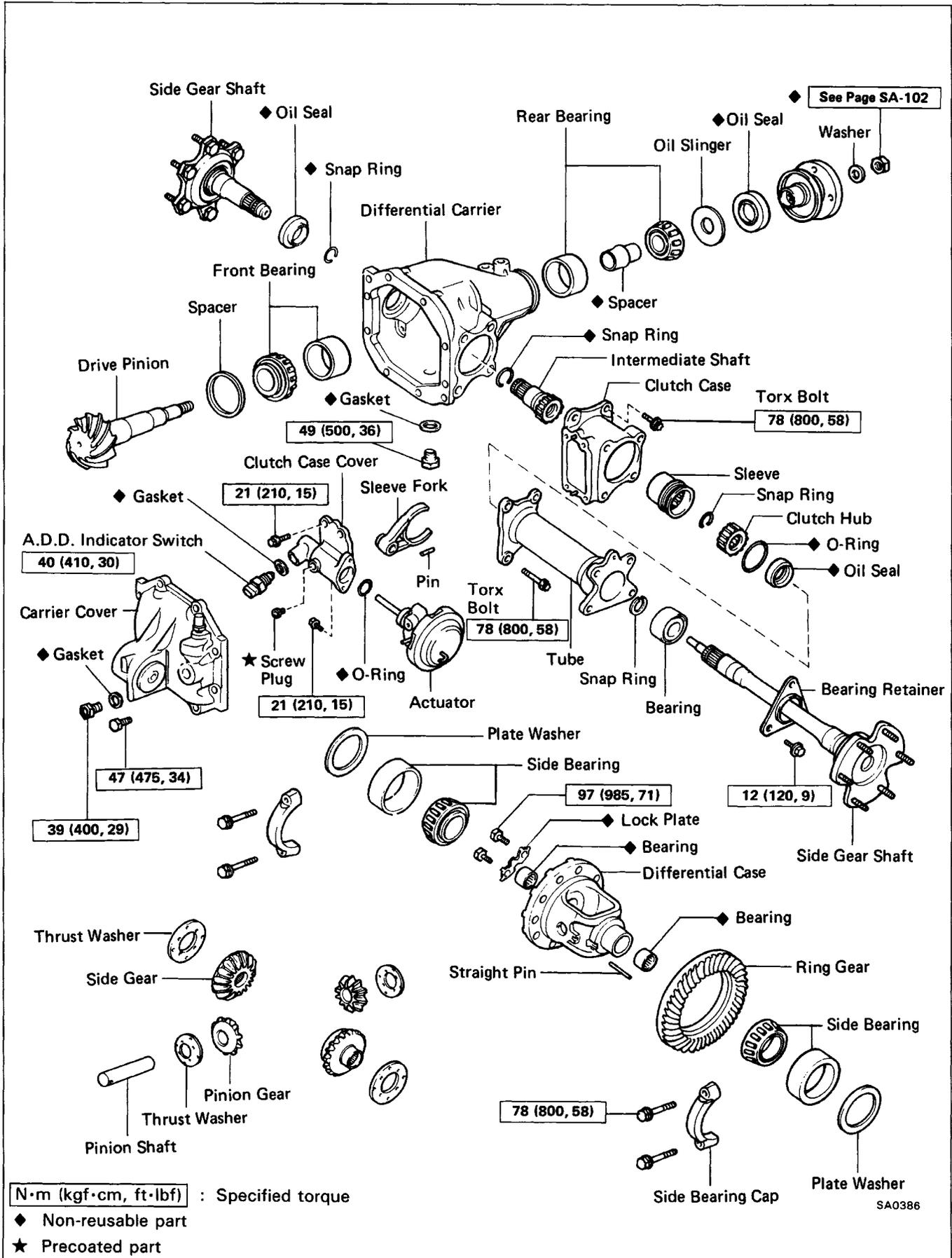
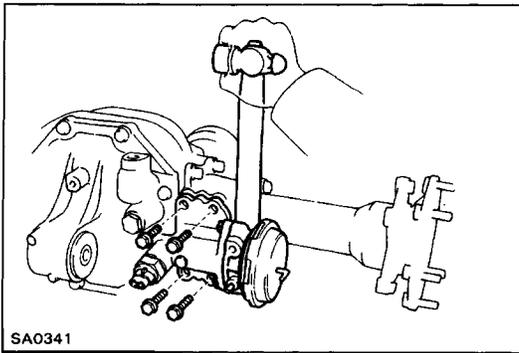


# Disassembly and Assembly of Differential (with A.D.D.)

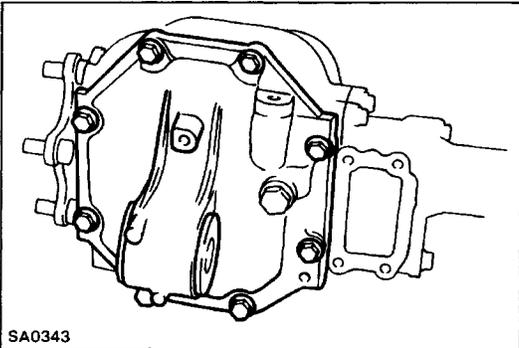




## DISASSEMBLY OF DIFFERENTIAL

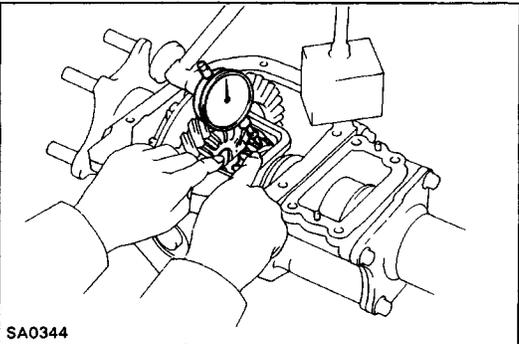
### 1. REMOVE ACTUATOR

- (a) Remove the four bolts.
- (b) Using a hammer, remove the actuator.



### 2. REMOVE DIFFERENTIAL CARRIER COVER

Remove the eight bolts and tap off the cover with a plastic-faced hammer.



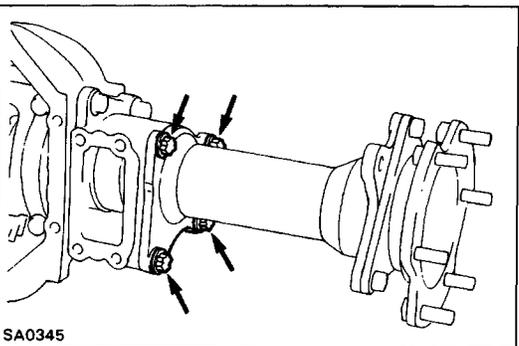
### 3. CHECK SIDE GEAR BACKLASH

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

**Standard backlash: 0.05 – 0.20 mm**

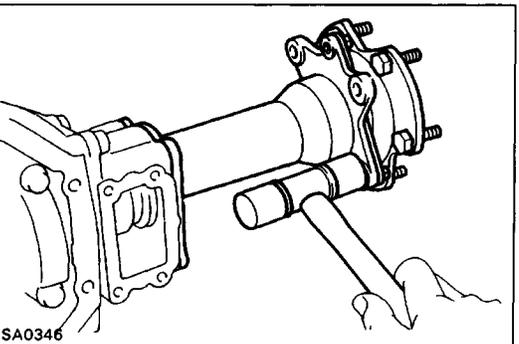
**(0.0020 – 0.0079 in.)**

If the backlash is out of specification, install the correct thrust washers. (See page [SA-90](#))

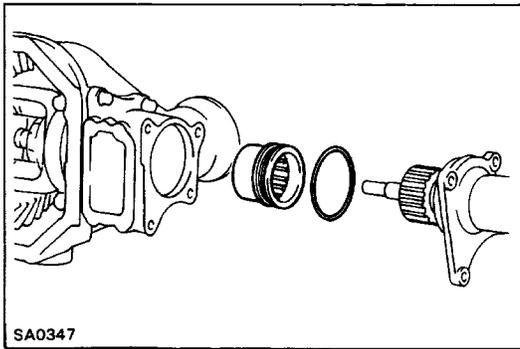


### 4. REMOVE LH SIDE GEAR SHAFT WITH TUBE

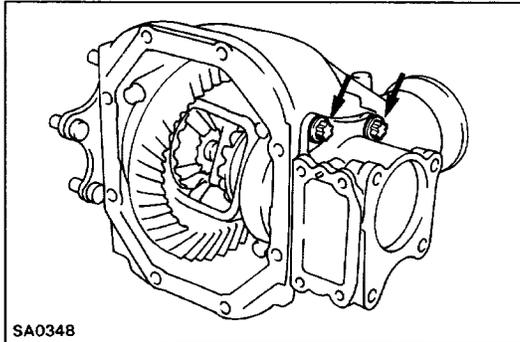
- (a) Remove the four torx bolts.  
Torx wrench: E14 (Part No. 09044-00010 or locally manufactured tool)



- (b) Using a plastic-faced hammer, tap on the tube to remove it.

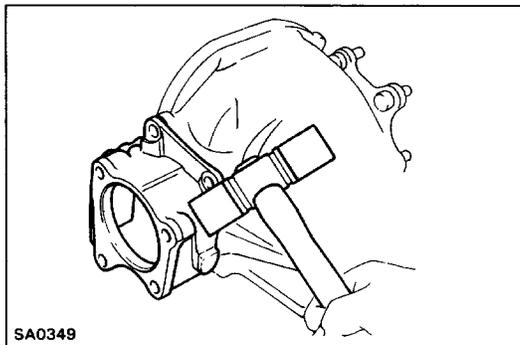


- (c) Remove the sleeve.  
 (d) Remove the O-ring from the tube.

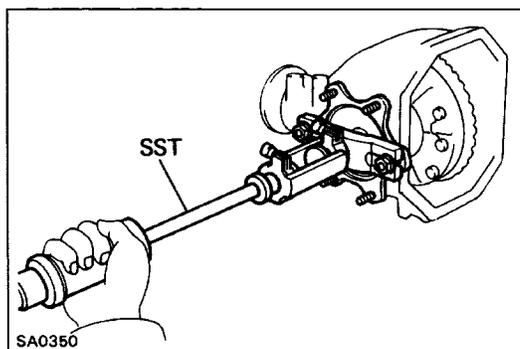


### 5. REMOVE CLUTCH CASE

- (a) Remove the two torx bolts.  
 Torx wrench: E14 (Part No. 09044-00010 or locally manufactured tool)

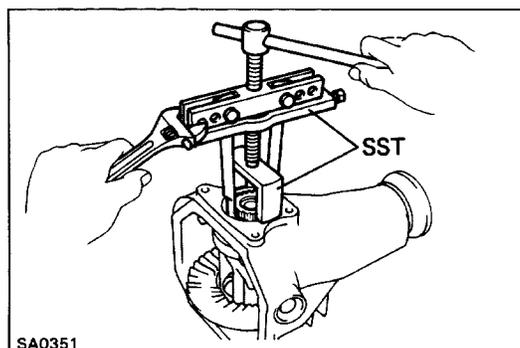


- (b) Using a plastic-faced hammer, tap on the clutch case to remove it.



