REAR AXLE SHAFT

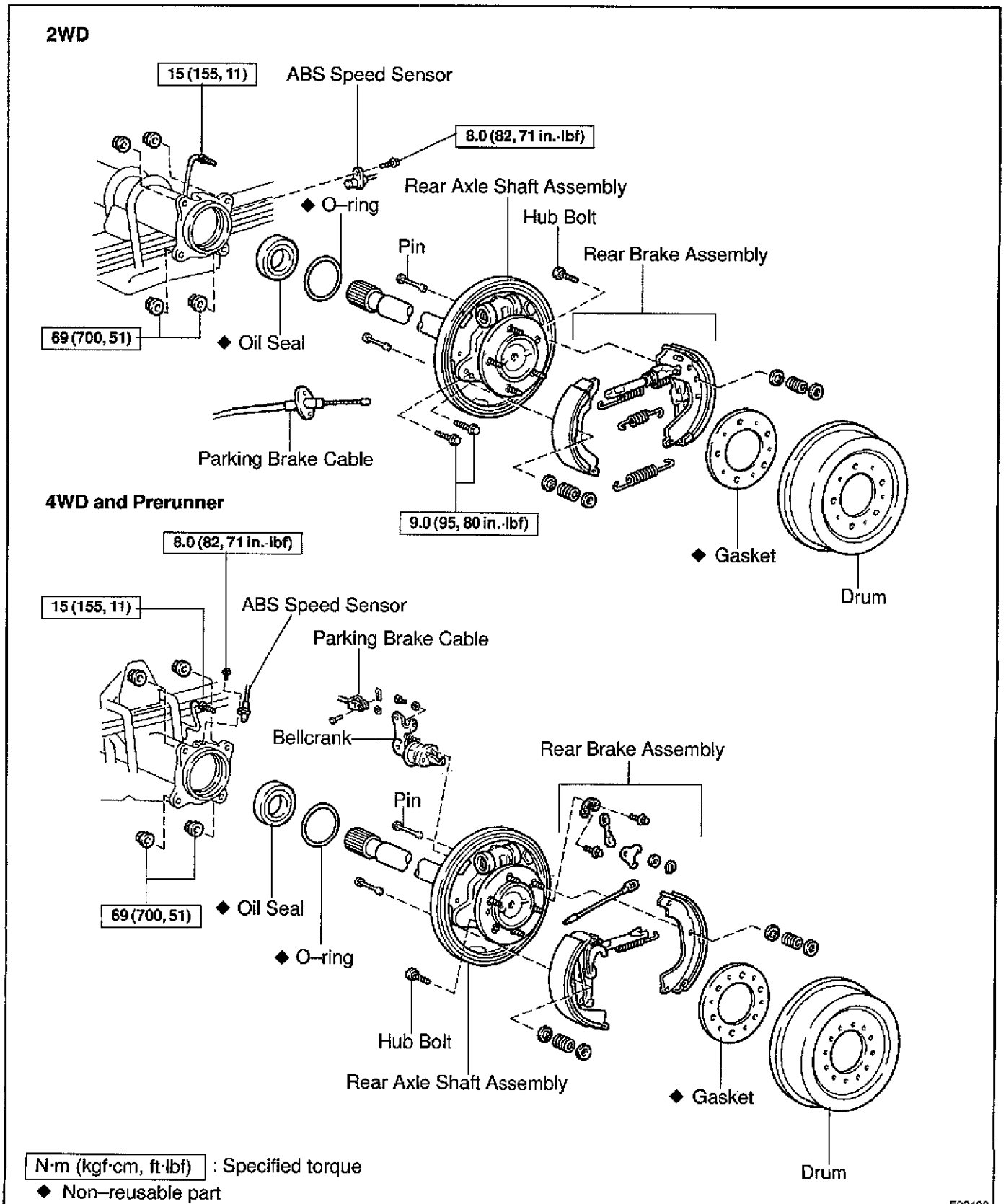
COMPONENTS

