

FRONT DIFFERENTIAL CARRIER ASSEMBLY > DISASSEMBLY

for Preparation [Click here](#)

1. INSPECT DIFFERENTIAL RING GEAR BACKLASH

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

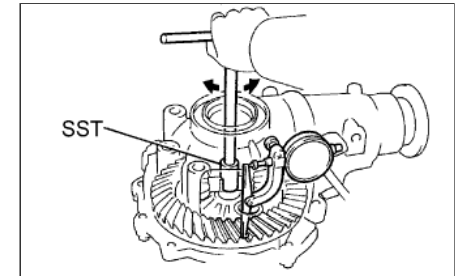
SST
09564-32011

Standard backlash:
0.11 to 0.21 mm (0.00433 to 0.00826 in.)

If the backlash is not as specified, adjust the side bearing preload or perform repairs as necessary.

HINT:

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



2. INSPECT FRONT DRIVE PINION COMPANION FLANGE SUB-ASSEMBLY

- a. Using a dial indicator, measure the runout of the companion flange vertically and laterally.

Distance from center to runout measurement point:
30 mm (1.18 in.)

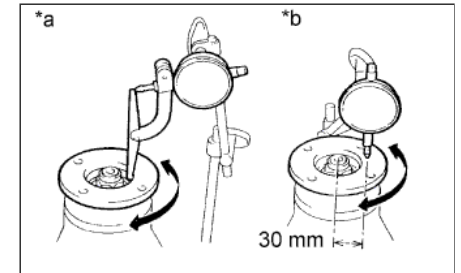
Maximum Runout:

Item	Specified Condition
Vertical runout	0.15 mm (0.00591 in.)
Lateral runout	0.15 mm (0.00591 in.)

Text in Illustration

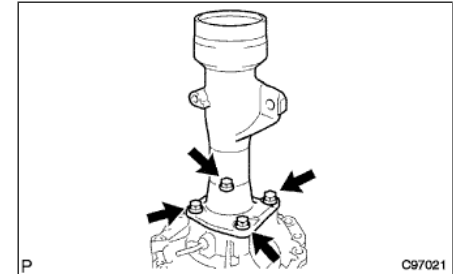
*a	Vertical Runout
*b	Lateral Runout

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



3. REMOVE FRONT DIFFERENTIAL TUBE ASSEMBLY

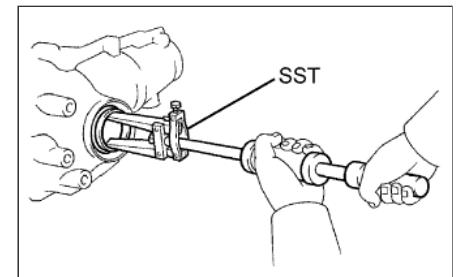
- a. Using an E14 "TORX" socket wrench, remove the 4 bolts.
- b. Using a plastic-faced hammer, tap out the differential tube.



4. REMOVE DIFFERENTIAL SIDE GEAR SHAFT OIL SEAL

- a. Using SST, remove the 2 oil seals.

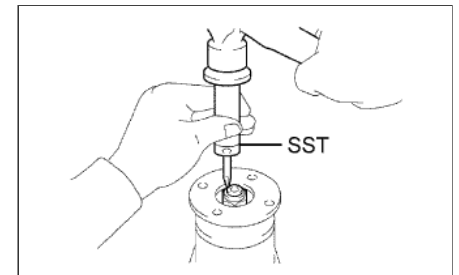
SST
09308-00010



5. REMOVE FRONT DRIVE PINION COMPANION FLANGE NUT

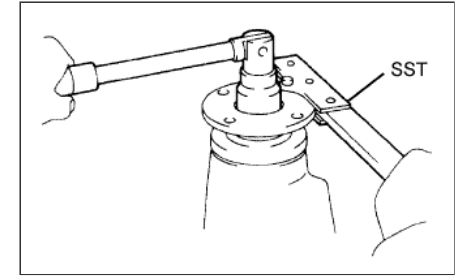
- a. Using SST and a hammer, unstake the nut.

SST
09930-00010



- b. Using SST to hold the companion flange, remove the nut.

SST
09330-00021 (09330-00030)



6. REMOVE FRONT DRIVE PINION COMPANION FLANGE SUB-ASSEMBLY

- a. Using SST, remove the companion flange.