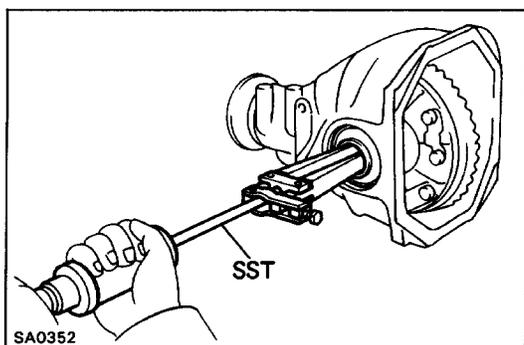
### 6. REMOVE RH SIDE GEAR SHAFT

- Using SST, pull off the RH side gear shaft.  
 SST 09910-00015  
 (09911-00011, 09912-00010, 09914-00011)



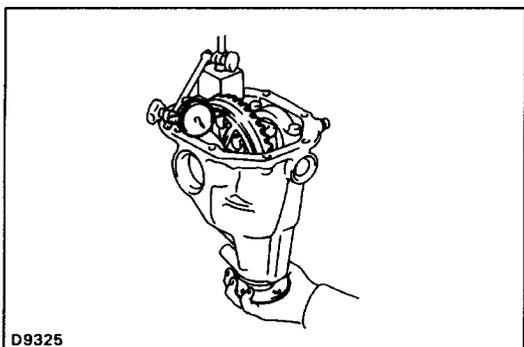
### 7. REMOVE INTERMEDIATE SHAFT

- Using SST, pull off the intermediate shaft.  
 SST 09350-20015 (09369-20040), 09950-20017



## 8. REMOVE RH SIDE OIL SEAL

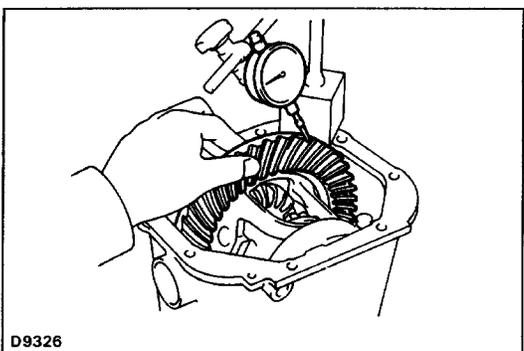
Using SST, remove the oil seal.  
SST 09308-00010



## 9. CHECK RING GEAR RUNOUT

Using a dial indicator, measure the ring gear runout.  
**Maximum runout: 0.07 mm (0.0028 in.)**

If the runout is greater than maximum, replace the ring gear and drive pinion as a set.



## 10. CHECK RING GEAR BACKLASH

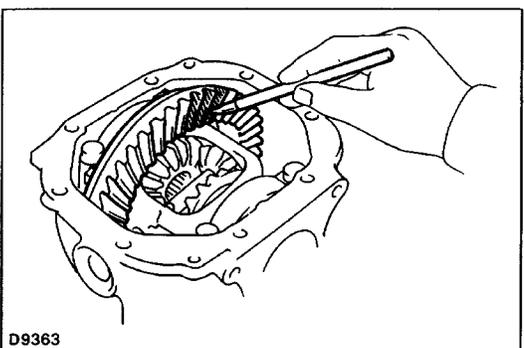
(a) Fix the dial indicator on the tooth surface at a 90° angle.

(b) Holding the drive pinion flange, measure the ring gear backlash.

**Ring gear backlash: 0.13 – 0.18 mm  
(0.0051 – 0.0071 in.)**

If the backlash is not within specification, adjust the ring gear backlash.

HINT: Measure from three or more places on the circumference of the ring gear.



## 11. INSPECT TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION (SEE STEP 7 ON PAGE SA-100)

## 12. MEASURE DRIVE PINION PRELOAD

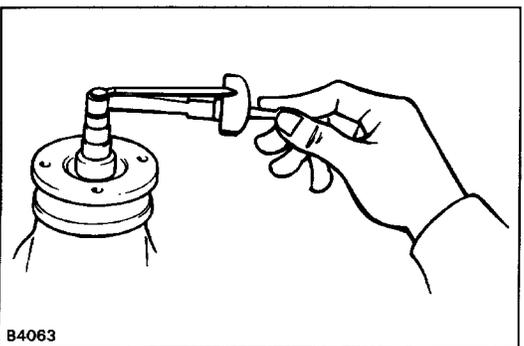
Using a torque gauge, measure the preload of the backlash between the drive pinion and ring gear.

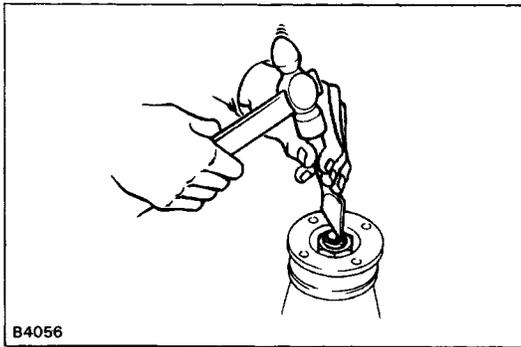
**Preload (starting):  
0.6 – 1.0 N-m (6 – 10 kgf-cm, 5.2 – 8.7 in.-lbf)**

## 13. CHECK TOTAL PRELOAD

Using a torque gauge, measure the total preload.

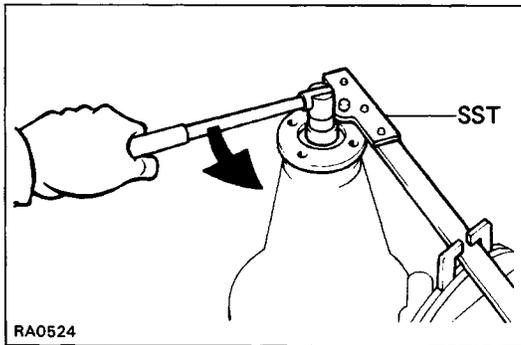
**Total preload (starting):  
Add drive pinion preload  
0.4 – 0.6 N-m  
(4 – 6 kgf-cm, 3.5 – 5.2 in.-lbf)**



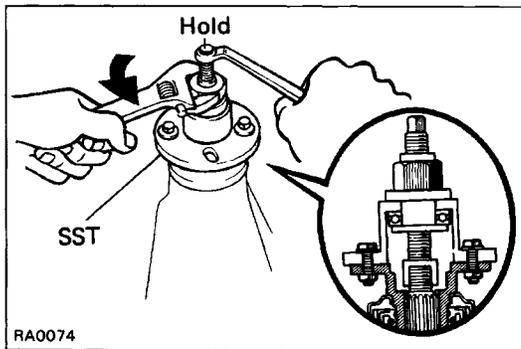


#### 14. REMOVE COMPANION FLANGE

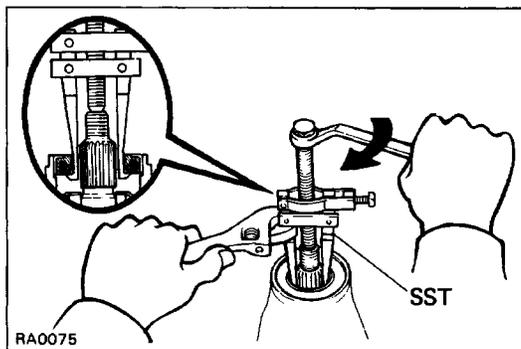
- (a) Using a hammer and chisel, loosen the staked part of the nut.



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

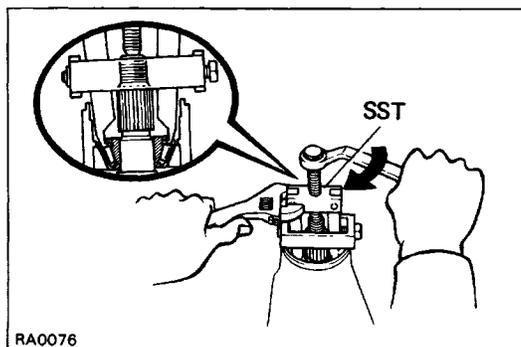


- (c) Using SST, remove the companion flange.  
SST 09557-22022 (09557-22030)



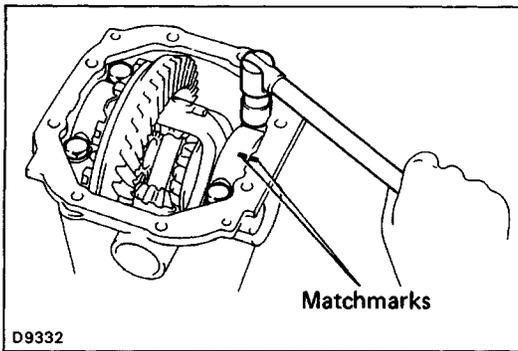
#### 15. REMOVE OIL SEAL AND OIL SLINGER

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

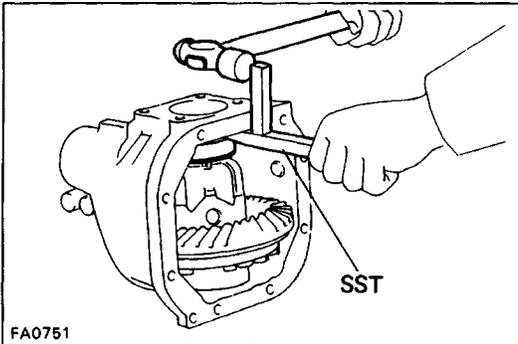


#### 16. REMOVE REAR BEARING AND BEARING SPACER

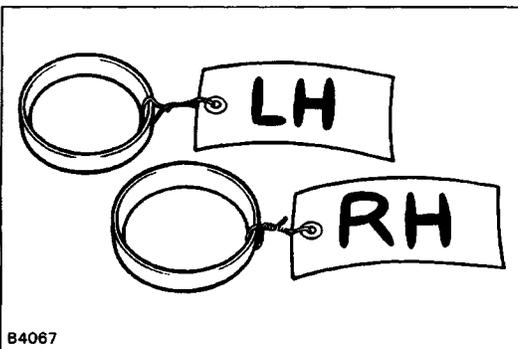
- (a) Using SST, remove the rear bearing from drive pinion.  
SST 09556-30010  
(b) Remove the bearing spacer.  
If the rear bearing is damaged or worn, replace the bearing.

**17. REMOVE DIFFERENTIAL CASE AND RING GEAR**

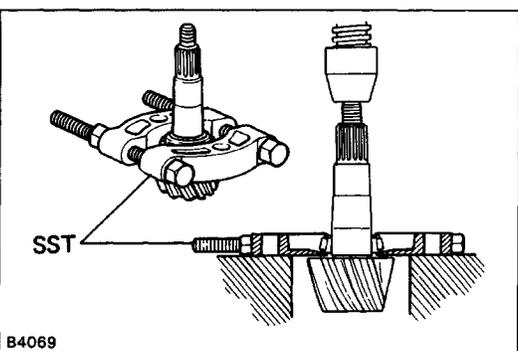
- (a) Place matchmarks on the bearing cap and differential carrier.
- (b) Remove the two bearing caps.



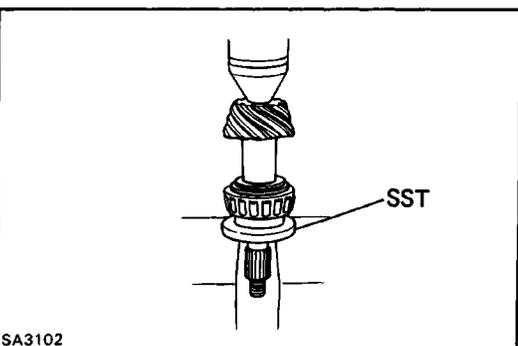
- (c) Using SST and a hammer, remove the two side bearing preload adjusting plate washers.  
SST 09504-22011  
HINT: Measure the adjusting plate washer and note the thickness.



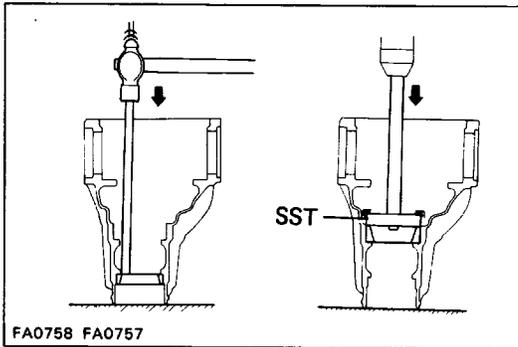
- (d) Remove the differential case with bearing outer race from the carrier.  
HINT: Tag the bearing outer races to show the location for reassembly.

