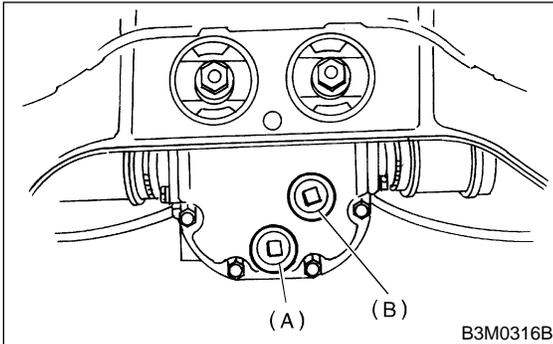


2. Rear Differential

A: ON-CAR SERVICE

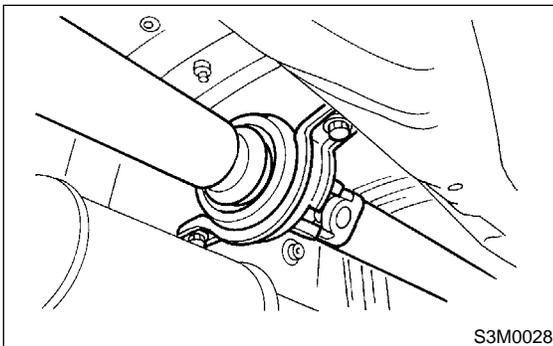
1. FRONT OIL SEAL

- 1) Disconnect ground terminal from battery.
- 2) Move select lever or gear shift lever to "N".
- 3) Release the parking brake.
- 4) Remove oil drain plug, and drain gear oil.

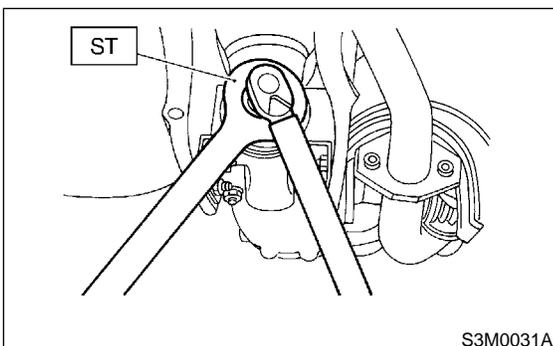


- (A) Drain plug
- (B) Filler plug

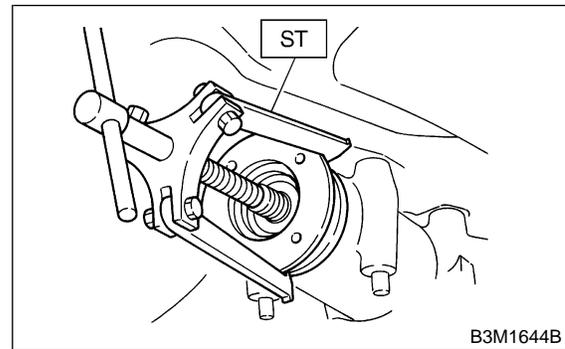
- 5) Jack-up rear wheels and support the vehicle body with sturdy racks.
- 6) Remove propeller shaft from body. <Ref. to 3-4 [W1B0].>



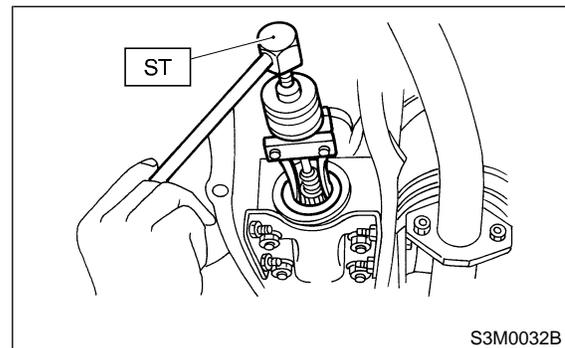
- 7) Remove self-locking nut while holding companion flange with ST.
ST 498427200 FLANGE WRENCH



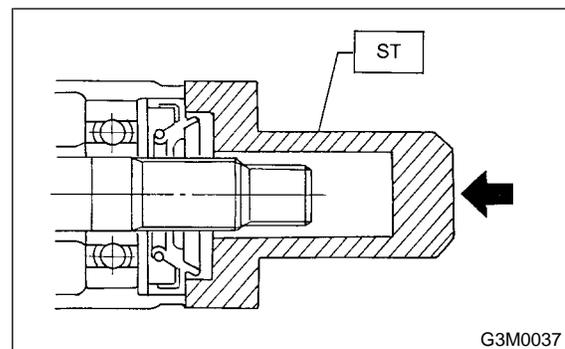
- 8) Extract companion flange with a puller.



- 9) Remove oil seal using ST.
ST 398527700 PULLER ASSY



- 10) Fit a new oil seal using ST.
ST 498447120 OIL SEAL INSTALLER



- 11) Install companion flange.

12) Tighten self-locking nut within the specified torque range so that the turning resistance of companion flange becomes the same as that before replacing oil seal.

CAUTION:

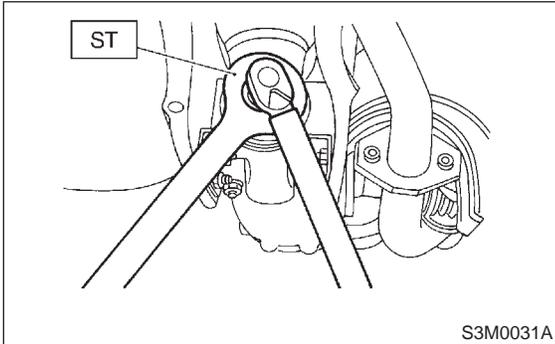
Use a new self-locking nut.

