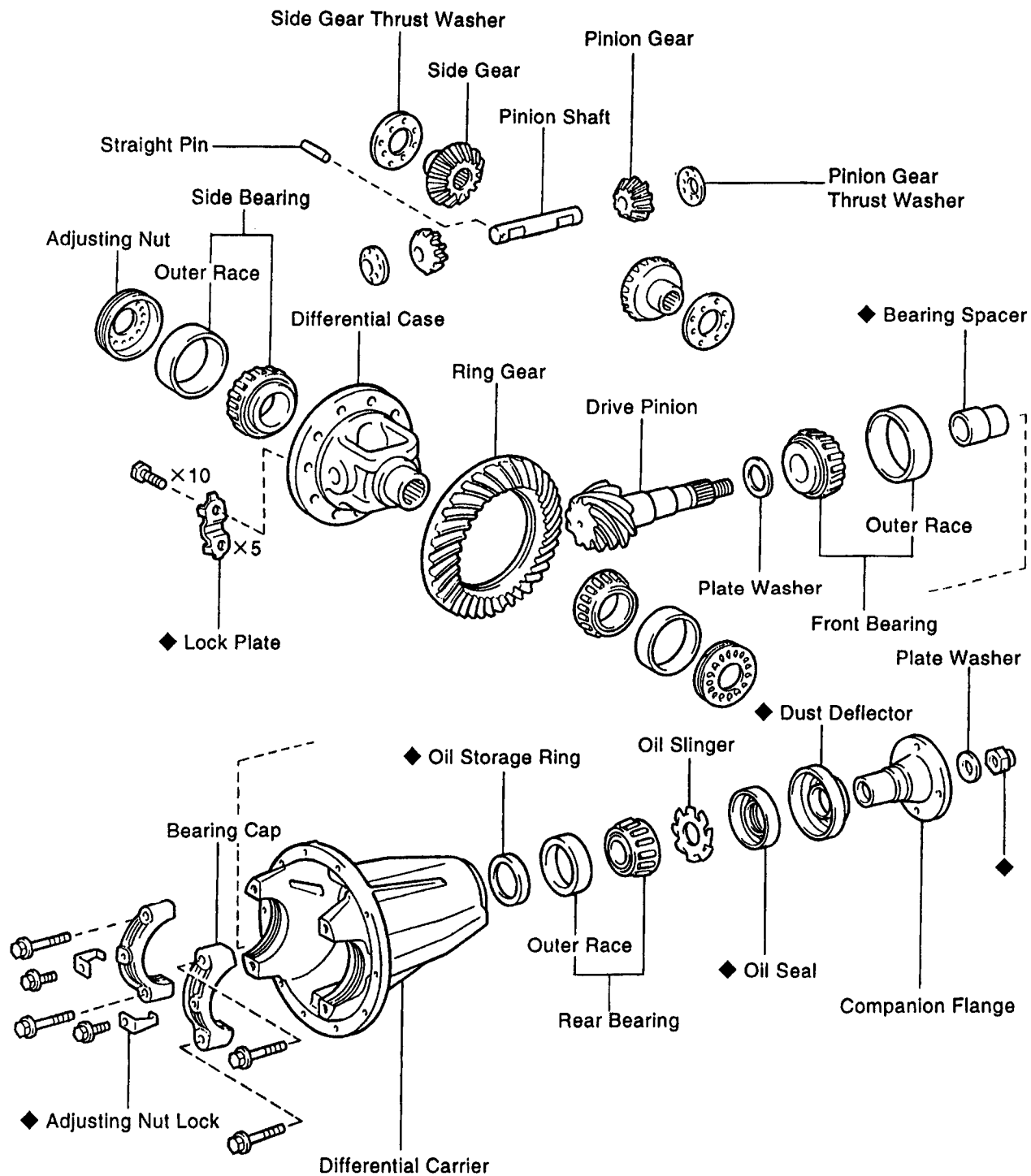


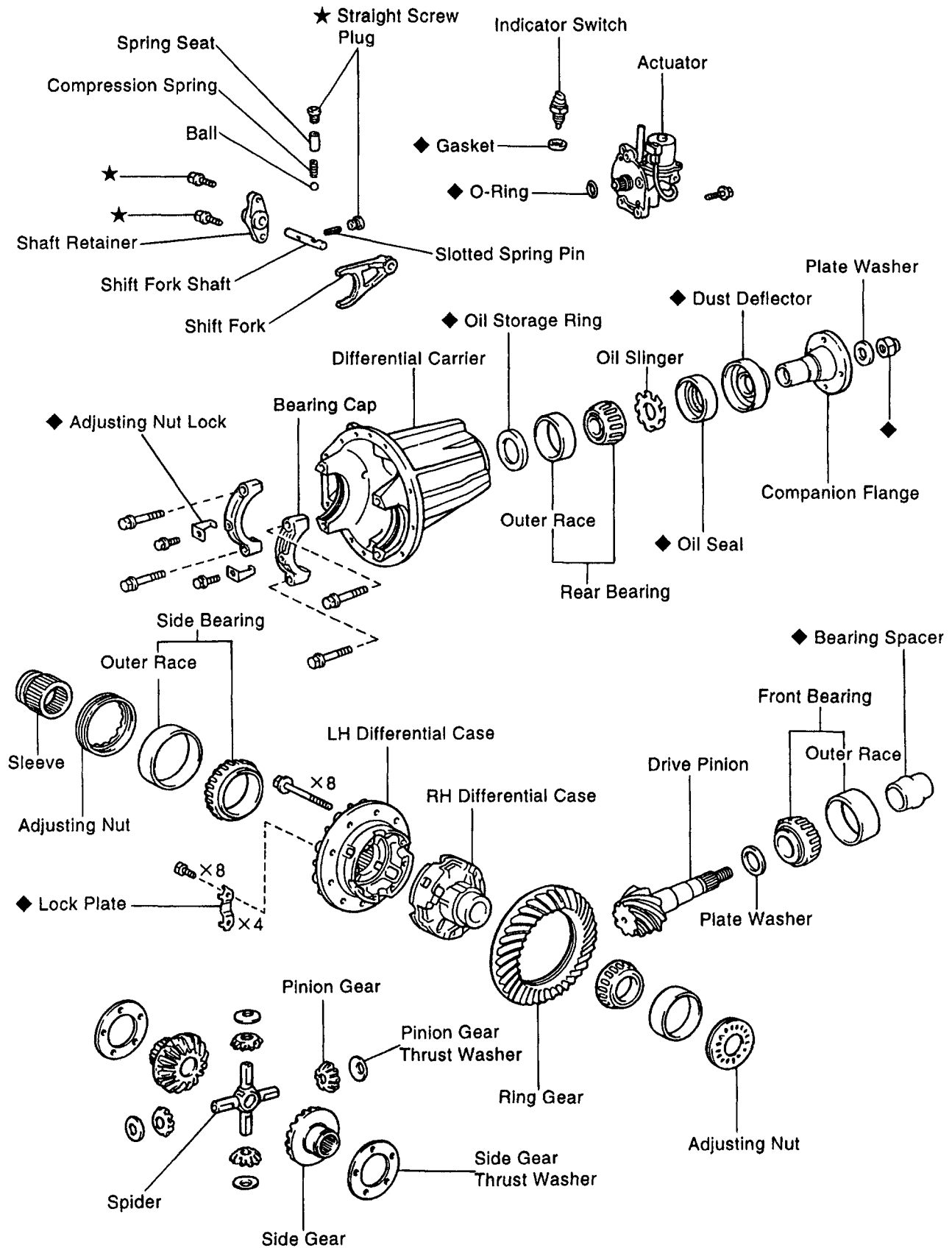
DIFFERENTIAL CARRIER COMPONENTS

w/o Differential Lock

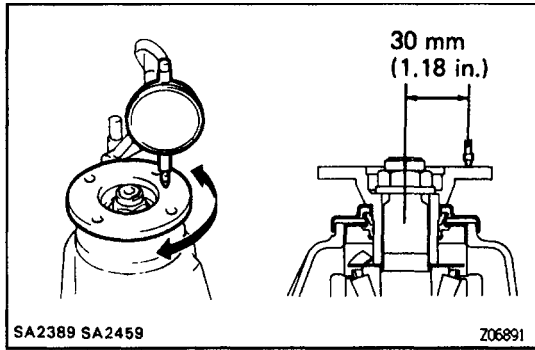


◆ Non-reusable part

w/ Differential Lock



◆ Non-reusable part
 ★ Precoated part



DIFFERENTIAL CARRIER INSPECTION

1. CHECK RUNOUT OF COMPANION FLANGE

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

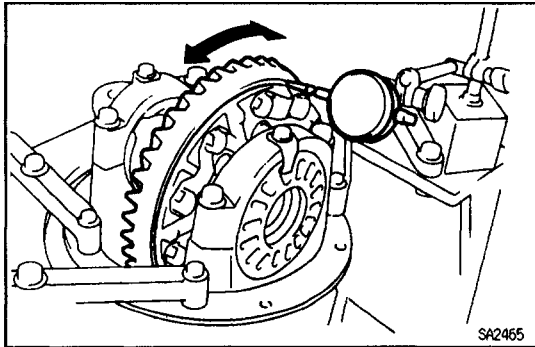
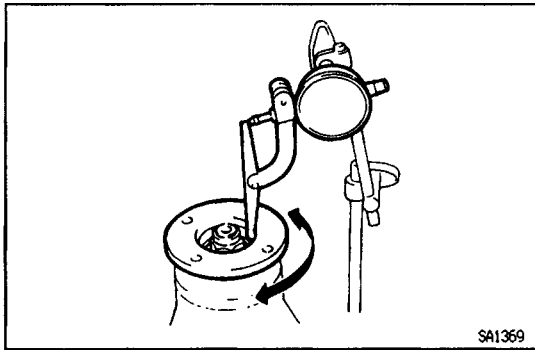
Maximum vertical runout:

0.10 mm (0.0039 in.)

Maximum lateral runout:

0.10 mm (0.0039 in.)

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



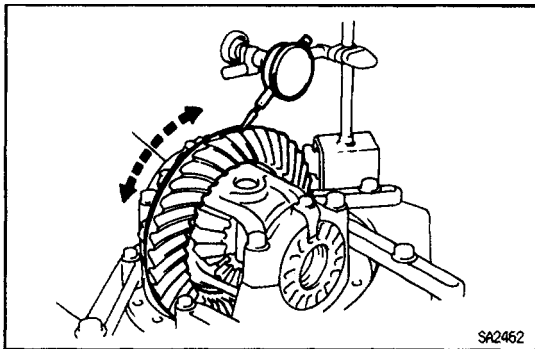
2. CHECK RING GEAR RUNOUT

Using a dial indicator, measure the ring gear runout.