**18. REMOVE DRIVE PINION FROM DIFFERENTIAL CARRIER****INSPECTION AND REPLACEMENT OF DIFFERENTIAL****1. REPLACE DRIVE PINION FRONT BEARING**

- (a) Using SST, press out the front bearing from the drive pinion.  
SST 09950-00020  
HINT: If the drive pinion or ring gear are damaged, replace them as a set.

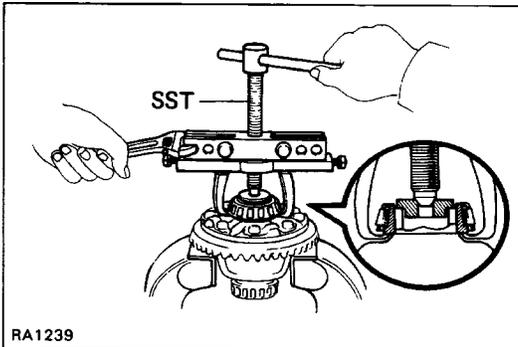


- (b) Install the washer on the drive pinion.
- (c) Using SST, press in the front bearing onto the drive pinion.  
SST 09506-30012



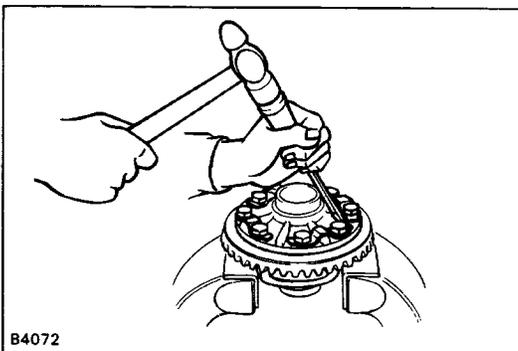
## 2. REPLACE DRIVE PINION FRONT AND REAR BEARING OUTER RACES

- Using a brass bar and hammer, drive out the outer race.
- Using SST, drive in a new outer race.  
SST 09608-35014  
Front outer race (09608-06020, 09608-06120)  
Rear outer race (09608-06020, 09608-06110)



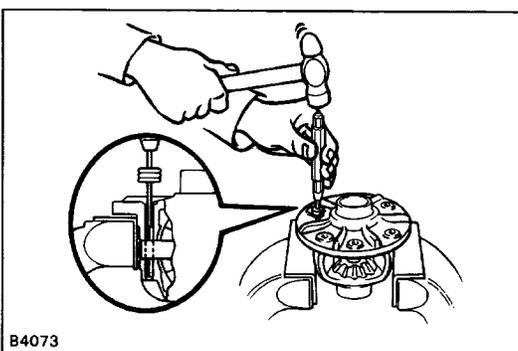
## 3. REMOVE SIDE BEARING FROM DIFFERENTIAL CASE

- Using SST, remove the side bearing from the differential case.  
SST 09950-20017  
HINT: Fix the claws of SST to the notches in the differential case.



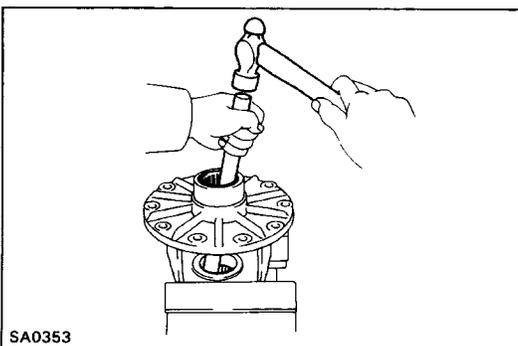
## 4. REMOVE RING GEAR

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

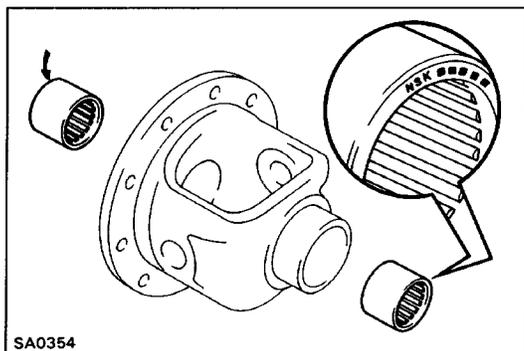


## 5. DISASSEMBLE DIFFERENTIAL CASE

- Using a hammer and punch, drive out the straight pin. Remove the pinion shaft, two pinion gears, two side gears and four thrust washers.



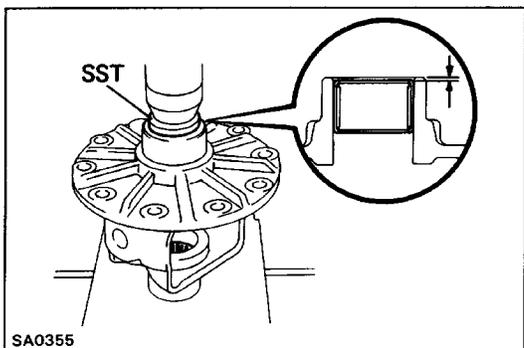
- Using a hammer and brass bar, drive out the needle bearings.



## 6. ASSEMBLE DIFFERENTIAL CASE

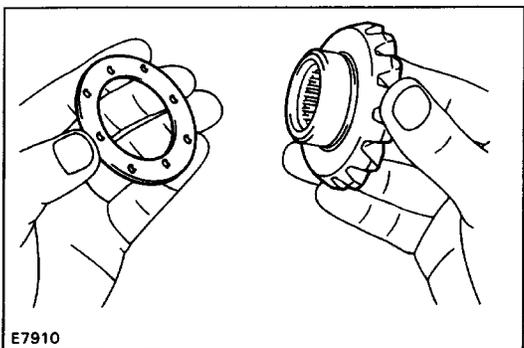
- (a) Using SST, press the new needle bearing into the differential case.

**NOTICE:** Press in the bearings, with the engraved side of each bearing facing outward from the differential case.



**Bearing press in depth: 2.0 mm 10.079 in.)**

SST 09950-20017

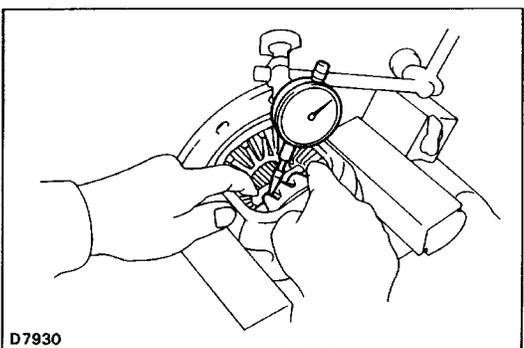


- (b) Install the thrust washers to the side gears.  
 (c) Install the side gears with thrust washers and pinion gears with thrust washers.  
 (d) Install the pinion shaft.  
 (e) Check the side gear backlash.

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

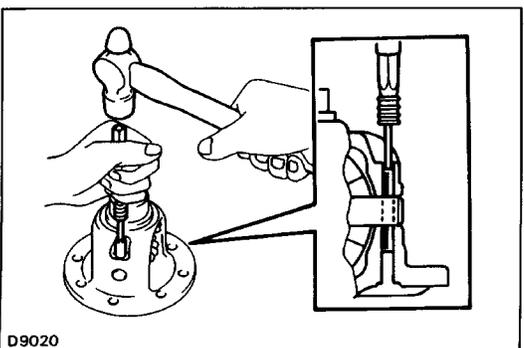
**Backlash: 0.05 – 0.20 mm (0.0020 – 0.0079 in.)**

If the backlash is not within specification, install the side gear thrust washers of different thickness.

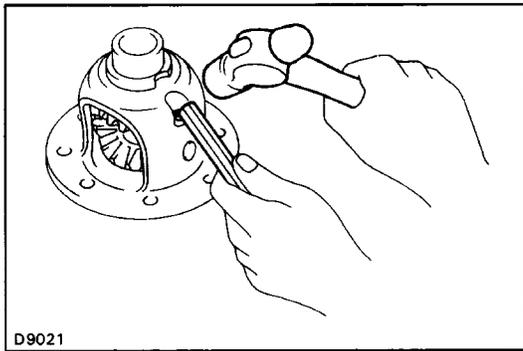


Thickness	mm (in.)
0.96 – 1.04	(0.0378 – 0.0409)
1.06 – 1.14	(0.0417 – 0.0449)
1.16 – 1.24	(0.0457 – 0.0488)
1.26 – 1.34	(0.0496 – 0.0528)

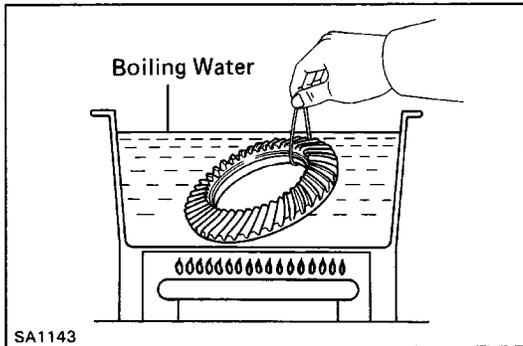
**HINT:** Use washers of same thickness on both the right and left sides.



- (f) Using a hammer and punch, drive in the straight pin through the case and hole in the pinion shaft.



(g) Stake the case.

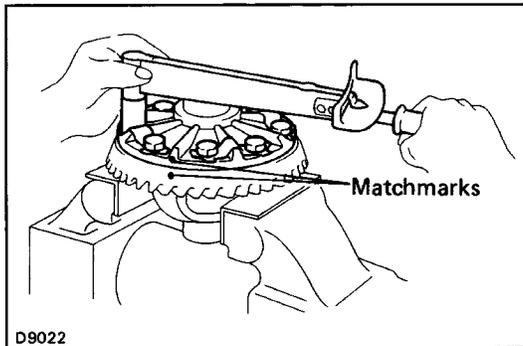


## 7. INSTALL RING GEAR ON DIFFERENTIAL CASE

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

(b) Heat the ring gear in boiling water.

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



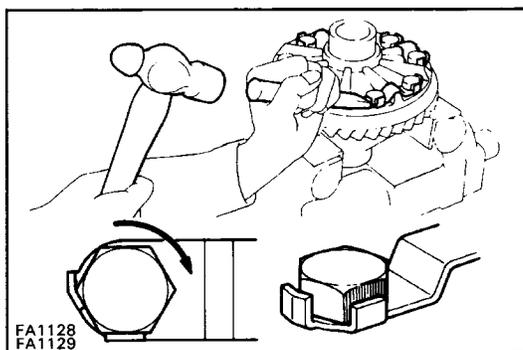
(d) Align the matchmarks on the ring gear and differential case.

(e) Coat the ring gear set bolts with gear oil.

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

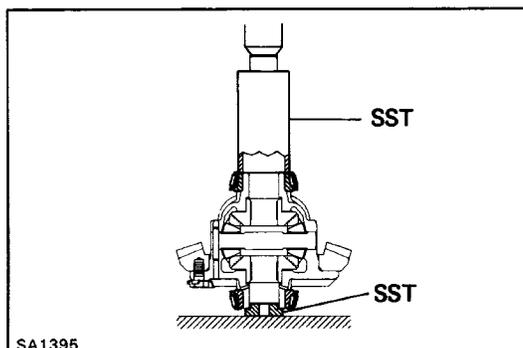
(g) After the ring gear cools down enough, tighten the set bolts uniformly and a little at a time.

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



(h) Using a hammer and drift punch, stake the lock plates.

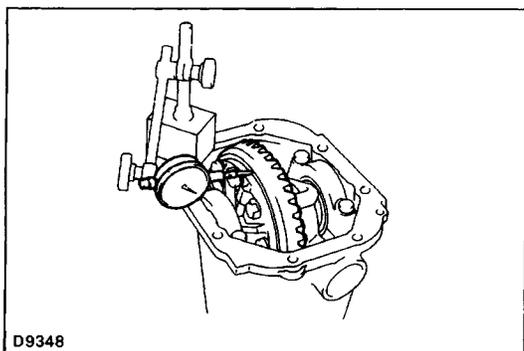
**HINT:** Stake one claw flush with the flat surface of the nut. For the claw contacting the protruding portion of the nut, stake only the half on the tightening side.