ST 498427200 FLANGE WRENCH

Tightening torque:

181.4±14.7 N·m (18.50±1.50 kg·m,

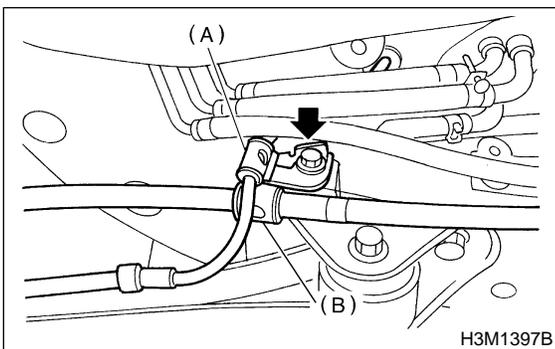
133.8±10.8 ft·lb)



13) Reassembling procedure hereafter is the reverse of the disassembling.

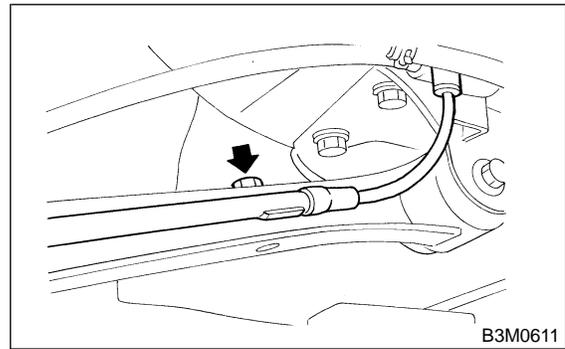
2. SIDE OIL SEAL

- 1) Disconnect ground terminal from battery.
- 2) Move select lever or gear shift lever to "N".
- 3) Release the parking brake.
- 4) Loosen both wheel nuts.
- 5) Jack-up the vehicle and support it with rigid racks.
- 6) Remove wheels.
- 7) Remove muffler. <Ref. to 2-9 [W3A0].>
- 8) Remove the ABS sensor cable clamp and parking brake cable clamp from bracket.

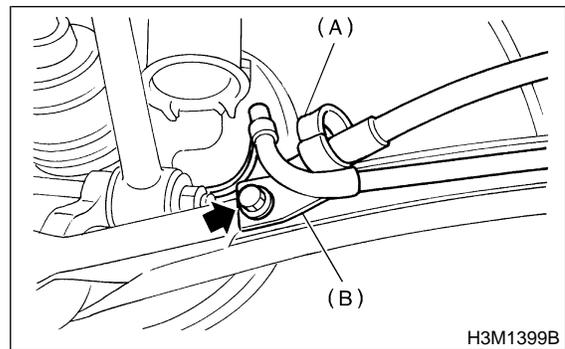


- (A) ABS sensor cable clamp
- (B) Parking brake cable clamp

9) Remove the ABS sensor cable clamp from the trailing link.

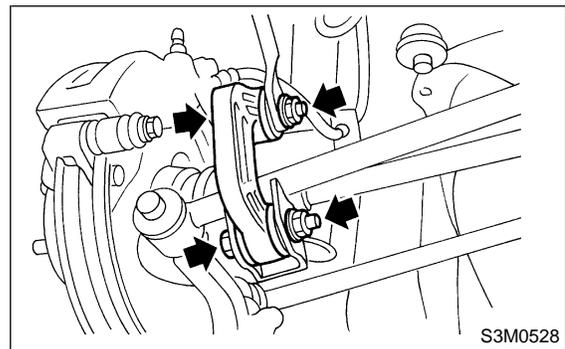


10) Remove the ABS sensor cable clamp and parking brake cable guide from the trailing link.

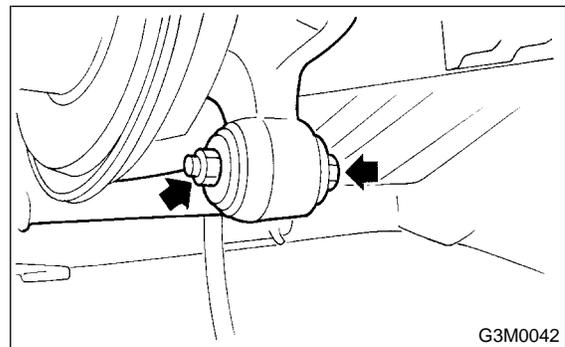


- (A) ABS sensor cable clamp
- (B) Parking brake cable clamp

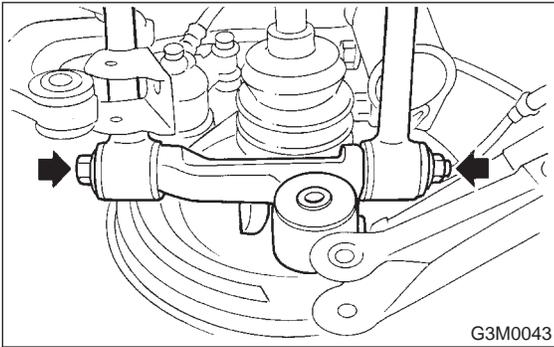
11) Remove the rear stabilizer link.



12) Remove the bolts which secure the trailing link to the rear housing.



13) Remove the bolts which secure the front and rear lateral link to the rear housing.

