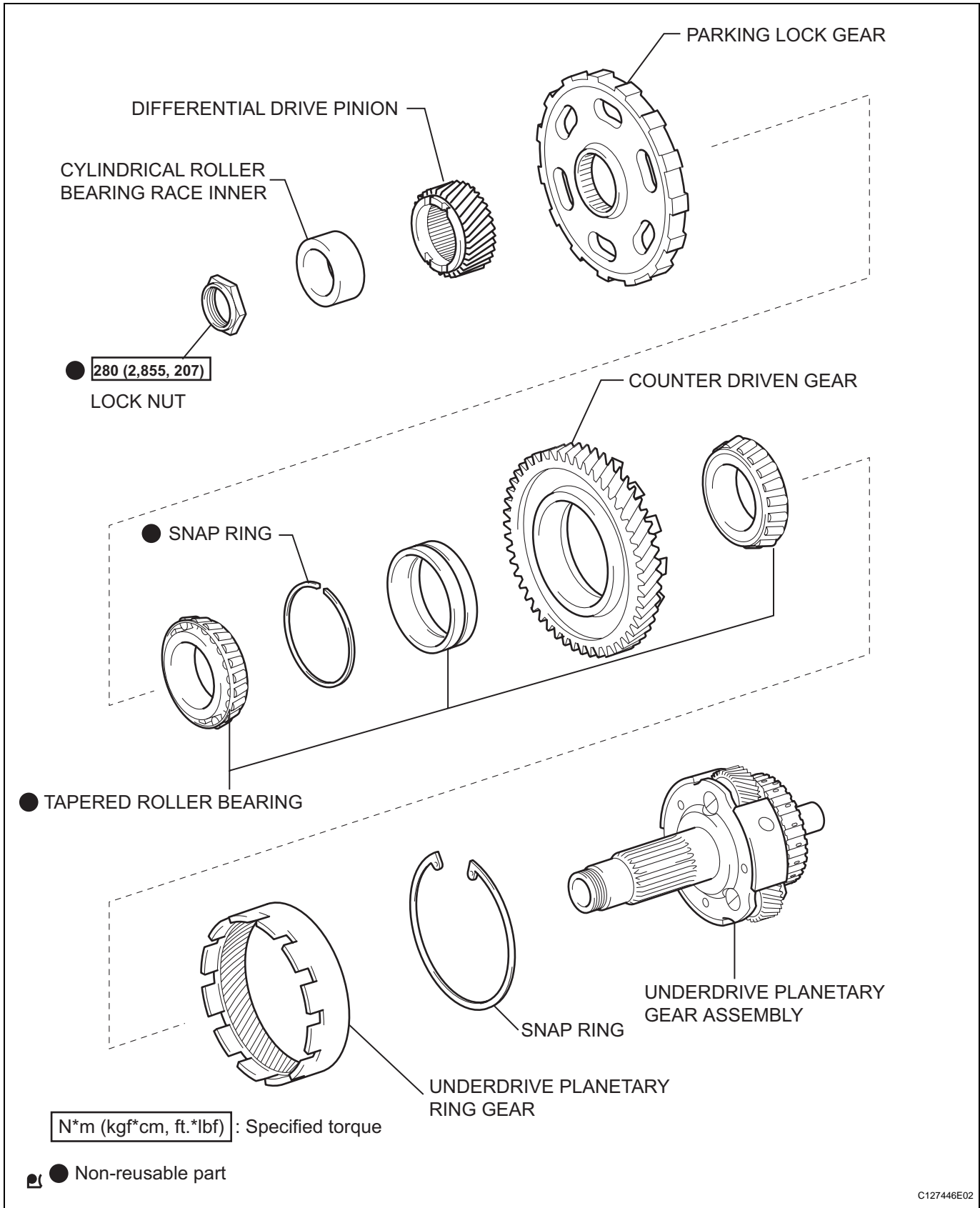


UNDERDRIVE PLANETARY GEAR

COMPONENTS

AX

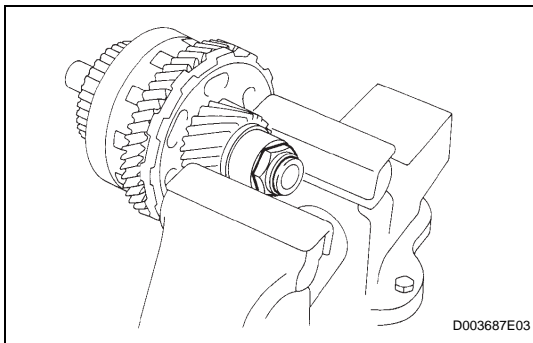
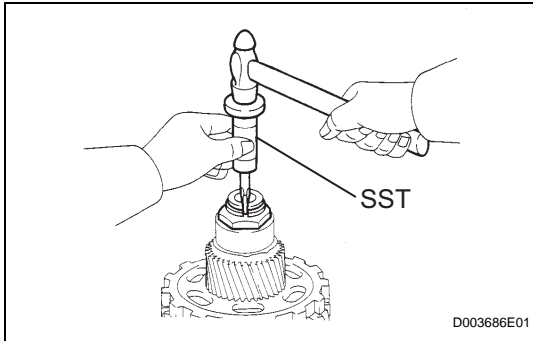


DISASSEMBLY

1. INSPECT UNDERDRIVE PLANETARY GEAR PRELOAD (See page AX-240)

2. REMOVE CYLINDRICAL ROLLER BEARING RACE INNER

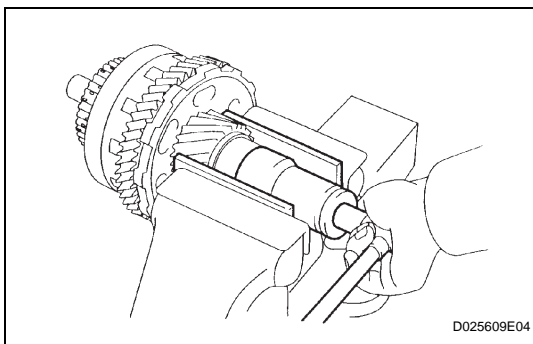
- (a) Using SST, loosen the staked part of the nut.
SST 09930-00010 (09931-00010, 09931-00020), 09387-00050



