

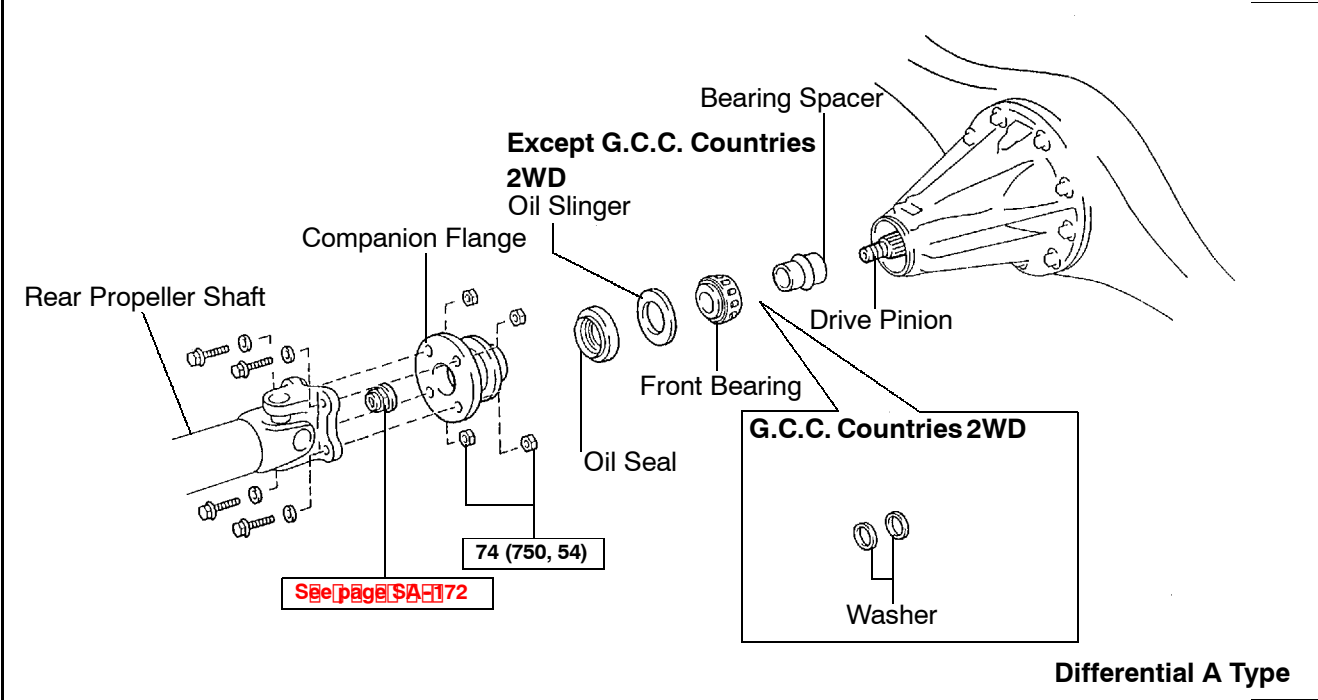
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# REAR DIFFERENTIAL FRONT OIL SEAL COMPONENTS