## 8. INSTALL SIDE BEARINGS

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

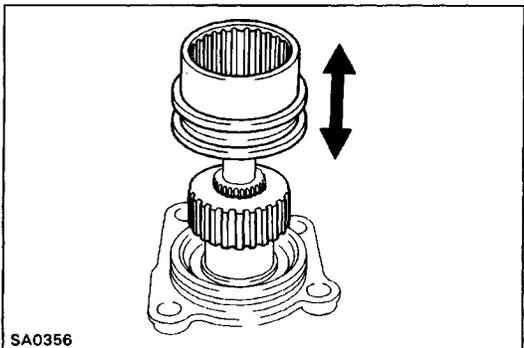
SST 09226-10010, 09950-20017



## 9. CHECK RING GEAR RUNOUT

- (a) Install the differential case onto the carrier and install the plate washers to where there is no play in the bearing. (See page SA-97)
- (b) Install bearing caps. (See page SA-99)
- (c) Using a dial indicator, measure the runout of ring gear.

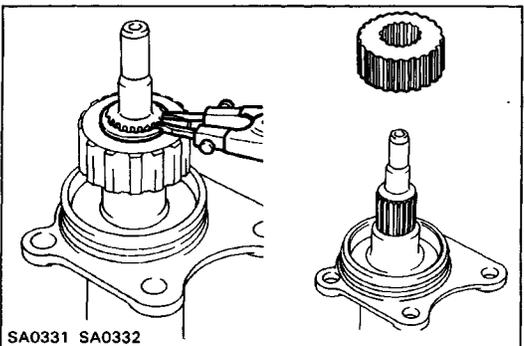
**Maximum runout: 0.07 mm (0.0028 in.)**



## INSPECTION AND REPLACEMENT OF LH SIDE GEAR SHAFT

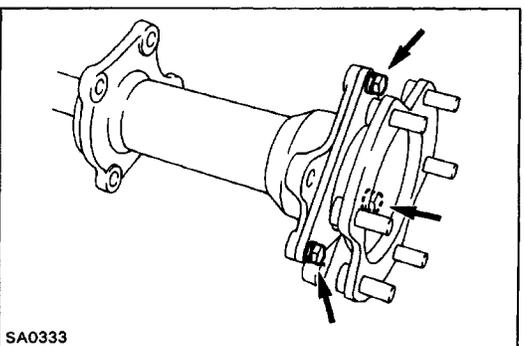
### 1. INSPECT CLUTCH HUB AND CLUTCH SLEEVE

- (a) Check the wear and damage of the clutch hub and clutch sleeve.  
If necessary, replace them.
- (b) Check that the clutch sleeve slides smoothly on the clutch hub.



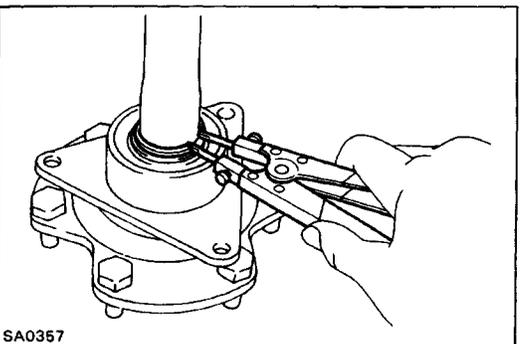
### 2. REMOVE CLUTCH HUB

- (a) Using a snap ring expander, remove the snap ring.
- (b) Remove the clutch hub from the side gear shaft.



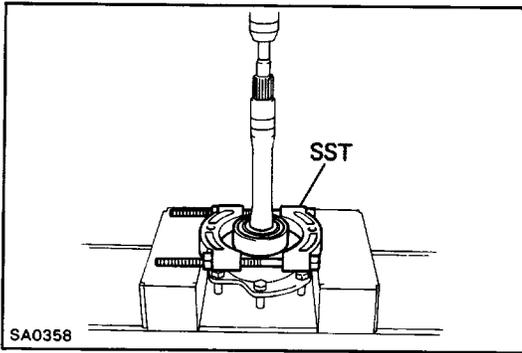
### 3. REMOVE SIDE GEAR SHAFT FROM TUBE

- (a) Remove the three bearing retainer bolts.
- (b) Remove the side gear shaft from the tube.

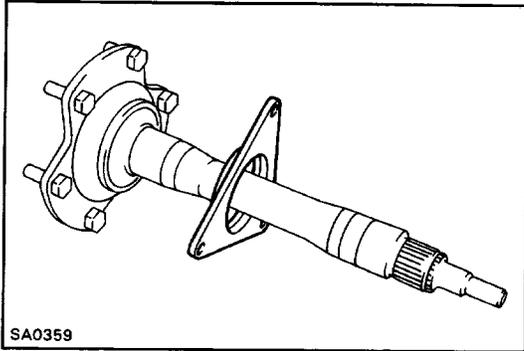


### 4. REPLACE LH SIDE GEAR SHAFT BEARING

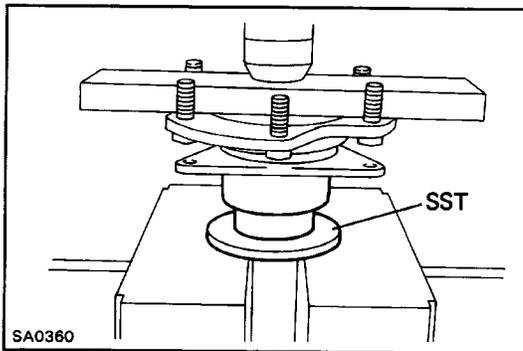
- (a) Using a snap ring expander, remove the snap ring.



- (b) Using a press and SST, remove the bearing.  
SST 09950-00020

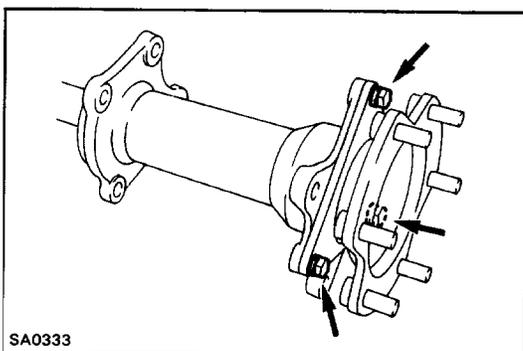


- (c) Remove the bearing retainer.  
(d) Install the bearing retainer.



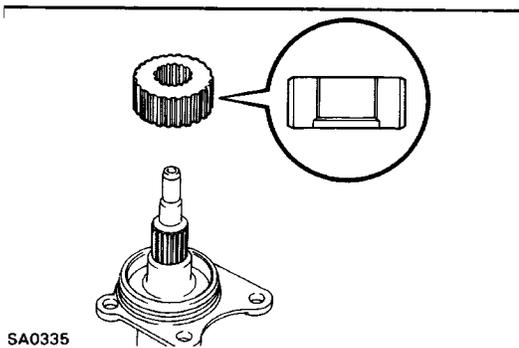
- (e) Using a press and SST, install the new bearing.  
SST 09316-60010 (09316-00040)  
**NOTICE: Be careful not to damage the bearing retainer.**

## 5. REPLACE SIDE OIL SEAL (See page SA-62)



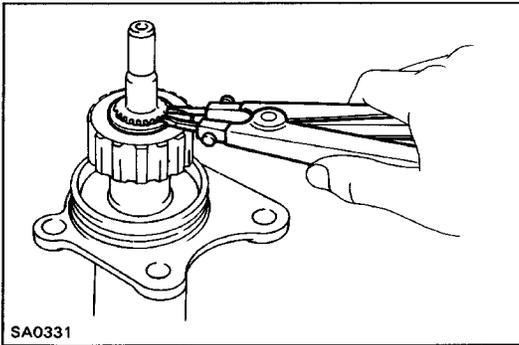
## 6. INSTALL SIDE GEAR SHAFT

- (a) Install the side gear shaft into the tube.  
(b) Tighten the three bearing retainer bolts.

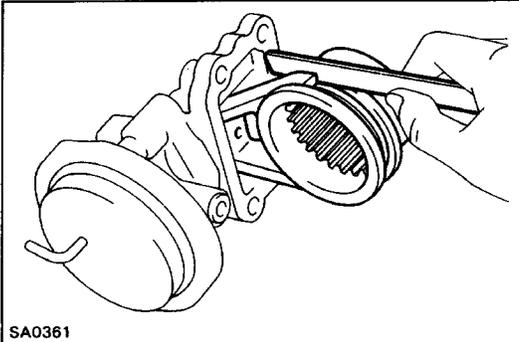


## 7. INSTALL CLUTCH HUB

- (a) Install the clutch hub to the shaft.



(b) Using a snap ring expander, install the snap ring.



## INSPECTION AND REPLACEMENT OF ACTUATOR

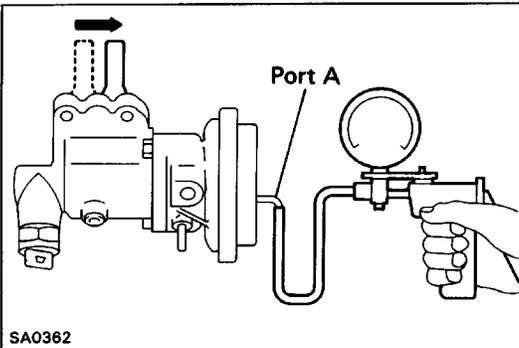
### 1. MEASURE CLEARANCE OF SLEEVE FORK AND CLUTCH SLEEVE

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

**Maximum clearance: 0.35 mm (0.0138 in.)**

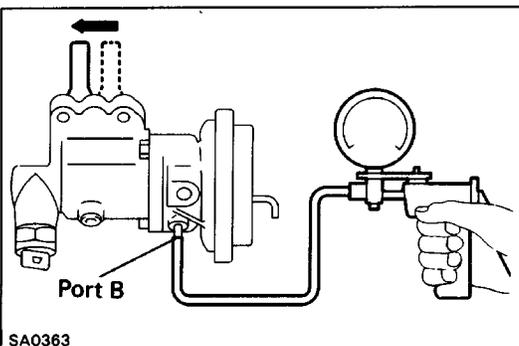
If the clearance exceeds the limit, replace the fork or sleeve.

### 2. INSPECT A.D.D. ACTUATOR



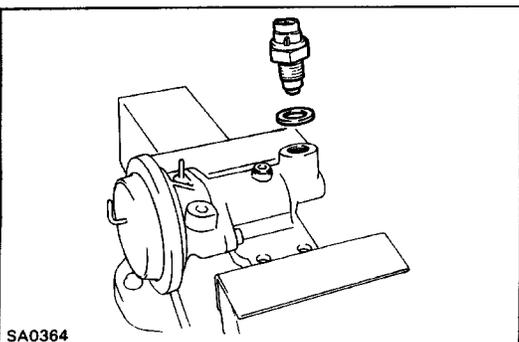
(a) Check that the sleeve fork moves to the actuator side when a vacuum of 500 mmHg (19.69 in.Hg, 66.7 kPa) is applied to port A. Also check that the vacuum does not leak.

If not, replace the actuator.

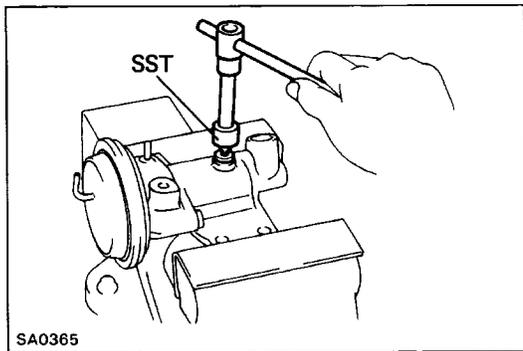


(b) Check that the sleeve fork moves away from the actuator when a vacuum of 500 mmHg (19.69 in.Hg, 66.7 kPa) is applied to port B. Also check that the vacuum does not leak.