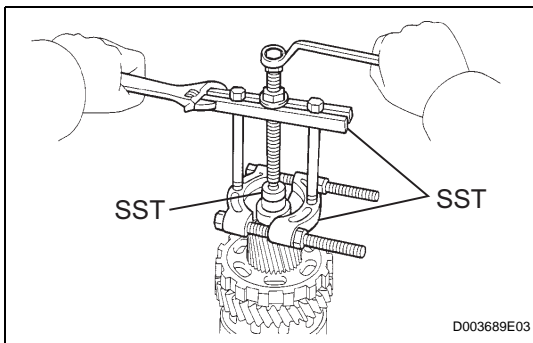
- (b) Clamp the underdrive planetary gear in soft jaw vise.

NOTICE:

Be careful not to damage the differential drive pinion.

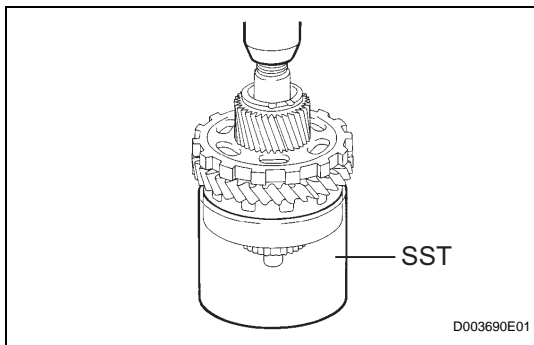


- (c) Using SST, remove the lock nut.
SST 09564-16020



- (d) Using SST, remove the cylindrical roller bearing inner race.
SST 09950-00020, 09950-00030, 09950-60010 (09951-00340)