SST

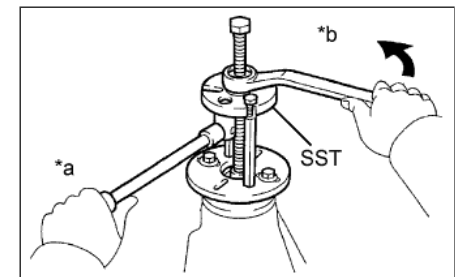
09950-30012 (09951-03010, 09953-03010, 09954-03010, 09955-03030, 09956-03020)

Text in Illustration

*a	Hold
*b	Turn

NOTICE:

Before using SST (center bolt), apply hypoid gear oil to its threads and tip.



7. REMOVE FRONT DIFFERENTIAL DUST DEFLECTOR

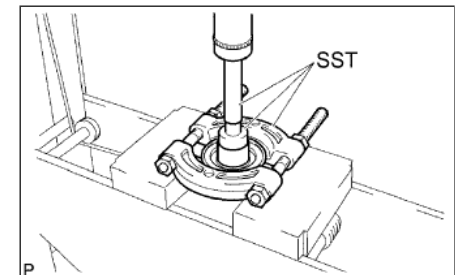
- a. Using SST and a press, press out the dust deflector.

SST

**09950-00020
09950-60010 (09951-00510)
09950-70010 (09951-07150)**

NOTICE:

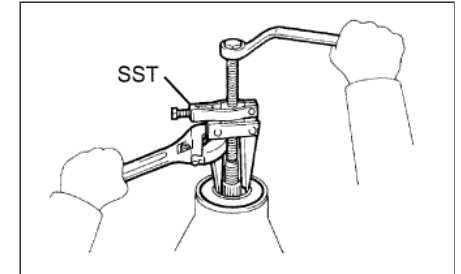
Do not drop the companion flange.



8. REMOVE FRONT DIFFERENTIAL CARRIER OIL SEAL

- a. Using SST, remove the oil seal from the differential carrier assembly.

SST
09308-10010



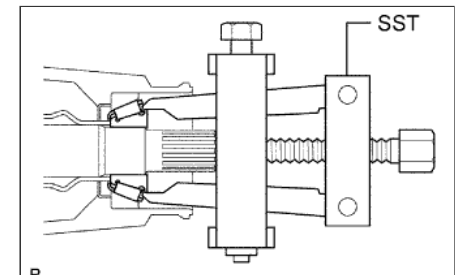
9. REMOVE FRONT DIFFERENTIAL DRIVE PINION OIL SLINGER

- a. Remove the oil slinger from the drive pinion.

10. REMOVE FRONT DRIVE PINION FRONT TAPERED ROLLER BEARING (INNER)

- a. Using SST, remove the front tapered roller bearing (inner) from the drive pinion.

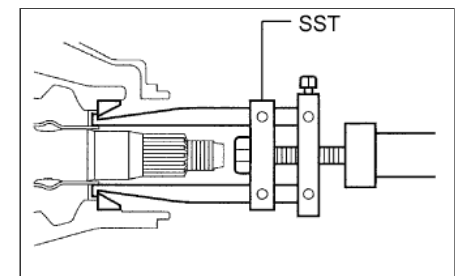
SST
09556-22010



11. REMOVE FRONT DRIVE PINION FRONT TAPERED ROLLER BEARING (OUTER)

- a. Using SST, remove the front tapered roller bearing (outer).

SST
09308-00010

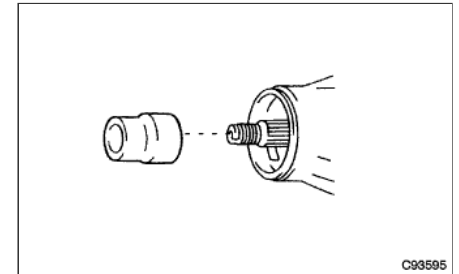


12. REMOVE FRONT DIFFERENTIAL OIL STORAGE RING

- a. Using a screwdriver and hammer, tap out the oil storage ring.

13. REMOVE FRONT DIFFERENTIAL DRIVE PINION BEARING SPACER

- a. Remove the bearing spacer.



14. REMOVE DIFFERENTIAL SIDE BEARING RETAINER

- a. Using a screwdriver, remove the union.
- b. Remove the 10 bolts and tap out the side bearing retainer with a plastic-faced hammer.

15. REMOVE DIFFERENTIAL CASE ASSEMBLY

16. REMOVE DIFFERENTIAL DRIVE PINION

17. REMOVE FRONT DRIVE PINION REAR TAPERED ROLLER BEARING (INNER)

- a. Using SST and a press, remove the rear tapered roller bearing (inner) and washer from the drive pinion.