Maximum runout:

0.10 mm (0.0039 in.)

If the runout is greater than the maximum, replace the ring gear.



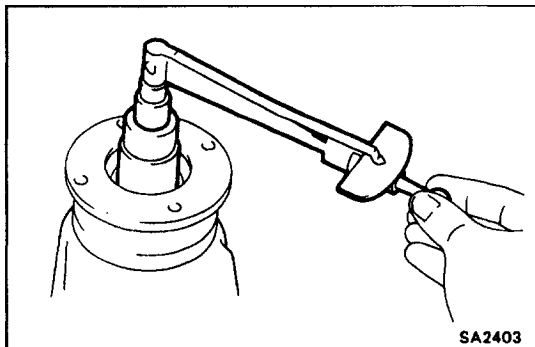
3. CHECK RING GEAR BACKLASH

Using a dial indicator, measure the ring gear backlash.

Backlash:

0.13–0.18 mm (0.0051–0.0071 in.)

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

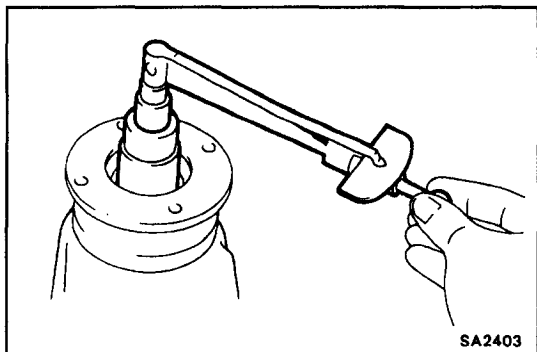


4. MEASURE DRIVE PINION PRELOAD

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

Preload (at starting):

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



5. CHECK TOTAL PRELOAD

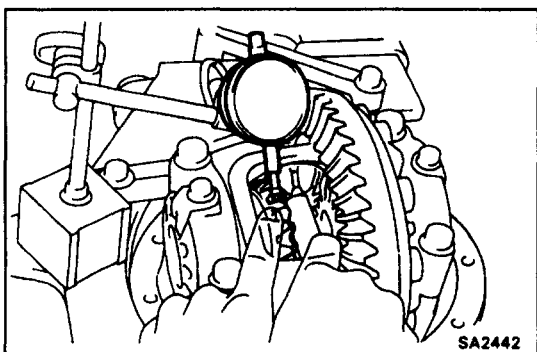
Using a torque wrench, measure the total preload.

Total preload (at starting):

In addition to drive pinion preload

0.4–0.6 N·m (4–6 kgf·cm, 3.5–5.2 in.-lbf)

If necessary, disassemble and inspect the differential.



6. w/o DIFFERENTIAL LOCK:

CHECK SIDE GEAR BACKLASH

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

Standard backlash:

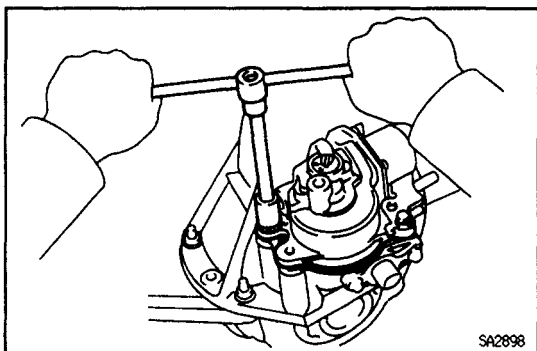
0.05–0.20 mm (0.0020–0.0079 in.)

If the backlash is out of specification, install the correct thrust washers.

(See page [SA-38](#))

7. CHECK TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION

(See page [SA-45](#))

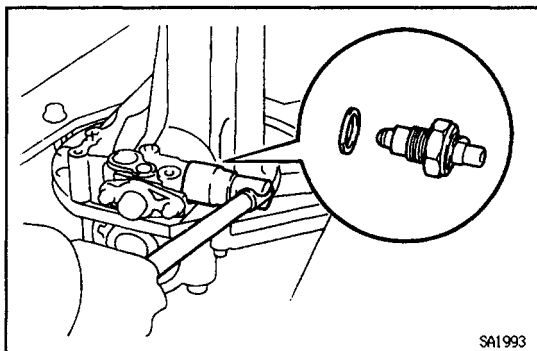


DIFFERENTIAL CARRIER DISASSEMBLY

1. w/ DIFFERENTIAL LOCK:

REMOVE ACTUATOR

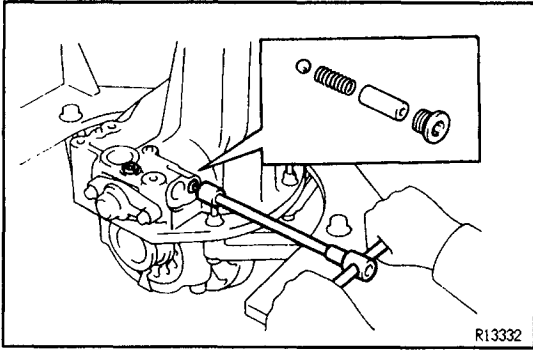
- (a) Remove the bolt and actuator from the differential carrier.
- (b) Remove the O-ring.



2. w/ DIFFERENTIAL LOCK:

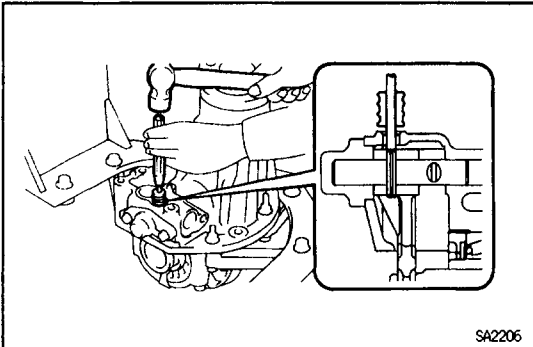
REMOVE INDICATOR SWITCH

Remove the indicator switch and gasket.

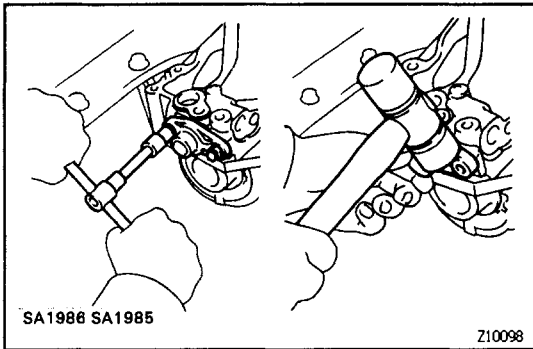


3. w/ DIFFERENTIAL LOCK: REMOVE SHIFT FORK SHAFT

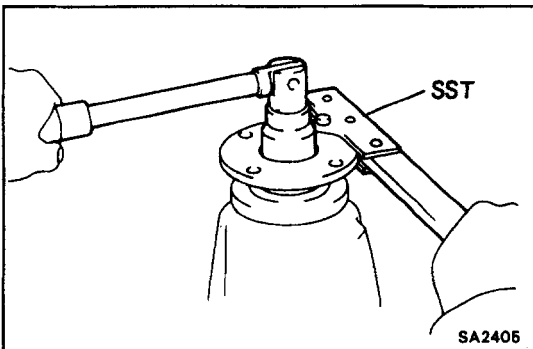
- (a) Using a hexagon wrench, remove the 2 straight screw plugs.
- (b) Remove the spring seat, compression spring and ball.



- (c) Using a pin punch and hammer, remove the slotted spring pin.



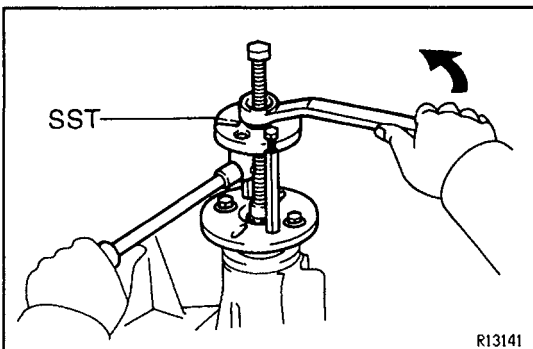
- (d) Remove the 2 bolts from the shaft retainer.
 - (e) Using a plastic hammer, tap out the shaft retainer.
 - (f) Remove the shift fork shaft.
- HINT: Pull out the shift fork shaft with a screwdriver turned round.



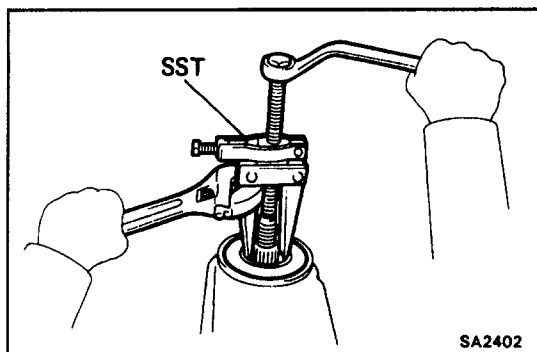
4. REMOVE COMPANION FLANGE

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

SST 09330-00021

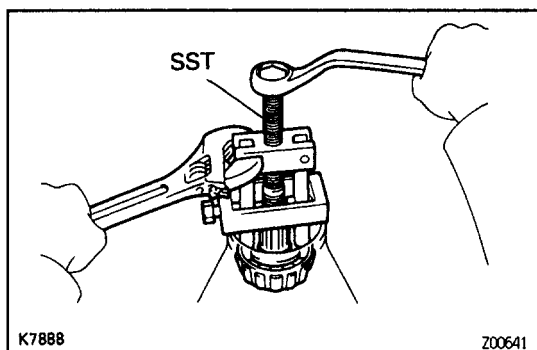


- (c) Using SST, remove the companion flange.
- SST 09950-30010



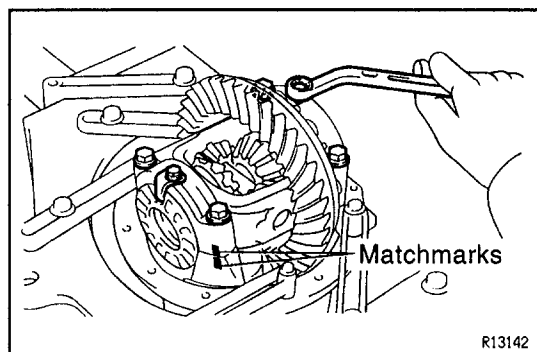
5. REMOVE OIL SEAL AND OIL SLINGER

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



6. REMOVE REAR BEARING

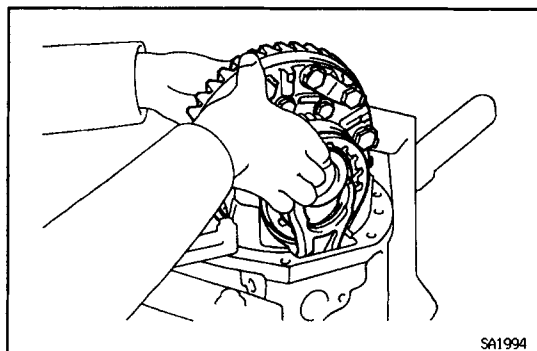
Using SST, remove the rear bearing from the drive pinion.
SST 09556-22010



7. REMOVE DIFFERENTIAL CASE

- (a) Place matchmarks on the bearing cap and differential carrier.
- (b) Remove the 2 adjusting nut locks.
- (c) Remove the 4 bolts and 2 bearing caps.
- (d) w/o Differential lock:
Remove the 2 adjusting nuts.
- (e) w/o differential lock:
Remove the differential case with the side bearing outer races from the carrier.