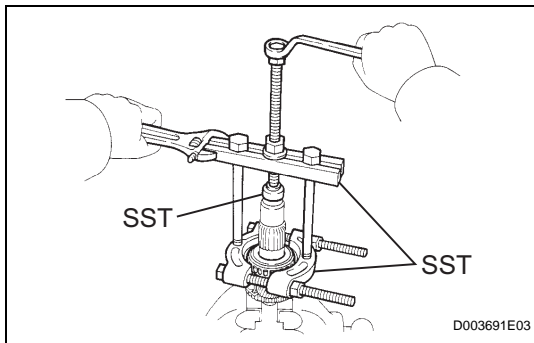
AX



3. REMOVE UNDERDRIVE PLANETARY GEAR ASSEMBLY

- (a) Using SST and a press, remove the differential drive pinion, parking lock gear, counter driven gear with underdrive planetary ring gear and front tapered roller bearing.

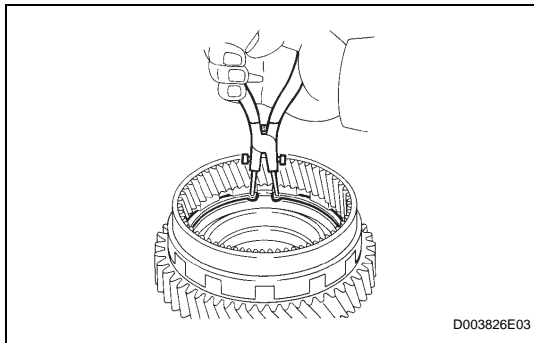
SST 09387-00050



- (b) Clamp the underdrive planetary gear in soft jaw vise.

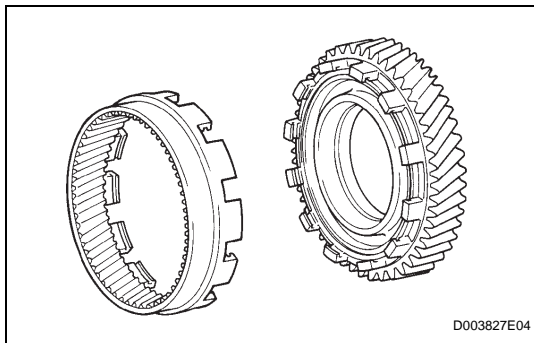
- (c) Using SST, remove rear tapered roller bearing from the underdrive planetary gear.

SST 09950-00020, 09950-00030, 09950-60010 (09951-00320)

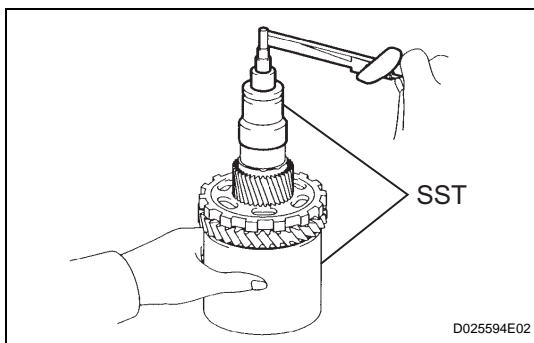


4. REMOVE UNDERDRIVE PLANETARY RING GEAR

- (a) Using snap ring pliers, remove the snap ring.



- (b) Remove the underdrive planetary ring gear from the counter driven gear.



INSPECTION

1. INSPECT UNDERDRIVE PLANETARY GEAR PRELOAD

- (a) Using SST a torque wrench, measure the turning torque of the underdrive planetary gear assembly while rotating the torque wrench at 60 rpm.

