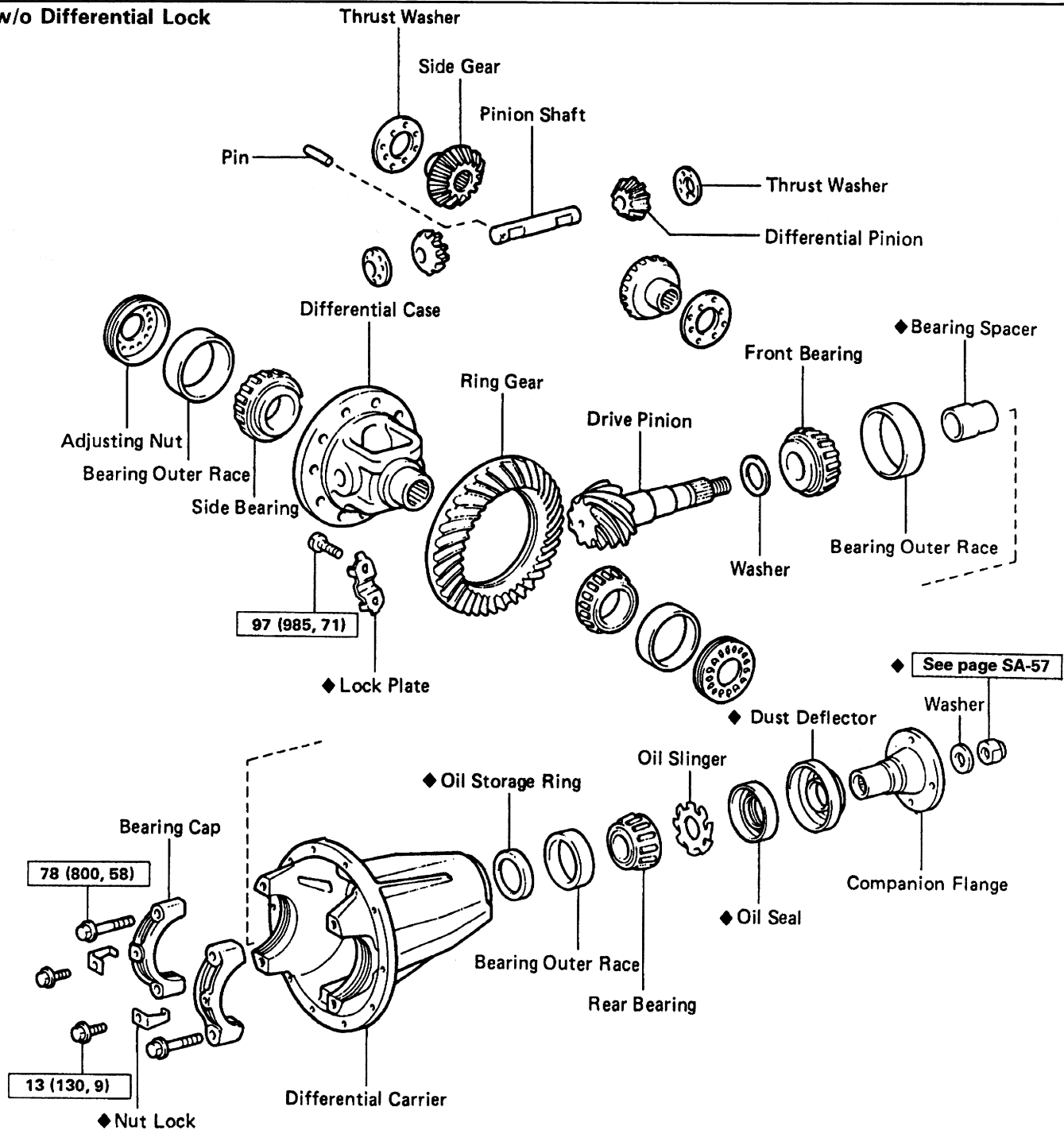


DIFFERENTIAL CARRIER COMPONENTS

SA17F-01

w/o Differential Lock

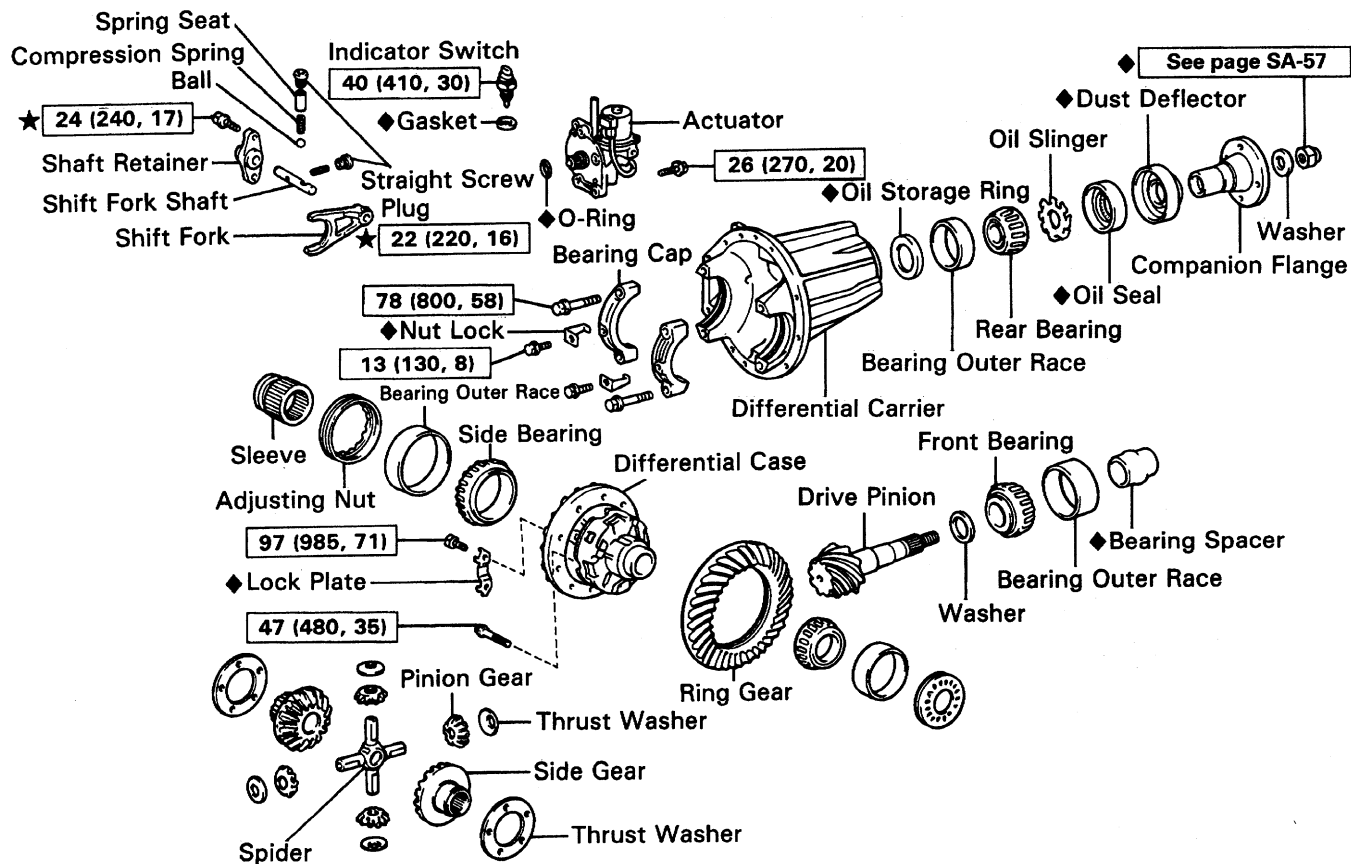


N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

SA2478

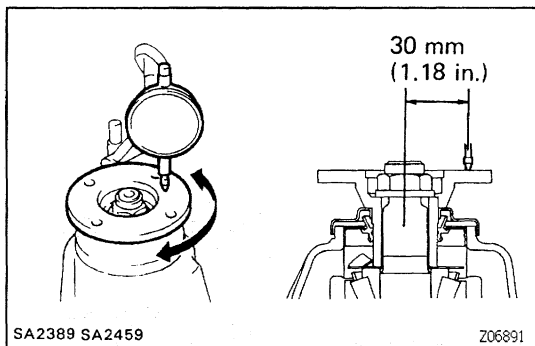
w/ Differential Lock



N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

★ Precoated part



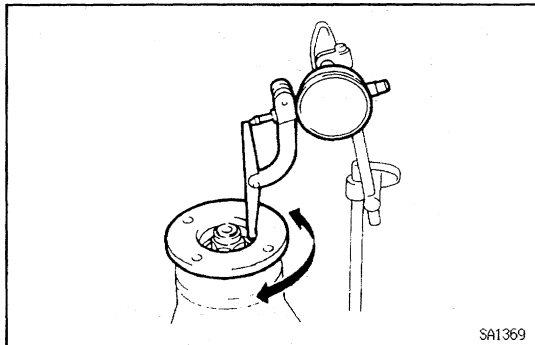
DIFFERENTIAL CARRIER INSPECTION ^{SAPTY-02}

1. CHECK RUNOUT OF COMPANION FLANGE

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

Maximum vertical runout:

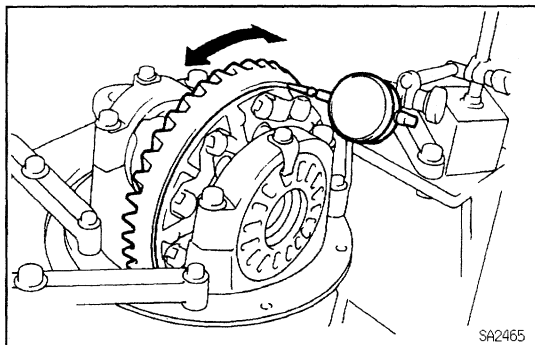
0.10 mm (0.0039 in.)



Maximum lateral runout:

0.10 mm (0.0039 in.)

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

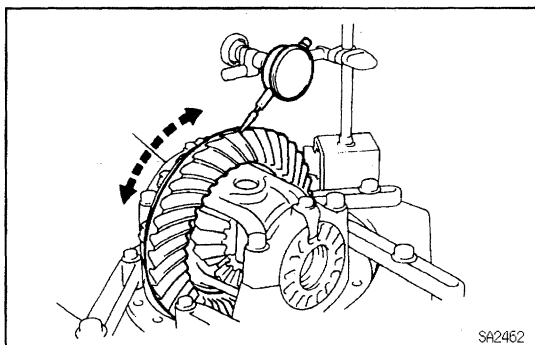


2. CHECK RING GEAR RUNOUT

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

Maximum runout:

0.10 mm (0.0039 in.)

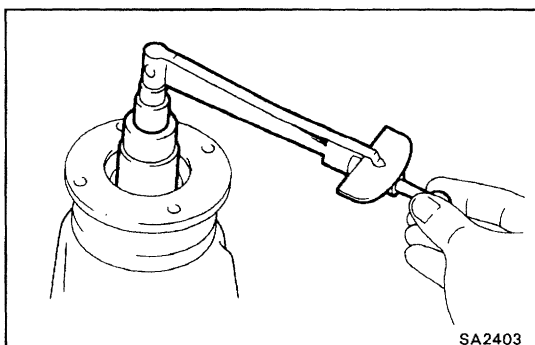


3. CHECK RING GEAR BACKLASH

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

Backlash:

0.13–0.15 mm (0.0051 –0.0071 in.)