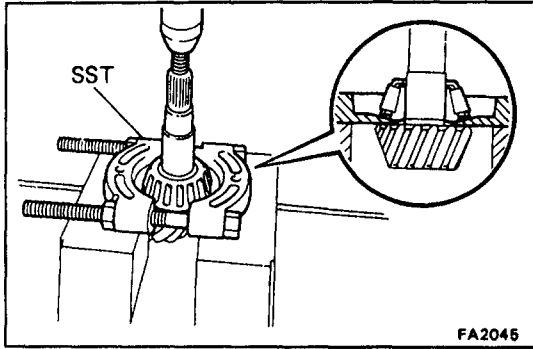
HINT: Tag the disassembled parts to show the location for reassembly.



- (f) w/ Differential lock:
Remove the differential case with side bearing outer race, adjusting nuts and sleeve from the differential carrier.
- (g) w/ Differential lock:
Remove the shift fork.

8. REMOVE DRIVE PINION AND BEARING SPACER

- (a) Remove the drive pinion with the front bearing.
- (b) Remove the bearing spacer.



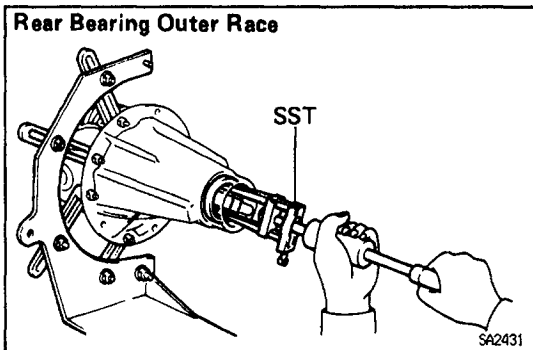
9. REMOVE DRIVE PINION FRONT BEARING

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

SST 09950-00020

HINT: If the drive pinion or ring gear are damaged, replace them as a set.

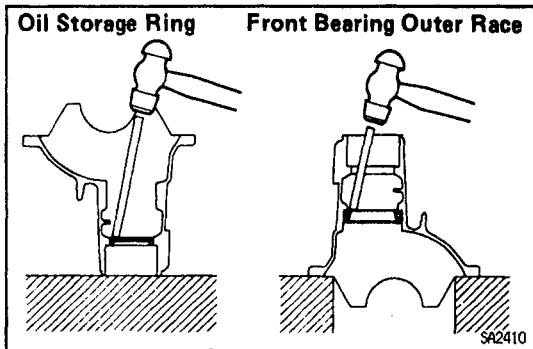
- (b) Remove the plate washer from the drive pinion.



10. REMOVE FRONT AND REAR BEARING OUTER RACES AND OIL STORAGE RING

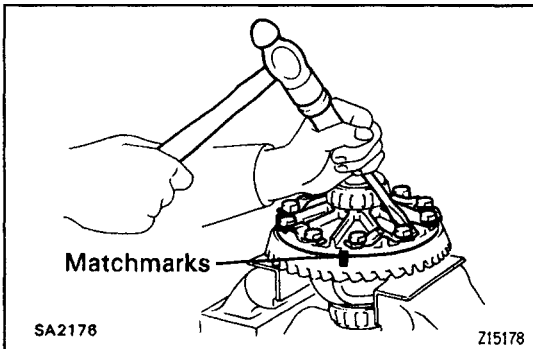
- (a) Using SST, remove the rear bearing outer race.

SST 09308-00010



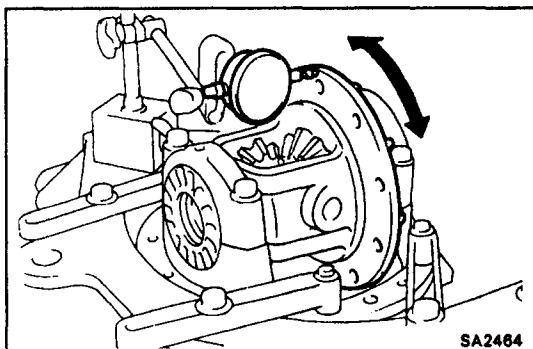
- (b) Using a brass bar and hammer, remove the oil storage ring and front bearing outer race.

HINT: Do not remove the oil storage ring unless replacing it with a new one.



11. REMOVE RING GEAR

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



12. CHECK DIFFERENTIAL CASE RUNOUT

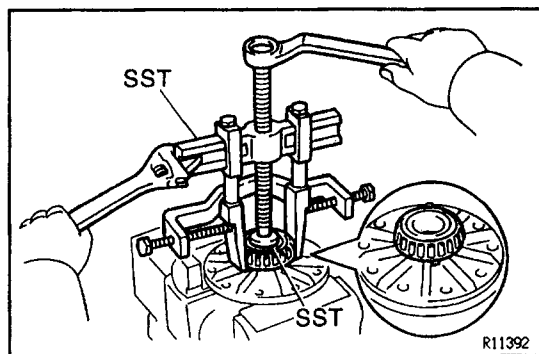
- (a) Install the differential case in the differential carrier and tighten the adjusting nut just to where there is no play in the bearing.

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

Maximum case runout:

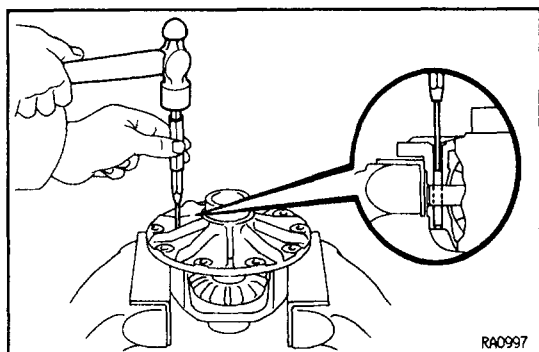
0.07 mm (0.0028 in.)

- (c) Remove the differential case.

**13. REMOVE SIDE BEARING FROM DIFFERENTIAL CASE**

Using SST, pull the side bearing from the differential case.
SST 09950-40010, 09950-60010 (09951-00480)

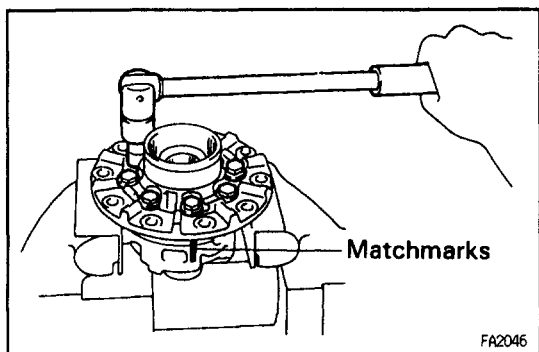
HINT: Fix the claws of SST to the notches in the differential case.

**14. w/o DIFFERENTIAL LOCK:****DISASSEMBLE DIFFERENTIAL CASE**

(a) Using a pin punch and hammer, remove the straight pin.

(b) Remove these parts:

- Pinion shaft
- Pinion gears (2 pieces)
- Pinion gear thrust washers (2 pieces)
- Side gears (2 pieces)
- Side gear thrust washers (2 pieces)

**15. w/ DIFFERENTIAL LOCK:****DISASSEMBLE DIFFERENTIAL CASE**

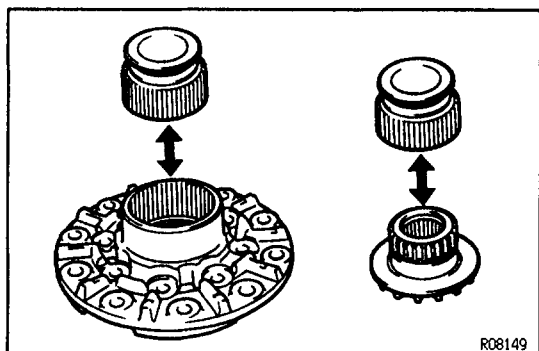
(a) Place matchmarks on the LH and RH cases.

(b) Remove the 8 bolts uniformly, a little at a time.

(c) Using a plastic hammer, separate the LH and RH cases.

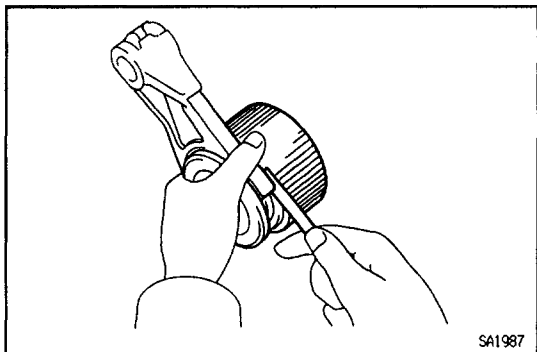
(d) Remove these parts:

- Side gear (2 pieces)
- Side gear thrust washer (2 pieces)
- Spider
- Pinion gear (4 pieces)
- Pinion gear thrust washer (4 pieces)

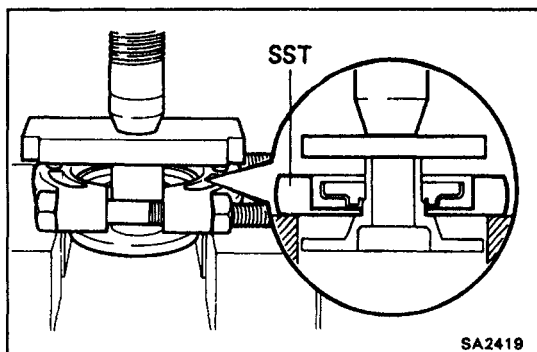
**COMPANION FLANGE DUST DEFLECTOR REPLACEMENT****1. w/ DIFFERENTIAL LOCK:****INSPECT SLEEVE**

(a) Install the sleeve to the differential case (LH) and check it moves smoothly.

