

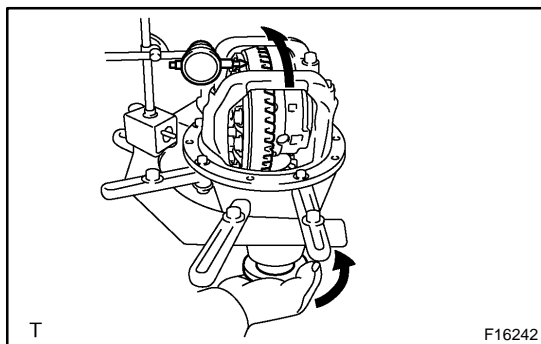
DISASSEMBLY

1. CHECK RUNOUT OF COMPANION FLANGE

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

Maximum runout: 0.09 mm (0.0035 in.)

If the runout is not within the specification, replace the companion flange.

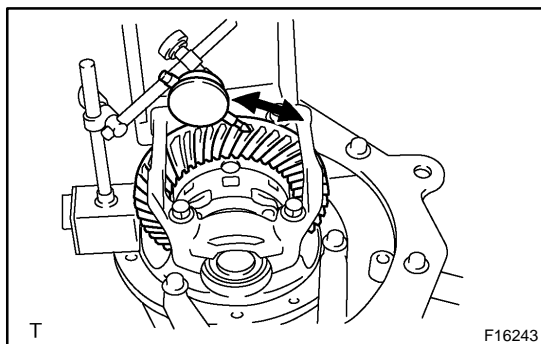


2. CHECK RING GEAR RUNOUT

Using a dial indicator, measure the ring gear runout.

Maximum runout: 0.05 mm (0.0020 in.)

If the runout is not within the specification, replace the ring gear.



3. CHECK RING GEAR BACKLASH

Using a dial indicator, while holding the companion flange, measure the ring gear backlash.

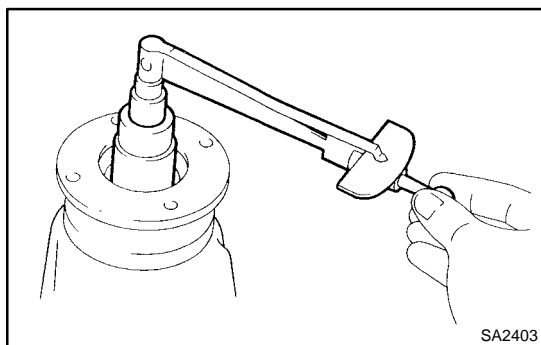
Backlash: 0.13 – 0.18 mm (0.0051 – 0.0071 in.)

HINT:

Measure at 3 or more positions around the circumference of the ring gear.

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

4. CHECK TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION (See page [SA-133](#))



5. MEASURE DRIVE PINION PRELOAD

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

Preload (at starting):

0.6 – 0.9 N·m (6.1 – 9.2 kgf·cm, 5.3 – 8.0 in.-lbf)

6. CHECK TOTAL PRELOAD

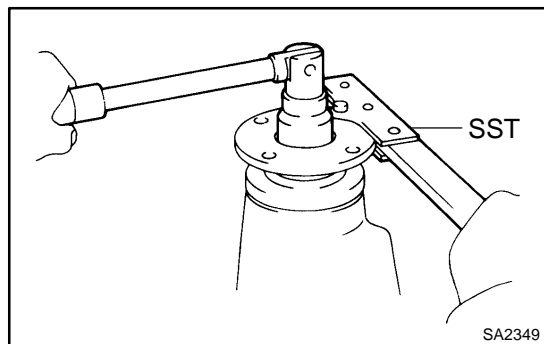
Using a torque wrench, measure the preload with the teeth of the drive pinion and ring gear in contact.