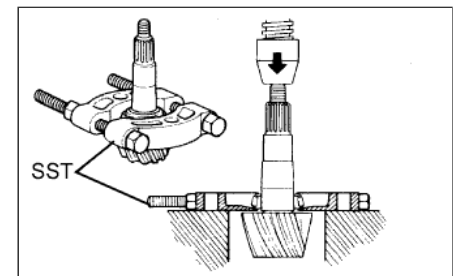
SST
09950-00020

NOTICE:

Do not drop the drive pinion.

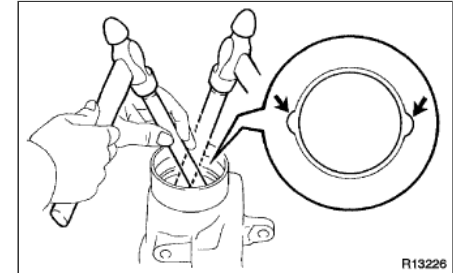
HINT:

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



18. REMOVE FRONT DRIVE PINION REAR TAPERED ROLLER BEARING (OUTER)

- a. Using a brass bar and hammer, remove the rear tapered roller bearing (outer).



19. REMOVE FRONT DIFFERENTIAL CASE BEARING

HINT:

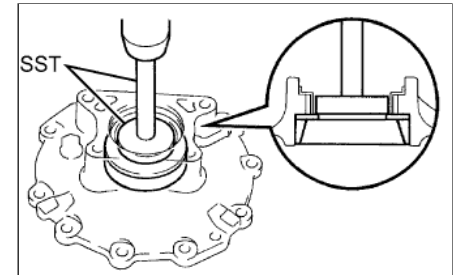
- Measure the thickness of the case washer.
- Tag the bearing outer races so that they can be reinstalled in the correct locations.

- a. Using SST and a press, press out the case bearing (outer race) and case washer from the bearing retainer.

SST

09950-60020 (09951-00680)
09950-70010 (09951-07150)

If the bearing is damaged during removal, replace it.

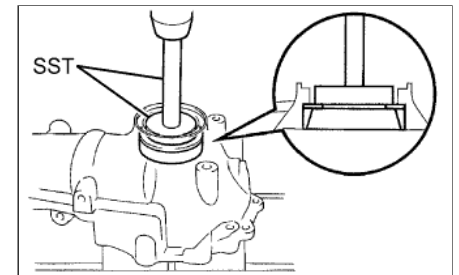


- b. Using SST and a press, press out the case bearing (outer race) and plate washer from the differential carrier.

SST

09950-60020 (09951-00680)
09950-70010 (09951-07150)

If the bearing is damaged during removal, replace it.



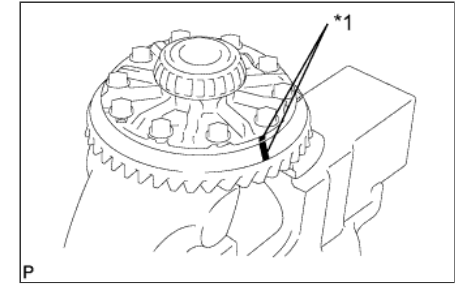
20. REMOVE DIFFERENTIAL RING GEAR

- a. Place matchmarks on the ring gear and differential case.

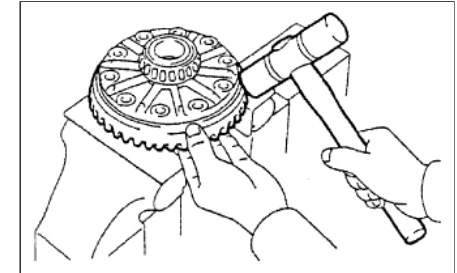
Text in Illustration

*1	Matchmark
----	-----------

b. Remove the 10 ring gear set bolts.



c. Using a plastic-faced hammer, tap on the ring gear to separate it from the differential case.



21. REMOVE FRONT DIFFERENTIAL CASE BEARING

HINT:

The differential case and case bearings should only be removed when replacement is necessary.

a. Using SST, remove the 2 differential case bearings (inner) from the differential case.