SST 09387-00050, 09564-16020

Torque: Standard turning torque at 60 rpm

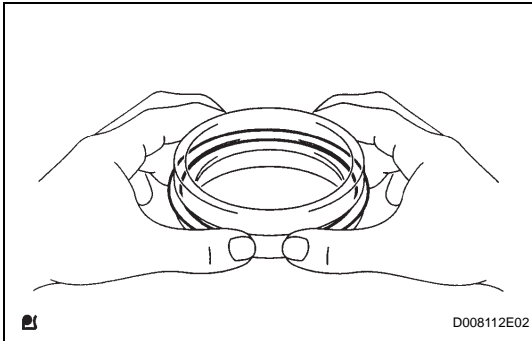
0.23 to 5.01 N*m (2 to 51 kgf*cm, 2.0 to 44.3 in.*lbf)

HINT:

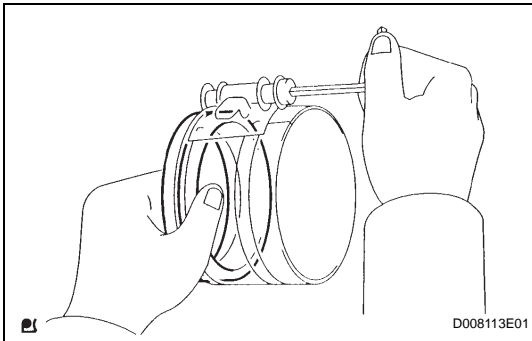
Use a torque wrench with a fulcrum length of 160 mm (6.3 in.).

REASSEMBLY**1. INSTALL UNDERDRIVE PLANETARY RING GEAR**

- (a) Install a new snap ring to the outer race of the tapered roller bearing.

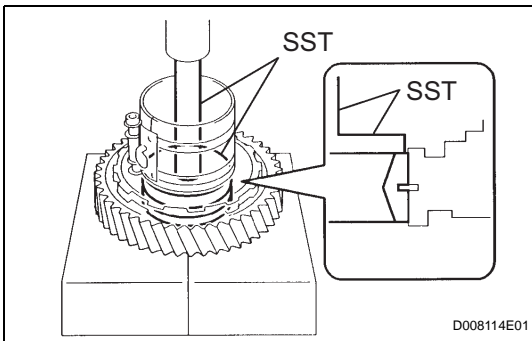


- (b) Using a piston ring compressor, squeeze the snap ring.

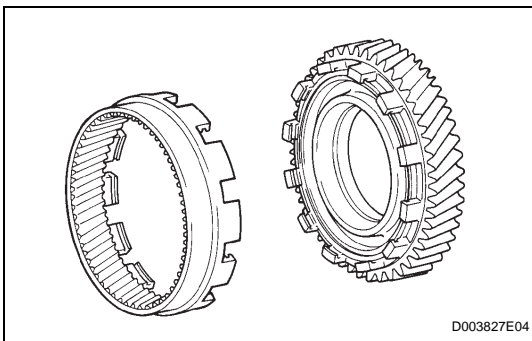


- (c) Using SST a press, press in the outer race of the tapered roller bearing.

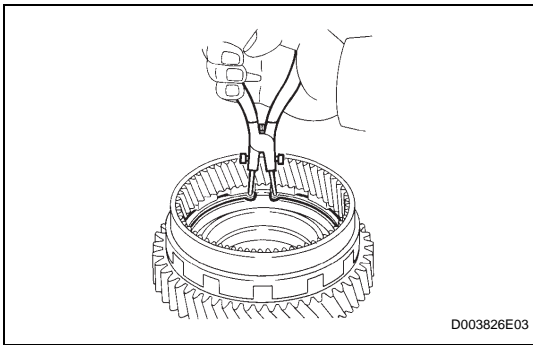
SST 09950-60020 (09951-00890), 09950-70010 (09951-07100)



- (d) Install the underdrive planetary ring gear to the counter driven gear.