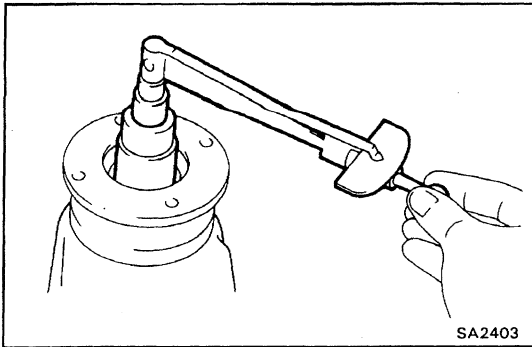


4. MEASURE DRIVE PINION PRELOAD

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

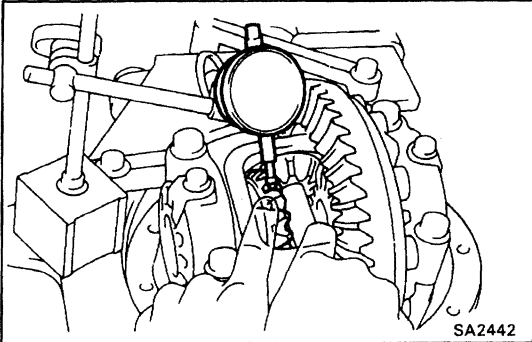
Using a torque wrench, measure the total preload.

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 a differential.



6. (w/o DIFFERENTIAL LOCK)

CHECK SIDE GEAR BACKLASH

Measure the side gear backlash while holding 1 pinion gear toward the case.

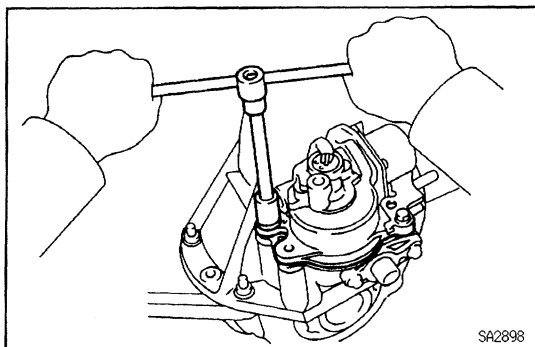
Standard backlash:

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-48](#))

7. CHECK TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION

(See page [SA-56](#))



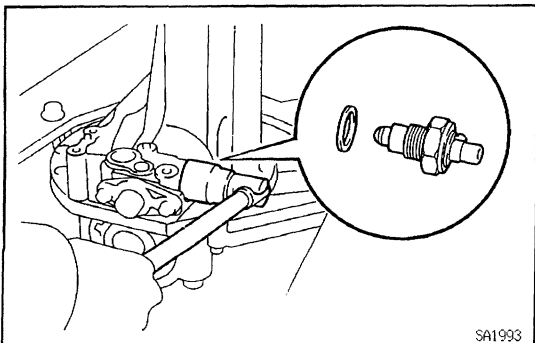
DIFFERENTIAL CARRIER DISASSEMBLY

1. (w/ DIFFERENTIAL LOCK)

REMOVE ACTUATOR

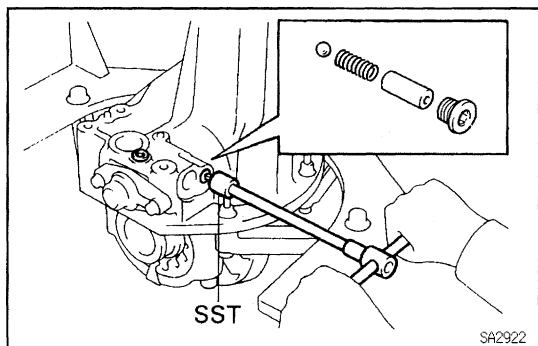
(a) Remove the bolt and actuator from the differential carrier.

(b) remove the O-ring.



2. (w/ DIFFERENTIAL LOCK)

REMOVE INDICATOR SWITCH



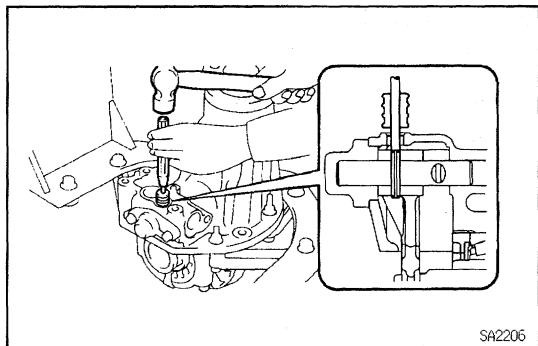
3. (w/ DIFFERENTIAL LOCK)

REMOVE SHIFT FORK SHAFT

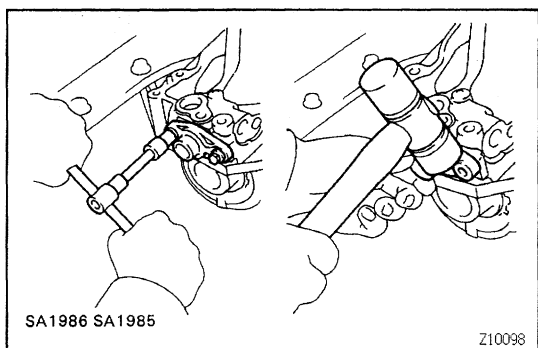
(a) Using SST, remove the 2 straight screw plugs.

SST 09313-30021

(b) Remove the spring seat, compression spring and ball.

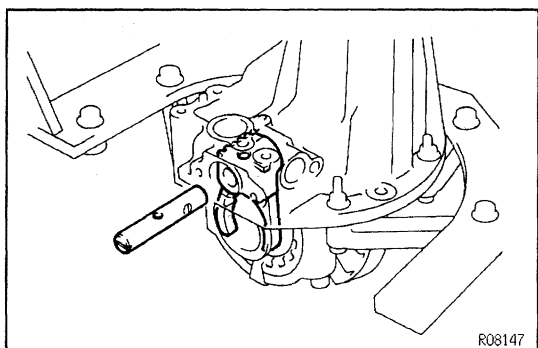


(c) Using a pin punch and hammer, drive out the slotted spring pin.



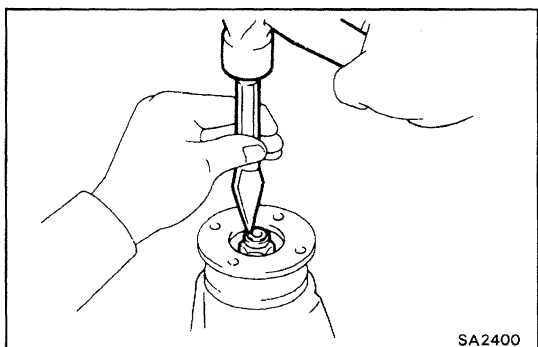
(d) Remove the 2 bolts from the shaft retainer.

(e) Using a plastic hammer, tap out the shaft retainer.



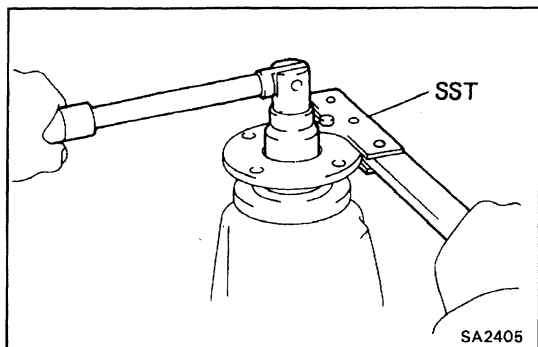
(f) Remove the shift fork shaft.

HINT: Pull out the shift fork shaft with the screwdriver turned round.

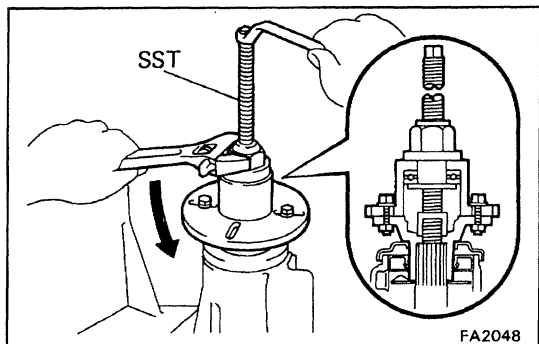


4. REMOVE COMPANION FLANGE

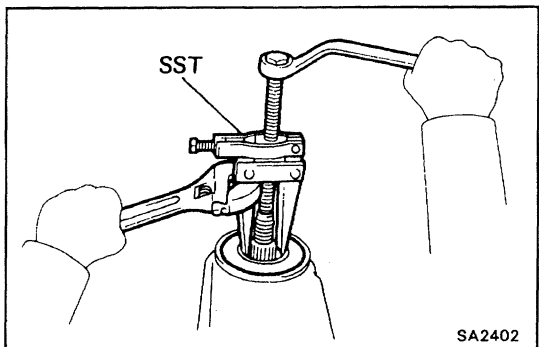
(a) Using a chisel and hammer, unseat the nut.



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

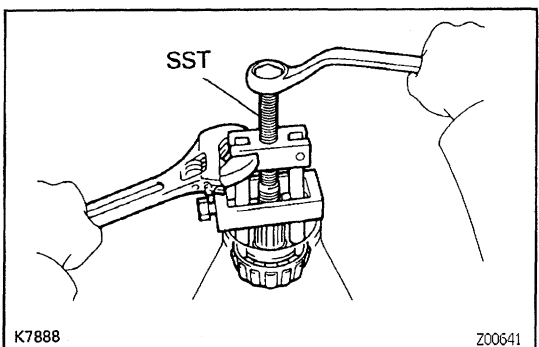


- (c) Using SST, remove the companion flange.
SST 09557-22022 (09557-22050)



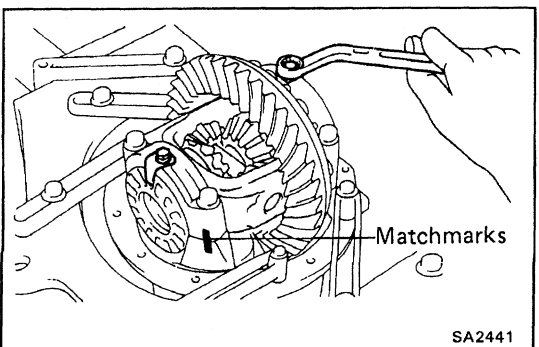
5. REMOVE OIL SEAL AND OIL SLINGER

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



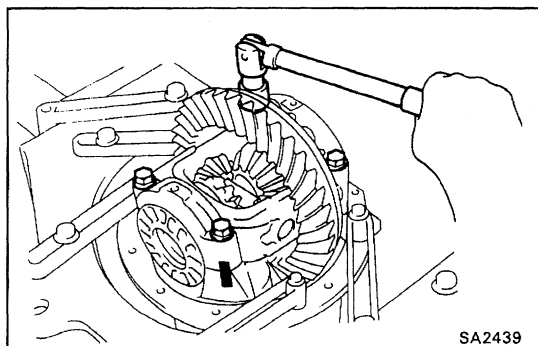
6. REMOVE REAR BEARING

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



7. REMOVE DIFFERENTIAL CASE

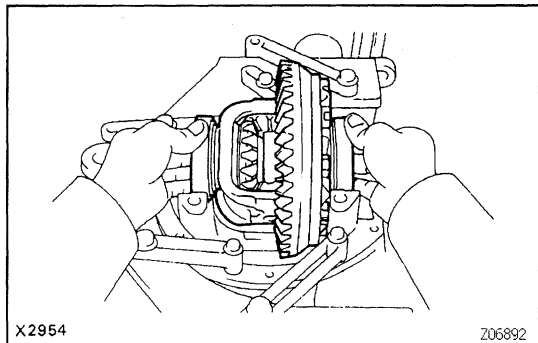
- (a) (w/o Differential lock only)
Place matchmarks on the bearing cap and differential carrier.
(b) Remove the 2 adjusting nut locks.