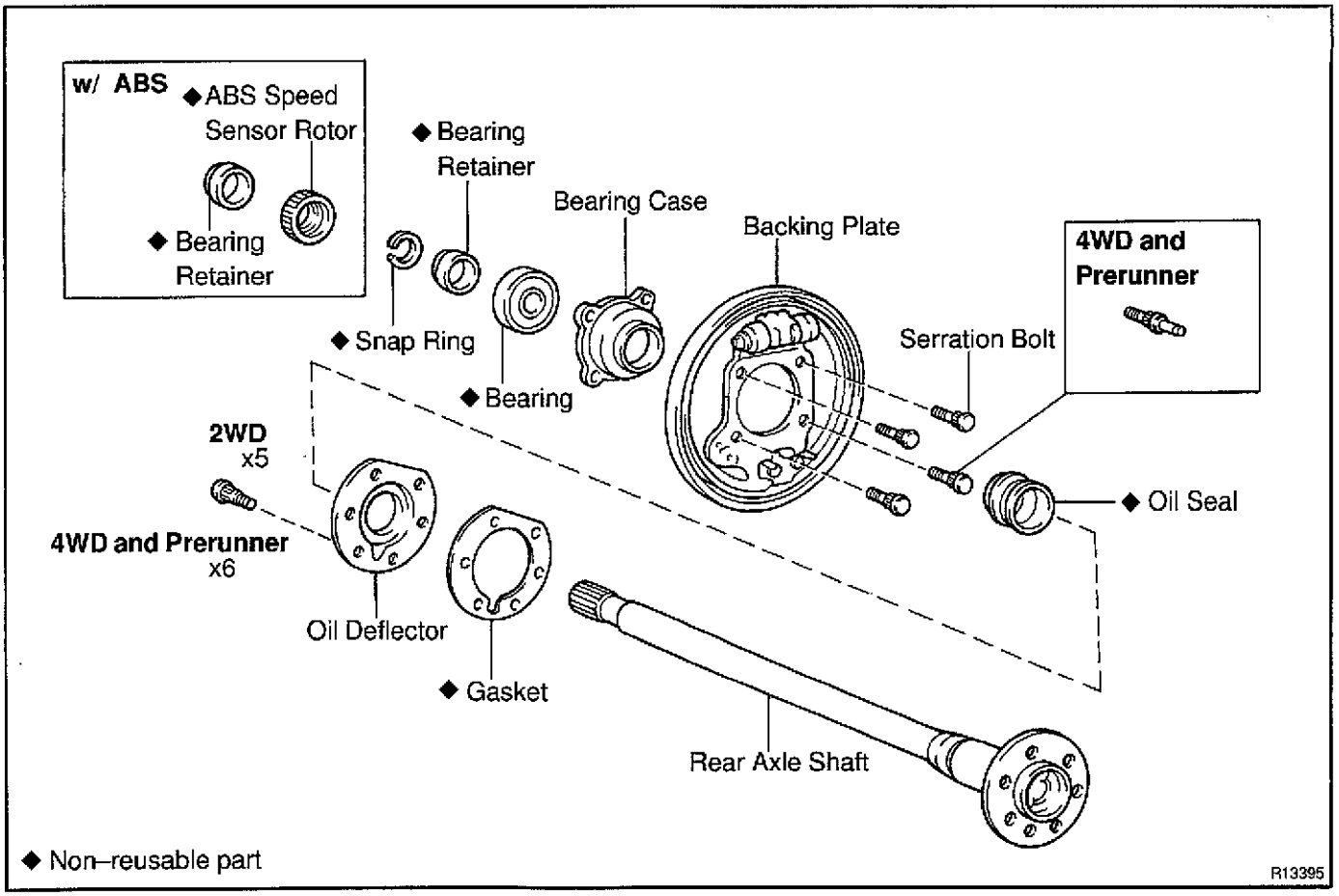
SA0B8-03

HINT:

Prerunner is the model described below.