If not, replace the actuator.

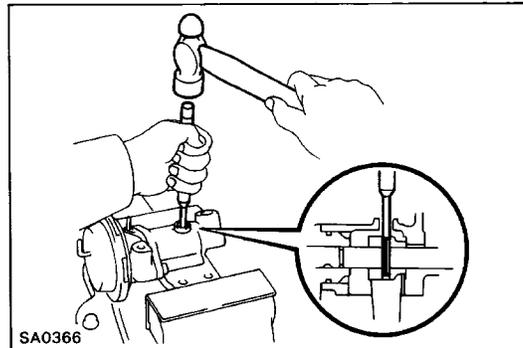


### 3. REMOVE A.D.D. INDICATOR SWITCH

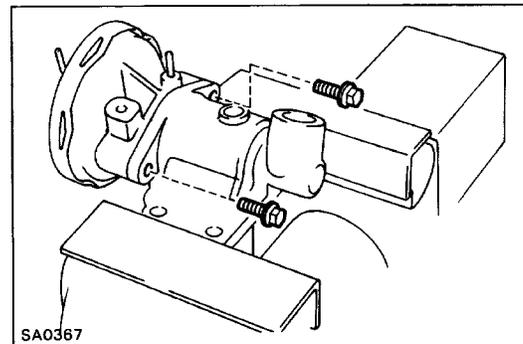


#### 4. REMOVE SLEEVE FORK PIN

- (a) Using SST, remove the screw plug.  
SST 09313-30021

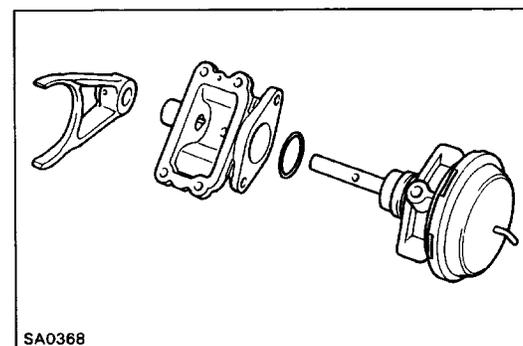


- (b) Using a hammer and punch, drive out the pin through the hole of clutch case cover.

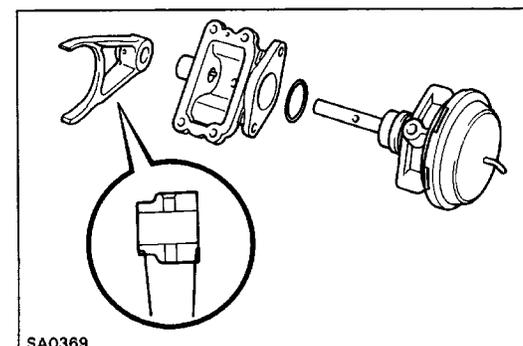


#### 5. SEPARATE ACTUATOR FROM CLUTCH CASE COVER AND REMOVE SLEEVE FORK

- (a) Remove the two bolts.

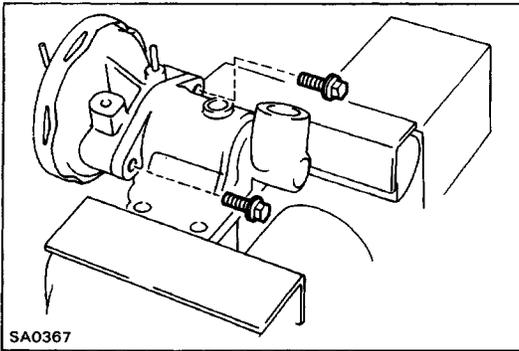


- (b) Separate the actuator from clutch case cover and remove the sleeve fork.  
(c) Remove the O-ring from actuator.

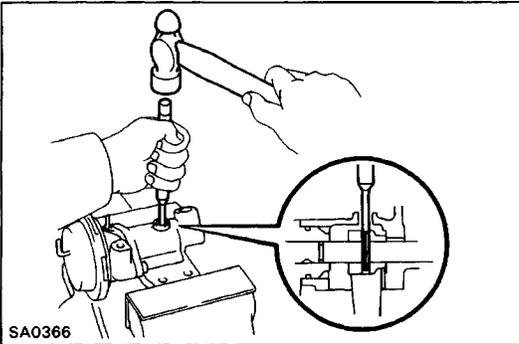


#### 6. INSTALL SLEEVE FORK AND ACTUATOR INTO CLUTCH CASE COVER

- (a) Install a new O-ring to the actuator.  
(b) Coat the O-ring with MP grease.  
(c) Place the sleeve fork and install the actuator to the clutch case cover.

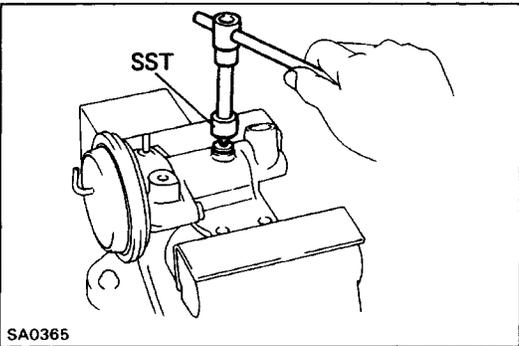


- (d) Tighten the two bolts.  
**Torque: 21 N-m (210 kgf-cm, 15 ft-lbf)**

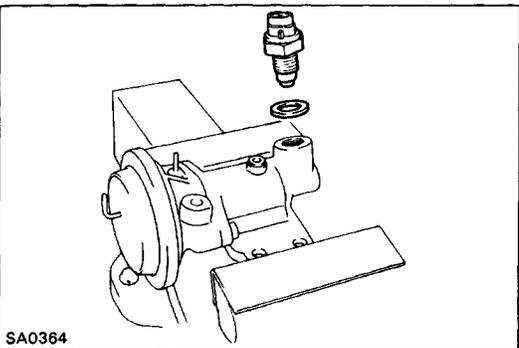


## 7. INSTALL SLEEVE FORK PIN

- (a) Using a hammer and punch, drive in the pin through the hole of clutch case cover.

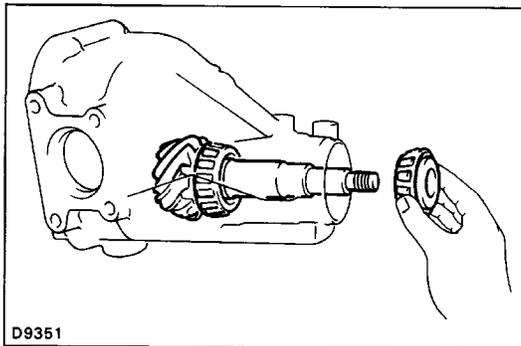


- (b) Coat the threads of screw plug with sealer.  
**Sealer: Part No. 08826-00090, THREE BOND 1281 or equivalent**
- (c) Using SST, install the screw plug.  
**Torque: 20 N-m (200 kgf-cm, 14 ft-lbf)**  
**SST 09313-30021**



## 8. INSTALL A.D. D. INDICATOR SWITCH

- Install a new gasket and indicator switch.  
**Torque: 40 N-m (410 kgf-cm, 30 ft-lbf)**



## ASSEMBLY OF DIFFERENTIAL

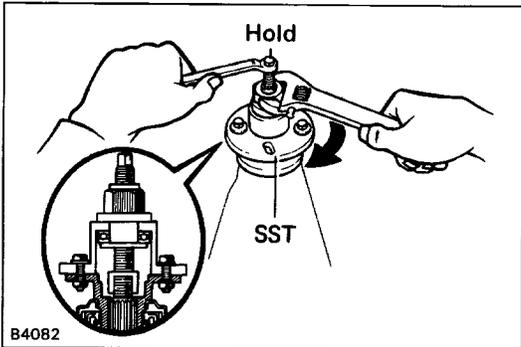
(See page SA-83)

### 1. TEMPORARILY ADJUST DRIVE PINION PRELOAD

(a) Install the following parts.

- Drive pinion
- Front bearing

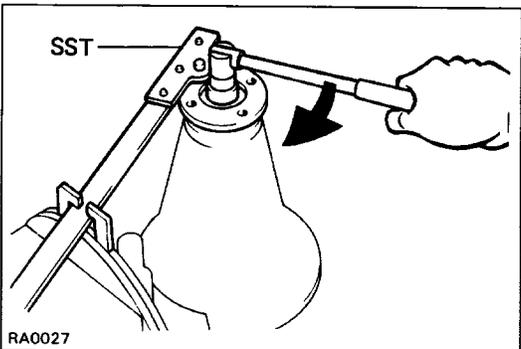
HINT: Assemble the spacer and oil seal after adjusting the gear contact pattern.



(b) Install the companion flange with SST.

Coat the threads of the nut with MP grease.

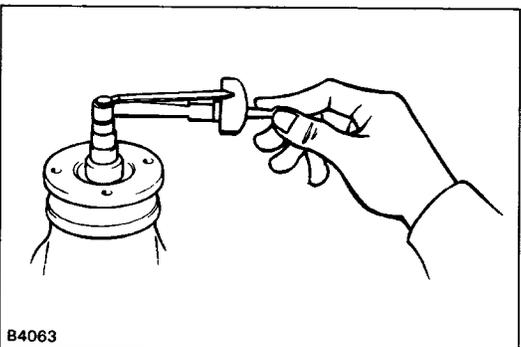
SST 09557-22022 (09557-22030)



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

Using SST to hold the flange, tighten the nut.

SST 09330-00021



(d) Using a torque meter, measure the preload.

**Preload (starting):**

**New bearing**

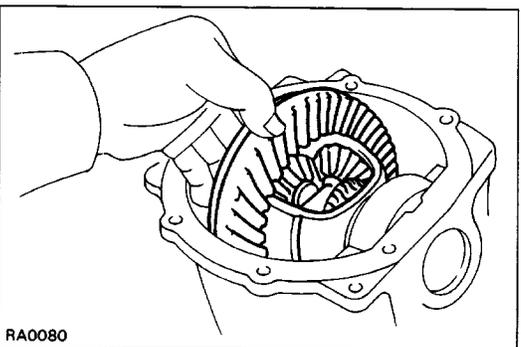
1.2 – 1.9 N·m

(12 – 19 kgf·cm, 10.4 – 16.5 in.-lbf)

**Reused bearing**

0.6 – 1.0 N·m

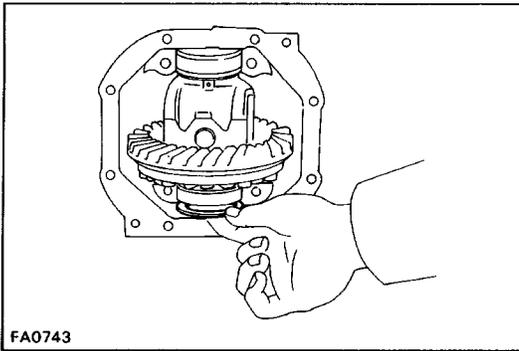
(6 – 10 kgf·cm, 5.2 – 8.7 in.-lbf)



### 2. 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.

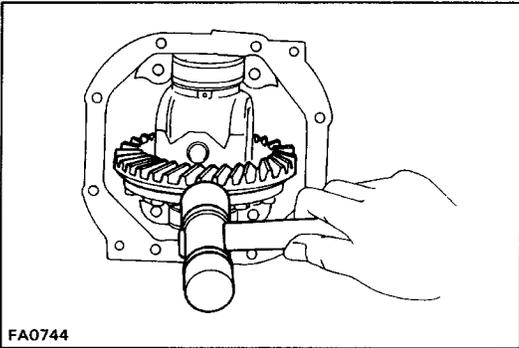
(b) Install the differential case in the carrier.