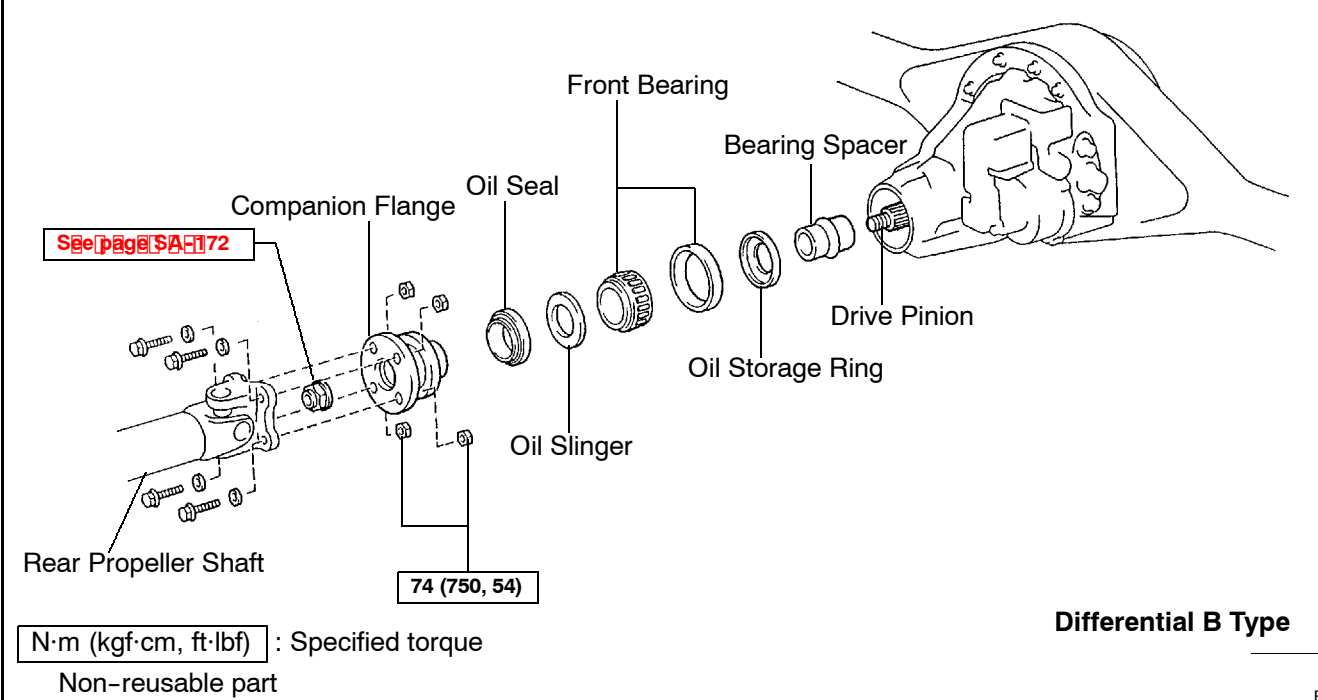
SA0BD-02

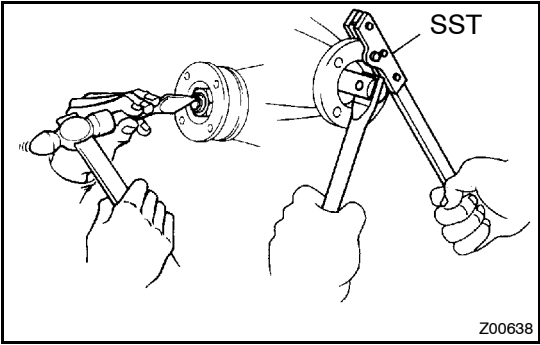
HINT:  
Prerunner is the model described below.  
**RZN193L-PRMDK, LN191L-PRMDS**

1RZ, 3RZ-F 2WD, 2RZ-FE 2WD,  
2L, 3L, 5L, 3RZ-FE A/T



3RZ-F 4WD, 3RZ-FE M/T, 2L-T,  
2RZ-FE 4WD and Prerunner



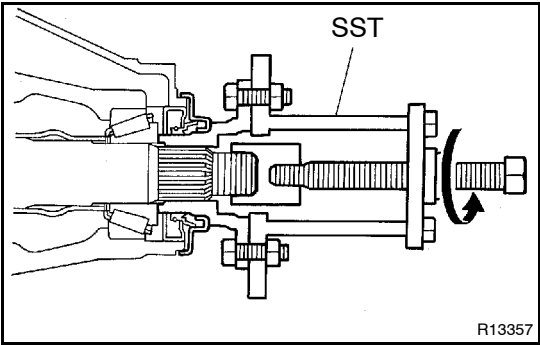


## REPLACEMENT

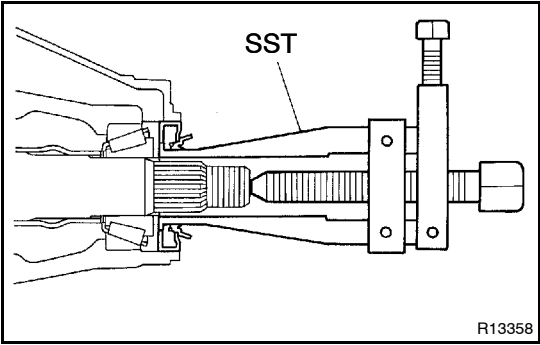
1. DRAIN HYPOID GEAR OIL
2. REMOVAL REAR PROPELLER SHAFT  
2WD: See page PR-3  
4WD: See page PR-11

### 3. REMOVE COMPANION FLANGE

- (a) Using a chisel and hammer, loosen the staked part of the nut.
- (b) Using SST to hold the flange, remove the nut.  
SST 09330-00021