RZN193L–PRMDK, LN191L–PRMDS



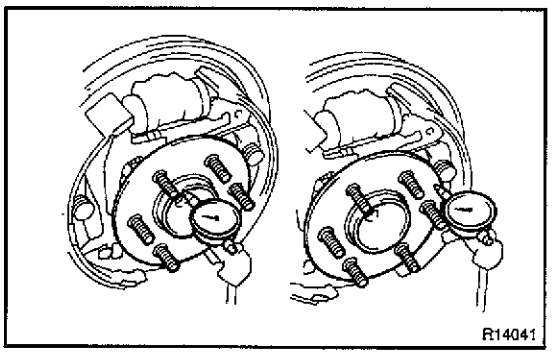

w/ ABS
◆ABS Speed Sensor Rotor
◆ Bearing Retainer
◆ Bearing Retainer
Bearing Case
Backing Plate
4WD and Prerunner
◆ Snap Ring
◆ Bearing
Serration Bolt
2WD x5
4WD and Prerunner x6
◆ Oil Seal
Oil Deflector
◆ Gasket
Rear Axle Shaft
◆ Non–reusable part
R13395

SA0B9-02

REMOVAL

1. REMOVE REAR WHEEL AND BRAKE DRUM

Torque:
2WD:
Australia Gasoline Engine:
150 N·m (1,500 kgf·cm, 108 ft·lbf)
Others:
140 N·m (1,400 kgf·cm, 101 ft·lbf)
4WD and Prerunner: 105 N·m (1,050 kgf·cm, 76 ft·lbf)



2. CHECK BEARING BACKLASH AND AXLE SHAFT DEVIATION

(a) Using a dial indicator, check the backlash in the bearing shaft direction.

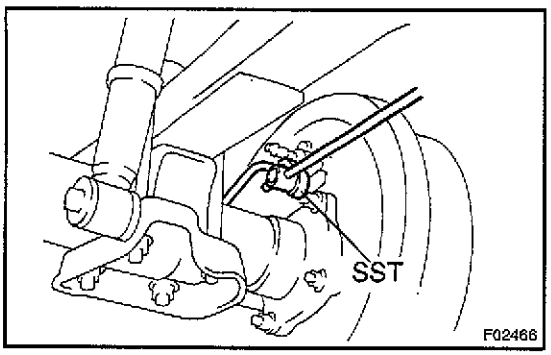
Maximum: 0.7 mm (0.027 in.)

If the backlash exceeds the maximum, replace the bearing.

(b) Using a dial indicator, check the deviation at the surface of the axle shaft outside the hub bolt.

Maximum: 0.1 mm (0.0039 in.)

If the deviation is the maximum, replace the axle shaft.



3. w/ ABS:

REMOVE ABS SPEED SENSOR FROM REAR AXLE HOUSING

Torque: 8.0 N·m (82 kgf·cm, 71 in.·lbf)

4. REMOVE REAR BRAKE ASSEMBLY

2WD: See page BR–50
4WD and Prerunner: See page BR–55

5. DISCONNECT BRAKE LINE AND PARKING BRAKE CABLE

(a) Using SST, disconnect the brake line from the wheel cylinder.

SST 09023–00100

Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

(b) 2WD:

Remove the 2 bolts and parking brake cable from the backing plate.

Torque: 9.0 N·m (95 kgf·cm, 80 in.·lbf)

6. REMOVE REAR AXLE SHAFT ASSEMBLY

(a) Remove the 4 backing plate mounting nuts.

Torque: 69 N·m (700 kgf·cm, 51 ft·lbf)

(b) Pull out the rear axle shaft assembly from the rear axle housing.

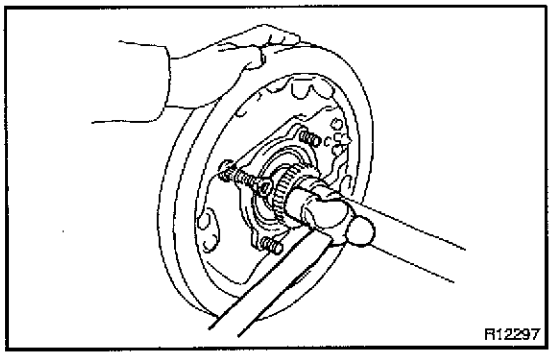
NOTICE:

Be careful not to damage the oil seal.

