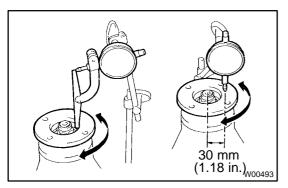
SA05A-05



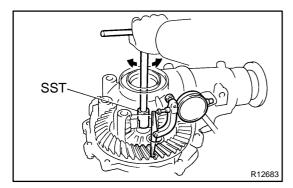
## DISASSEMBLY

#### 1. CHECK RUNOUT OF COMPANION FLANGE

Using a dial indicator, measure the vertical and lateral runout of the companion flange.

### Maximum runout: 0.10 mm (0.0039 in.)

If the runout is greater than the maximum, replace the companion flange.

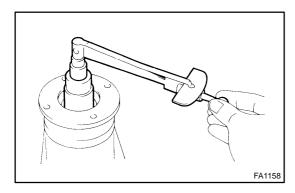


#### 2. CHECK RING GEAR BACKLASH

Using SST and a dial indicator, measure the ring gear backlash. SST 09564-3201 1

Backlash: 0.10 - 0.18 mm (0.0039 - 0.0071 in.)

If the backlash is not within the specification, adjust the side bearing preload or repair as necessary.



#### 3. MEASURE DRIVE PINION PRELOAD

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

Preload (at starting):

0.6 - 1.0 N·m (6 - 10 kgf·cm, 5.2 - 8.7 in.·lbf)

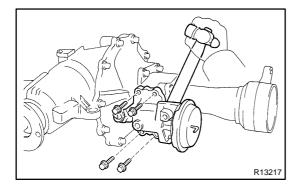
#### 4. CHECK TOTAL PRELOAD

Using a torque wrench, measure the preload with the teeth of the drive pinion and ring gear in contact.

Total preload (at starting):

Drive pinion preload plus 0.4 - 0.6 N·m (4 - 6 kgf·cm, 3.5 - 5.2 in.·lbf)

If necessary, disassemble and inspect the differential.

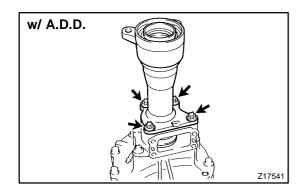


5. w/ A.D.D.:

**REMOVE A.D.D. ACTUATOR** 

- (a) Remove the 4 bolts.
- (b) Using a hammer handle, remove the actuator.

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#### 6. w/ A.D.D.:

#### **REMOVE DIFFERENTIAL TUBE**

- (a) Using a torx socket E14, remove the 4 torx bolts.
- (b) Using a plastic hammer, remove the differential tube.
- (c) Remove the sleeve.
- (d) Remove the O-ring from the differential tube.

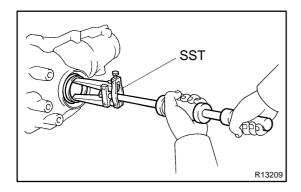
#### 7. w/o A.D.D.:

#### **REMOVE DIFFERENTIAL TUBE**

- (a) Remove the 4 bolts.
- (b) Using a plastic hammer, remove the differential tube.
- 8. w/ A.D.D.:

#### **REMOVE CLUTCH CASE**

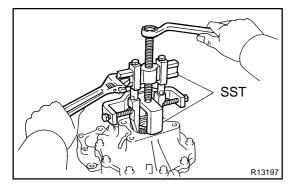
- (a) Using a torx socket E14, remove the 2 torx bolts.
- (b) Using a plastic hammer, remove the clutch case.



#### 9. REMOVE SIDE OIL SEAL

Using SST, remove the side oil seal.

SST 09308-00010

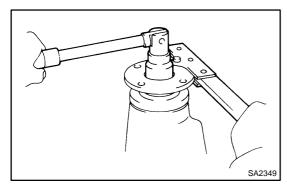


#### 10. w/ A.D.D.:

#### **REMOVE INTERMEDIATE SHAFT NO. 1**

Using SST, remove the intermediate shaft No. 1.

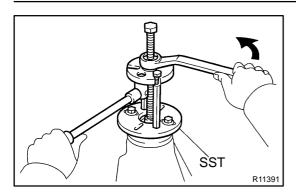
SST 09350-20015 (09369-20040), 09950-40011 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04011, 09957-04010, 09958-04011)



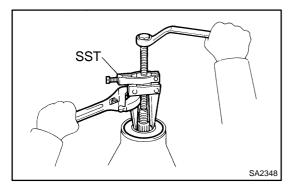
#### 11. REMOVE COMPANION FLANGE

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

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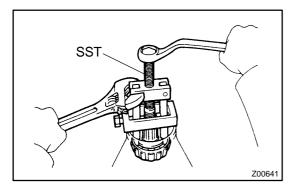


(c) Using SST, remove the companion flange. SST 09950-30012 (09951-03010, 09953-03010, 09954-03010, 09955-03030, 09956-03020)



#### 12. REMOVE OIL SEAL AND OIL SLINGER

- (a) Using SST, remove the oil seal. SST 09308-10010
- (b) Remove the oil slinger.