(c) Remove the 4 bolts and 2 bearing caps.

(d) (w/o Differential lock only)

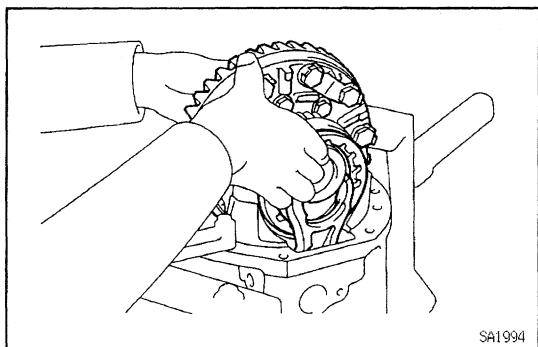
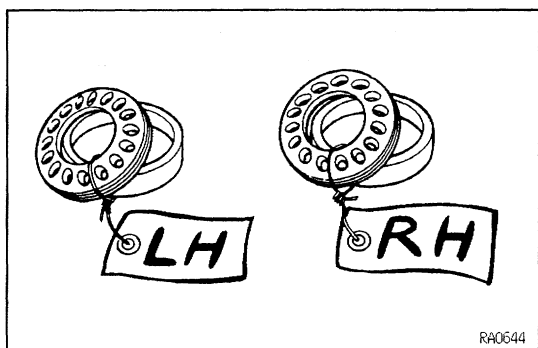
Remove the 2 adjusting nuts.



(e) (w/o differential lock only)

Remove the differential case with the side bearing outer races from the carrier.

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

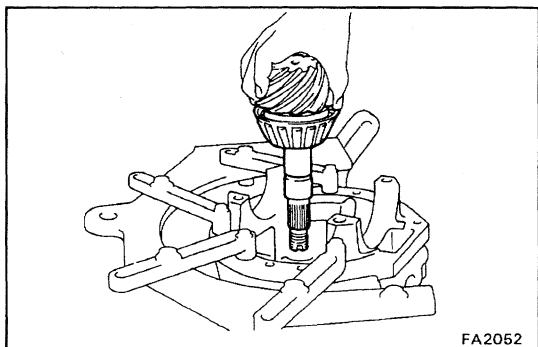


(f) (w/ Differential lock only)

Remove the differential case with both side bearing outer race, adjusting nuts and sleeve from the differential carrier.

(g) (w/ Differential lock only)

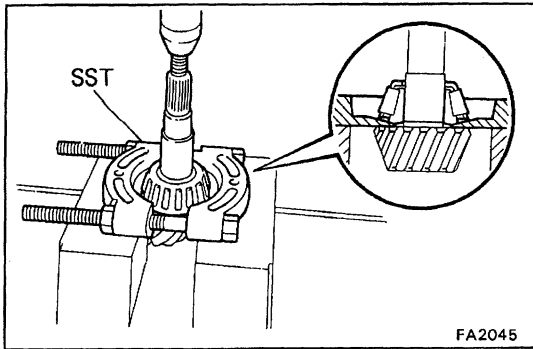
Remove the shift fork.



8. REMOVE DRIVE PINION AND BEARING SPACER

(a) Remove the drive pinion with the front bearing.

(b) Remove the bearing spacer.



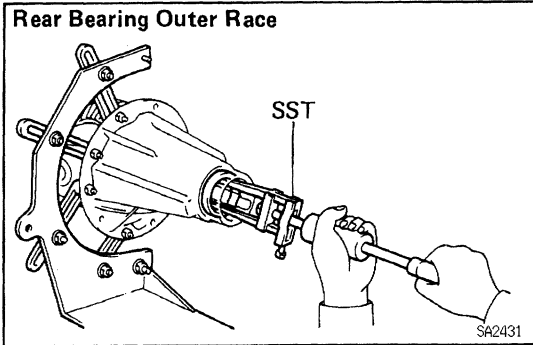
9. REMOVE DRIVE PINION FRONT BEARING

(a) Using SST and a press, pull out the bearing from the drive pinion.

SST 09950-00020

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

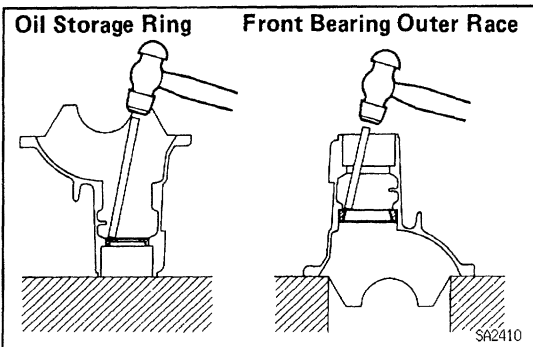
(b) Remove the plate washer from the drive pinion.



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

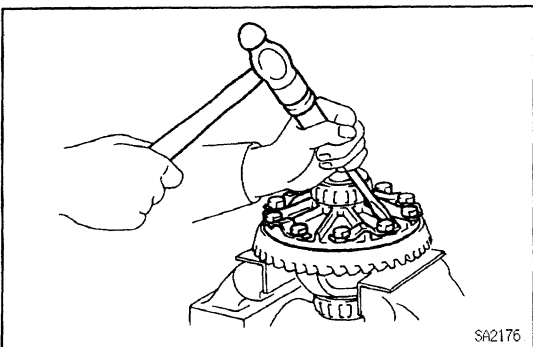
(a) Using SST, remove the bearing outer race.

SST 09308 - 00010



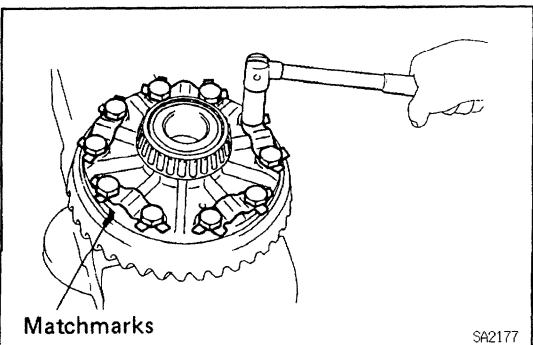
(b) Using a hammer and brass bar, drive out the oil storage ring and outer race.

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



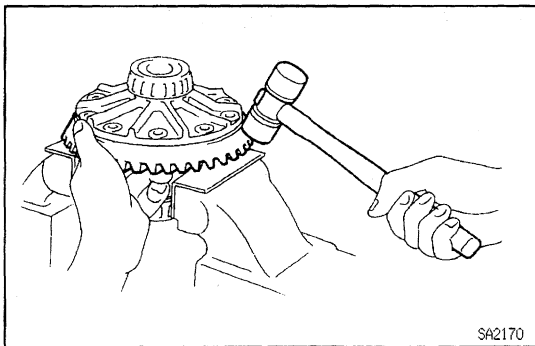
11. REMOVE RING GEAR

(a) Using a screwdriver, unstake the lock plate.

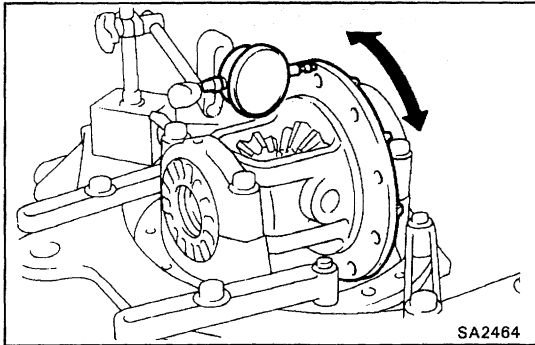


(b) Place the matchmarks on the ring gear and differential case.

(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.



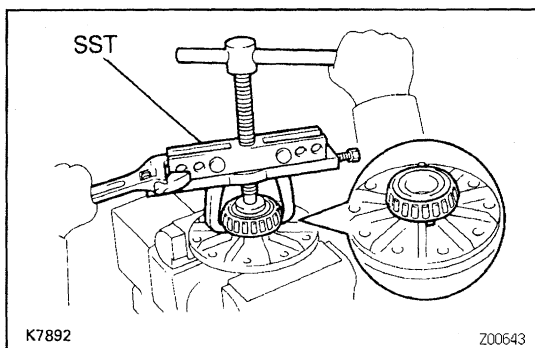
12. CHECK DIFFERENTIAL CASE RUNOUT

- (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.

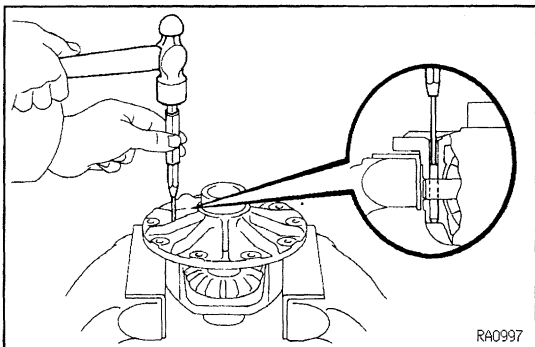


13. REMOVE SIDE BEARING FROM DIFFERENTIAL CASE

Using SST, pull the side bearing from the differential case.

SST 09950-20017

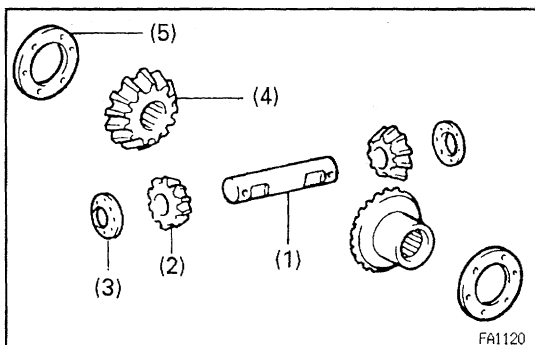
HINT: Fix the claws of SST to the notches in the differential case.



14. (w/o DIFFERENTIAL LOCK)

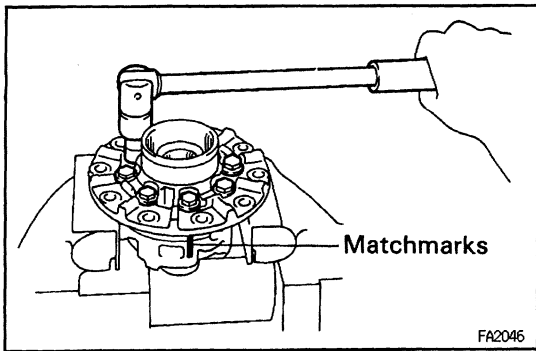
DISASSEMBLE DIFFERENTIAL CASE

- (a) Using a hammer and punch, drive out the straight pin.