7. REMOVE O–RING FROM REAR AXLE HOUSING

SA0BA–02

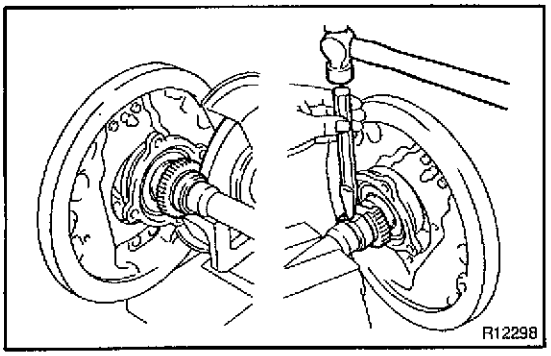
INSPECTION



1. w/ ABS:
REMOVE BEARING RETAINER (DIFFERENTIAL SIDE) AND ABS SPEED SENSOR ROTOR

(a) Attach 4 nuts to the serration bolts and remove the serration bolts from the backing plate using a hammer.

NOTICE:
Do not reuse the nuts previously removed from the vehicle.



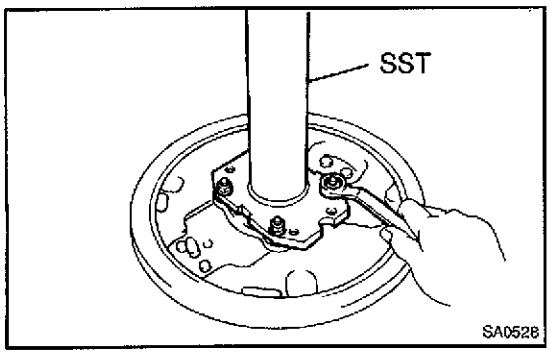
(b) Grind the retainer and sensor rotor surfaces using a grinder, then chisel them out with a chisel and hammer.

(c) Attach washers and nut to the serration bolts, then torque the nuts to install the serration bolts to the backing plate.

(d) Remove the 4 nuts from the serration bolts.

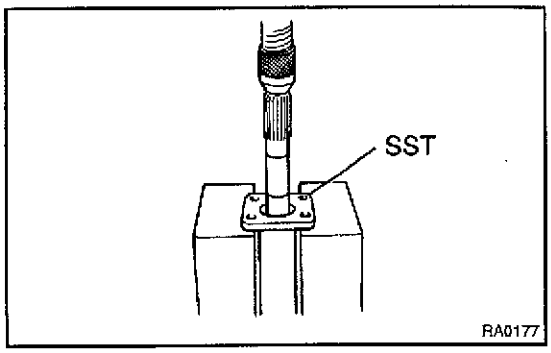
2. REMOVE SNAP RING FROM AXLE SHAFT

Using a snap ring expander, remove the snap ring.



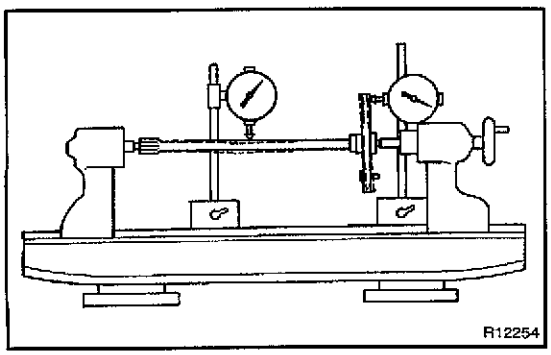
3. REMOVE REAR AXLE SHAFT FROM BACKING PLATE

(a) Position SST on the backing plate with 4 nuts.
SST 09521–25011



(b) Using a press, remove the rear axle shaft with the bearing retainer from the backing plate.

(c) Remove the SST.
SST 09521–25011

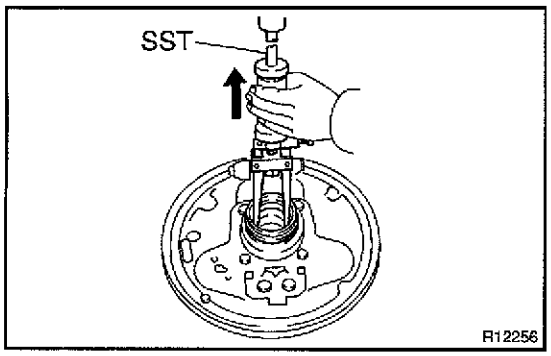


4. INSPECT AXLE SHAFT

Using a dial indicator, measure the runout of the shaft and flange.

Maximum shaft runout: 2.0 mm (0.079 in.)
Maximum flange runout: 0.1 mm (0.004 in.)