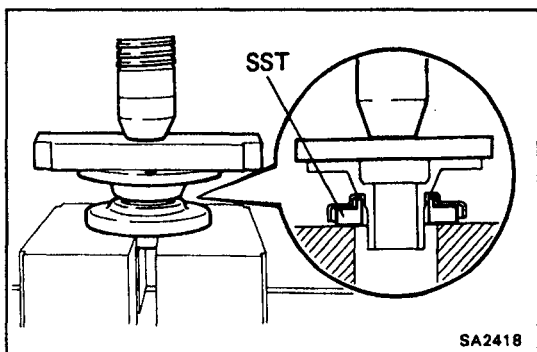
(b) Install the sleeve to the side gear and check it moves smoothly.



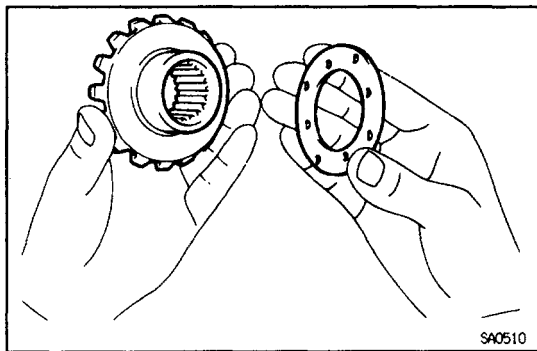
2. **w/ DIFFERENTIAL LOCK:**
MEASURE CLEARANCE OF SHIFT FORK AND SLEEVE
 Using a feeler gauge, measure the clearance between the shift fork and sleeve.
Clearance (Reference):
 0.15 – 0.35 mm (0.006 – 0.014 in.)



3. **REMOVE DUST DEFLECTOR TO COMPANION FLANGE**
 Using SST and a press, remove the dust deflector.
 SST 09950-00020



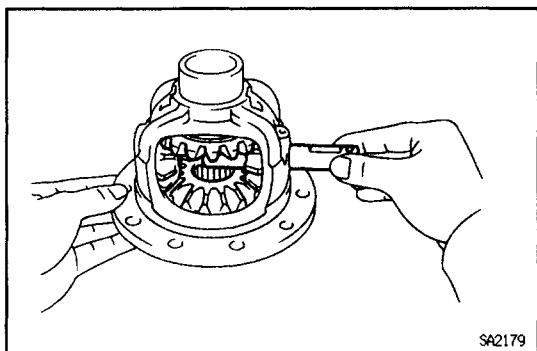
4. **INSTALL DUST DEFLECTOR TO COMPANION FLANGE**
 Using SST and a press, install a new dust deflector.
 SST 09726-40010



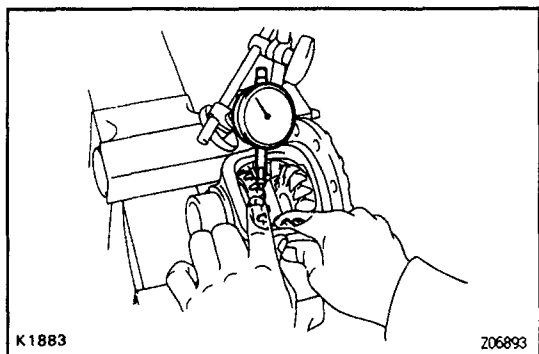
DIFFERENTIAL CARRIER ASSEMBLY

1. **w/o DIFFERENTIAL LOCK:**
ASSEMBLE DIFFERENTIAL CASE
- (a) Apply all of the sliding and rotating surfaces with gear oil.
 - (b) Install the thrust washers and side gears.
 Using the table below, select the thrust washers which will ensure that the backlash is within specification.
 Try to select washers of the same size for both sides.
Thrust washer thickness

Thickness mm (in.)	Thickness mm (in.)
1.6 (0.063)	1.8 (0.071)
1.7 (0.067)	–



- (c) Install the side gears with the side gears thrust washers, pinion gear, pinion gear thrust washers and pinion shaft.

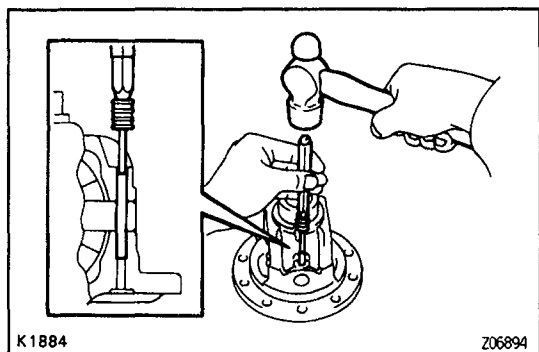


- HINT: Align the hole for the pinion shaft with the case hole.
- (d) Using a dial indicator, measure the side gear backlash while holding one pinion gear toward the case.

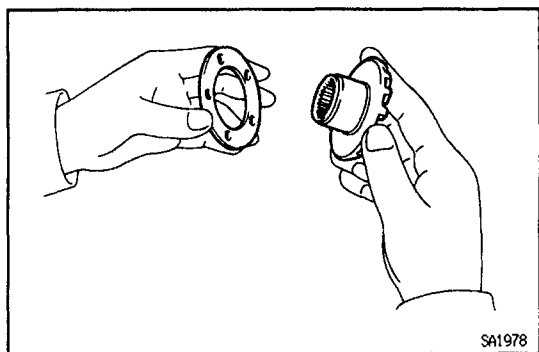
Standard backlash:

0.05 – 0.20 mm (0.0020 – 0.0079 in.)

If the backlash is not within specification, install a thrust washer of different thickness.



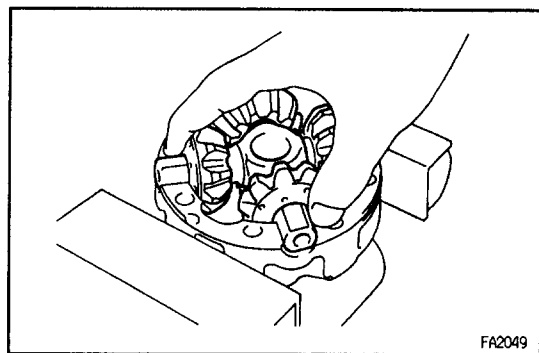
- (e) Using a pin punch and hammer, install the straight pin through the holes in the differential case and pinion shaft.
- (f) Using a chisel and hammer, stake the out side of the differential case pin hole.



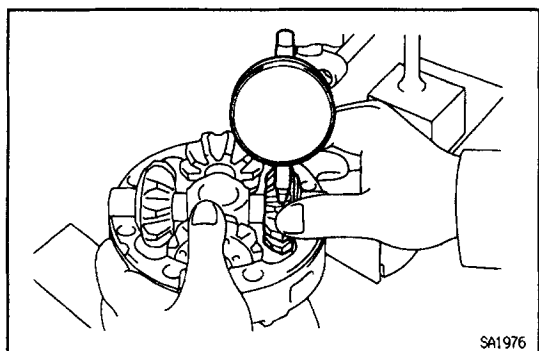
2. w/ DIFFERENTIAL LOCK:

ASSEMBLE DIFFERENTIAL CASE

- (a) Apply all of the sliding and rotating surfaces with gear oil.
- (b) Install the side gear thrust washer to the side gear.
- (c) Install the side gear to the RH case.



- (d) Install the 4 pinion gears and pinion gear thrust washers to the spider.
- (e) Install the pinion gear with spider to the RH case.



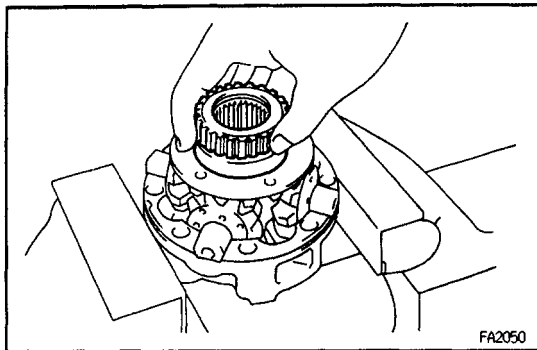
- (f) Using a dial indicator, hold the side gear and spider and measure the side gear backlash.

Standard backlash:

0.05 – 0.20 mm (0.0020 – 0.0079 in.)

HINT:

- Measure at all 4 locations.
- Measure the backlash at the RH case at the LH case.

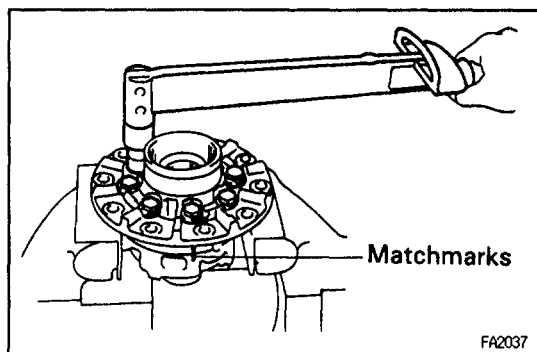


If the backlash is not within specification, install a thrust washer of a different thickness.

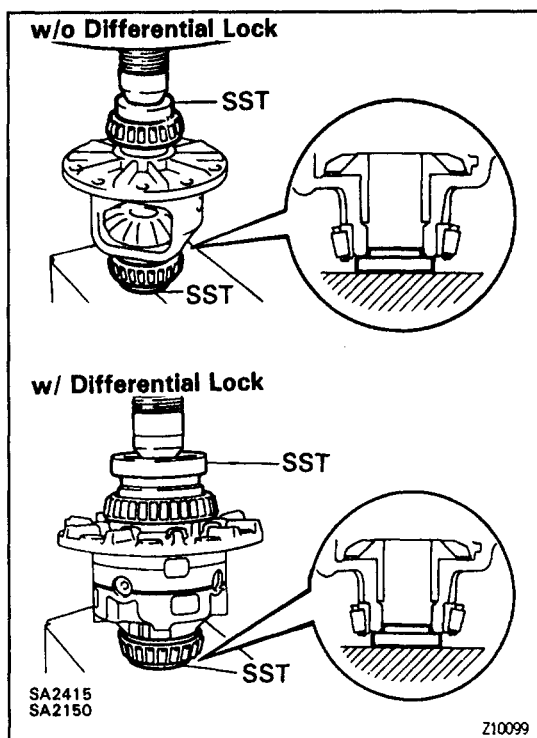
Thrust washer thickness

Thickness mm (in.)	Thickness mm (in.)
0.9 (0.035)	1.1 (0.043)
1.0 (0.039)	–

- (g) Install the side gear and side gear thrust washer to the RH case.
- (h) Install the pinion gears and spider to the RH case.
- (i) Install the side gear and side gear thrust washer to the RH case.