Total preload (at starting):**Drive pinion preload plus****0.4 – 0.6 N·m (4 – 6 kgf·cm, 3.5 – 5.2 in.-lbf)**

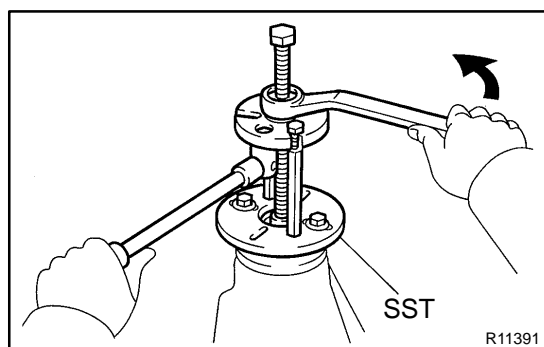
If necessary, disassemble and inspect the differential.

7. REMOVE COMPANION FLANGE

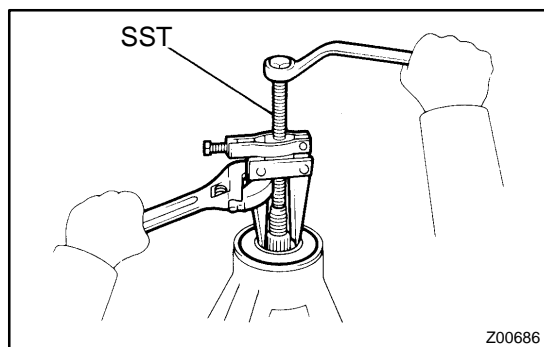
- (a) Using a chisel and a hammer, unstake the nut.



- (b) Using SST to hold the flange, remove the nut.
SST 09330-00021

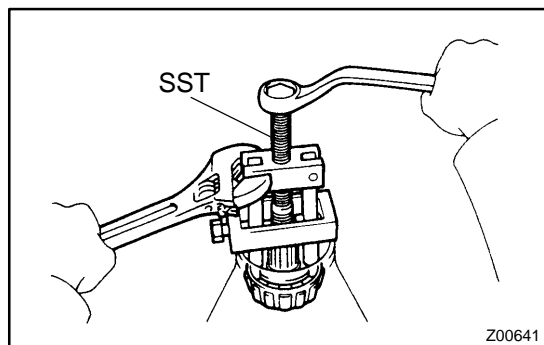


- (c) Using SST, remove the companion flange.
SST 09950-30012 (09951-03010, 09953-03010, 09954-03010, 09955-03030, 09956-03030)

**8. REMOVE FRONT OIL SEAL**

Using SST, remove the oil seal from the differential carrier.

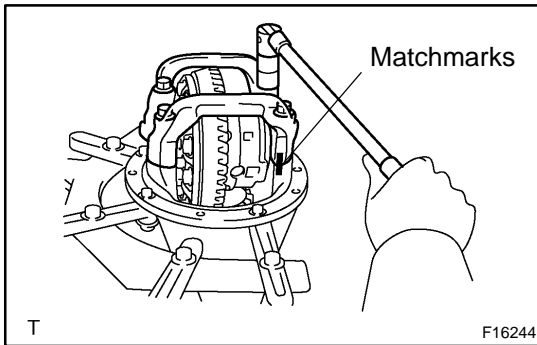
SST 09308-10010

**9. REMOVE FRONT BEARING AND BEARING SPACER**

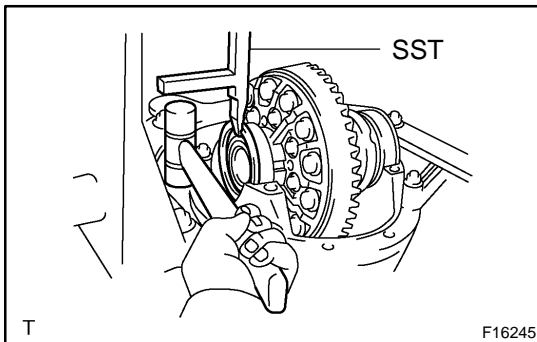
- (a) Using SST, remove the bearing from the drive pinion.
SST 09556-22010

If the front bearing is damaged or worn, replace the front bearing.

- (b) Remove the 2 washers and bearing spacer.