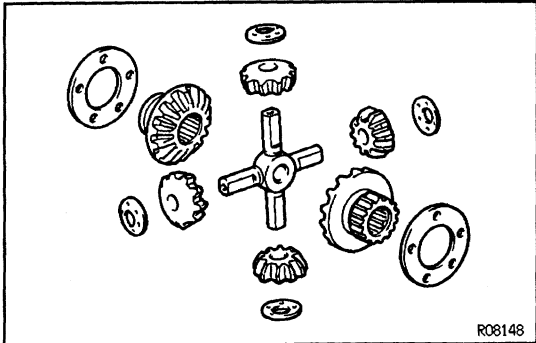


- (b) Remove the following parts:

- (1) Pinion shaft
- (2) Pinion gears
- (3) Pinion gear thrust washers
- (4) Side gears
- (5) Side gear thrust washers

**15. (w/ DIFFERENTIAL LOCK)****DISASSEMBLE DIFFERENTIAL CASE**

- (a) Place the 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.

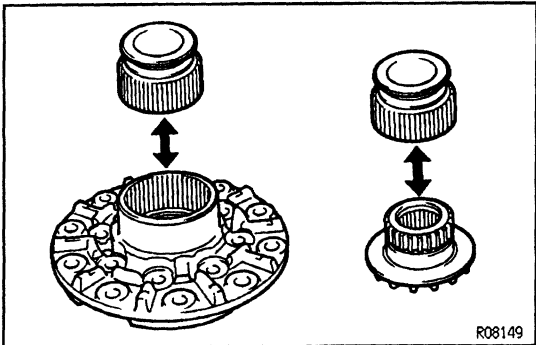


- (d) Remove the following parts:

- 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**

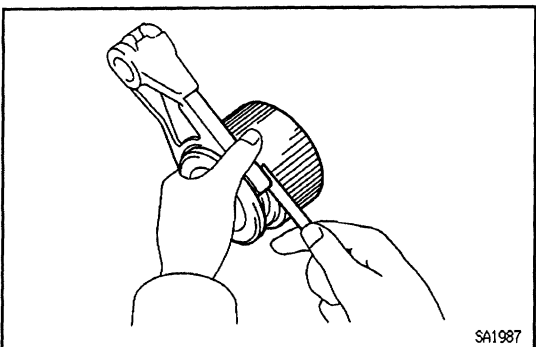
- (a) Install the sleeve to the differential case (I-H) and check it moves smoothly.
- (b) Install the sleeve to the side gear and check it moves smoothly.

**2. (w/ DIFFERENTIAL LOCK)****MEASURE CLEARANCE OF SHIFT FORK AND SLEEVE**

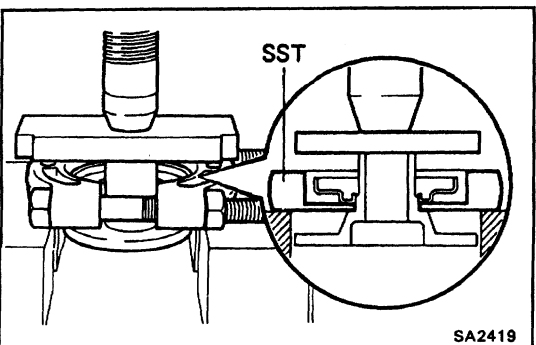
Using a feeler gauge, measure the clearance between the shift fork and sleeve.

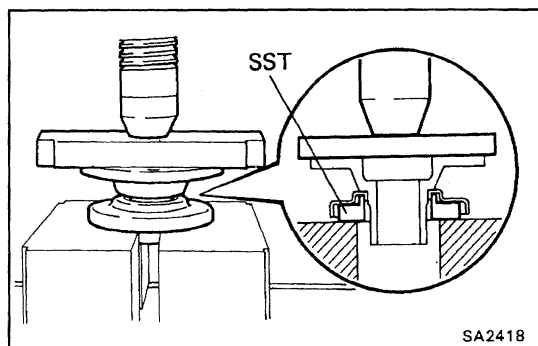
Clearance (Reference):

0.15 - 0.35 mm (0.06 - 0.014 in.)

**3. REMOVE DUST DEFLECTOR**

Using SST and a press, remove the dust deflector.
SST 09950-00020

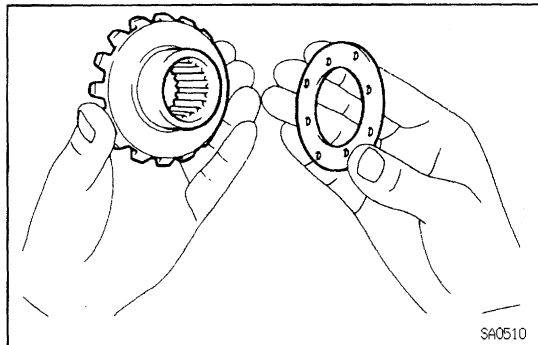




SA2418

4. INSTALL NEW DUST DEFLECTOR

Using SST and a press, install the new dust deflector.
SST 09726-40010



SA0510

DIFFERENTIAL CARRIER ASSEMBLY

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

1. (w/o DIFFERENTIAL LOCK)

ASSEMBLE DIFFERENTIAL CASE

(a) Install the proper thrust washers and side gears.
Using the table below, select the thrust washers which will ensure that the backlash is within specification.

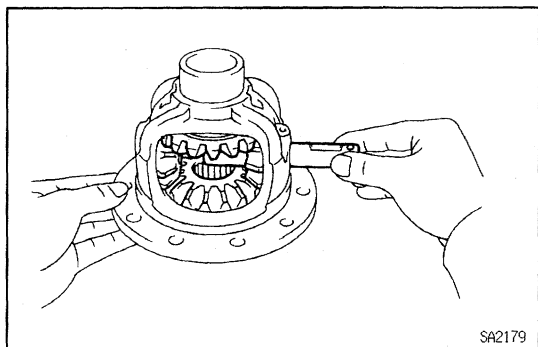
Try to select washers of the same size for both sides.

Standard backlash:

0.05–0.20 mm (0.0020–0.0079 in.)

Thrust washer thickness:

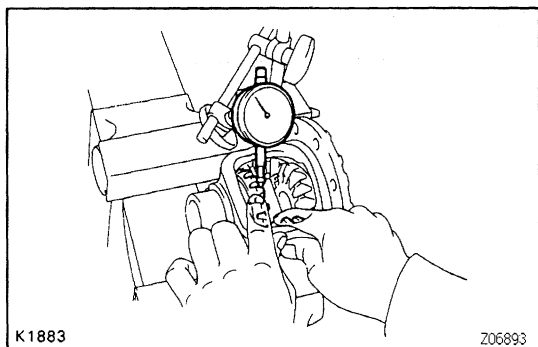
Thickness mm (in.)	Thickness mm (in.)
1.6 (0.063)	1.8 (0.071)
1.7 (0.067)	



SA2179

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

HINT: Align the hole for the pinion shaft with the case hole.



K1883

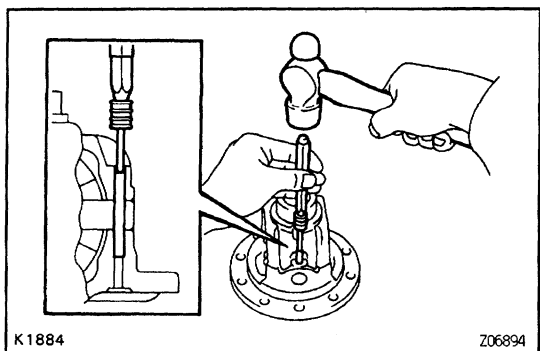
Z06893

(c) Using a dial indicator, measure the side gear backlash while holding 1 pinion gear toward the case.

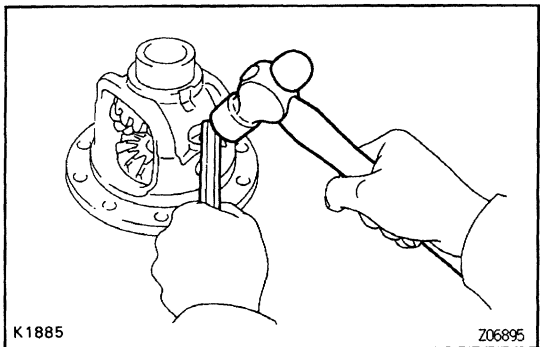
Standard backlash:

0.05–0.20 mm (0.0020–0.0079 in.)

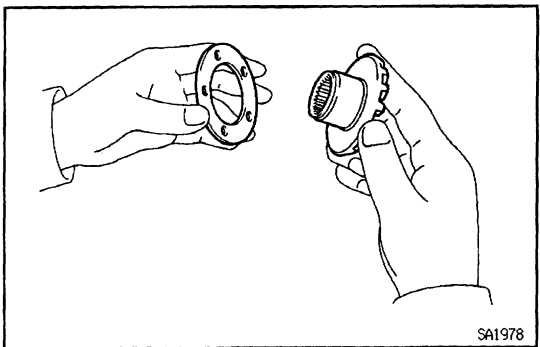
If the backlash is not within specification, install a thrust washer of different thickness.



- (d) Using a pin punch and hammer drive in the straight pin through the holes in the differential case and pinion shaft.



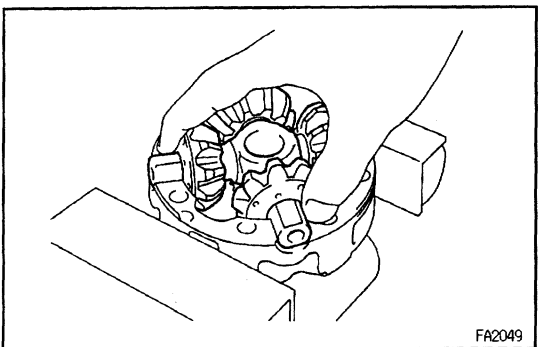
- (e) Using a chisel and hammer, stake the out side of the differential case pin hole.



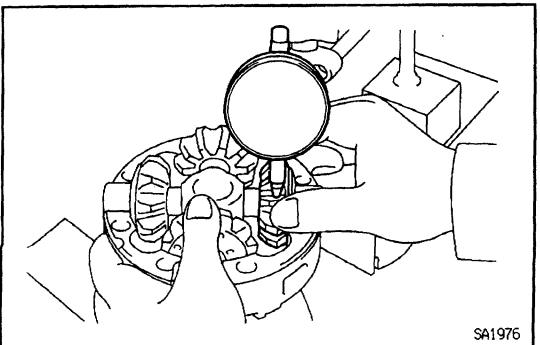
2. (w/ DIFFERENTIAL LOCK)

ASSEMBLE DIFFERENTIAL CASE

- (a) Apply gear oil to each part.
 (b) Install the thrust washer to the side gear.
 (c) Install the side gear to the RH case.



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



- (f) Hold the side gear and spider, measure the side gear backlash.

Standard backlash:

0.05 – 0.20 mm (0.0010 – 0.0079 in.)