- (j) Align the matchmarks on the LH and RH cases.
 - (k) Torque the 8 bolts uniformly, a little at a time.
- Torque: 47 N·m (480 kgf·cm, 35 ft·lbf)**



3. INSTALL SIDE BEARINGS

Using SST and a press, install the side bearings on the differential case.

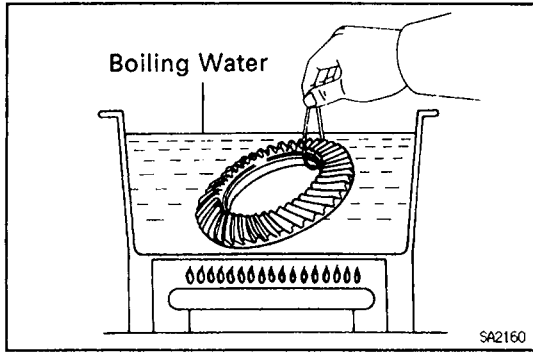
SST w/o Differential lock:

09608-30012 (09608-00060).

09950-60010 (09950-00480)

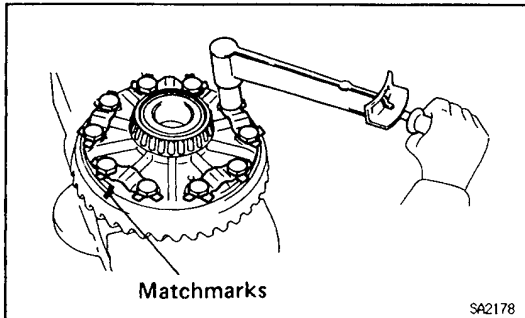
SST w/ Differential lock:

09223-15020, 09608-30012 (09608-04060)



4. INSTALL RING GEAR ON DIFFERENTIAL CASE

- Clean the contact surfaces of the differential case and ring gear.
- Heat the ring gear to about 100°C (212°F) in boiling water.
- Carefully remove the ring gear from the water.
- After the moisture on the ring gear has completely evaporated, quickly install the ring gear to the differential case.

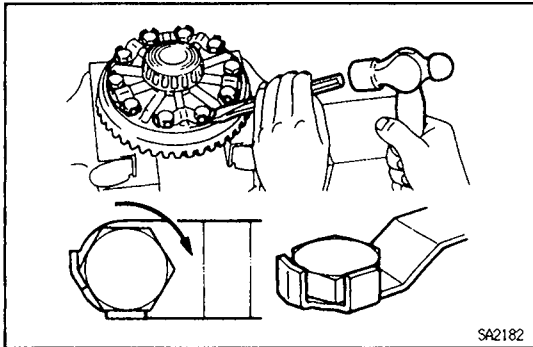


- Align the matchmarks on the ring gear and differential case.
- Temporarily install new lock plates and set bolts.

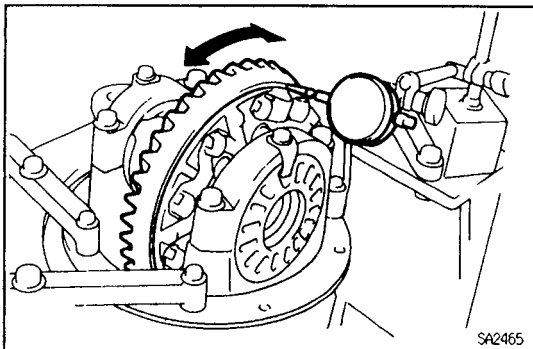
NOTICE: The ring gear set bolts should not tighten until the ring gear has cooled sufficiently.

- After the ring gear cools down enough, tighten the set bolts uniformly and a little at a time.

Torque: 97 N·m (985 kgf·cm, 71 ft·lbf)



- Using a drift punch and hammer, stake the lock plates.
HINT: Stake one claw flush with the flat surface of the bolt. For the claw contacting the protruding portion of the bolt, stake only the half on the tightening side.



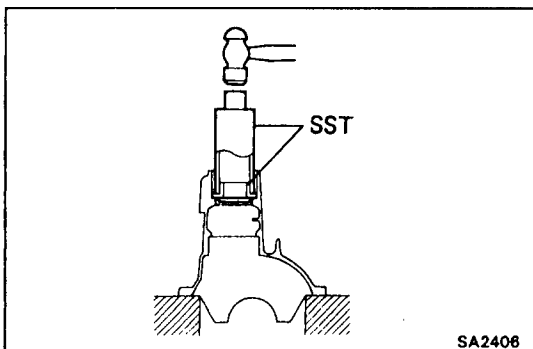
5. CHECK RING GEAR RUNOUT

- Install the differential case onto the carrier and tighten the adjusting nut just to where there is no play in the bearings.
- Using a dial indicator, check the ring gear runout.

Maximum runout:

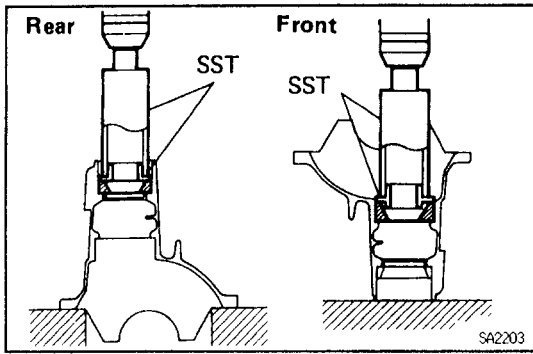
0.10 mm (0.0039 in.)

- Remove the differential case.



6. INSTALL OIL STORAGE RING

Using SST and a hammer, install a new oil storage ring.
SST 09316-60010 (09316-00010, 09316-00020)



7. INSTALL DRIVE PINION FRONT AND REAR BEARING OUTER RACES

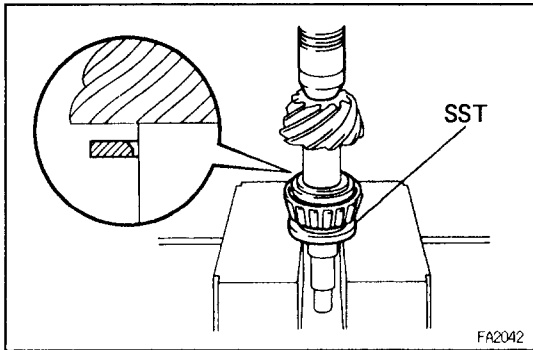
Using SST and a press, install the outer races.

Front side:

SST 09316-60010 (09316-00010, 09316-00020)

Rear side:

SST 09316-60010 (09316-00010, 09316-00050)

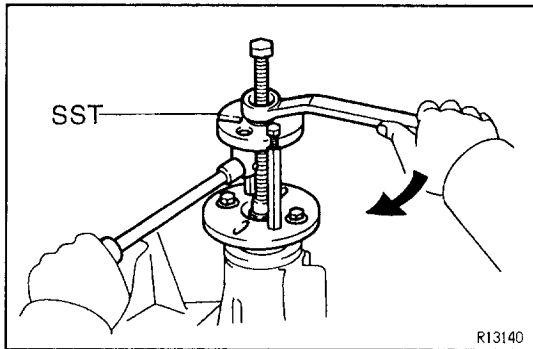


8. INSTALL DRIVE PINION FRONT BEARING

- (a) Install the plate washer on the drive pinion with the chamfered and facing the pinion gear.

- (b) Using SST and a press, install the front bearing onto the drive pinion.

SST 09506-30012



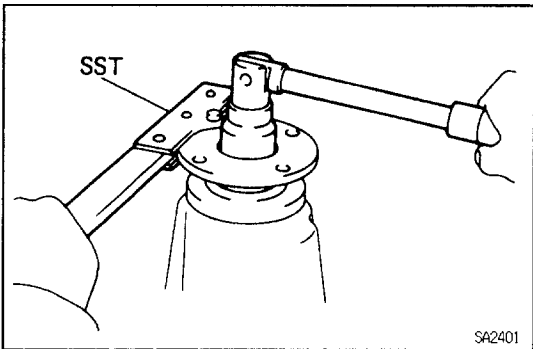
9. TEMPORARILY ADJUST DRIVE PINION PRELOAD

- (a) Install the drive pinion, rear bearing and oil slinger.

HINT: Assemble the spacer and oil seal after adjusting the gear contact pattern.

- (b) Install the companion flange with SST.

SST 09550-30010

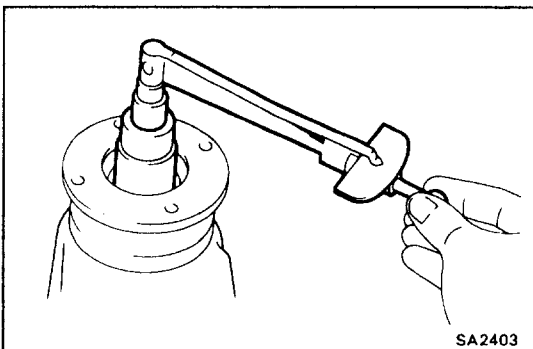


- (c) Adjust the drive pinion preload by tightening the companion flange nut.

Using SST to hold the flange, tighten the nut.

SST 09330-00021

NOTICE: As there is no spacer, tighten a little at a time, being careful not to overtighten.



- (d) Using a torque wrench, measure the preload.

Preload (starting):

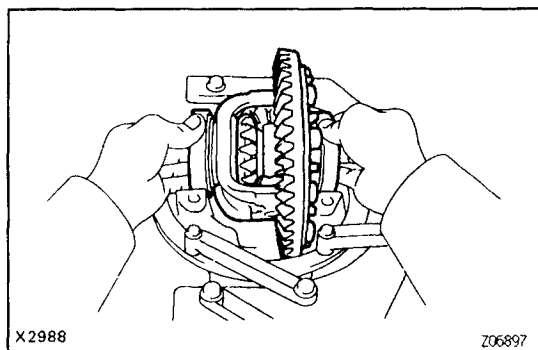
New bearing

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

Reused bearing

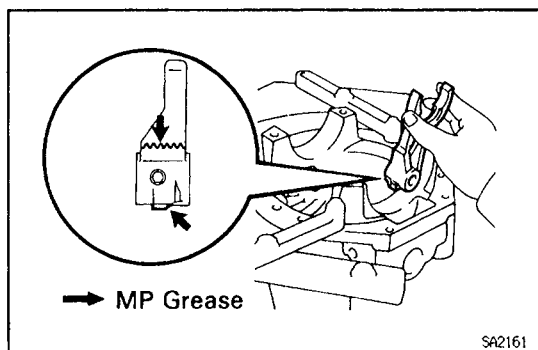
0.5 – 0.8 N·m (5 – 8 kgf·cm, 4.3 – 6.9 in.·lbf)

HINT: Measure the total preload after first turning the bearing clockwise and counterclockwise several times to mark the bearing smooth.



