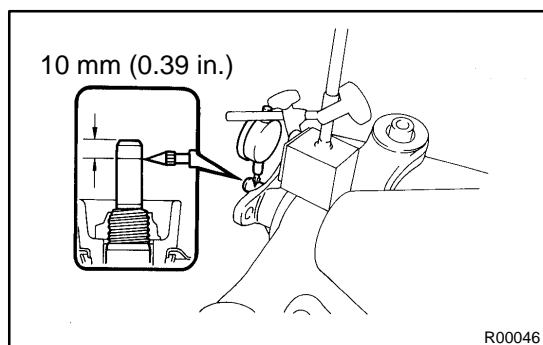


DISASSEMBLY

1. REMOVE DIFFERENTIAL CARRIER COVER

- Remove the 8 bolts from the carrier cover.
- Using a brass bar and hammer, separate the cover and carrier.
- Remove the breather plug from the differential carrier cover.

2. SET DIFFERENTIAL CARRIER TO OVERHAUL STAND ETC., AS SHOWN

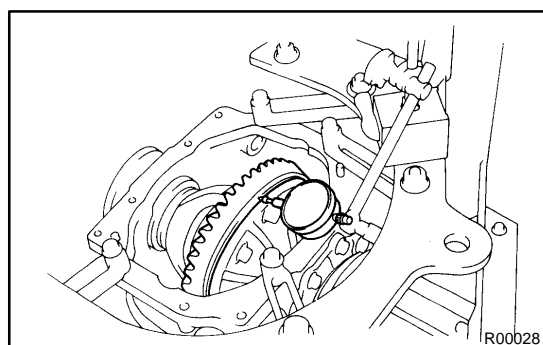


3. CHECK RUNOUT OF DRIVE PINION SHAFT

Using a dial indicator, measure the drive pinion shaft runout at a position 10 mm (0.39 in.) from the end of the shaft.

Maximum runout: 0.08 mm (0.0031 in.)

If the runout is not within the specification, replace the drive pinion and/or ring gear.

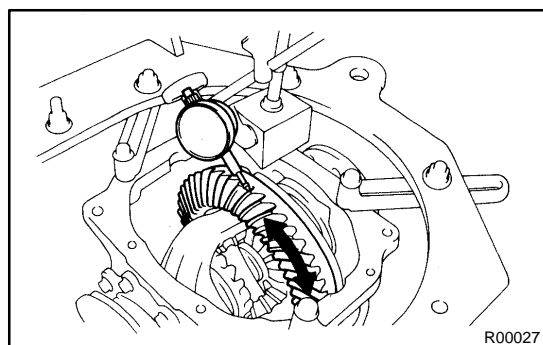


4. CHECK RING GEAR RUNOUT

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 drive pinion, ring gear and/or differential case.



5. CHECK RING GEAR BACKLASH

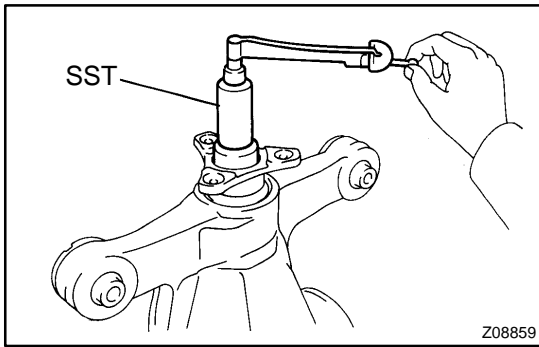
Using a dial indicator, measure the backlash of the ring gear at 3 points at least and check that the average value is within the specification.

Backlash: 0.08 – 0.13 mm (0.0031 – 0.0051 in.)

NOTICE:

The difference between the maximum and minimum measured values must be less than 0.05 mm (0.0020 in.).

If the backlash is not within the specification, adjust the ring gear backlash (See page [SA-70](#)).



6. MEASURE DRIVE PINION PRELOAD

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

SST 09229-55010

Preload (at starting):

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

HINT:

With vehicles which have run less than 8,000 km (5,000 miles), the preload may be large.