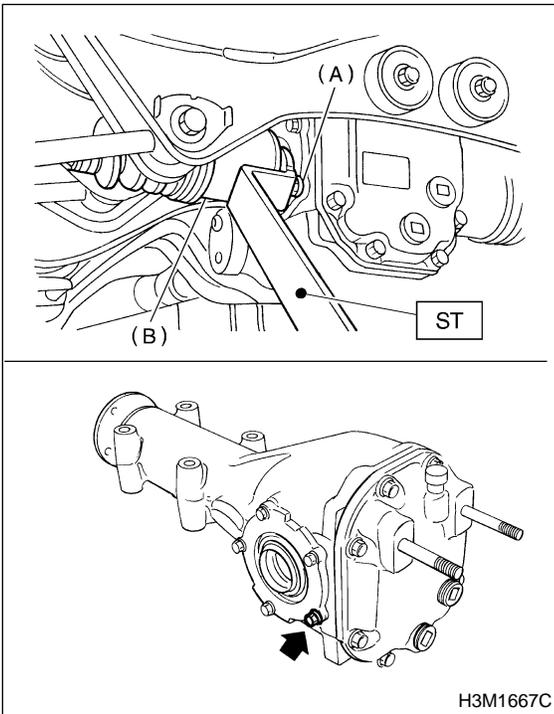


14) Remove the DOJ from the rear differential by using ST.

CAUTION:

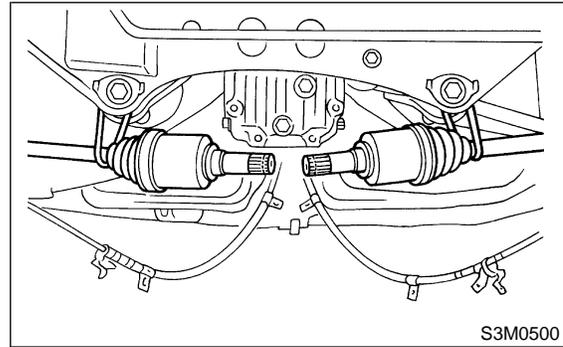
When removing the DOJ from the rear differential, fit ST to the bolt as shown in figure so as not to damage the side bearing retainer.

ST 208099PA100 DRIVE SHAFT REMOVER

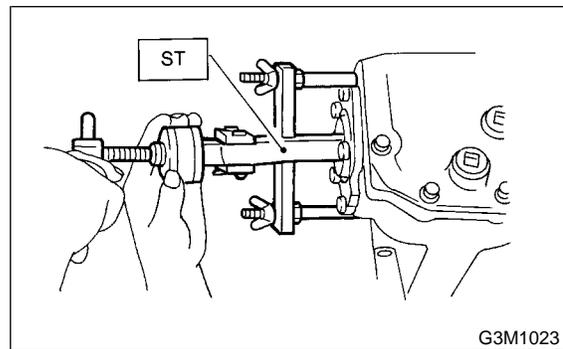


- (A) Bolt
- (B) DOJ

15) Secure rear drive shaft to rear crossmember using wire.



16) Remove side oil seal with ST.
ST 398527700 PULLER ASSY

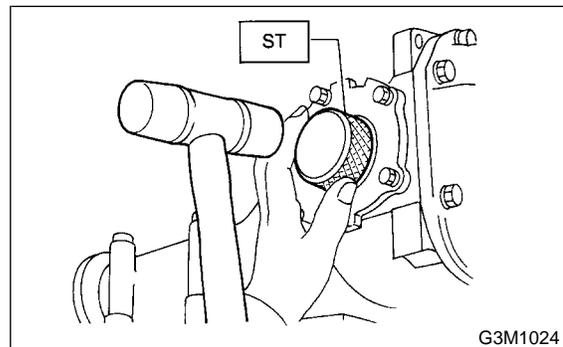


17) Drive in a new side oil seal with ST.

CAUTION:

Apply chassis grease between the oil seal lips.

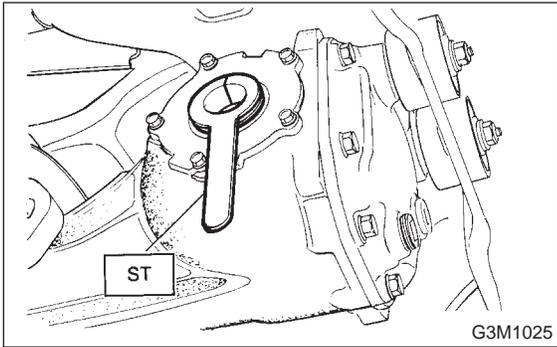
ST 398437700 DRIFT



2. Rear Differential

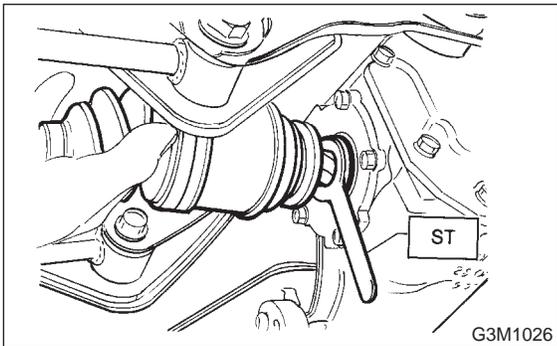
18) Install ST to rear differential.

ST 28099PA090 SIDE OIL SEAL PROTECTOR



19) Insert the spline shaft until the spline portion is inside the side oil seal.