- (c) Using SST, remove the companion flange.  
SST 09950-00010 (09951-03010, 09953-03010, 09954-03010, 09955-03030, 09956-03030, 09956-03050)

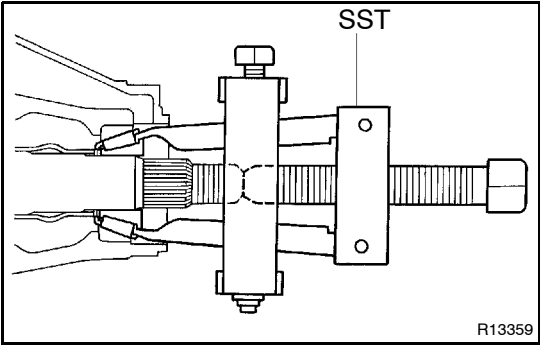


### 4. REMOVE OIL SEAL

Using SST, remove the oil seal.

SST 09308-00010

### 5. Except Differential A Type G.C.C. Countries 2WD: REMOVE OIL SLINGER

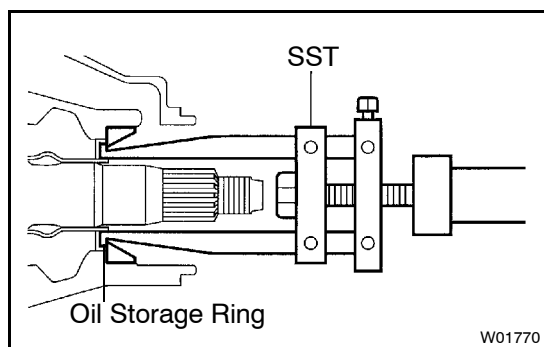


### 6. REMOVE FRONT BEARING

Using SST, remove the front bearing from the drive pinion.

SST 09556-02010

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#### 7. Differential B Type

##### REMOVE FRONT BEARING OUTER RACE AND OIL STORAGE RING

- Using SST, remove the front bearing outer race.  
SST 09308-00010
- Using a screwdriver, bend the oil storage ring and remove it.

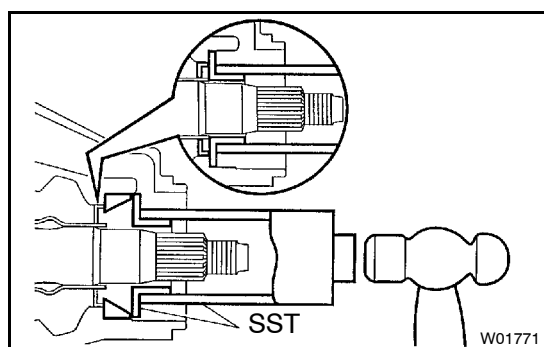
#### 8. REMOVE BEARING SPACER

- Differential A type G.C.C. countries 2WD:  
Remove the 2 washers.

- Remove the bearing spacer.

#### 9. INSTALL NEW BEARING SPACER

- Install a new bearing spacer.
- Differential A type G.C.C. countries 2WD:  
Install the 2 washers.

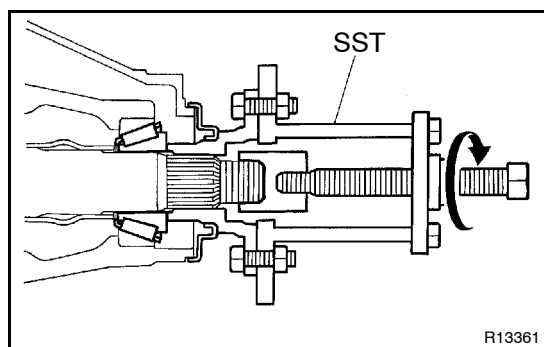


#### 10. Differential B Type

##### INSTALL OIL STORAGE RING AND FRONT BEARING OUTER RACE

- Using SST and a hammer, install a new oil storage ring.  
SST 09316-00011 (09316-00011, 09316-00021)
- Using SST and a hammer, install the front bearing outer race.

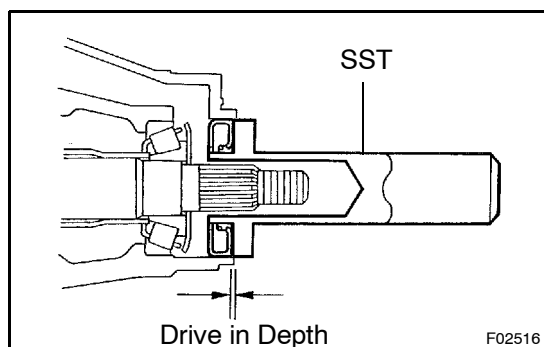
SST 09316-00011 (09316-00011, 09316-00021)



#### 11. INSTALL FRONT BEARING

- Place the front bearing.
- Except differential A type G.C.C. countries 2WD:  
Place the oil slinger.
- Using SST and the companion flange, install the front bearing then remove the companion flange.