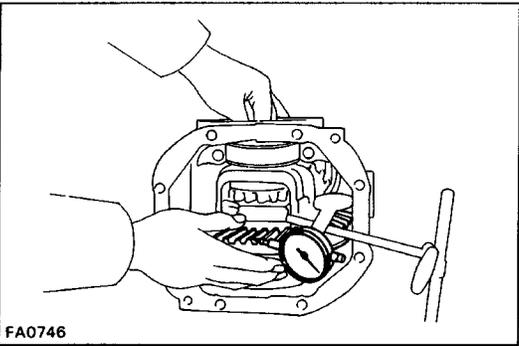
### 3. ADJUST RING GEAR BACKLASH

- (a) Install only the plate washer on the ring gear back side.

HINT: Insure that the ring gear has backlash.

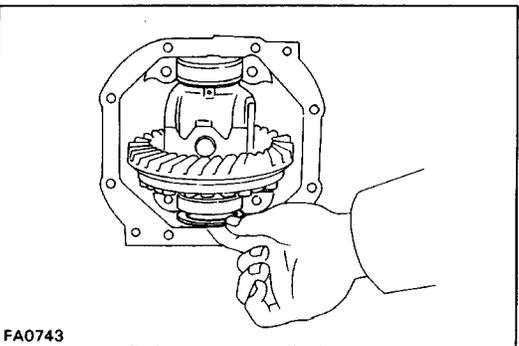


- (b) Snug down the washer and bearing by tapping on the ring gear with a plastic-faced hammer.

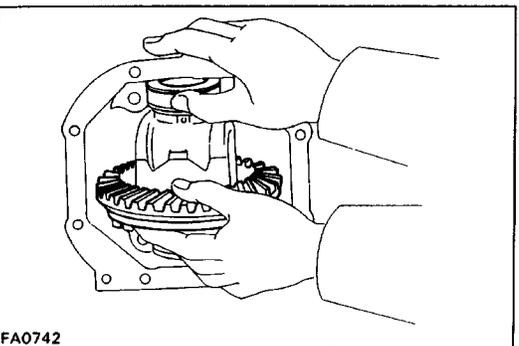


- (c) Hold the side bearing boss on the teeth surface of the ring gear and measure the backlash.

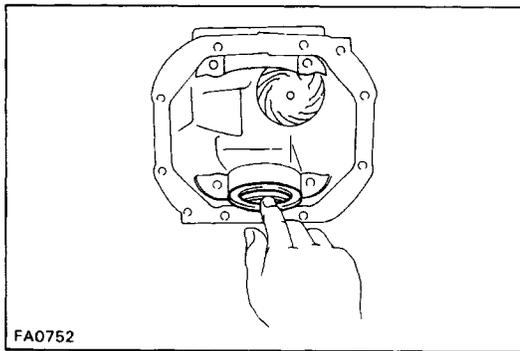
**Backlash (reference): 0.13 mm (0.0051 in.)**



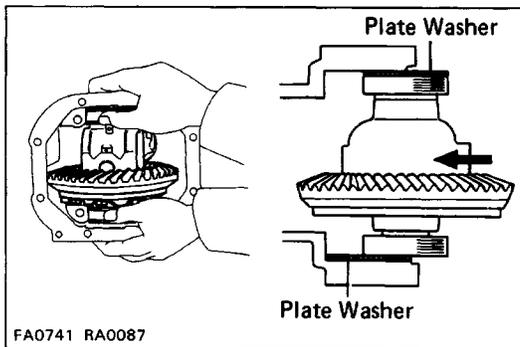
- (d) Select a ring gear back plate washer, using the backlash as reference. (See page [SA-99](#))



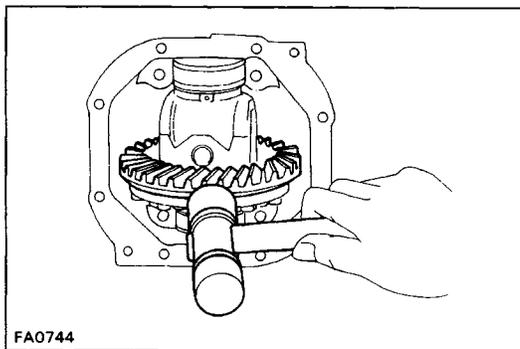
- (e) Select a ring gear teeth side washer with a thickness which eliminates any clearance between the outer race and case.



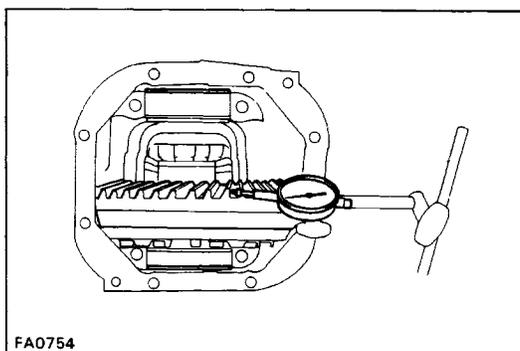
- (f) Remove the plate washers and differential case.
- (g) Install the plate washer into the lower part of the carrier.



- (h) Place the other plate washer onto the differential case together with the outer race, and install the differential case with the outer race into the carrier.

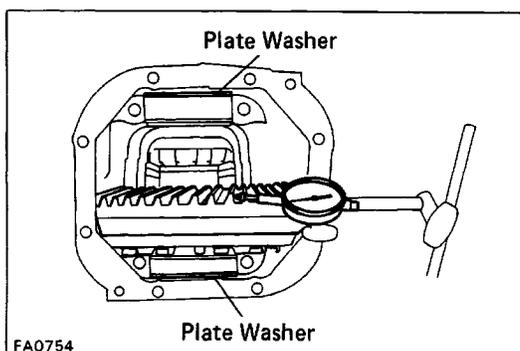


- (i) Using a plastic-faced hammer, snug down the washer and bearing by tapping the ring gear.



- (j) Using a dial indicator, measure the ring gear backlash.

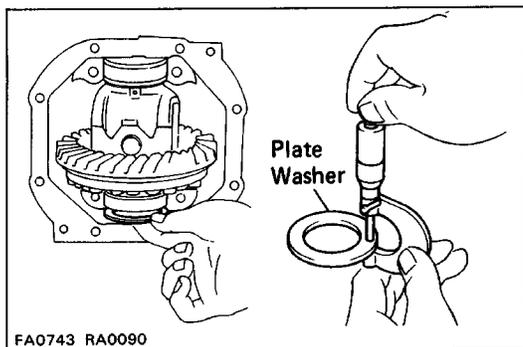
**Backlash: 0.13 – 0.18 mm (0.0051 – 0.0071 in.)**



- (k) If not within specification, adjust by either increasing or decreasing the number of washers on both sides by an equal amount.

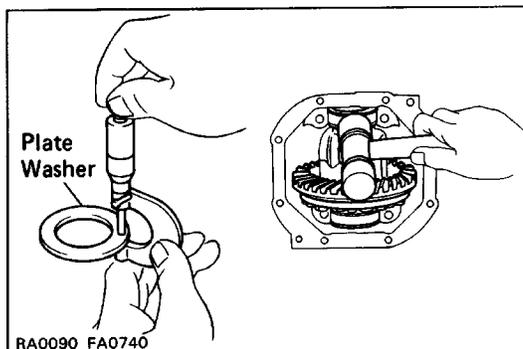
**HINT:** There should be no clearance between the plate washer and case.

Insure that there is ring gear backlash.

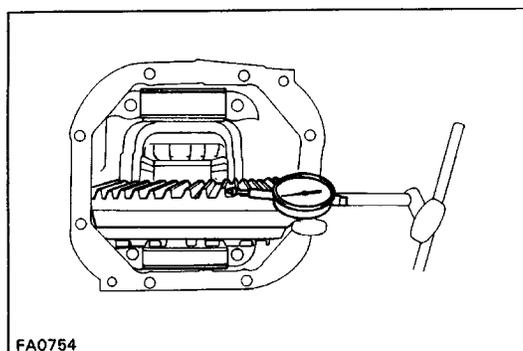


#### 4. ADJUST SIDE BEARING PRELOAD

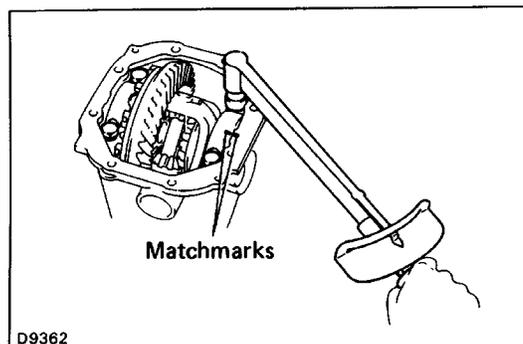
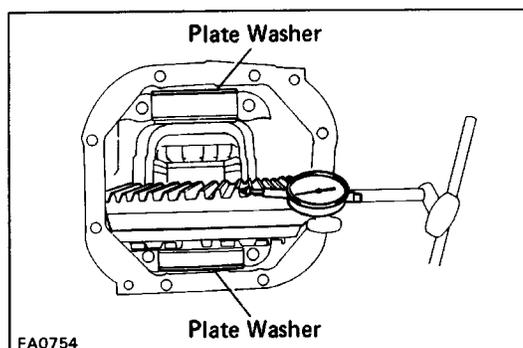
- (a) Remove the ring gear teeth plate washer and measure the thickness.



- (b) Using the backlash as a reference, install a new washer of 0.06 – 0.09 mm (0.0024 – 0.0035 in.) thicker than the washer removed.  
HINT: Select a washer which can be pressed in 2/3 of the way with your finger.
- (c) Using a plastic-faced hammer, tap in the side washer.



- (d) Recheck the ring gear backlash.  
**Backlash: 0.13 – 0.18 mm (0.0051 – 0.0071 in.)**
- (e) If not within standard, adjust by either increasing or decreasing the washers on both sides by an equal amount.  
HINT: The backlash will change about 0.02 mm (0.0008 in.) with 0.03 mm (0.0012 in.) alteration of the side washer.