ST 28099PA090 SIDE OIL SEAL PROTECTOR



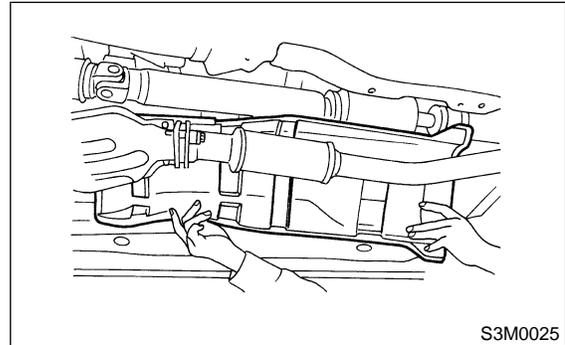
20) Remove ST.

ST 28099PA090 SIDE OIL SEAL PROTECTOR

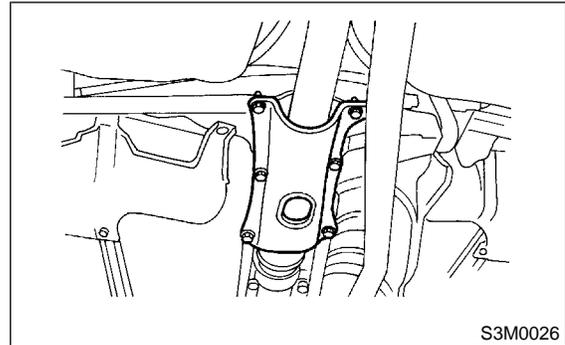
21) Reassemble in the reverse order of disassembly.

B: REMOVAL

- 1) Disconnect ground terminal from battery.
- 2) Move select lever or gear shift lever to "N".
- 3) Release the parking brake.
- 4) Loosen wheel nuts.
- 5) Jack-up vehicle and support it with sturdy racks.
- 6) Remove wheels.
- 7) Remove rear exhaust pipe and muffler.
<Ref. to 2-9 [W2A0].> and <Ref. to 2-9 [W3A0].>
- 8) Remove front exhaust cover.



9) Remove front cover of rear differential mount.



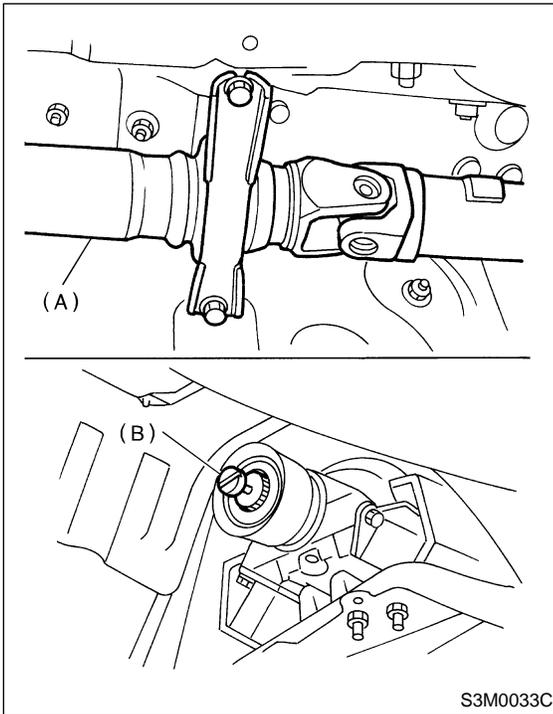
10) Remove propeller shaft.

CAUTION:

When removing propeller shaft, pay attention not to damage the sliding surfaces of rear drive shaft (extension) spline, oil seal and sleeve yoke.

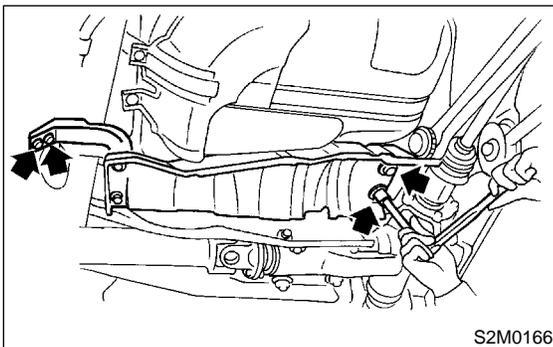
NOTE:

- Prepare an oil can and cap since the transmission oil flows out from the extension at removing propeller shaft.
- Insert the cap into the extension to prevent transmission oil from flowing out immediately after removing the propeller shaft.

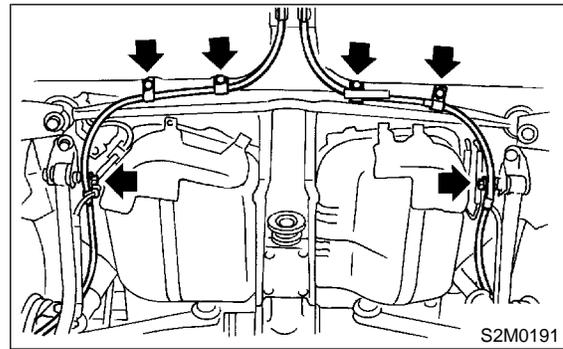


- (A) Propeller shaft
(B) Extension cap

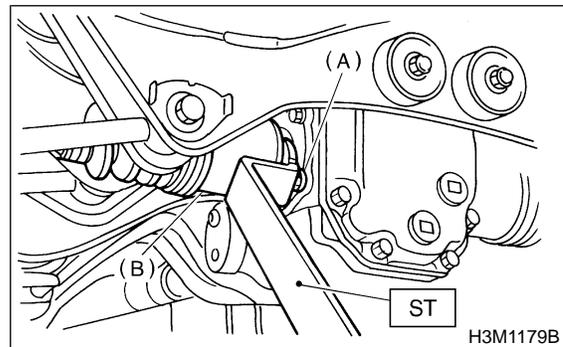
11) Remove heat sealed cover.