#### 13. REMOVE REAR BEARING AND BEARING SPACER

- (a) Using SST, remove the rear bearing from the drive pinion. SST 09556-22010
- (b) Remove the bearing spacer.
- 14. REMOVE SIDE BEARING RETAINER

Remove the 10 bolts and tap out the retainer with a plastic hammer.

- 15. REMOVE DIFFERENTIAL CASE ASSEMBLY
- 16. REMOVE DRIVE PINION FROM DIFFERENTIAL CAR-RIER

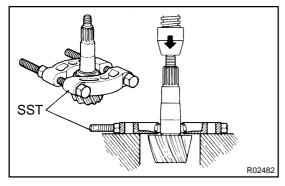


Using SST and a press, remove the bearing and washer from the drive pinion.

SST 09950-00020

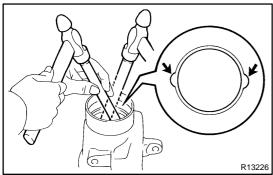
HINT:

If the drive pinion or ring gear are damaged, replace them as

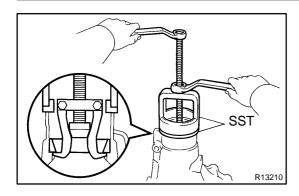


# 18. REMOVE DRIVE PINION BEARING OUTER RACES (a) Using a brass bar and hammer, remove the front bearing

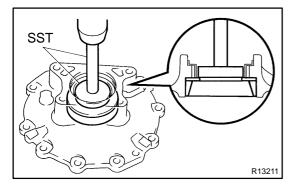
(a) Using a brass bar and hammer, remove the front bearing outer race.



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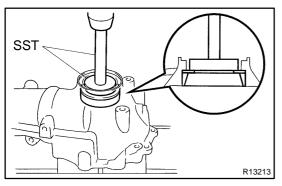
(b) Using SST, remove the rear bearing outer race. SST 09502-12010, 09612-65014 (09612-01020, 09612-01050)



## 19. REMOVE SIDE BEARING OUTER RACES HINT:

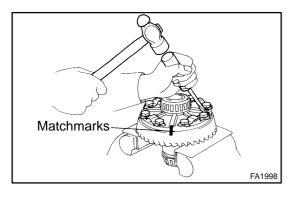
- Measure the plate washer and note the thickness.
- Tag the bearing outer races to show the location for reassembly.
- (a) Using SST and a press, remove the outer race and plate washer from the bearing retainer.

SST 09950-60010 (09951-00540), 09550-70010 (09951-07150)



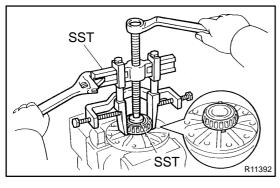
(b) Using SST and a press, remove the outer race and plate washer from the differential carrier.

SST 09950-60010 (09951-00650), 09950-70010 (09951-07150)



#### 20. REMOVE RING GEAR

- (a) Place matchmarks on the ring gear and differential case.
- (b) Using a screwdriver, unstake the 5 lock plates.
- (c) Remove the 10 bolts and 5 lock plates.
- (d) Using a plastic hammer, tap on the ring gear to separate it from the differential case.



## 21. REMOVE SIDE BEARINGS

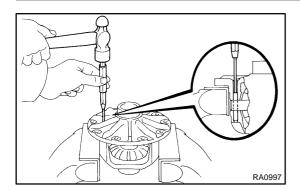
Using SST, remove the 2 side bearings from the differential case.

SST 09950-40011 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04061, 09957-04010, 09958-04011), 09950-60010 (09951-00480)

HINT:

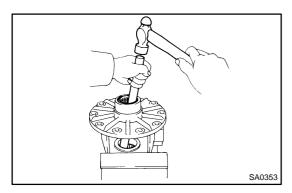
Fix the claws of SST to the notch in the differential case.

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#### 22. DISASSEMBLE DIFFERENTIAL CASE ASSEMBLY

- (a) Using a pin punch and hammer, remove the straight pin.
- (b) Remove the pinion shaft, 2 pinion gears, 2 pinion gears thrust washers, 2 side gears and 2 side gear thrust washers.



## 23. w/ A.D.D.: REMOVE BEARINGS

Using a brass bar and hammer, remove the 2 bearings.

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