**10. REMOVE DIFFERENTIAL CASE**

- (a) Place matchmarks on the bearing cap and differential carrier.
- (b) Remove the 4 bolts and bearing cap.



- (c) Using SST and a plastic hammer, remove the 2 side bearing plate washers.

SST 09504-22012

HINT:

Measure the plate washer thickness and note it down.

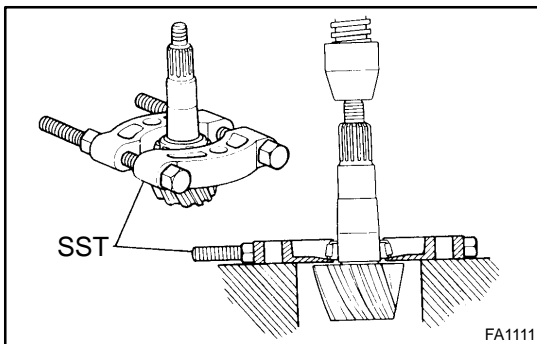
- (d) Remove the differential case with the bearing outer races from the carrier.

HINT:

Tag the disassembled parts to show the location for reassembling.

11. REMOVE DRIVE PINION FROM DIFFERENTIAL CARRIER

Remove the drive pinion with the rear bearing.

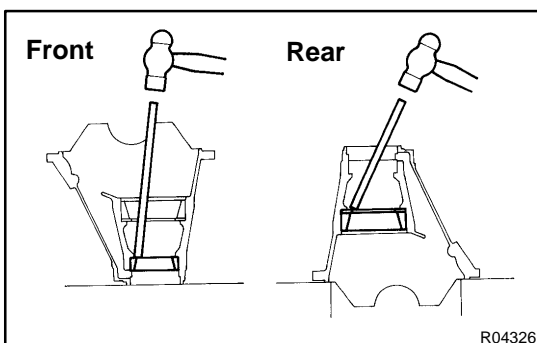
**12. REMOVE DRIVE PINION REAR BEARING**

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

SST 09950-00020

HINT:

If the drive pinion or ring gear is damaged, replace them as a set.

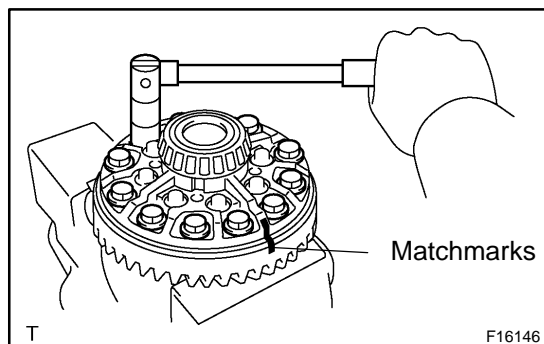
**13. REMOVE FRONT AND REAR BEARING OUTER RACES AND ADJUST WASHER****NOTICE:**

Do not remove the outer races except when replacing the bearings.

Using a brass bar and hammer, remove the outer races and adjusting washer from the carrier.

HINT:

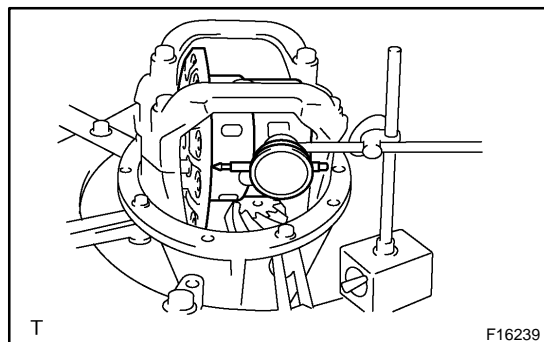
Measure the adjusting washer thickness and note it down.

**14. REMOVE RING GEAR**

- Place matchmarks on the ring gear and differential case.
- Remove the 12 ring gear set bolts.
- Using a plastic hammer, tap on the ring gear to separate it from the differential case.