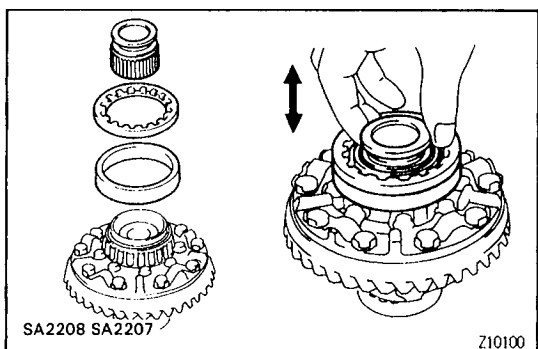
**10. w/o DIFFERENTIAL LOCK:
INSTALL DIFFERENTIAL CASE IN CARRIER**

- (a) Place the bearing outer races on their respective bearings. Make sure the left and right outer races are not interchanged.
 - (b) Install the case in the carrier.
- HINT: Make sure that there is backlash between the ring gear and drive pinion.

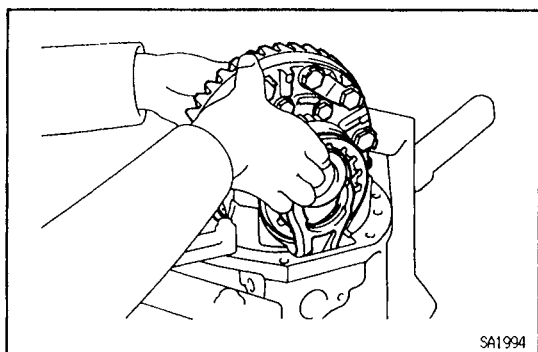


**11. w/ DIFFERENTIAL LOCK:
INSTALL DIFFERENTIAL CASE IN CARRIER**

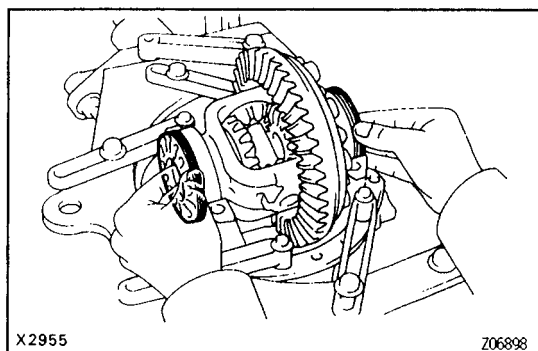
- (a) Apply MP grease on the rack of the shift fork and connecting part of the indicator switch.
- (b) Insert the shift fork into the differential carrier, as shown.



- (c) Install outer races, adjusting nuts and left side to sleeve.
- HINT: Check that the sleeve moves smoothly.

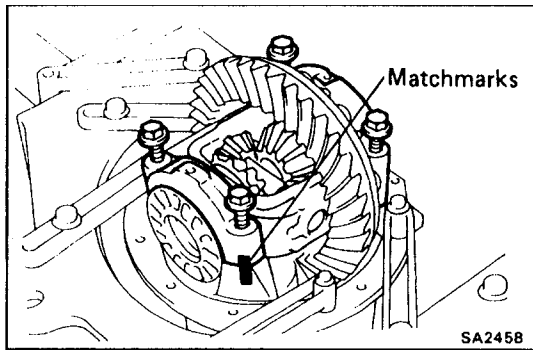


- (d) Install the shift fork in the groove of the sleeve holding it by hand and install the case in the carrier.
- HINT: Make sure that there is backlash between the ring gear and drive pinion.



**12. w/o DIFFERENTIAL LOCK:
INSTALL ADJUSTING NUTS**

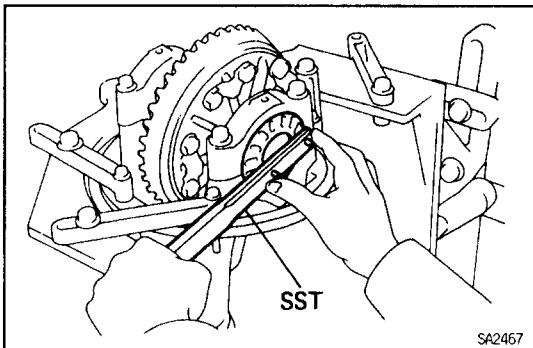
Install the adjusting nuts on the carrier, making sure the nuts are threaded properly.



13. INSTALL BEARING CAPS

Align the matchmarks on the cap and carrier. Screw in the 2 bearing cap bolts 2 or 3 turns and press down the bearing cap by hand.

HINT: If the bearing cap does not fit tightly on the carrier, the adjusting nuts are not threaded properly. Reinstall the adjusting nuts if necessary.



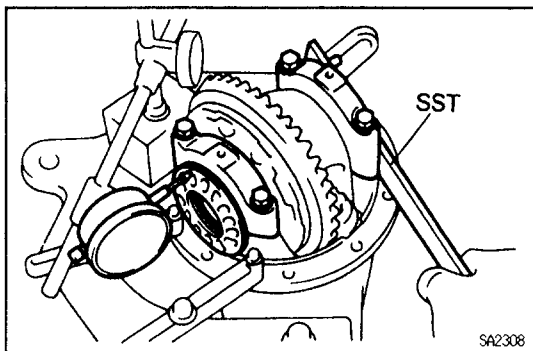
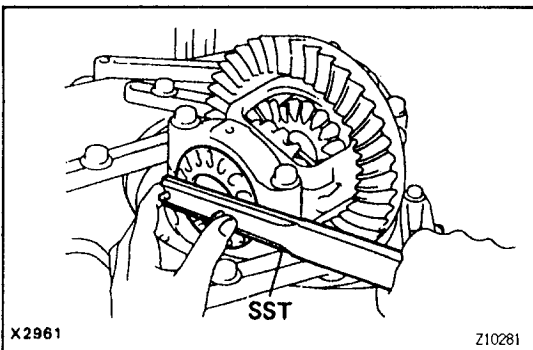
14. ADJUST SIDE BEARING PRELOAD

- (a) Torque the 4 bearing cap bolts to the specified torque, then loosen them to the point where the adjusting nuts can be turned by SST.

SST 09504-00011

Torque: 78 N·m (800 kgf·cm, 58 ft·lbf)

- (b) Fully tighten the 4 bearing cap bolts by hand.
 (c) Using the SST, torque the adjusting nut on the ring gear side until the ring has a backlash of about 0.2 mm (0.008 in.).
 (d) While turning the ring gear, use the SST to fully tighten the adjusting nut on the drive pinion side. After the bearings are settled, loosen the adjusting nut on the drive pinion side.



- (e) Place a dial indicator on the top of the adjusting nut on the ring gear side.
 (f) Adjust the side bearing for zero preload by tightening the other adjusting nut until the pointer on the indicator begins to move.
 (g) Torque the adjusting nut 1-1.5 notches from the zero preload position.
 (h) Using a dial indicator, adjust the ring gear backlash until it is within specification.

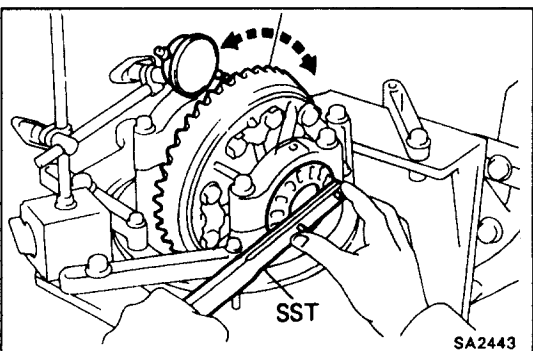
Backlash:

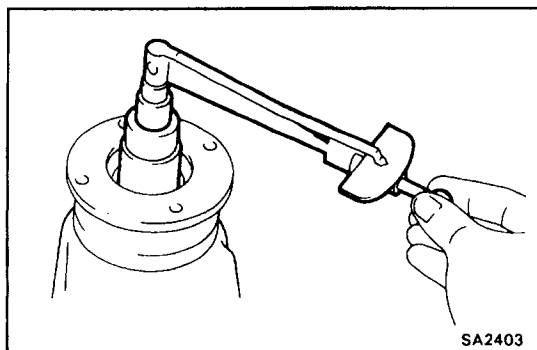
0.13-0.18 mm (0.0051-0.0071 in.)

HINT: The backlash is adjusted by turning the left and right adjusting nuts equal amounts. For example, loosen the nut on the left side one notch and torque the nut on the right side one notch.

- (i) Torque the bearing cap bolts.

Torque: 78 N·m (800 kgf·cm, 58 ft·lbf)





- (j) Recheck the ring gear backlash.

Backlash:

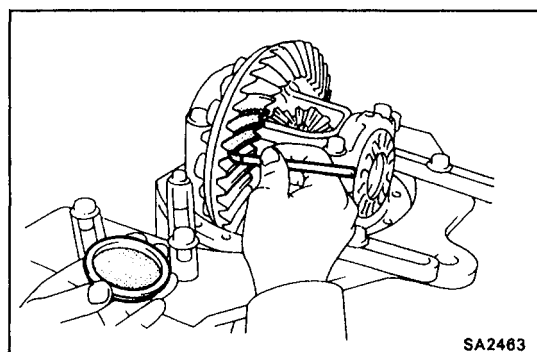
0.13–0.18 mm (0.0051–0.0071 in.)

- (k) Using a torque wrench, measure the total preload.