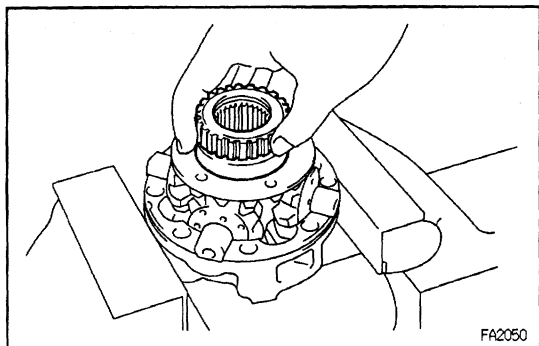
HINT:

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

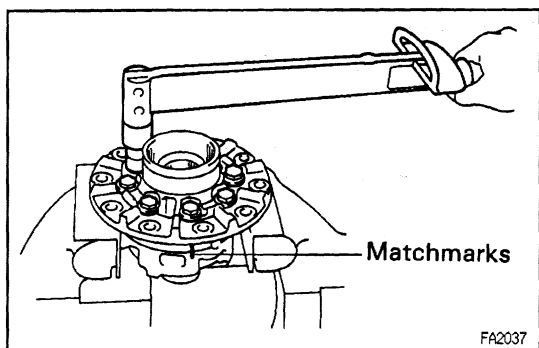
If the backlash is not within specification, install a thrust washer of a different thickness.

Thrust washer thickness:

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

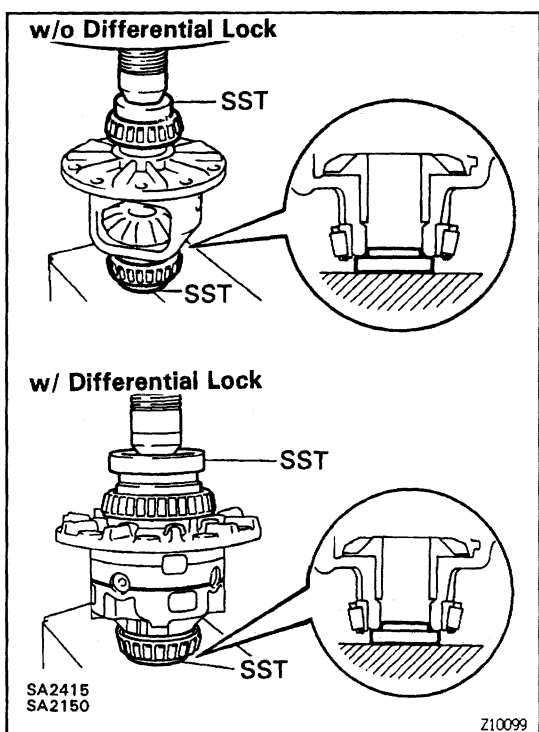


- (g) Install the side gear and thrust washer to the RH case.
- (h) Install the pinion gears and spider to the RH case.
- (i) Install the side gear and thrust washer to the RH case.



- (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

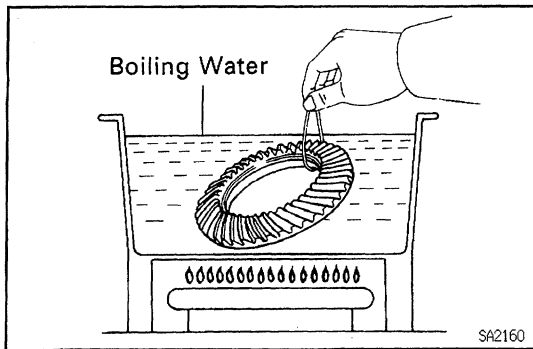
Using a press and SST, press the side bearings on the differential case.

SST (w/o Differential lock)

09608-30012 (09608-00060, 09608-04060)

(w/ Differential lock)

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

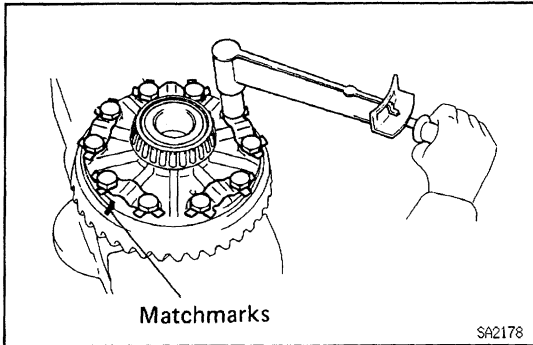


4. INSTALL RING GEAR ON DIFFERENTIAL CASE

(a) Clean the contact surfaces of the differential case and ring gear.

(b) Heat the ring gear to about 100°C (212°F) in boiling water.

(c) After the moisture on the ring gear has completely evaporated, quickly install the ring gear to the differential case.



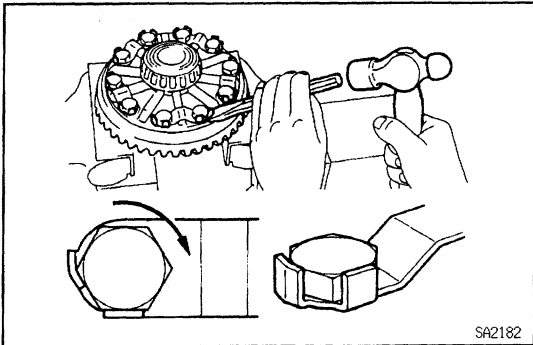
(d) Align the matchmarks on the ring gear and differential case.

(e) Temporarily install the lock plates and set bolts.

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

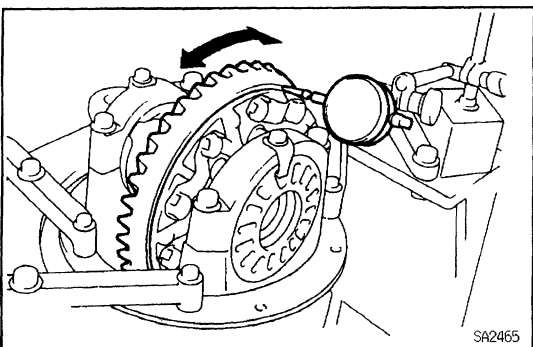
(f) After the ring gear cools down enough, tighten the set bolts uniformly and a little at a time.

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



(g) Using a hammer and drift punch, 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

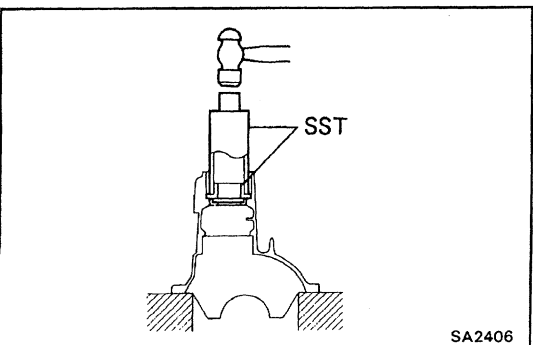
(a) Install the differential case onto the carrier and tighten the adjusting nut just to where there is no play in the bearings.

(b) Check the ring gear runout.

Maximum runout:

0.10 mm (0.0039 in.)

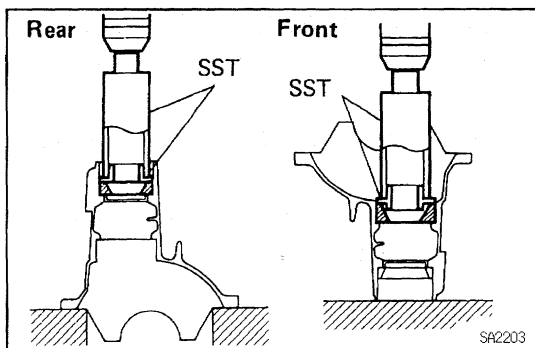
(c) Remove the differential case.



6. INSTALL OIL STORAGE RING

Using SST and a hammer, install the new oil storage ring.

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



7. INSTALL DRIVE PINION FRONT AND REAR BEARING OUTER RACES

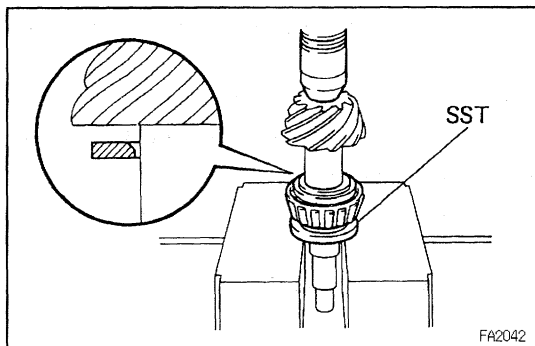
Using SST and a press, install the outer races.

Front side:

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

Rear side:

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

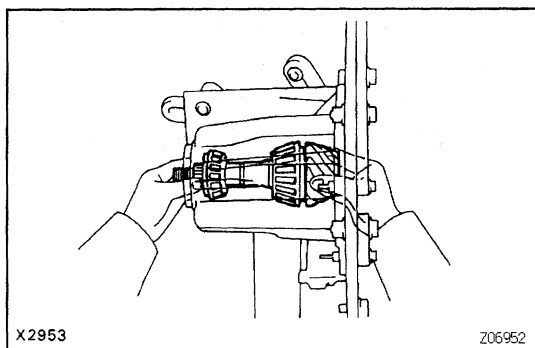


8. INSTALL DRIVE PINION FRONT BEARING

(a) Install the washer on the drive pinion with the chamfered end facing the pinion gear.

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

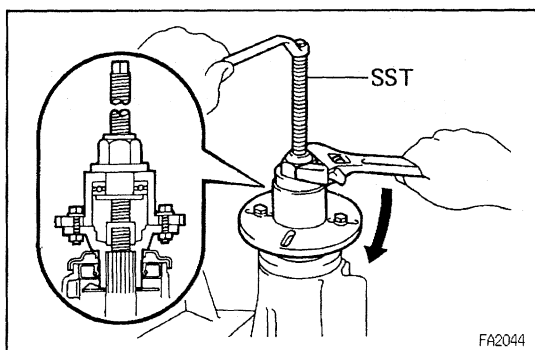
SST 09506-30012



9. TEMPORARILY ADJUST DRIVE PINION PRELOAD

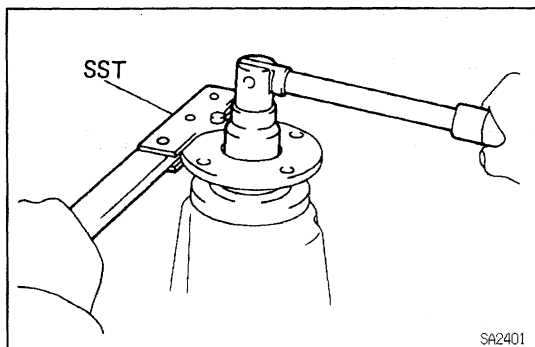
(a) Install the drive pinion, rear bearing and oil slinger.

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



(b) Install the companion flange with SST.

SST 09557-22022 (09557-22050)

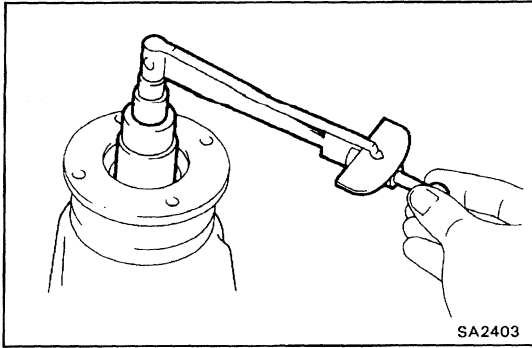


(c) Adjust the drive pinion preload by tightening the companion flange nut.

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):

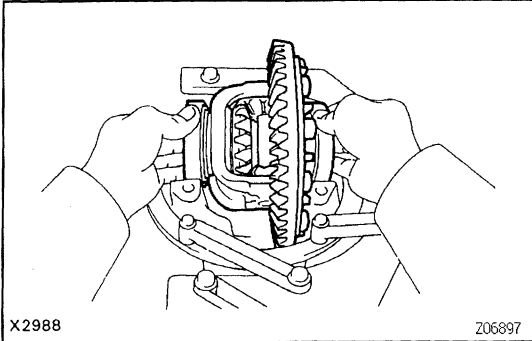
New bearing

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 snug down the bearing.