SST

09950-60010 (09951-00390)

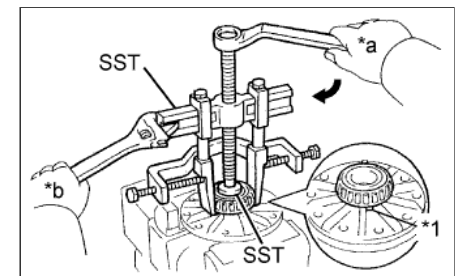
09950-40011 (09951-04020, 09952-04010, 09953-04030, 09954-04010, 09955-04061, 09957-04010, 09958-04011)

Text in Illustration

*1	Notch
----	-------

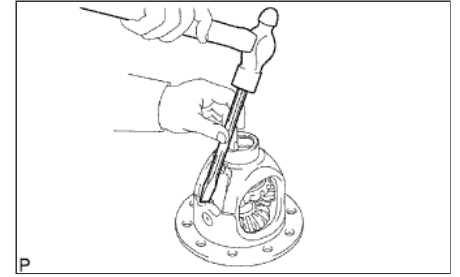
HINT:

Set the claws of SST into the notches in the differential case.

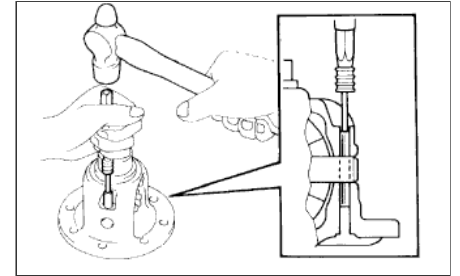


22. REMOVE DIFFERENTIAL CASE ASSEMBLY

a. Using a chisel and hammer, unstake the differential case.



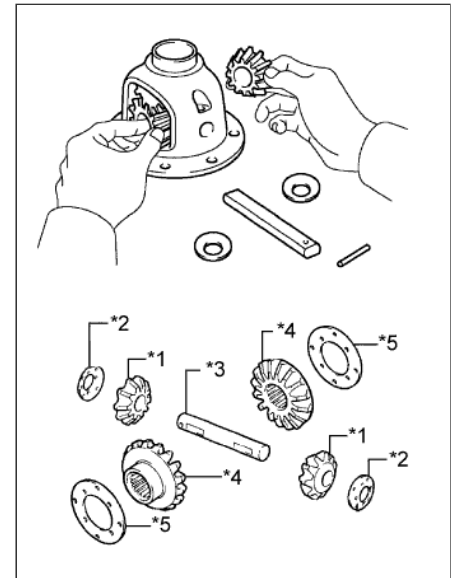
b. Using a 5 mm pin punch and hammer, tap out the straight pin.



c. Remove the parts shown in the illustration from the differential case.

Text in Illustration

*1	Differential Pinion Gear
*2	Differential Pinion Gear Thrust Washer
*3	Differential Pinion Shaft
*4	Differential Side Gear
*5	Differential Side Gear Thrust Washer



23. INSPECT DIFFERENTIAL GEAR KIT

a. Check that the differential pinion and differential side gear are not damaged.
If the differential pinion or differential side gear is damaged, replace the differential gear kit.

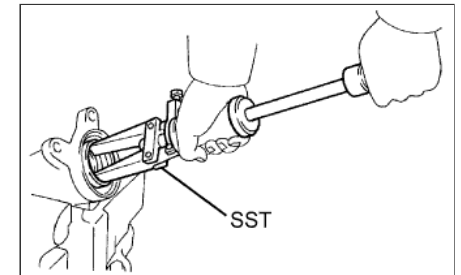
24. INSPECT FRONT DIFFERENTIAL CASE

- a. Check that the differential case is not damaged.
If the differential case is damaged, replace it.

25. REMOVE DIFFERENTIAL SIDE GEAR SHAFT OIL SEAL

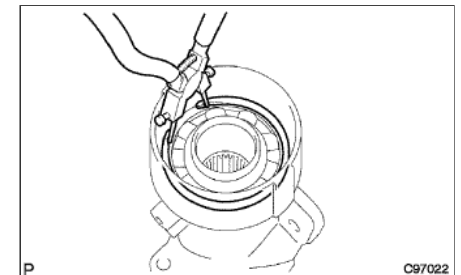
- a. Using SST, tap out the oil seal from the differential tube.

SST
09308-00010



26. REMOVE DIFFERENTIAL SIDE GEAR SHAFT SUB-ASSEMBLY RH

- a. Using a snap ring expander, remove the snap ring.
- b. Remove the side gear shaft from the differential tube.



27. REMOVE FRONT DIFFERENTIAL SIDE GEAR SHAFT BEARING RH

- a. Using a snap ring expander, remove the snap ring.
- b. Using SST, a brass bar and press, press out the bearing.

SST
09950-00020

NOTICE:

- Do not damage the bearing.
- Do not drop the shaft.