SST 09950-00010 (09951-03010, 09953-03010, 09954-03010, 09955-03030, 09956-03030, 09956-03050)



#### 12. INSTALL NEW OIL SEAL

- Apply MP grease to a new oil seal.
- Except G.C.C. countries 2WD, w/ Diff. lock and w/ LSD:

Using SST, install the oil seal.

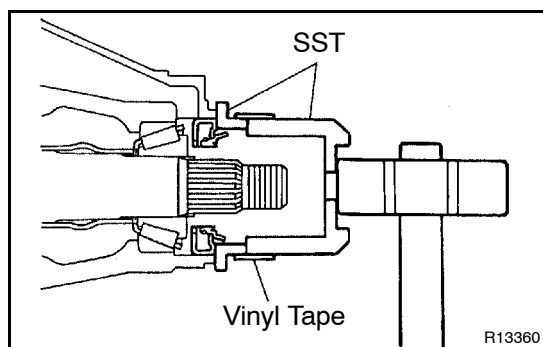
SST 09554-00011

Oil seal drive in depth: 1.0 mm (0.039 in.)

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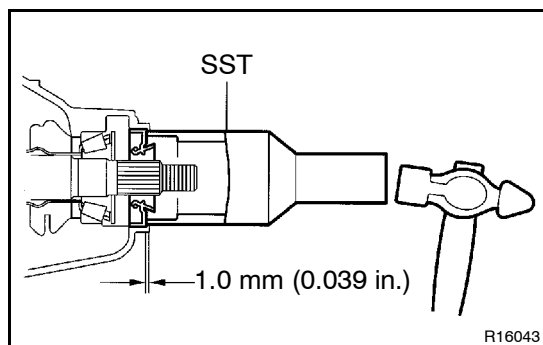
SA-174

SUSPENSION AND AXLE - REAR DIFFERENTIAL FRONT OIL SEAL

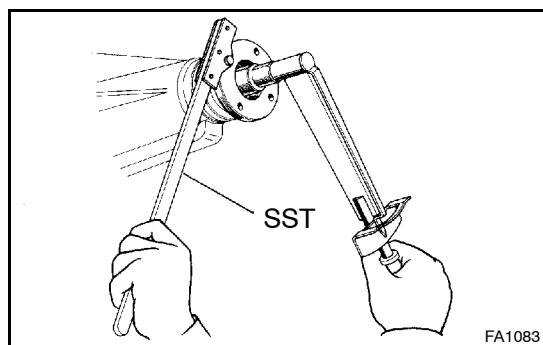


- (c) G.C.C. countries 2WD:  
Using SST, install the oil seal.  
**SST 09649 7010, 09316 2010**  
**Oil seal drive in depth: 0.5 mm (0.020 in.)**

**HINT:**  
Connect SST with vinyl tape.



- (d) w/ Diff. lock and w/ LSD:  
Using SST, install the oil seal.  
**SST 09214 6011**  
**Oil seal drive in depth: 1.0 mm (0.039 in.)**



### 13. INSTALL COMPANION FLANGE

- (a) Place the companion flange on the drive pinion.  
(b) Apply light coat of hypoid gear oil on threads of a new companion flange nut.  
(c) Using SST to hold the flange, torque the nut.