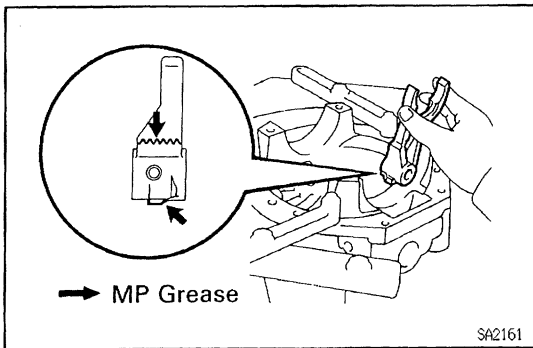
10. (w/o DIFFERENTIAL LOCK)

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.

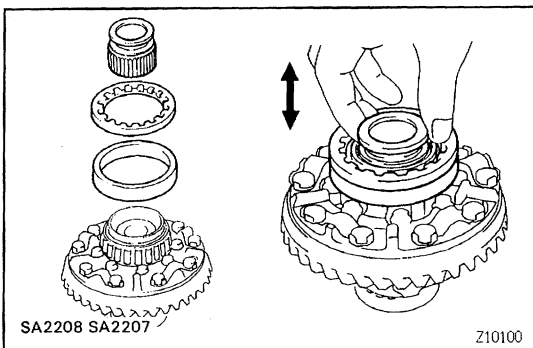


11. (w/ DIFFERENTIAL LOCK)

INSTALL DIFFERENTIAL CASE IN CARRIER

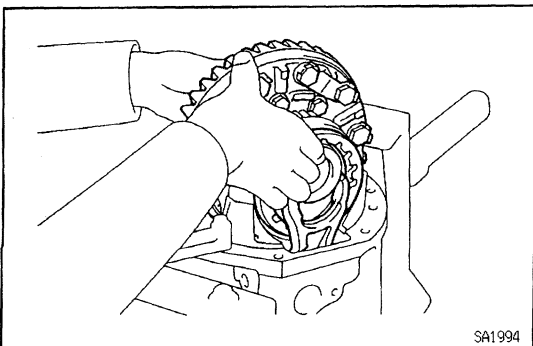
(a) Apply MP grease on the rack of the shift fork and connecting part of the indicator switch.

(b) Insert the shift fork into the differential carrier as shown.



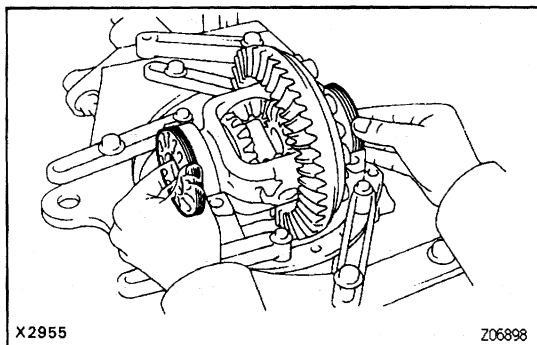
(c) Install both outer races, adjusting nuts and sleeve.

HINT: Check that the sleeve moves smoothly.



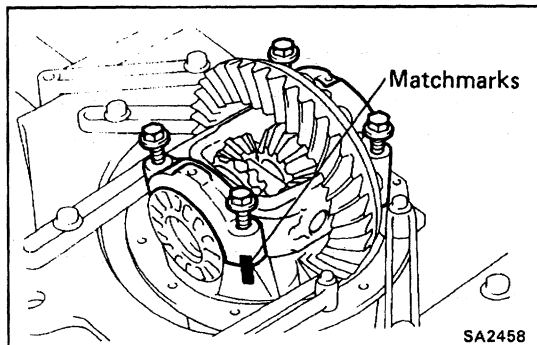
(d) Install the shift fork in the groove of the sleeve, holding it by hand, install the case in the carrier.

HINT: Make sure that there is backlash between the ring gear and drive pinion.



12. (w/o DIFFERENTIAL LOCK) INSTALL ADJUSTING NUTS

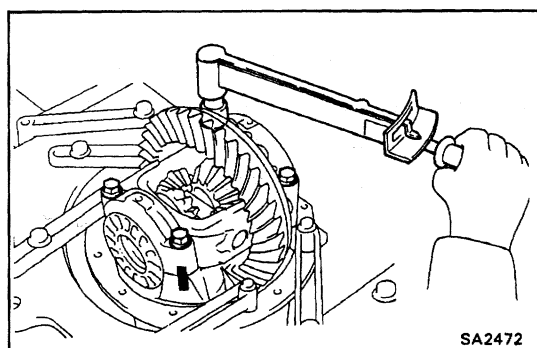
Install the adjusting nuts on the carrier, making sure the nuts are threaded properly.



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.



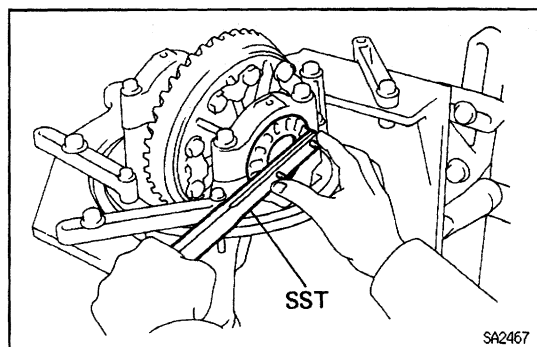
14. ADJUST SIDE BEARING PRELOAD

(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

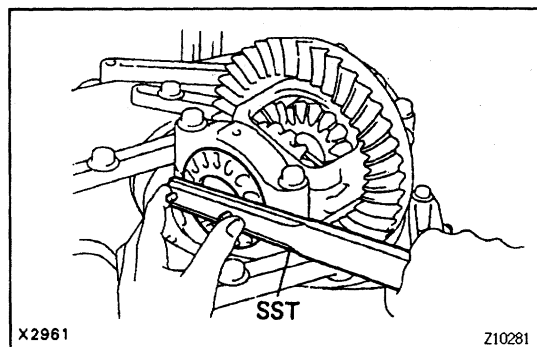
Torque: 78 N-m (800 kgf-cm, 58 ft-lbf)

(b) Fully tighten the 4 bearing cap bolts by hand.



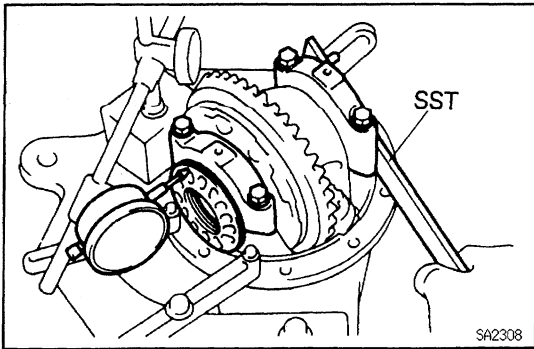
(c) Using SST, torque the adjusting nut on the ring gear side until the ring has a backlash of about 0.2 mm (0.008 in.).

SST 09504-0001 1

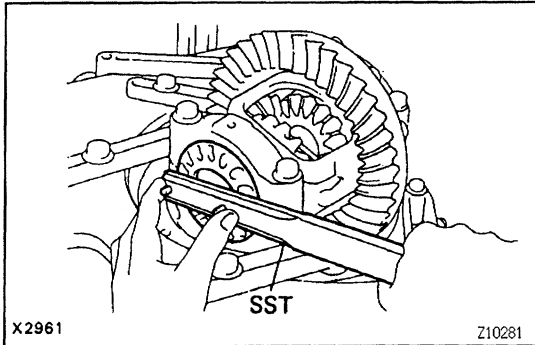


(d) While turning the ring gear, use SST to fully tighten the adjusting nut on the drive pinion side. After the bearings are settled, loosen the adjusting nut on the drive pinion side.

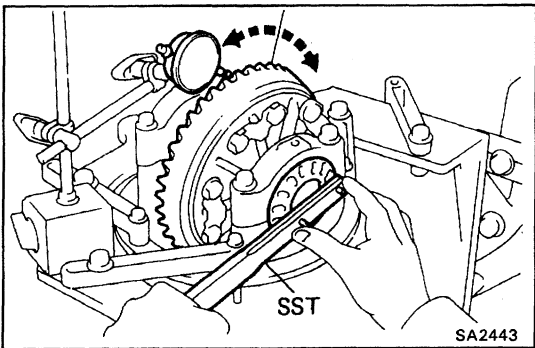
SST 09504 - 00011



- (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.

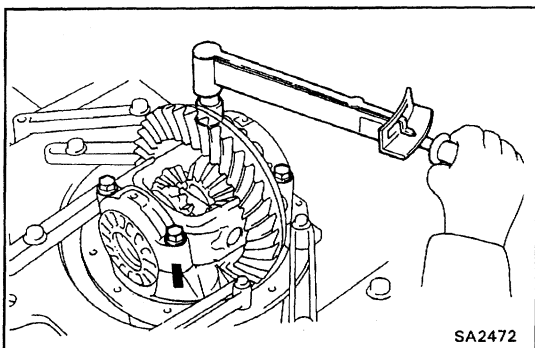


- (h) Using a dial indicator, adjust the ring gear backlash until it is within specification.

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.

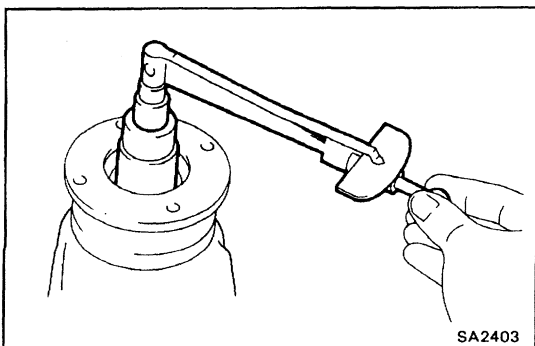


- (i) Torque the bearing cap bolts.
Torque: 78 N·m (800 kgf·cm, 58 ft·lbf)

- (j) Recheck the ring gear backlash.

Backlash:

0.13–0.18 mm (0.0051–0.0071 in.)

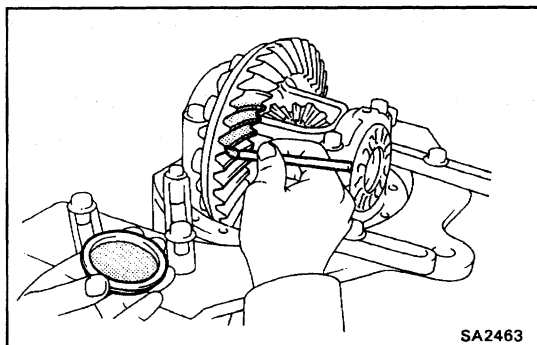


- (k) Using a torque wrench, measure the total preload.