Total preload (starting):

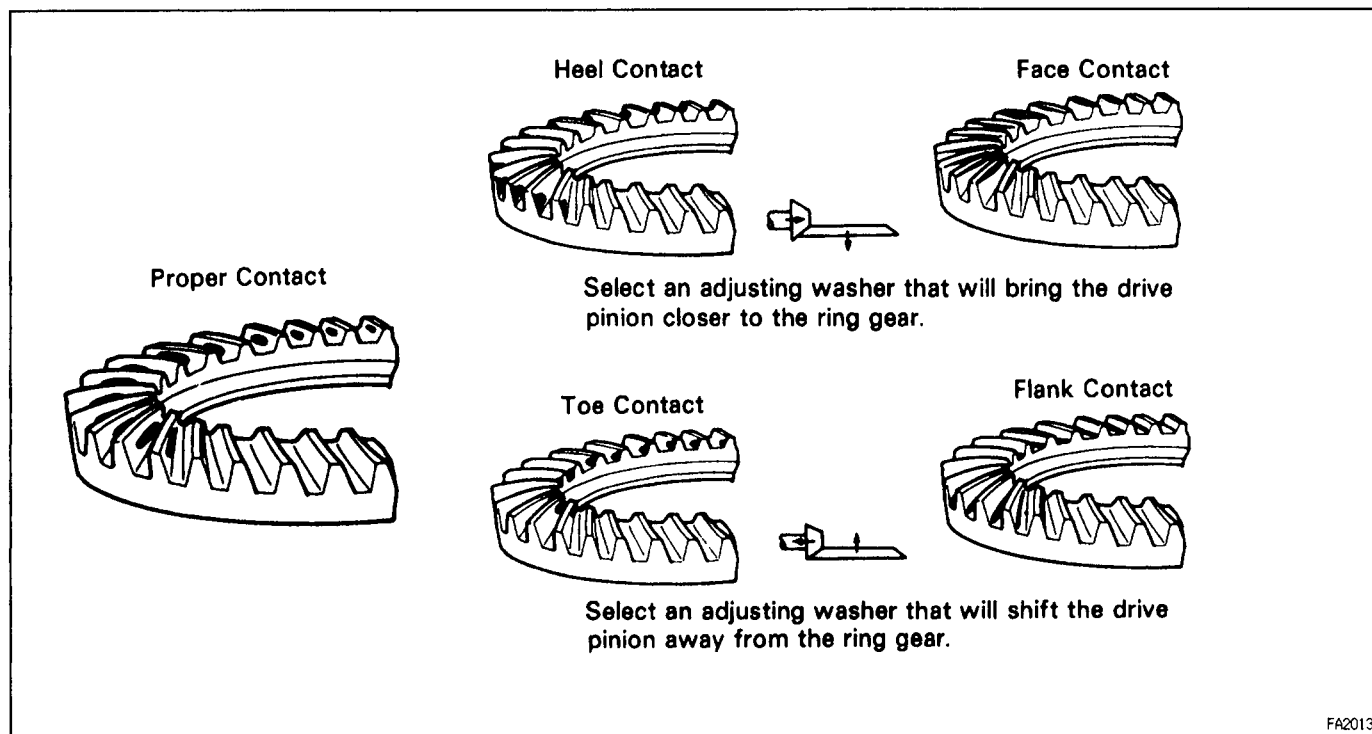
Add drive pinion preload

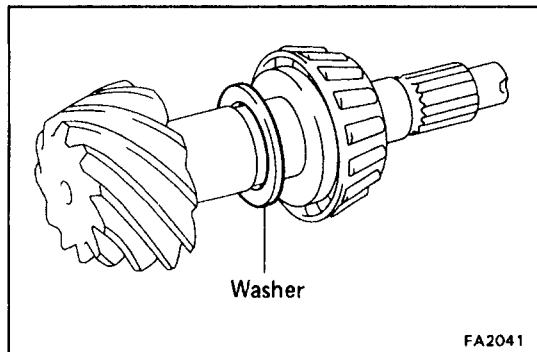
0.4–0.6 N·m (4–6 kgf·cm, 3.5–5.2 in.-lbf)



15. INSPECT TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION

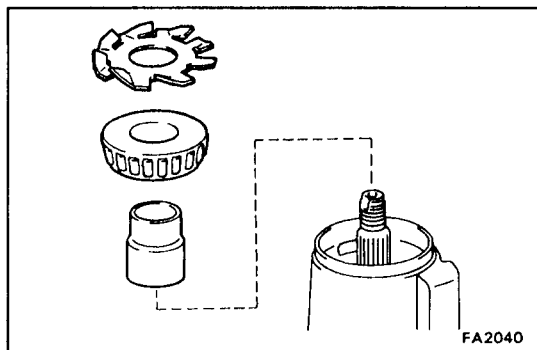
- Coat 3 or 4 teeth at 3 different positions on the ring gear with red lead.
- Hold the companion flange firmly and rotate the ring gear in both directions.
- Inspect the tooth pattern.





If the teeth are not contacting properly, use the following chart to select a proper washer for correction.

Thickness mm (in.)	Thickness mm (in.)
1.70 (0.0669)	2.03 (0.0799)
1.73 (0.0681)	2.06 (0.0811)
1.76 (0.0693)	2.09 (0.0823)
1.79 (0.0705)	2.12 (0.0835)
1.82 (0.0717)	2.15 (0.0846)
1.85 (0.0728)	2.18 (0.0858)
1.88 (0.0740)	2.21 (0.0870)
1.91 (0.0752)	2.24 (0.0882)
1.94 (0.0764)	2.27 (0.0894)
1.97 (0.0776)	2.30 (0.0906)
2.00 (0.0787)	2.33 (0.0917)



16. REMOVE COMPANION FLANGE

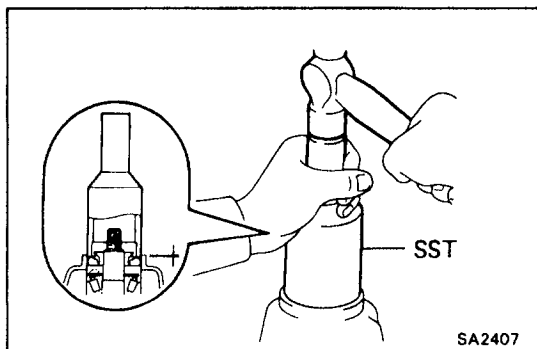
(See page SA-34)

17. REMOVE OIL SLINGER AND REAR BEARING

(See page SA-35)

18. INSTALL BEARING SPACER AND REAR BEARING

- Install a new bearing spacer on the shaft.
- Install the rear bearing and oil slinger.



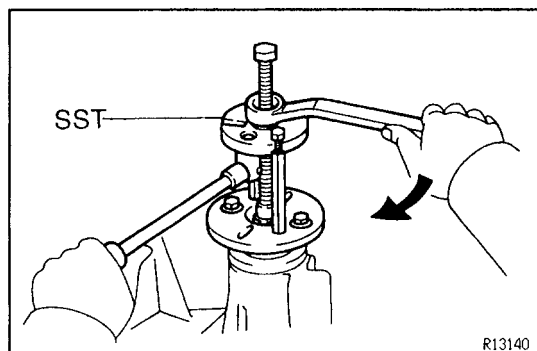
19. INSTALL OIL SEAL

- Using SST, install a new oil seal, as shown.
SST 09214-76011

Oil seal drive in depth:

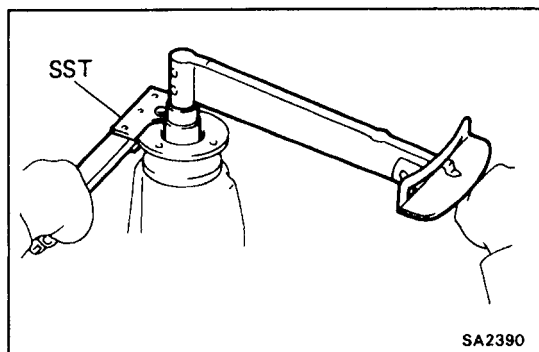
1.0 mm (0.039 in.)

- Apply MP grease to the oil seal lip.

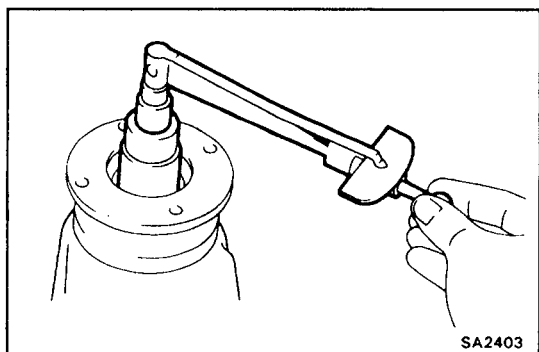


20. INSTALL COMPANION FLANGE

- Install the companion flange with SST.
SST 09550-30010



- (b) Install the plate washer and a new nut.
HINT: Coat the threads of a new nut with gear oil.
- (c) Using SST to hold the flange, tighten the nut.
SST 09330-00021
Torque: 196 N·m (2,000 kgf·cm, 145 ft·lbf)



21. ADJUST DRIVE PINION PRELOAD

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

Preload (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 greater than specification, replace the bearing spacer.
- If preload is less than 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.

Maximum torque:

343 N·m (3,500 kgf·cm, 253 ft·lbf)

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

22. RECHECK RING GEAR BACKLASH

(See page [SA-32](#))

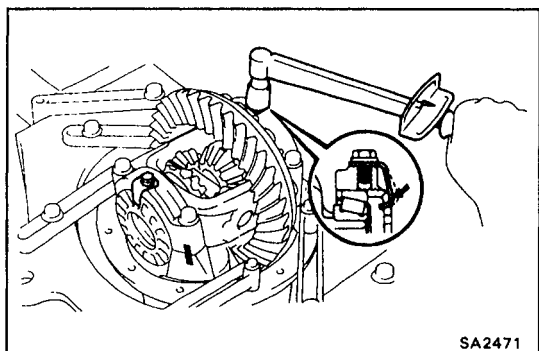
23. RECHECK TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION

(See page [SA-45](#))

24. CHECK RUNOUT OF COMPANION FLANGE

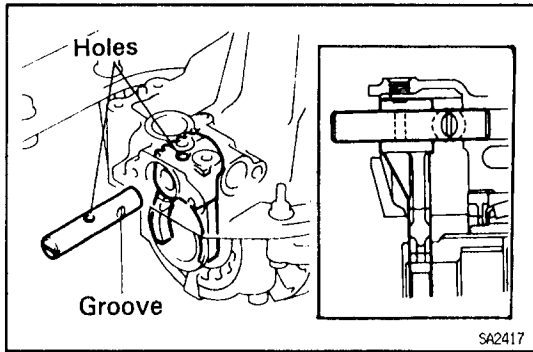
(See page [SA-32](#))

25. STAKE DRIVE PINION NUT



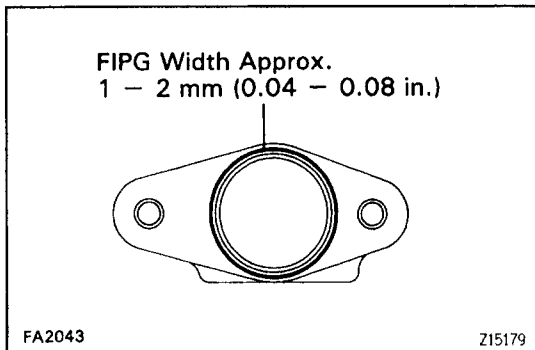
26. INSTALL ADJUSTING NUT LOCKS

- (a) Install 2 new nut locks on the bearing caps.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)
- (b) After tightening bolts, bend the nut locks.



**27. w/ DIFFERENTIAL LOCK:
INSTALL SHIFT FORK SHAFT**

- (a) Apply MP grease onto the outer circuit of the fork shaft.
- (b) Install the fork shaft to match the hole of the shift fork and that of the shift fork shaft.