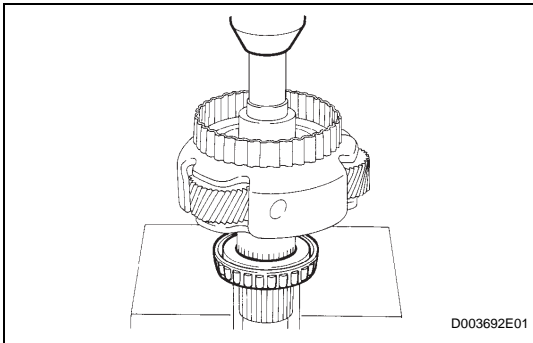


AX

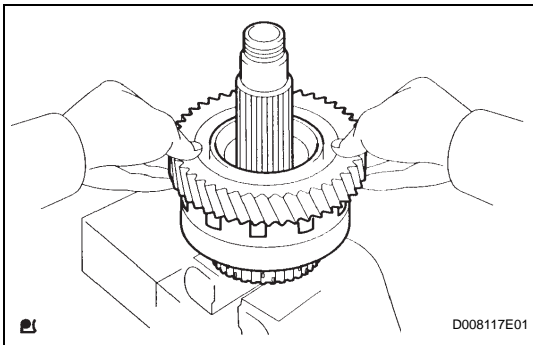


(e) Using snap ring pliers, install the snap ring.

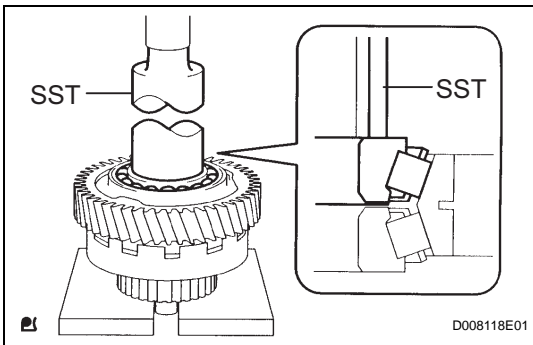
2. INSTALL UNDERDRIVE PLANETARY GEAR ASSEMBLY



(a) Using a press, install the tapered roller bearing.



(b) Install the counter driven gear with planetary ring gear to the underdrive planetary gear.

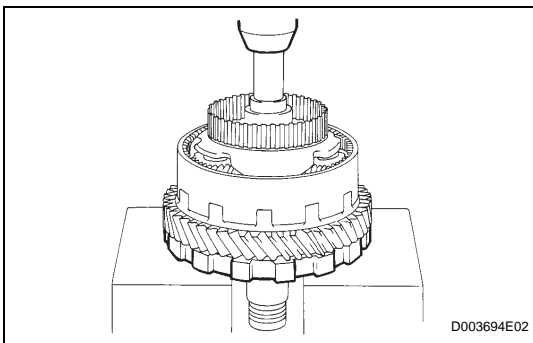


(c) Using SST and a press, press in the tapered roller bearing.

SST 09316-60011 (09316-00011)

NOTICE:

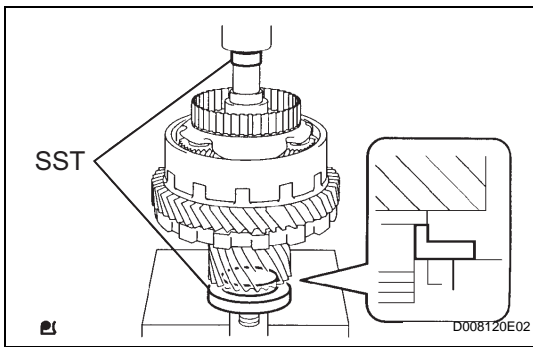
Press in the counter driven gear while rotating it.



(d) Using a press, press in the parking lock gear.

NOTICE:

Press in the counter driven gear while rotating it.