Total preload (starting):

Add drive pinion preload

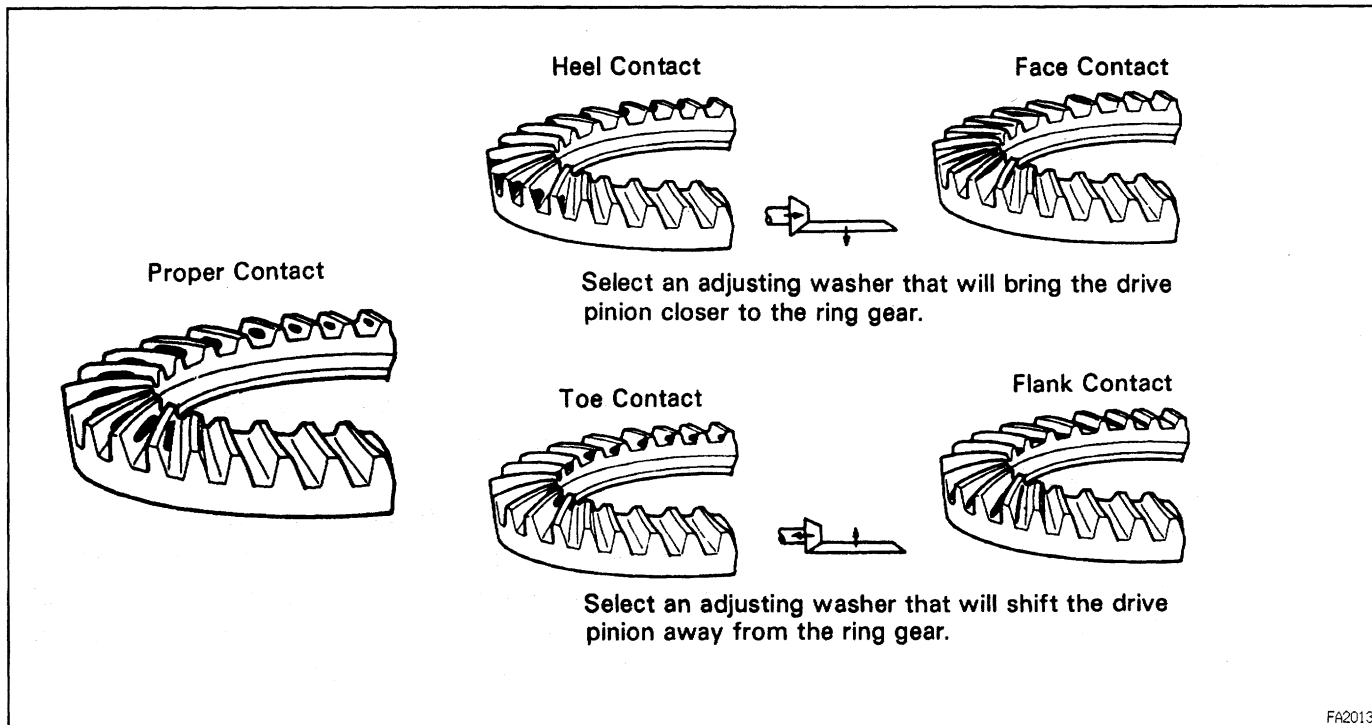
0.4–0.6 N·m (4–6 kgf·cm, 3.5–5.2 in.-lbf)



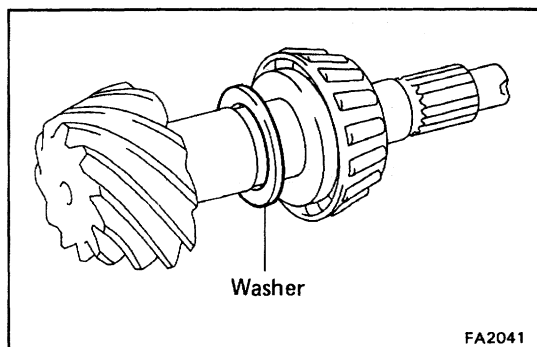
SA2463

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.



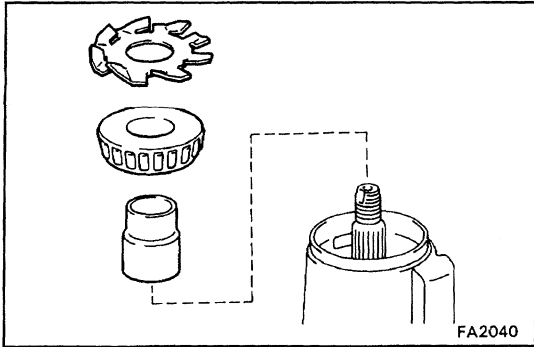
FA2013



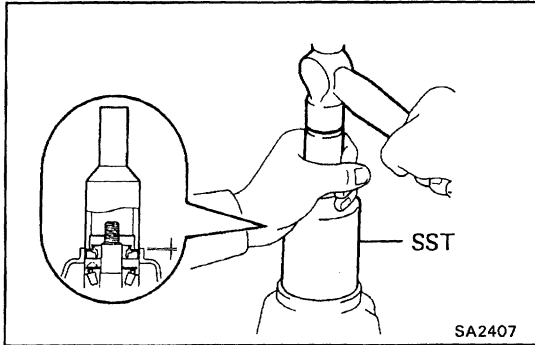
FA2041

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-42](#))**17. REMOVE OIL SLINGER AND REAR BEARING**(SEE PAGE [SA-43](#))**18. INSTALL NEW BEARING SPACER AND REAR BEARING**

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

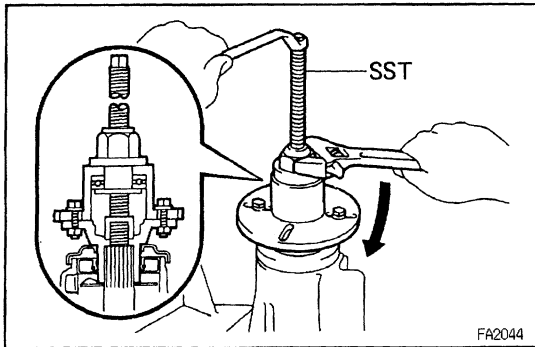
**19. INSTALL NEW OIL SEAL**

- (a) Using SST, drive in a new oil seal as shown.

SST 09214-7601 1

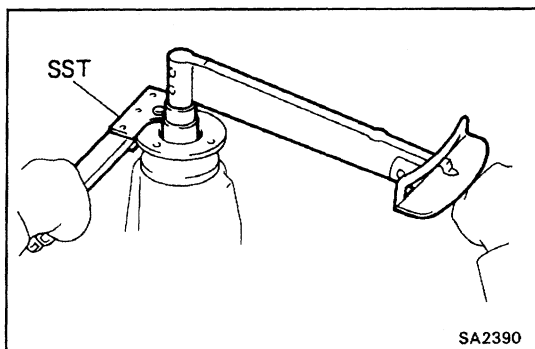
Oil seal drive in depth:**1.0 mm (0.039 in.)**

- (b) Apply MP grease to the oil seal lip.

**20. INSTALL COMPANION FLANGE**

- (a) Install the companion flange with SST.

SST 09557-22022 (09557-22050)

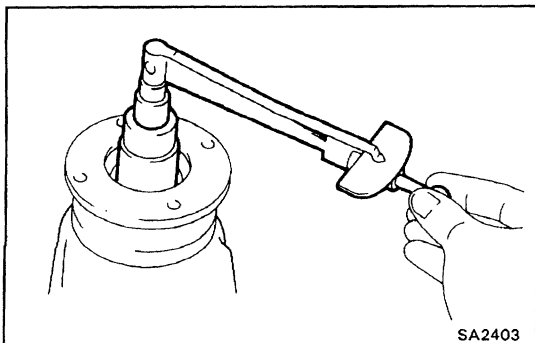


- (b) Install the washer and new nut.

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**

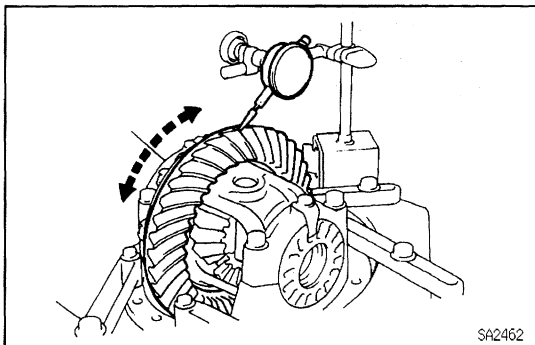
Using a small torque wrench, measure the preload of the backlash between the drive pinion and ring gear.

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 13 N-m (130 kgf-cm, 9 ft-lbf) a little at a time until the specified preload is reached.

Maximum torque:**343 N-m (3,500 kgf-cm, 253 ft-lbf)**

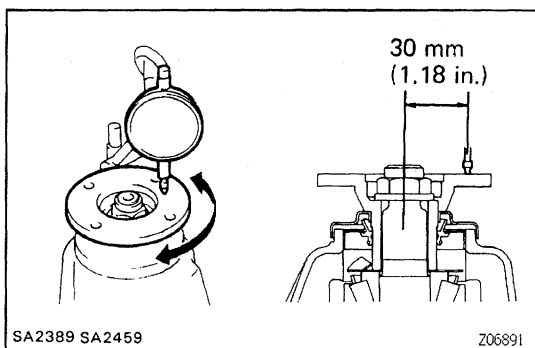
If the maximum torque is exceeded while retightening the nut, replace the bearing spacer and repeat the preload procedure. Do not back off the pinion nut to reduce the preload.



SA2462

22. RECHECK RING GEAR BACKLASH

Using a dial indicator, measure the ring gear backlash.

Ring gear backlash:**0.13–0.18 mm (0.0051–0.0071 in.)****23. RECHECK TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION (See page SA-56)**

SA2389 SA2459

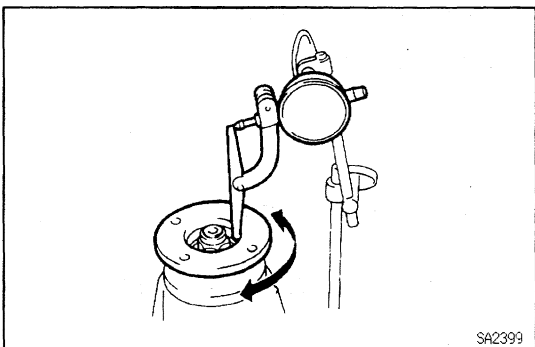
Z06891

24. CHECK RUNOUT OF COMPANION FLANGE

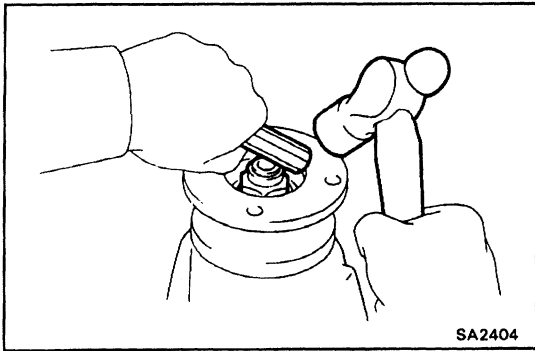
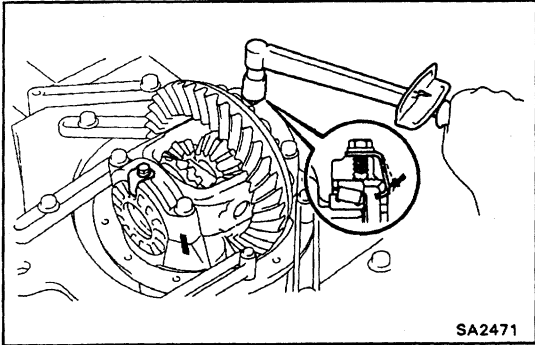
Using a dial indicator, measure the vertical and lateral runout of the companion flange.