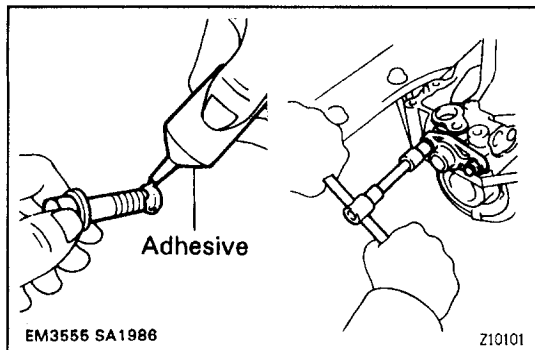
- (c) Remove any FIPG material and be careful not to drop oil on the contacting surface of the differential carrier and shaft retainer.

- (d) Apply FIPG to the carrier, as shown.

FIPG:

Part No. 08826-00090, THREE BOND 1281 or equivalent

HINT: Install the shaft retainer within 10 minutes after applying FIPG.



- (e) Clean the threads of the bolts and retainer bolts holes with toluene or trichlorethylene.

- (f) Apply adhesive to 2 or 3 threads of the mount bolt end.

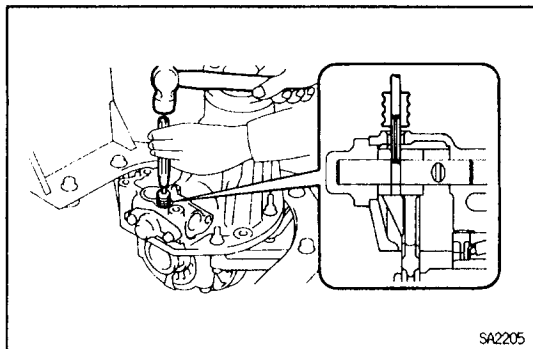
Adhesive:

Part No. 08833-00080, THREE BOND 1344, LOC-

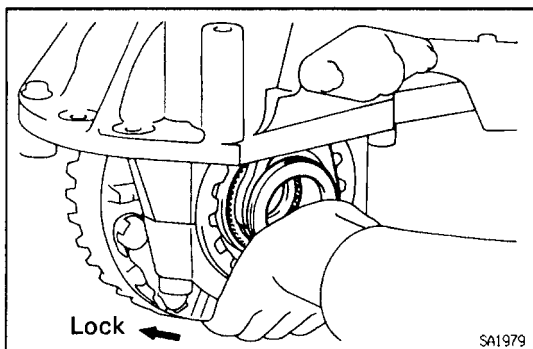
TITE 242 or equivalent

- (g) Tighten the shaft retainer with the 2 bolts.

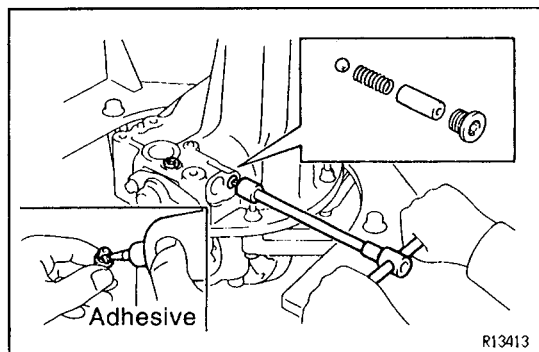
Torque: 24 N·m (240 kgf·cm, 17 ft·lbf)



- (h) Using a pin punch and hammer, install the slotted spring pin to the shift fork.



- (i) Shift the fork deeply and keep the differential lock condition.

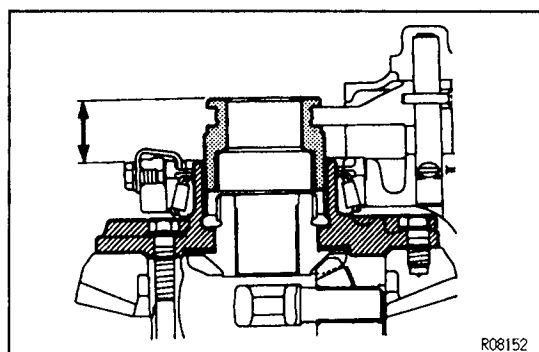


- (j) Install the ball, compression spring and spring seat.
- (k) Clean the threads of 2 plugs and plug holes with toluene or trichloroethylene.
- (l) Apply adhesive to the plug threads.

Adhesive:

Part No. 08833-00080, THREE BOND 1344, LOC-TITE 242 or equivalent

- (m) Using a hexagon wrench, install and tighten the screw plugs.
Torque: 22 N·m (220 kgf·cm, 16 ft·lbf)



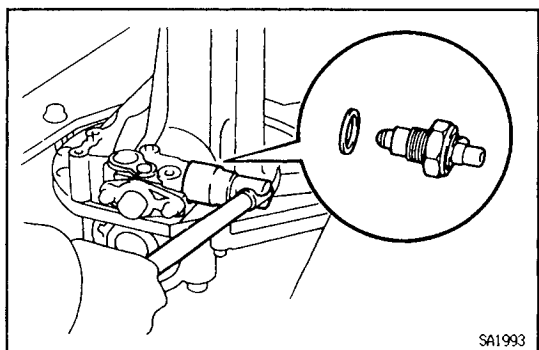
**28. w/ DIFFERENTIAL LOCK:
MEASURE DISTANCE BETWEEN SLEEVE AND DIFFERENTIAL CASE END SIDE**

Measure distance between the sleeve and tip of the differential case when differential is free and locked.

Standard distance:

LOCK: 17.44 – 18.86 mm (0.6866 – 0.7425 in.)

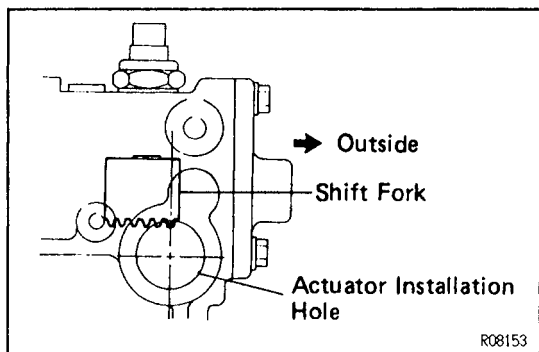
FREE: 32.40 – 33.90 mm (1.2756 – 1.3346 in.)



**29. w/ DIFFERENTIAL LOCK:
INSTALL INDICATOR SWITCH**

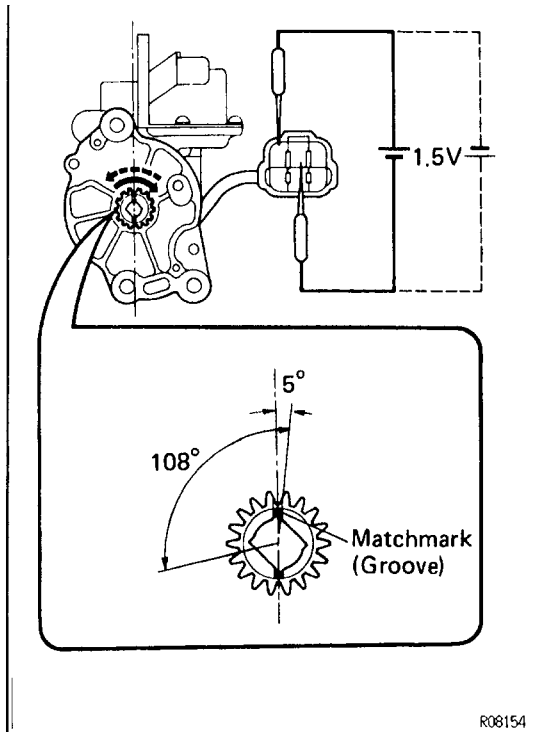
Install the indicator switch with a new gasket.

Torque: 40 N·m (410 kgf·cm, 30 ft·lbf)



**30. w/ DIFFERENTIAL LOCK:
INSTALL ACTUATOR**

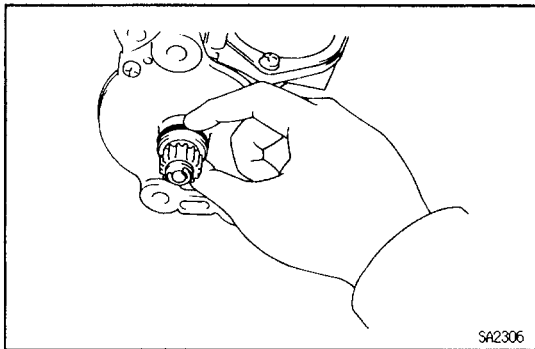
- (a) Check that the outermost rack tooth of the shift fork is virtually above the center line of the actuator installation hole.



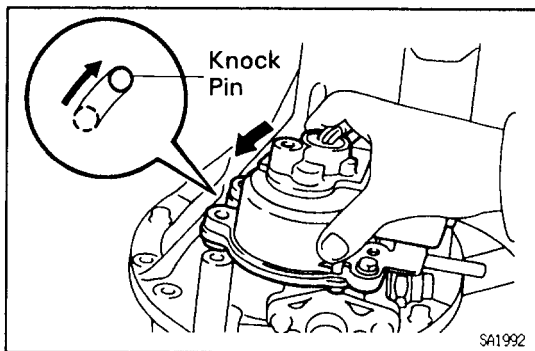
- (b) Ensure that the matchmarks of the pinion of the actuator is in the extent between zero and 5 degrees clockwise above the center line of the actuator.

NOTICE:

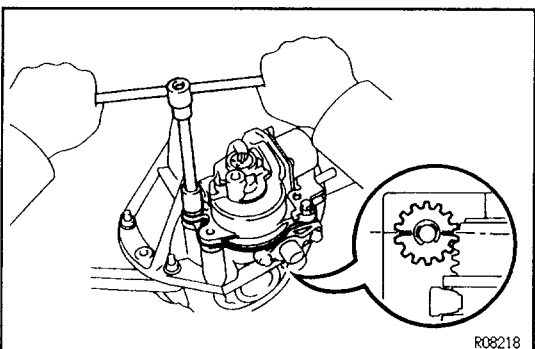
- If the matchmarks is not in this extent, rotate the pinion to be matched.
- Don't supply the battery positive voltage directly between terminals.
- If the matchmarks come to the extension limit of the rotation, don't electrify moreover.



- (c) Install a new O-ring to the actuator.
 (d) Apply a light coat of gear oil on the O-ring.
 (e) Apply MP grease to the gear part.



- (f) Insert the actuator so that the long hole on the actuator side fits with the knock pin on the carrier side.
 HINT: Don't damage the O-ring of the actuator.
 (g) Align the actuator with the long hole and rotate the actuator counterclockwise when the knock pin reaches the right-hand side.



- (h) Install the actuator to the differential carrier with the bolt so that the outermost rack tooth of the shift fork will fit the matchmarks of the pinion of the actuator.

Torque: 26 N·m (270 kgf·cm, 20 ft·lbf)