12) Remove clamps and bracket of parking brake cable.

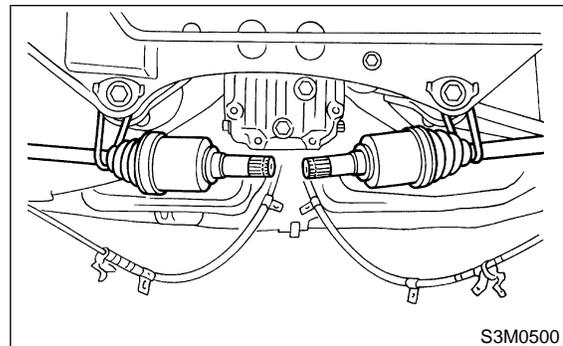


13) Remove DOJ of rear drive shaft from rear differential using ST. <Ref. to 3-4 [W2A2].>
ST 28099PA100 DRIVE SHAFT REMOVER



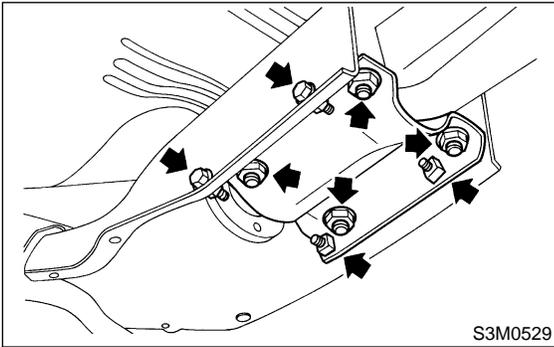
- (A) Bolt
(B) DOJ

14) Secure rear drive shaft to rear crossmember using wire.

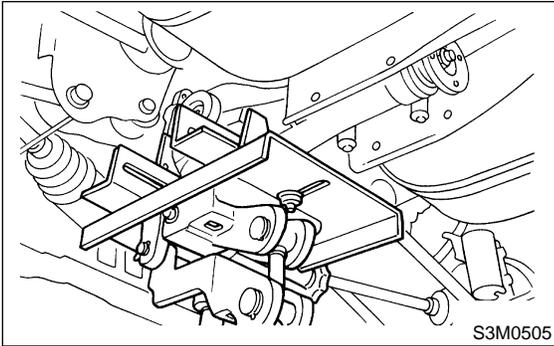


2. Rear Differential

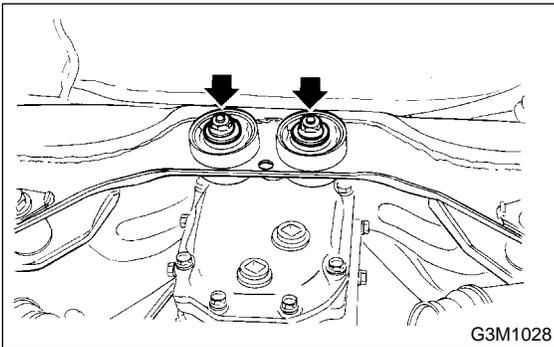
15) Remove lower differential bracket. (If rear differential protector is not equipped.)



16) Support rear differential with transmission jack.



17) Remove self-locking nuts connecting rear differential to rear crossmember.



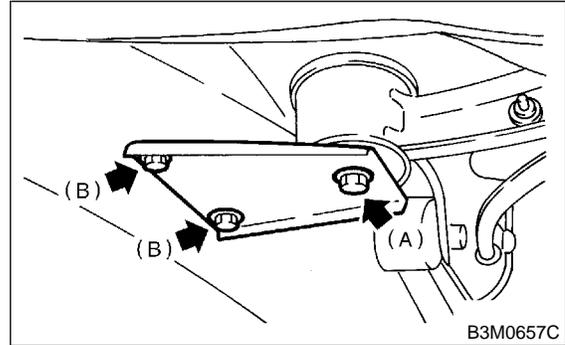
18) Remove bolts which secure rear differential front member to body.

(1) Loosen bolt A first, then remove bolts B.

NOTE:

Support front member with the use of a helper to prevent it from dropping.

(2) Remove bolt A.



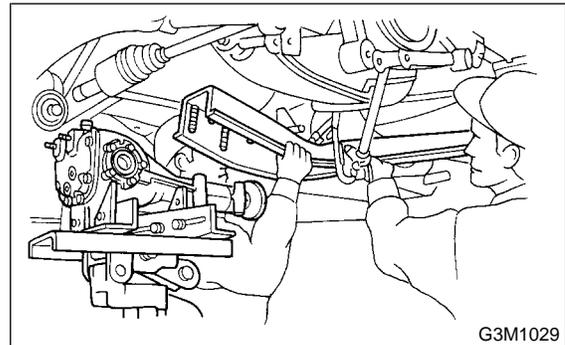
(A) Bolt A

(B) Bolt B

19) While slowly lowering transmission jack, move rear differential forward and remove front member and rear differential from body.