Maximum vertical runout:**0.10 mm (0.0039 in.)****Maximum lateral runout:****0.10 mm (0.0039 in.)**

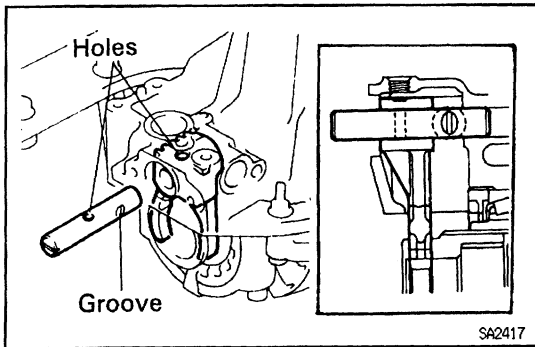
If the runout is greater than maximum, inspect the bearings.



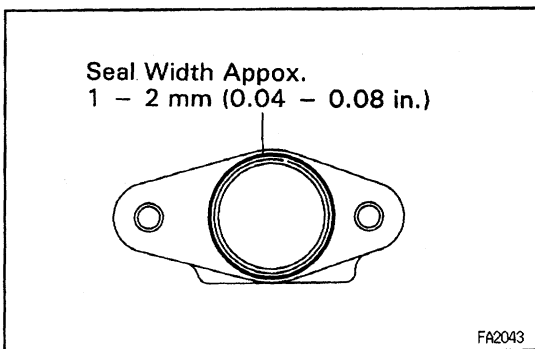
SA2399

**25. STAKE DRIVE PINION NUT****26. INSTALL ADJUSTING NUT LOCKS**

- (a) Install new 2 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.

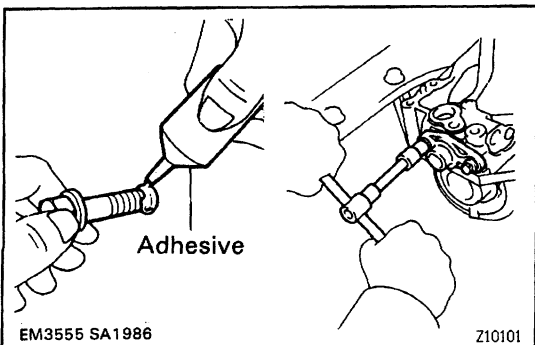


- (c) Remove any packing material and be careful not to drop oil on the contacting surface of the differential carrier and shaft retainer.

- (d) Apply seal packing to the carrier as shown.

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

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



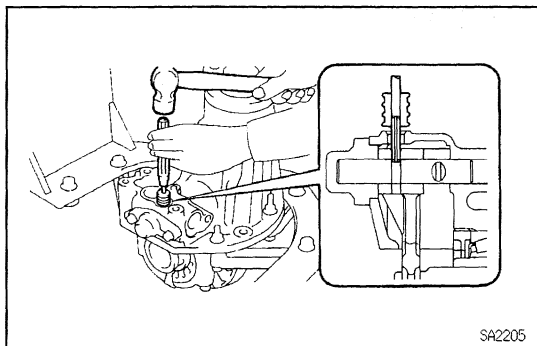
- (e) Clean the threads of the bolts and retainer bolts holes with toluene or trichlorethylene.

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

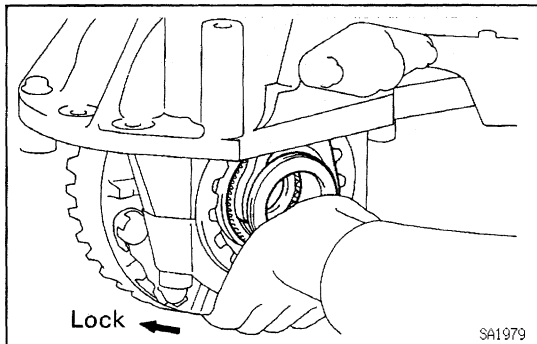
Adhesive: Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

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

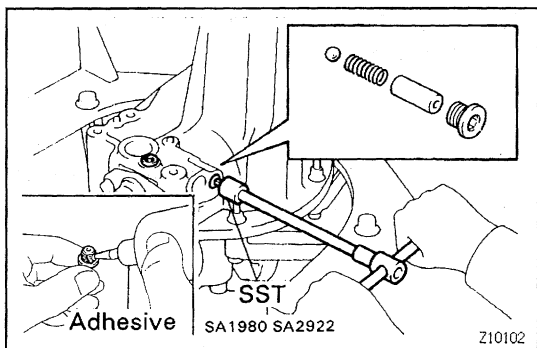
Torque: 24 N-m (240 kgf-cm, 17 ft-lbf)



- (h) Using a pin punch and hammer, drive in 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.

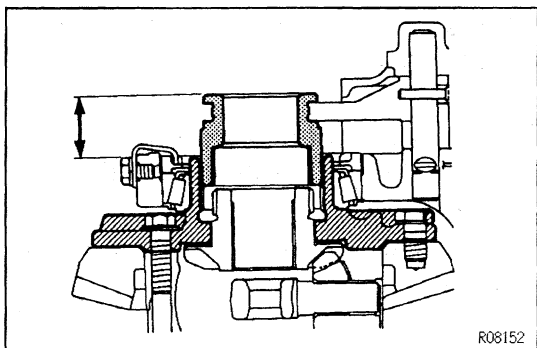
- (l) Apply adhesive to the plug threads.

Adhesive: Part No. 08833-00080, THREE BOND 1344, LOCTITE 242 or equivalent

- (m) Using SST, install and tighten the screw plugs.

SST 09313-30021

Torque: 22 N-m (220 kgf-cm, 16 ft-lbf)



28. (w/ DIFFERENTIAL LOCK)

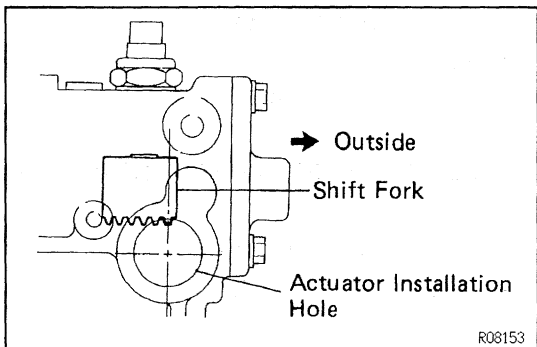
MEASURE DISTANCE BETWEEN SLEEVE AND DIFFERENTIAL CASE END SIDE

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

Standard distance:

LOCK 32.40 – 33.90 mm (1.2756 – 1.3346 in.)

FREE 17.44 – 18.86 mm (0.6866 – 0.7425 in.)

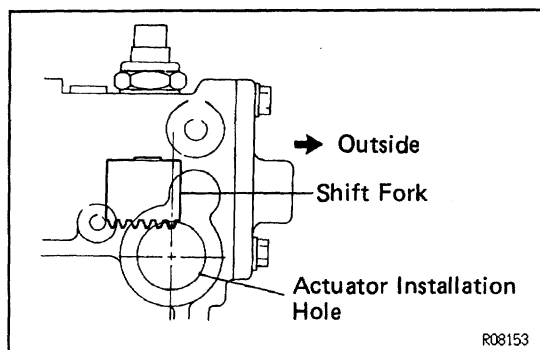


29. (w/ DIFFERENTIAL LOCK)

INSTALL INDICATOR SWITCH

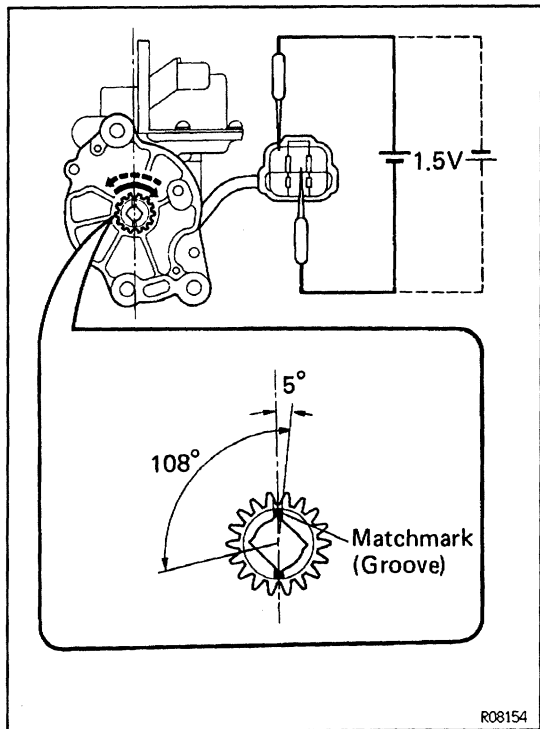
Install the indicator switch with a new gasket.

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



30. (w/ DIFFERENTIAL LOCK) INSTALL ACTUATOR

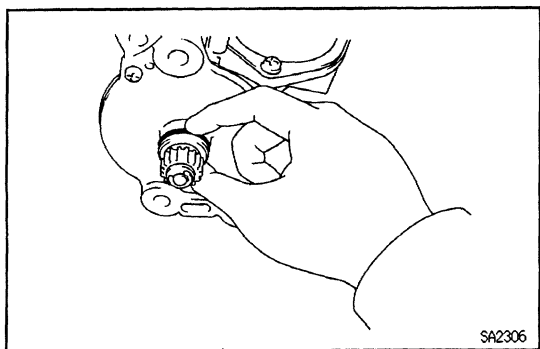
(a) Check that the outermost rack tooth of the shift fork is virtually above the center line of the actuator installation hole.



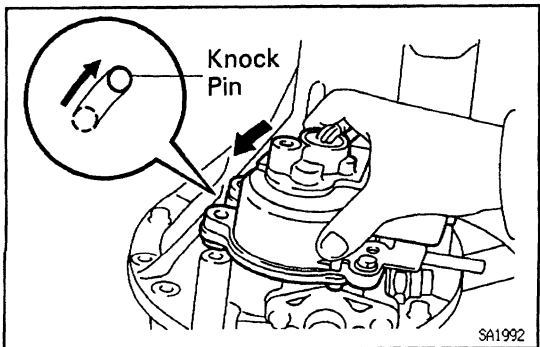
(b) Ensure that the matchmarks of the pinion of the actuator is in the extent between zero and 5 degrees clockwise above the center line of the actuator.

NOTICE:

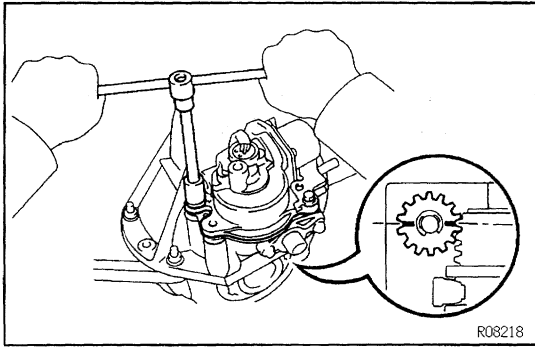
- If the matchmarks is not in this extent, rotate the pinion to be matched.
- Don't supply the battery voltage directly between terminals.
- If the matchmarks come to the extension limit of the rotation, don't electrify moreover.



- (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 bolt so that the outermost rack tooth of the shift fork shall fit the matchmarks of the pinion of the actuator.

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