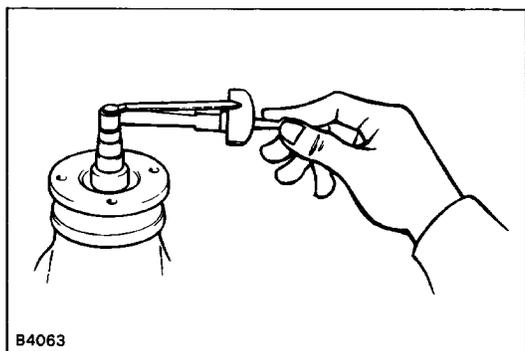


#### 5. INSTALL SIDE BEARING CAPS

- Align the matchmarks on the cap and carrier.  
**Torque: 78 N-m (800 kgf-cm, 58 ft-lbf)**

Washer thickness

Thickness mm (in.)	
2.57 – 2.59 (0.1012 – 0.1020)	2.93 – 2.95 (0.1154 – 0.1161)
2.60 – 2.62 (0.1024 – 0.1031)	2.96 – 2.98 (0.1165 – 0.1173)
2.63 – 2.65 (0.1035 – 0.1043)	2.99 – 3.01 (0.1177 – 0.1185)
2.66 – 2.68 (0.1047 – 0.1055)	3.02 – 3.04 (0.1189 – 0.1197)
2.69 – 2.71 (0.1059 – 0.1067)	3.05 – 3.07 (0.1201 – 0.1209)
2.72 – 2.74 (0.1071 – 0.1079)	3.08 – 3.10 (0.1213 – 0.1220)
2.75 – 2.77 (0.1083 – 0.1091)	3.11 – 3.13 (0.1224 – 0.1232)
2.78 – 2.80 (0.1094 – 0.1102)	3.14 – 3.16 (0.1236 – 0.1244)
2.81 – 2.83 (0.1106 – 0.1114)	3.17 – 3.19 (0.1248 – 0.1256)
2.84 – 2.86 (0.1118 – 0.1126)	3.20 – 3.22 (0.1260 – 0.1268)
2.87 – 2.89 (0.1130 – 0.1138)	3.23 – 3.25 (0.1272 – 0.1280)
2.90 – 2.92 (0.1142 – 0.1150)	



B4063

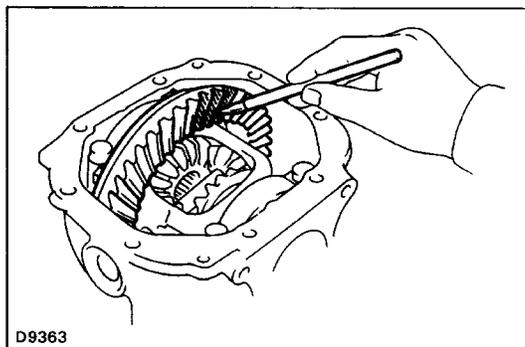
## 6. MEASURE TOTAL PRELOAD

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)**



D9363

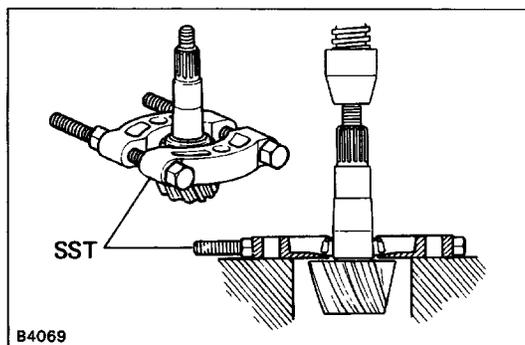
## 7. INSPECT TOOTH CONTACT BETWEEN RING GEAR AND DRIVE PINION

- Coat 3 or 4 teeth at three 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.

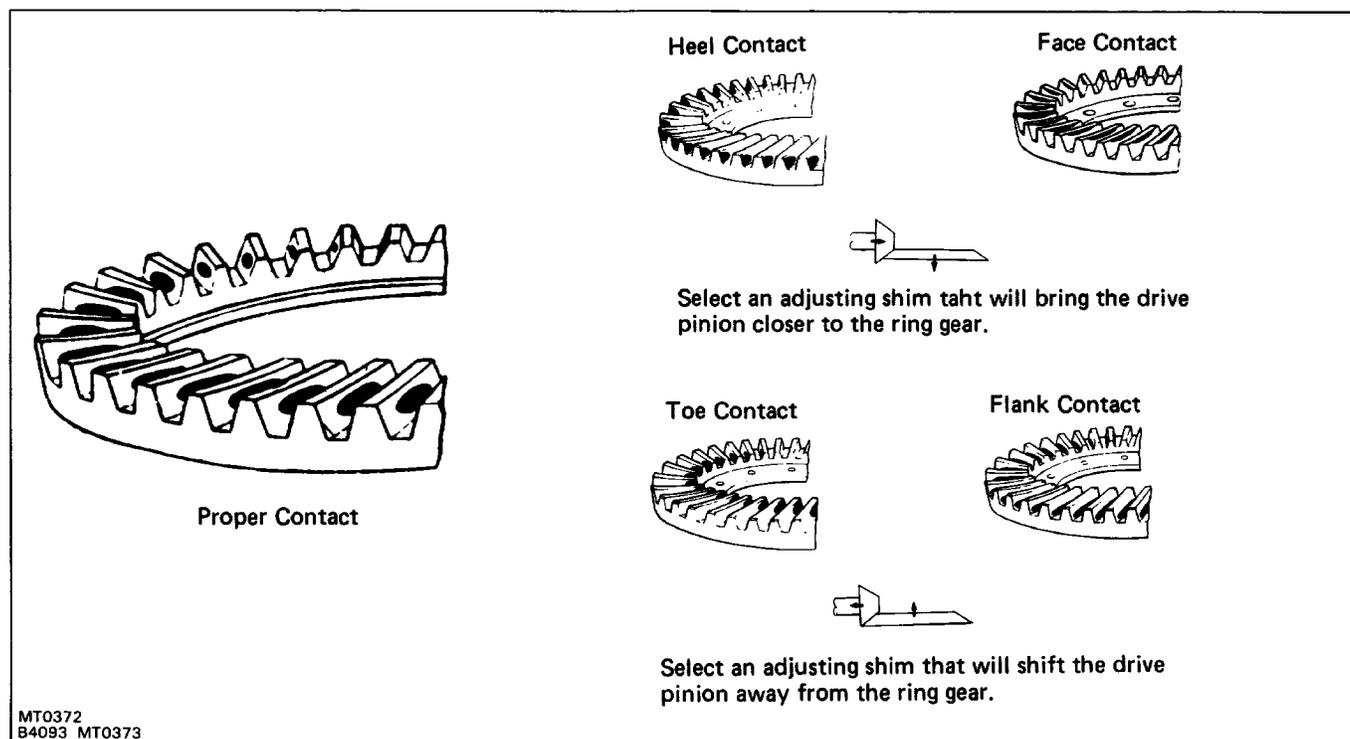
If the teeth are not contacting properly, use the following chart to select a proper washer for correction.

### Washer thickness

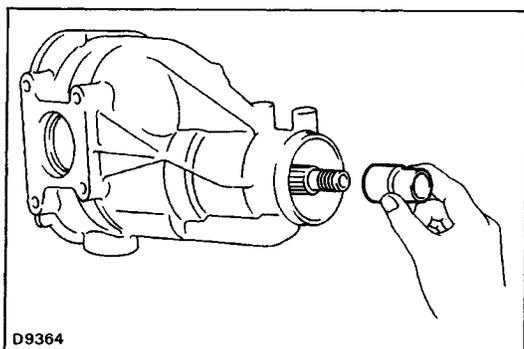
Thickness mm (in.)	
2.24 (0.0882)	2.51 (0.0988)
2.27 (0.0894)	2.54 (0.1000)
2.30 (0.0906)	2.57 (0.1012)
2.33 (0.0917)	2.60 (0.1024)
2.36 (0.0929)	2.63 (0.1035)
2.39 (0.0941)	2.66 (0.1047)
2.42 (0.0953)	2.69 (0.1059)
2.45 (0.0965)	2.72 (0.1071)
2.48 (0.0976)	



B4069



MT0372  
B4093 MT0373

**8. REMOVE COMPANION FLANGE**

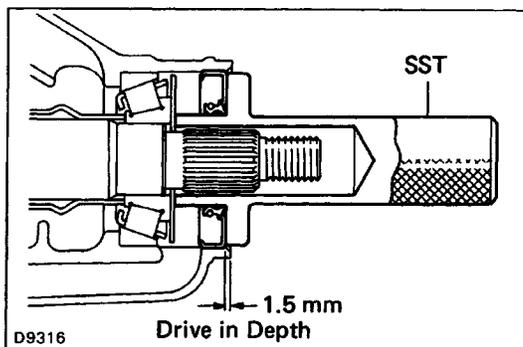
(See step 14 on page SA-86)

**9. REMOVE FRONT BEARING**

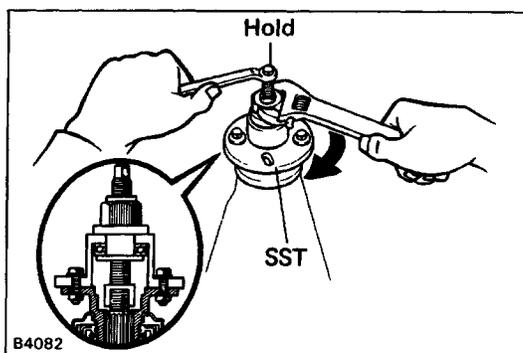
(See step 16 on page SA-86)

**10. INSTALL NEW BEARING SPACER AND FRONT BEARING**

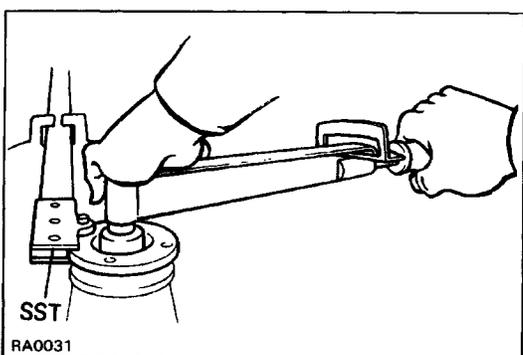
- Install a new bearing spacer on the drive pinion.
- Install the front bearing on the drive pinion.

**11. INSTALL OIL SLINGER AND NEW OIL SEAL**

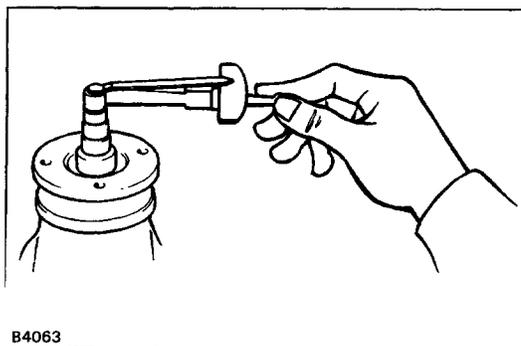
- Install the oil slinger.
- Using SST, drive in a new oil seal.  
SST 09554-30011  
**Oil seal drive in depth: 1.5 mm (0.059 in.)**
- Apply MP grease to the oil seal lip.

**12. INSTALL COMPANION FLANGE**

- Using SST, install the companion flange on the shaft.  
SST 09557-22022 (09557-22030)



- Coat the threads of a new nut with MP grease.
- Using SST to hold the flange, tighten the nut.  
Torque the nut.  
SST 09330-00021  
**Torque: 120 N-m (1,225 kgf-cm, 89 ft-lbf)**

**13. CHECK FRONT BEARING PRELOAD**

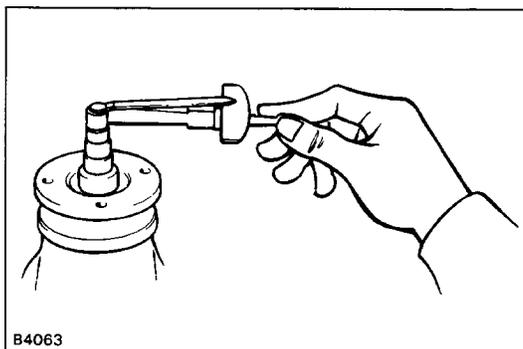
Using a torque meter, measure the preload of the back-lash between the drive pinion and ring gear.

**Preload (starting):****New bearing**

1.2 – 1.9 N-m  
(12 – 19 kgf-cm, 10.4 – 16.5 ft-lbf)

**Reused bearing**

0.6 – 1.0 N-m  
(6 – 10 kgf-cm, 5.2 – 8.7 ft-lbf)



B4063

- (a) If the preload is greater than specification, replace the bearing spacer.
- (b) If the 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.

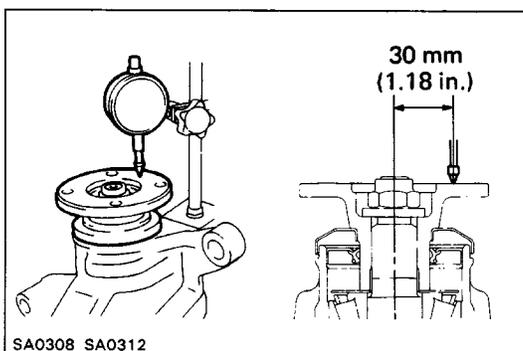
**Maximum torque: 223 N-m (2,275 kgf-cm, 165 ft-lbf)**

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.