NOTE:

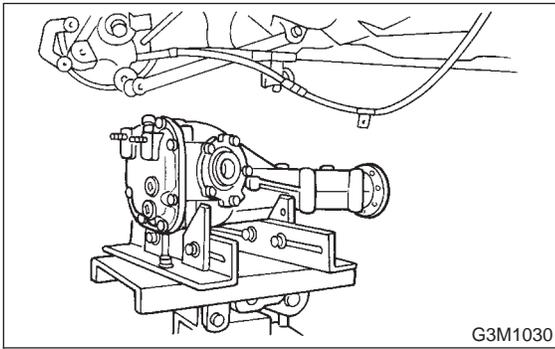
If rear differential protector is equipped, remove front member, rear differential and rear differential protector as a unit from body.



20) Remove rear differential protector. (If rear differential protector is equipped.)

21) Remove lower differential bracket. (If rear differential protector is equipped.)

22) Remove rear differential from front member.



G3M1030

C: DISASSEMBLY

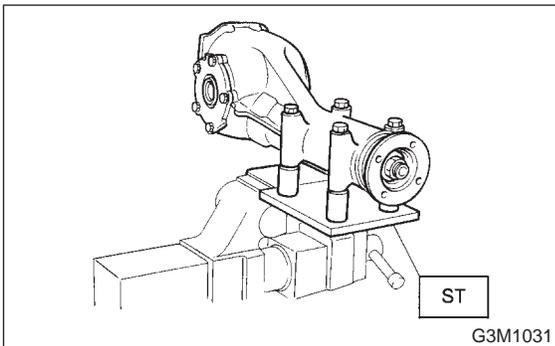
NOTE:

To detect real cause of trouble, inspect the following items before disassembling. <Ref. to 3-4 [W2E0].>

- Tooth contact of crown gear and pinion, and backlash
- Runout of crown gear at its back surface
- Turning resistance of drive pinion

1) Set ST on vise and install the differential assembly to ST.

ST 398217700 ATTACHMENT



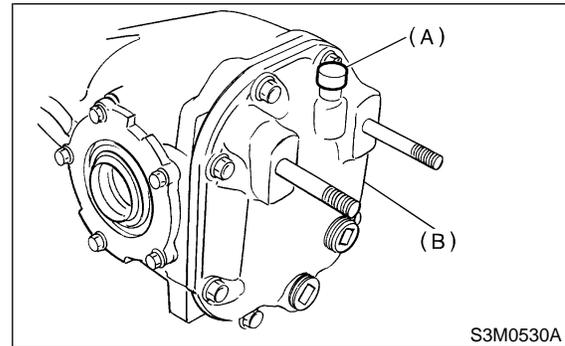
G3M1031

2) Drain gear oil by removing plug.

3) Remove the air breather cap.

NOTE:

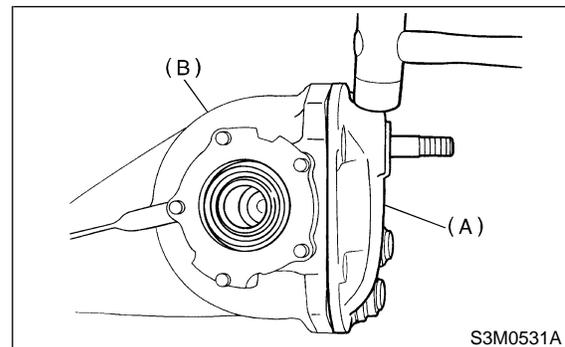
Do not attempt to replace the air breather cap unless necessary.



S3M0530A

- (A) Air breather cap
- (B) Rear cover

4) Remove rear cover by loosening retaining bolts.



S3M0531A

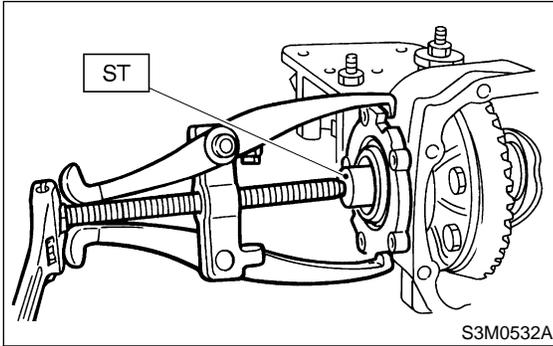
- (A) Rear cover
- (B) Differential carrier

5) Make right and left side bearing retainers in order to identify them at reassembly. Remove side bearing retainer attaching bolts, set ST to differential case, and extract right and left side bearing retainers with a puller.

CAUTION:

Each shim, which is installed to adjust the side bearing preload, should be kept together with its mating retainer.

ST 398457700 ATTACHMENT

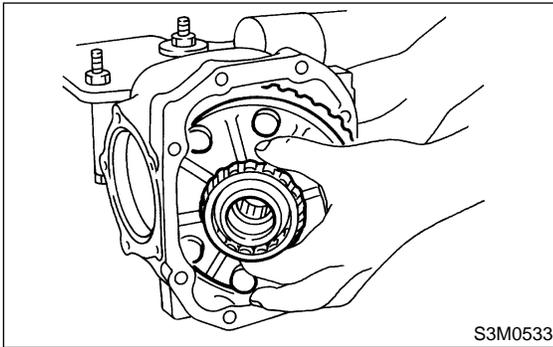


S3M0532A

6) Pull out differential assembly from differential carrier.