Maximum preload (at starting):

1.8 N·m (18 kgf·cm, 16.0 in.-lbf)

7. CHECK TOTAL PRELOAD

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

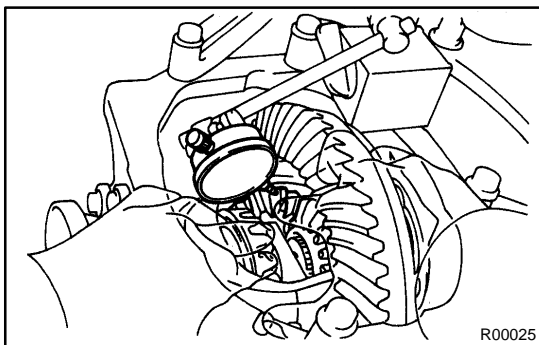
SST 09229-55010

Total preload (at starting):

Drive pinion preload plus

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

If necessary, disassemble and inspect the differential.



8. CHECK PINION GEAR BACKLASH

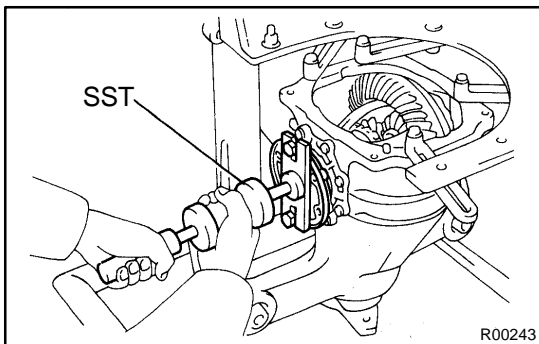
Using a dial indicator, measure the pinion gear backlash with holding one side gear toward the case.

Backlash: 0.05 – 0.20 mm (0.0020 – 0.0079 in.)

If the backlash is not within the specification, install the correct thrust washer (See page [SA-70](#)).

9. CHECK TOOTH CONTACT PATTERN

(See page [SA-70](#))



10. REMOVE SIDE GEAR SHAFTS

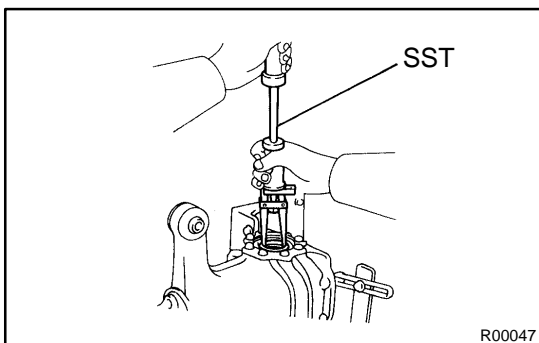
(a) Using SST, remove the 2 side gear shafts.

SST 09520-24010

NOTICE:

Be careful not to damage the oil seal.

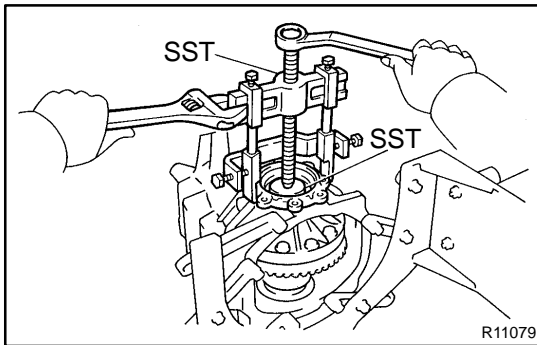
(b) Using a screwdriver, remove the 2 snap rings from the side gear shafts.



11. REMOVE SIDE GEAR SHAFT OIL SEALS

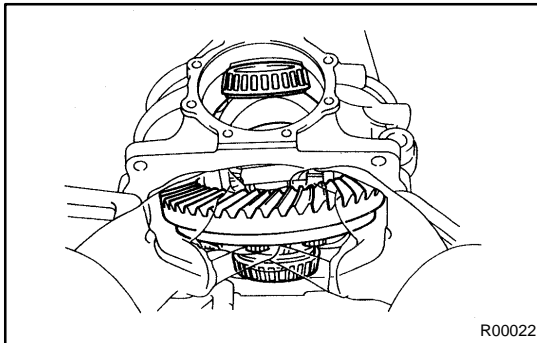
Using SST, remove the 2 oil seals.