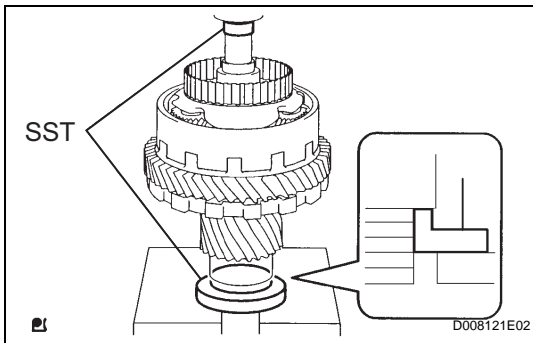


- (e) Using SST and a press, press in the differential drive pinion.

NOTICE:

Press in the counter driven gear while rotating it.

SST 09506-35010, 09950-60010 (09951-00250)

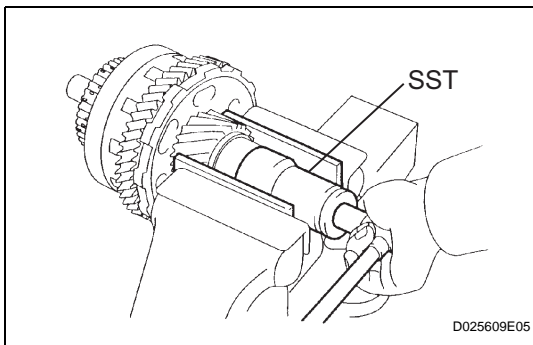


- (f) Using SST and a press, press in the cylindrical roller bearing inner race.

NOTICE:

Press in the counter driven gear while rotating it.

SST 09506-35010, 09950-60010 (09951-00250)



- (g) Clamp the underdrive planetary gear in a soft jaw vise.

NOTICE:

Be careful not to damage the differential drive pinion.

- (h) Using SST, install a new lock nut.

Torque: 280 N*m (2,855 kgf*cm, 207 in.*lbf)

SST 09564-16020

HINT:

Use a torque wrench with a fulcrum length of 750 mm (29.53 in.)

- (i) Using SST and a torque wrench, measure the turning torque of underdrive planetary gear assembly while rotating the torque wrench at 60 rpm.

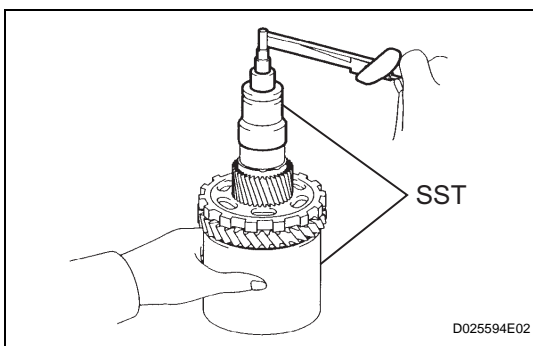
SST 09564-16020, 09387-00050

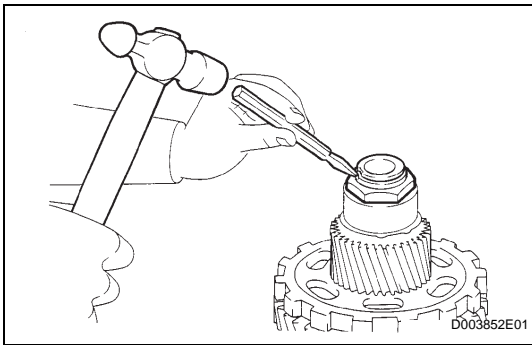
Torque: Standard turning torque at 60 rpm

0.23 to 5.01 N*m (2 to 51 kgf*cm, 2.0 to 44.3 in.*lbf)

HINT:

Use a torque wrench with a fulcrum length of 160 mm (6.30 in.).





- (j) Using a pin punch and hammer, stake the lock nut.
NOTICE:
Make sure that there are no cracks on the nut.

AX