CAUTION:

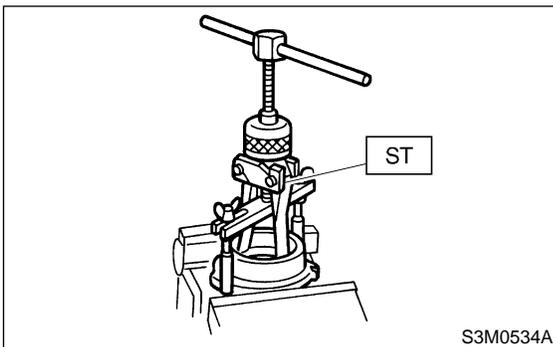
Be careful not to hit the teeth against the case.



S3M0533

7) When replacing side bearing, pull bearing cup from side bearing retainer using ST.

ST 398527700 PULLER ASSY



S3M0534A

8) Extract bearing cone with ST.

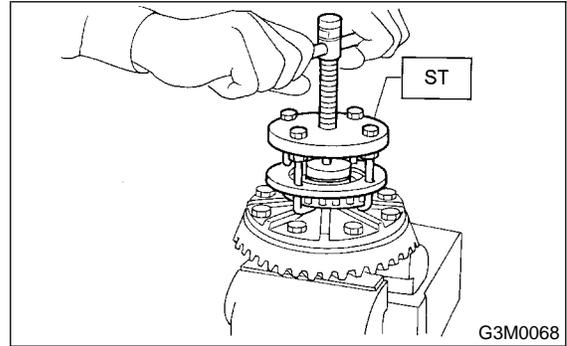
CAUTION:

Do not attempt to disassemble the parts unless necessary.

NOTE:

- Set puller so that its claw catch the edge of the bearing cone.
- Never mix up the right and left hand bearing cups and cones.

ST 399527700 PULLER SET

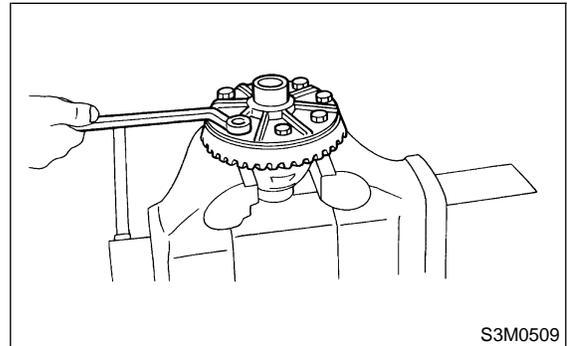


G3M0068

9) Remove crown gear by loosening crown gear bolts.

CAUTION:

Further disassembling is not allowed.



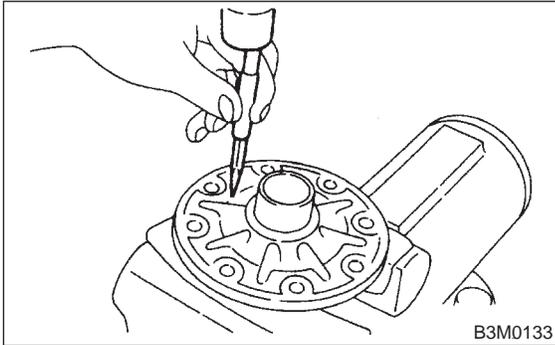
S3M0509

10) Drive out pinion shaft lock pin from crown gear side. (Without LSD)

NOTE:

The lock pin is staked at the pin hole end on the differential carrier; do not drive it out forcibly before unstaking it.

ST 899904100 STRAIGHT PIN REMOVER

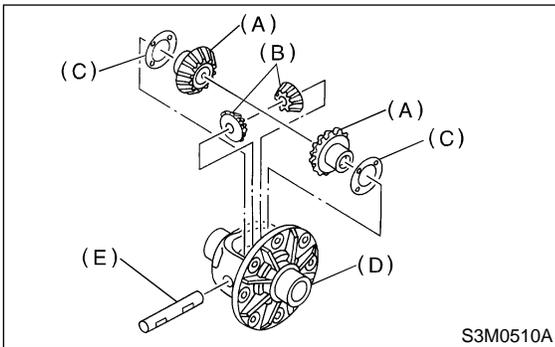


B3M0133

11) Draw out pinion mate shaft and remove pinion mate gears, side gears and thrust washers. (Without LSD)

NOTE:

The gears as well as thrust washers should be marked or kept separated left and right, and front and rear.

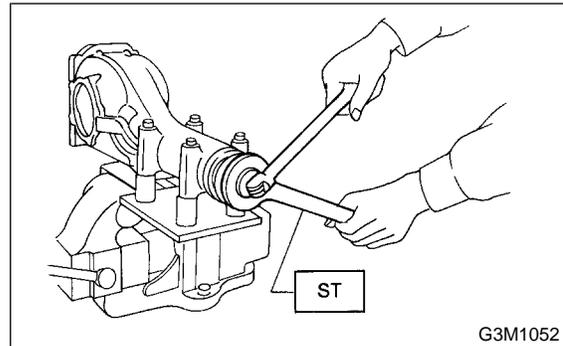


S3M0510A

- (A) Side gear
- (B) Pinion mate gear
- (C) Thrust washer
- (D) Differential case
- (E) Pinion mate shaft

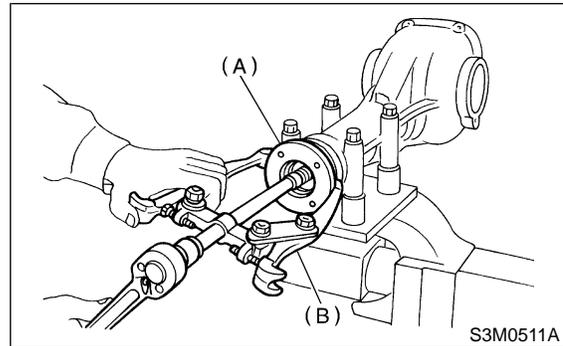
12) Hold companion flange with ST and remove drive pinion nut.