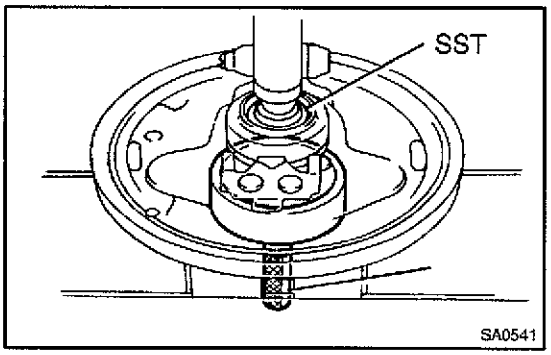
If the rear axle shaft or flange are damaged or worn, or if runout is greater than the maximum, replace the rear axle shaft.



5. REMOVE OUTER OIL SEAL

Using SST, remove the oil seal.

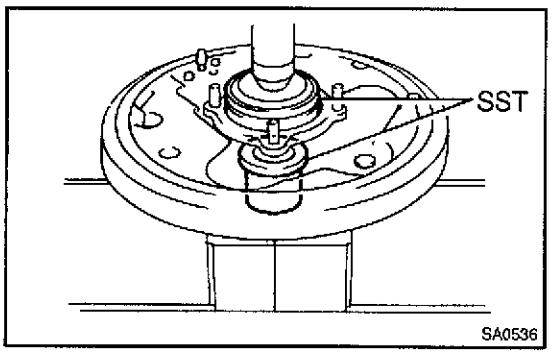
SST 09308–00010



6. REPLACE REAR AXLE BEARING

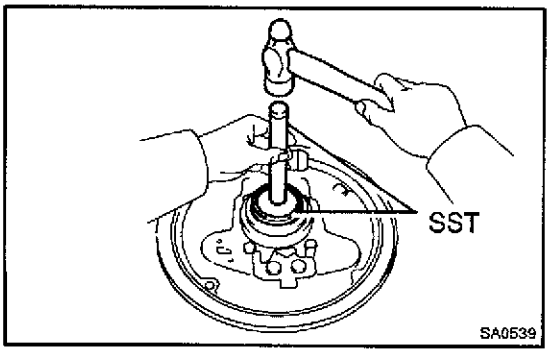
(a) Using SST and a press, remove the bearing.

SST 09223–56010, 09950–60010 (09951–00560)



(b) Using SST and a press, install a new bearing.

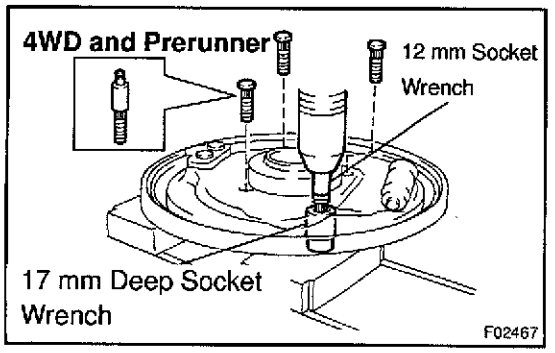
SST 09515–30010, 09950–60020 (09951–00890)



7. INSTALL NEW OUTER OIL SEAL

Using SST and a hammer, install a new oil seal.

SST 09950–60010 (09951–00610),
09950–70010 (09951–07150)



8. REPLACE BEARING CASE

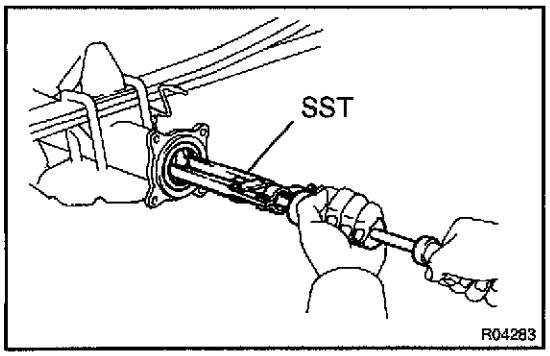
(a) Remove the oil seal (outer side) and bearing.

(b) Install 4 nuts to the serration bolts.

(c) Using a hammer, remove the serration bolts and bearing case.