SST 09308-00010

**12. REMOVE DIFFERENTIAL CARRIER RETAINERS**

- (a) Remove the 16 bolts.
- (b) Using SST, remove the 2 carrier retainers and washers.

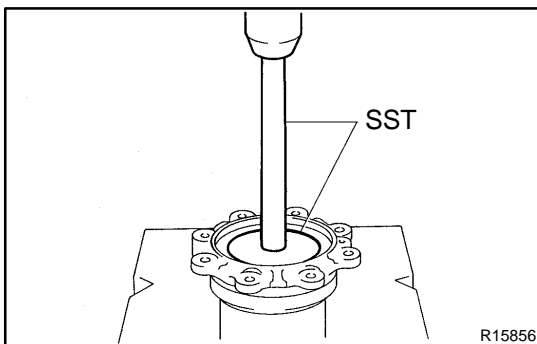
SST 09950-40010 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04070, 09957-04010, 09958-04010), 09950-60010 (09951-00450)

**13. REMOVE DIFFERENTIAL CASE**

Take the differential case out of the carrier while lifting the ring gear side, as shown in the illustration.

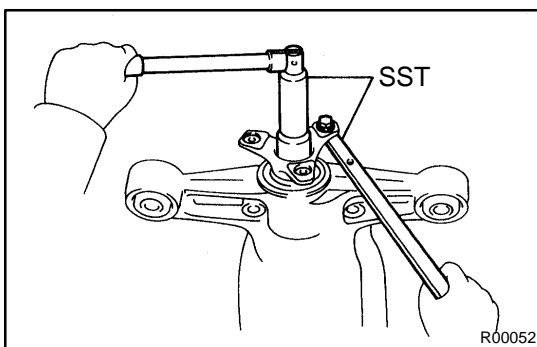
14. REMOVE O-RINGS FROM DIFFERENTIAL CARRIER RETAINERS

Using a screwdriver, remove the 2 O-rings.

**15. REMOVE SIDE BEARING OUTER RACES AND ADJUSTING PLATE WASHERS**

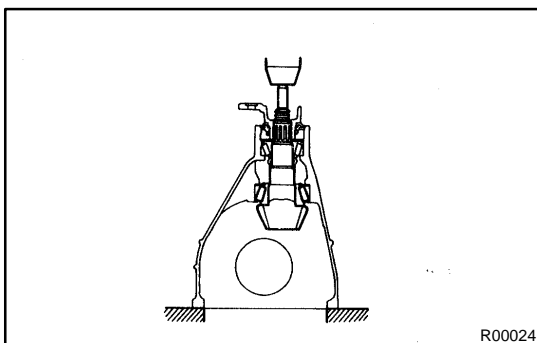
Using SST and a press, remove the 2 outer races and washers.

SST 09950-60020 (09951-00710), 09950-70010 (09951-07150)

**16. REMOVE DRIVE PINION, SPACER AND COMPANION FLANGE**

- (a) Using a chisel and hammer, loosen the staked part of the nut.
- (b) Using SST, remove the nut.

SST 09229-55010, 09330-00021

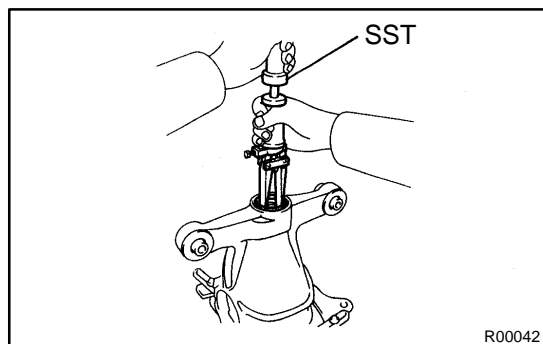


- (c) Using a press, remove the drive pinion with the rear bearing and remove the companion flange.