**SST 09330 0021**

**Torque:**

**G.C.C. countries 2WD:**

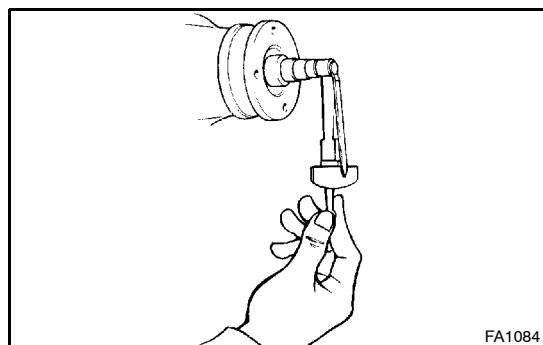
**147 N·m (1,500 kgf·cm, 109 ft·lbf)**

**w/ Diff. lock and w/ LSD:**

**196 N·m (2,000 kgf·cm, 145 ft·lbf)**

**Others:**

**108 N·m (1,100 kgf·cm, 80 ft·lbf)**



### 14. ADJUST DRIVE PINION PRELOAD

**G.C.C. countries 2WD: See page SA-201**

**w/ Diff. lock: See page SA-220**

**w/ LSD: See page SA-242**

**Others: See page SA-185**

### 15. STAKE DRIVE PINION NUT

### 16. CONNECT REAR PROPELLER SHAFT

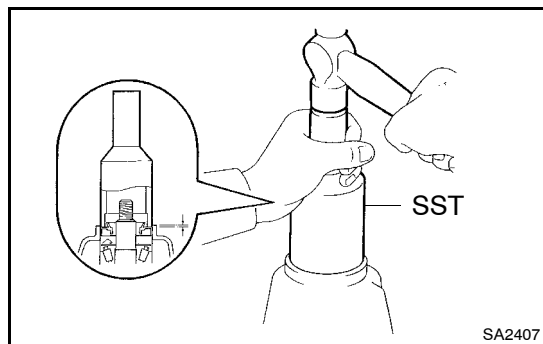
**2WD: See page PR-8**

**4WD: See page PR-17**

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SA-226

SUSPENSION AND AXLE - REAR DIFFERENTIAL CARRIER (w/ Diff. Lock)

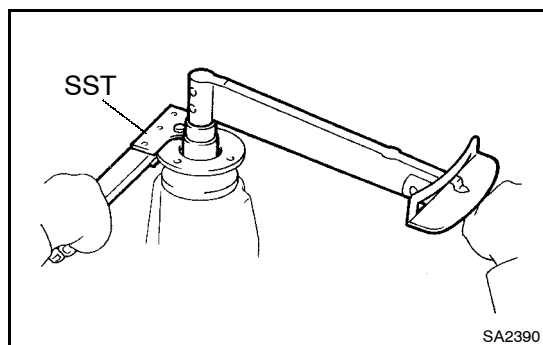


#### 15. INSTALL OIL SEAL

- Apply MP grease to the oil seal lip.
- Using SST and hammer, install a new oil seal.

SST 09214-76011

Oil seal drive in depth: 1.0 mm (0.039 in.)



#### 16. INSTALL COMPANION FLANGE

- Place the companion flange on the drive pinion.
- Install a new nut.

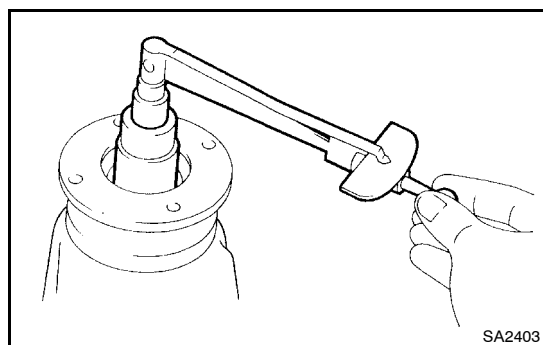
HINT:

Coat the threads of a new nut with hypoid gear oil.

- Using SST to hold the flange, tighten the nut.

SST 09330-00021

Torque: 196 N·m (2,000 kgf·cm, 145 ft·lbf)



#### 17. ADJUST DRIVE PINION PRELOAD

Using a torque wrench, measure the preload of the backlash between the drive pinion and ring gear.

**Preload (at starting):**

**New bearing :**

0.9 - 1.6 N·m (10 - 16 kgf·cm, 8.7 - 13.9 in·lbf)

**Reuse bearing :**

0.5 - 0.8 N·m (5 - 8 kgf·cm, 4.3 - 6.9 in·lbf)

If preload is larger than the specification, replace the bearing spacer.

If preload is less than the specification, retighten the nut a little at a time with a torque of 13 N·m (130 kgf·cm, 9 ft·lbf) until the specified preload is reached.

**Torque: 343 N·m (3,500 kgf·cm, 253 ft·lbf) or less**

If the maximum torque is exceeded while retightening the nut, replace the bearing spacer and repeat the preload adjusting procedure. Do not loosen the pinion nut to reduce the preload.

#### 18. RECHECK RING GEAR BACKLASH

(See page SA-214)

#### 19. RECHECK TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION (See page SA-220)

#### 20. CHECK RUNOUT OF COMPANION FLANGE

(See page SA-214)

#### 21. STAKE DRIVE PINION NUT

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