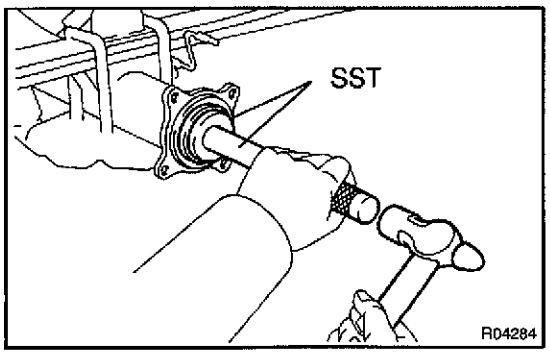
(d) Position the backing plate on a new bearing case and using a press and 2 socket wrenches, install the serration bolts.

(e) Install a new bearing and oil seal (outer side).

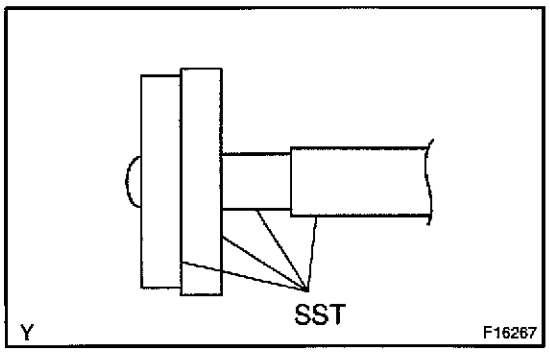


9. REPLACE OIL SEAL (INNER SIDE)

(a) Using SST, remove the oil seal.
SST 09308–00010

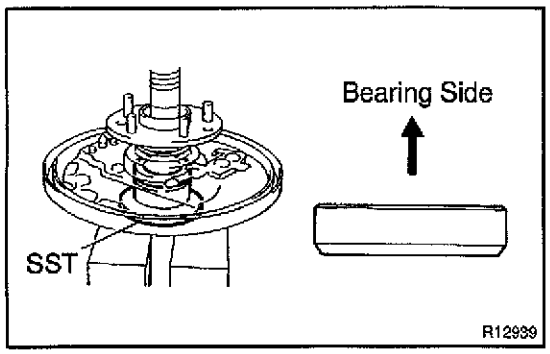


(b) Using SST and a hammer, install a new oil seal.
SST 09950–60020 (09951–00710),
09950–70010 (09951–07150)



(c) w/ ABS
Using SST and a hammer, install a new oil seal.
SST 09950–60020 (09951–00710, 09951–00750, 00952–06010)
00950–70010 (09951–07150)

(d) Apply MP grease to the oil seal lip.



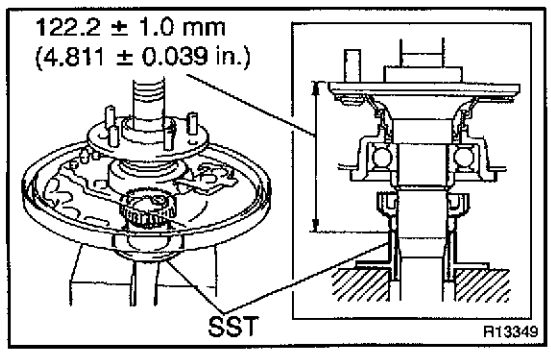
10. INSTALL REAR AXLE SHAFT IN BACKING PLATE

(a) Apply MP grease to the oil seal lip.

(b) Install the backing plate and bearing retainer on the rear axle shaft.

(c) Using SST and a press, install the rear axle shaft into the backing plate.
SST 09316–60011 (09316–00051)

(d) Using snap ring pliers, install a new snap ring.



11. w/ ABS:
INSTALL ABS SPEED SENSOR ROTOR AND BEARING RETAINER (DIFFERENTIAL SIDE)

Using SST and a press, install a new sensor rotor and new bearing retainer to the axle shaft.
SST 09316–60011 (09316–00051)
Standard length: 122.2 ± 1.0 mm (4.811 ± 0.039 in.)

5A0EB–02

INSTALLATION

Installation is in the reverse order of removal (See page SA–165).

AFTER INSTALLATION, BLEED BRAKE SYSTEM (See page BR–4) AND CHECK ABS SPEED SENSOR SIGNAL (See page DI–52)