NOTICE:

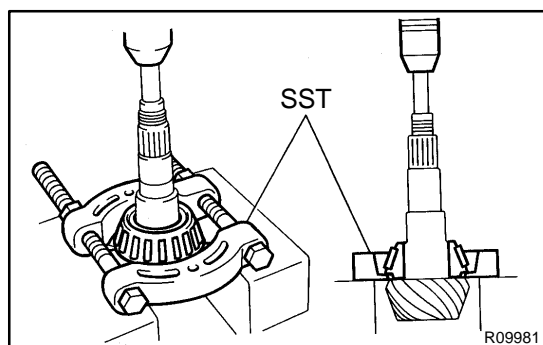
Be careful not to drop the drive pinion.

- (d) Remove the spacer from the drive pinion.

**17. REMOVE OIL SEAL**

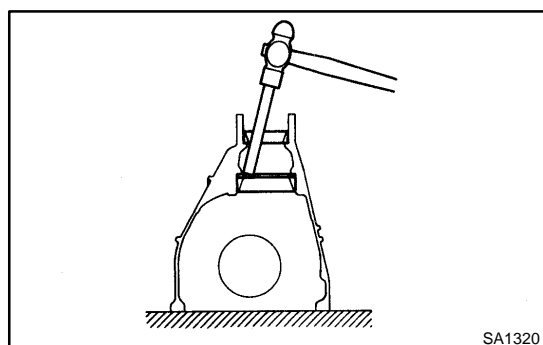
Using SST, remove the oil seal.

SST 09308-00010

18. REMOVE OIL SLINGER AND FRONT BEARING**19. REMOVE REAR BEARING FROM DRIVE PINION**

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

SST 09950-00020

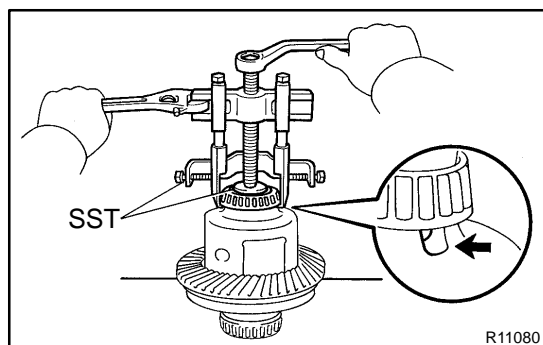
**20. REMOVE FRONT AND REAR BEARING OUTER RACES AND ADJUSTING PLATE WASHER****NOTICE:**

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

Using a brass bar and hammer, remove the 2 outer races and washer from the differential carrier.

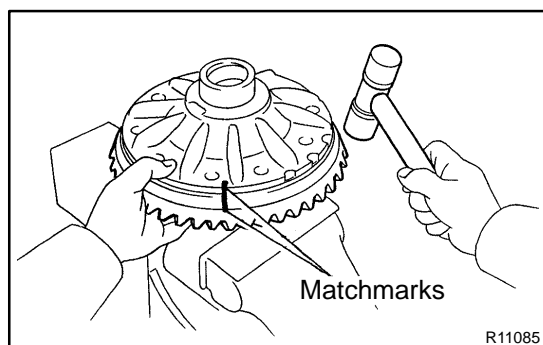
HINT:

Measure the washer thickness and make a note down of it for reassemble.

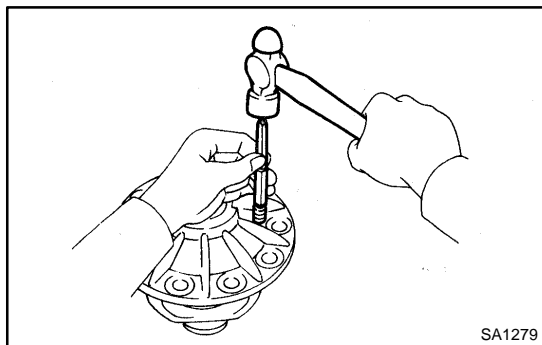
**21. REMOVE SIDE BEARINGS**

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

SST 09950-40010 (09951-04010, 09952-04010, 09953-04020, 09954-04010, 09955-04070, 09957-04010, 09958-04010), 09950-60010 (09951-00450)

**22. REMOVE RING GEAR**

- Place matchmarks on the ring gear and differential case.
- Remove the 10 ring gear set bolts.
- Using a plastic hammer, tap on the ring gear to separate it from the differential case.

**23. DISASSEMBLE DIFFERENTIAL CASE**

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