15. CHECK DIFFERENTIAL CASE RUNOUT

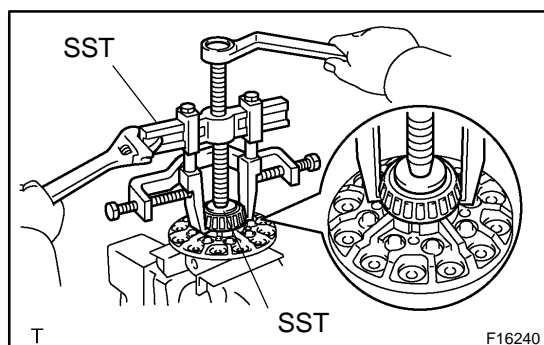
- Install the differential case in the differential carrier (See page SA-133).



- Using a dial indicator, measure the differential case runout.

Maximum case runout: 0.04 mm (0.0016 in.)

- Remove the differential case.

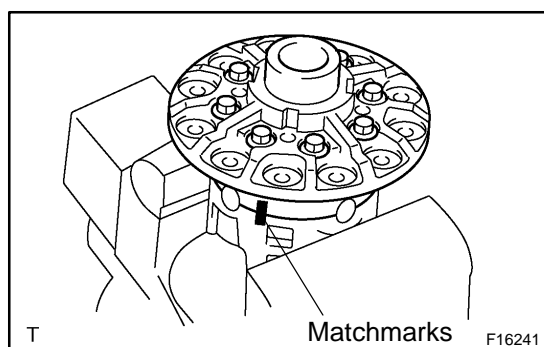
**16. REMOVE SIDE BEARINGS**

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

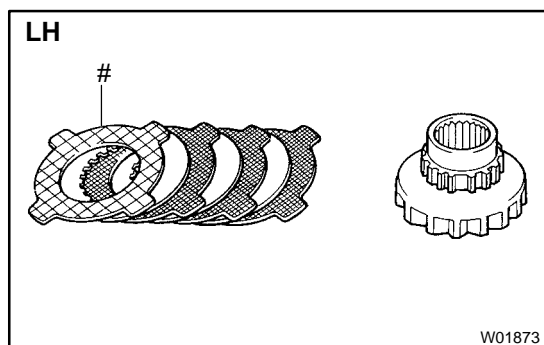
SST 09950-40011 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04061, 09957-04010, 09958-04011), 09950-60010 (09951-00480)

HINT:

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

**17. DISASSEMBLE DIFFERENTIAL CASE**

- Place matchmarks on the LH and RH cases.
- Remove the 8 bolts uniformly, a little at a time.
- Using a plastic hammer, separate the LH and RH cases.

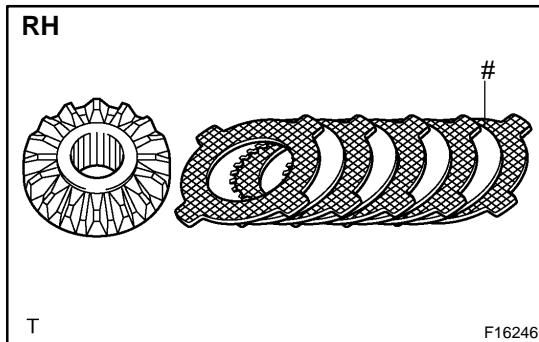
**18. REMOVE THESE PARTS FROM DIFFERENTIAL LH AND RH CASES:****HINT:**

Keep the disassembled parts in order.

- Remove these parts from the LH case.
 - Remove the side gear.
 - Remove the 4 side gear thrust washers.
 - Remove the 3 clutch plates.

HINT:

Face the rough side of the thrust washer marked by "#" to the differential case.



(b) Remove these parts from the RH case.

- (1) Remove the spring LH retainer.
- (2) Remove the compression spring.
- (3) Remove the spider with the pinion gear.
- (4) Remove the spring RH retainer.
- (5) Remove the side gear.
- (6) Remove the 5 side gear thrust washers.
- (7) Remove the 4 clutch plates.

HINT:

Face the rough side of the thrust washer marked by "#" to the differential case.