#### 14. CHECK RUNOUT OF COMPANION FLANGE

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

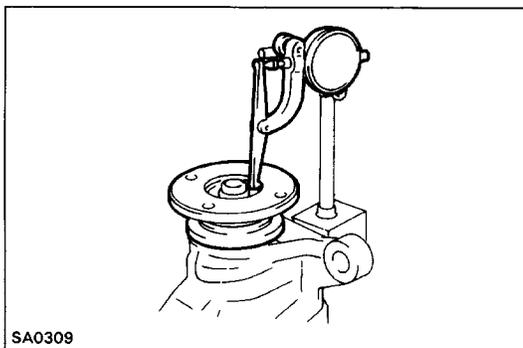
Maximum vertical runout: 0.10 mm (0.0039 in.)



SA0308 SA0312

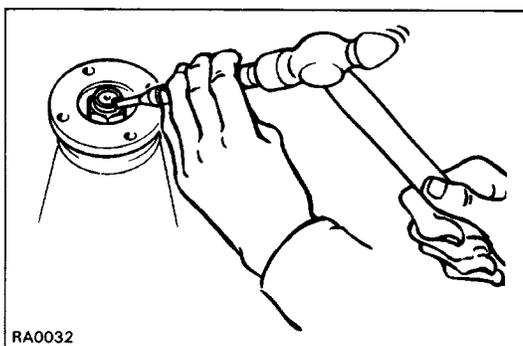
Maximum lateral runout: 0.10 mm (0.0039 in.)

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



SA0309

#### 15. STAKE DRIVE PINION NUT

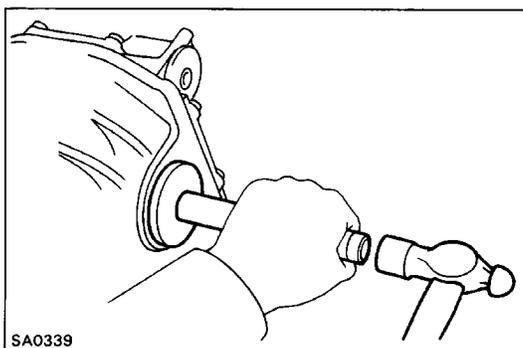


RA0032

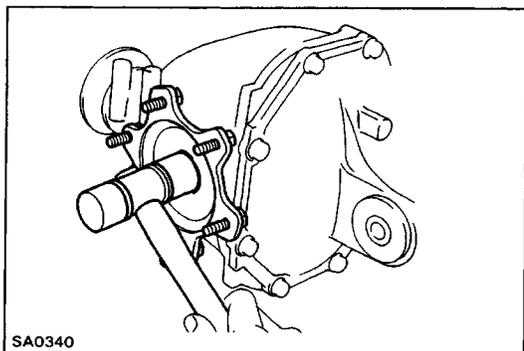
#### 16. INSTALL NEW RH SIDE GEAR SHAFT OIL SEAL

- (a) Coat the oil seal lip with MP grease.
- (b) Using SST, drive in the oil seal until it is flush with the carrier end surface.

SST 09550-22011 (09550-00020, 09550-00031)



SA0339

**17. INSTALL RH SIDE GEAR SHAFT**

- (a) Install a new snap ring to the side gear shaft.
- (b) Using a plastic-faced hammer, tap on the side gear shaft to install it.

**18. CHECK INSTALLATION OF SIDE GEAR SHAFT**

- (a) Check that there is 2 – 3 mm (0.08 – 0.12 in.) of play in axial direction.
- (b) Check that the side gear shaft will not come out by trying to pull it completely out by hand.

**19. INSTALL INTERMEDIATE SHAFT**

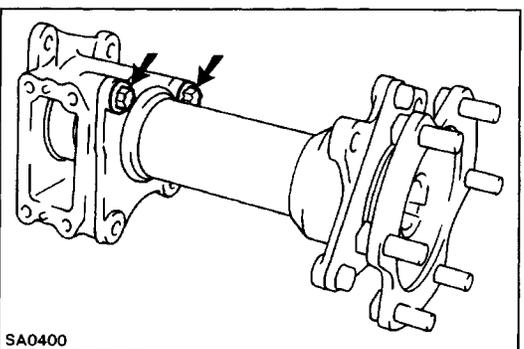
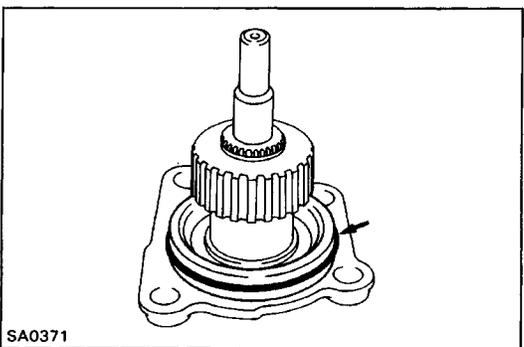
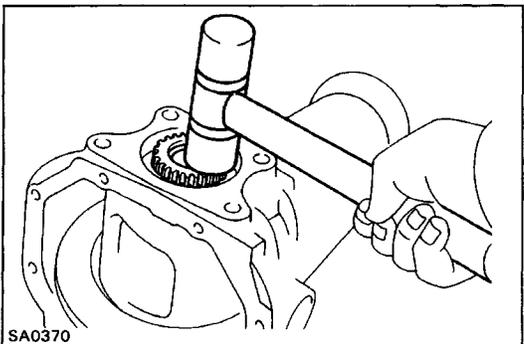
- (a) Install a new snap ring to the shaft.
- (b) Using a plastic-faced hammer, tap on the shaft to install it.

**20. CHECK INSTALLATION OF INTERMEDIATE SHAFT**

- (a) Check that there is 2 – 3 mm (0.08 – 0.12 in.) of play in axial direction.
- (b) Check that the shaft will not come out by trying to pull it completely out by hand.

**21. INSTALL CLUTCH CASE TO SIDE GEAR SHAFT TUBE**

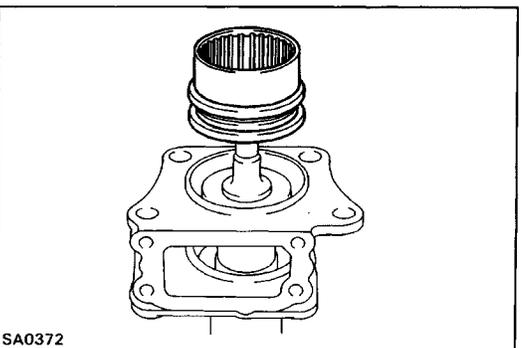
- (a) Install a new O-ring to the tube.
- (b) Coat the O-ring with MP grease.

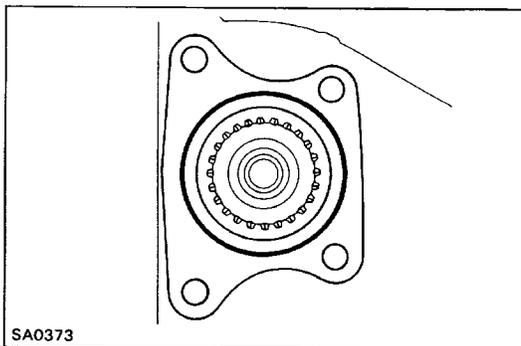


- (c) Install the clutch case to the tube.
- (d) Tighten the two torx bolts.

**Torque: 78 N $\cdot$ m / 800 kgf $\cdot$ cm, 58 ft $\cdot$ lbf**

**Torx wrench: E14 (Part No. 09044-00010 or locally manufactured tool)**

**22. INSTALL CLUTCH SLEEVE**



SA0373

### 23. INSTALL LH SIDE GEAR SHAFT TO DIFFERENTIAL CARRIER

- (a) Remove any packing material and be careful not to get oil on the contacting surfaces of the differential carrier and clutch case.
- (b) Apply seal packing to the differential carrier as shown.

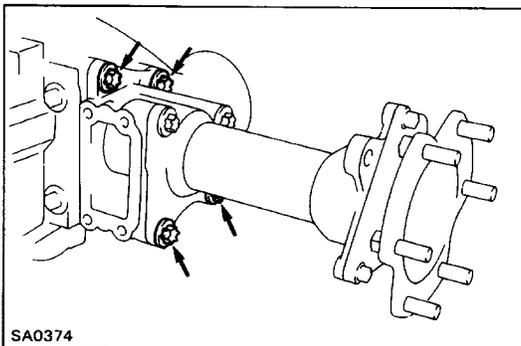
**Seal packing: Part No. 08826-00090, THREE BOND 1281 or equivalent**

**HINT:** Install the side gear shaft within ten minutes after applying seal packing.

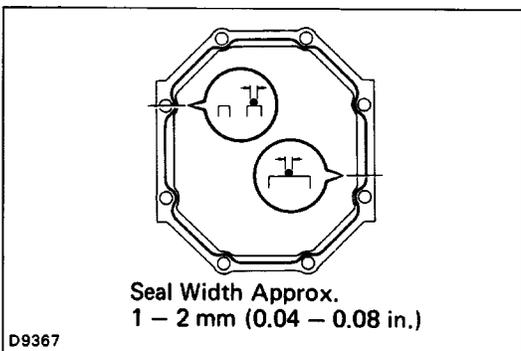
- (c) Install LH side gear shaft to the differential carrier. W Tighten the four torx bolts.

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

**Torx wrench: E14 (Part No. 09044-00010 or locally manufactured tool)**



SA0374



D9367

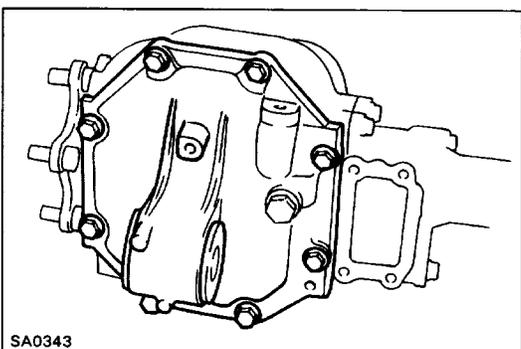
### 24. INSTALL DIFFERENTIAL CARRIER COVER

- (a) Remove any packing material and be careful not to drop oil on the contacting surface of the differential carrier or carrier cover.
- (b) Apply seal packing to the carrier cover.

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

**HINT:** Install the carrier cover within ten minutes after applying seal packing.

- (c) Install and torque the bolts.  
**Torque: 47 N-m (475 kgf-cm, 34 ft-lbf)**



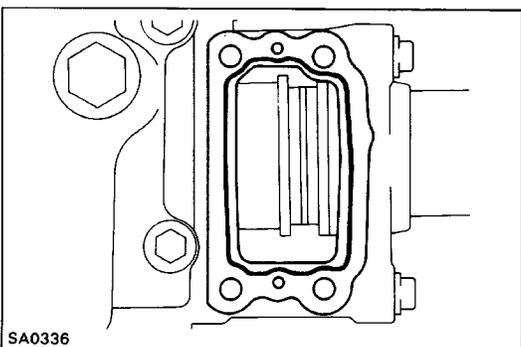
SA0343

### 25. INSTALL ACTUATOR

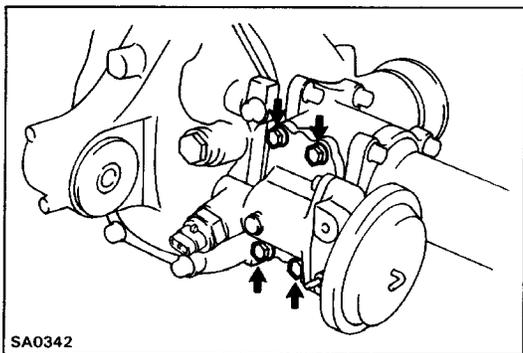
- (a) Remove any packing material and be careful not to get oil on the contacting surfaces of the actuator and clutch case.
- (b) Apply seal packing to the clutch case as shown.

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

**HINT:** Install the actuator within ten minutes after applying seal packing.



SA0336



(c) Tighten the four bolts.

**Torque: 21 N-m (210 kgf-cm, 15 ft-lbf)**