ST 498427200 FLANGE WRENCH



G3M1052

13) Extract the companion flange with a puller.



S3M0511A

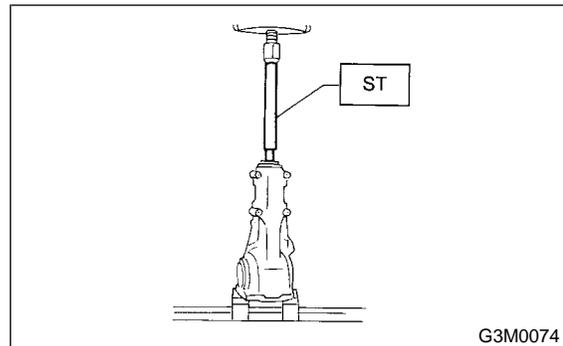
- (A) Companion flange
- (B) Puller

14) Press the end of drive pinion shaft and extract it together with rear bearing cone, preload adjusting spacer and washer.

NOTE:

Hold the drive pinion so as not to drop it.

ST 398467700 DRIFT



G3M0074

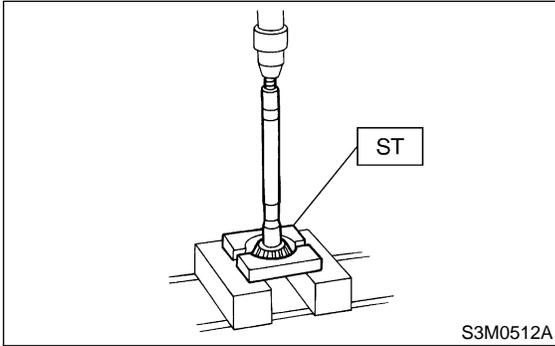
2. Rear Differential

15) Remove rear bearing cone from drive pinion by supporting cone with ST.

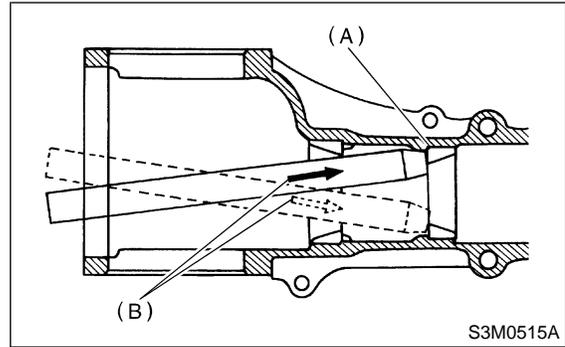
NOTE:

Place the replacer so that its center-recessed side faces the pinion gear.

ST 498515500 REPLACER



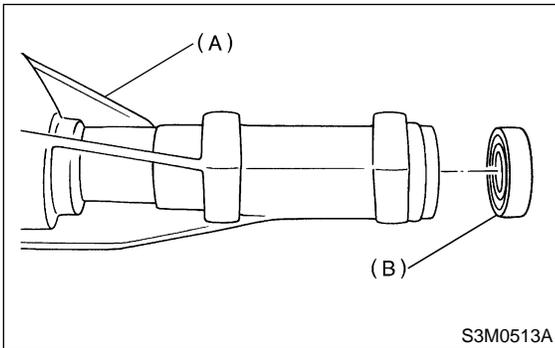
18) When replacing bearings, tap front bearing cup and rear bearing cup in this order out of case by using a brass bar.



- (A) 2 cutouts along diagonal lines
- (B) Tap alternately with brass bar.

16) Remove front oil seal from differential carrier using ST.

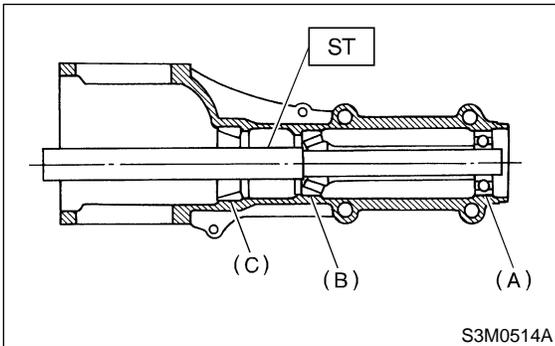
ST 398527700 PULLER ASSY



- (A) Differential carrier
- (B) Front oil seal

17) Remove pilot bearing together with front bearing cone using ST.

ST 398467700 DRIFT



- (A) Pilot bearing
- (B) Front bearing
- (C) Rear bearing cup

D: INSPECTION

Wash all the disassembled parts clean, and examine them for wear, damage, or other defects. Repair or replace defective parts as necessary.

1) Crown gear and drive pinion

- If abnormal tooth contact is evident, find out the cause and adjust to give correct tooth contact at assembly. Replace the gear if excessively worn or incapable of adjustment.

- If crack, score, or seizure is evident, replace as a set. Slight damage of tooth can be corrected by oil stone or the like.

2) Side gear and pinion mate gear

- Replace if crack, score, or other defects are evident on tooth surface.

- Replace if thrust washer contacting surface is worn or seized. Slight damage of the surface can be corrected by oil stone or the like.

3) Bearing

Replace if seizure, peeling, wear, rust, dragging during rotation, abnormal noise or other defect is evident.

4) Thrust washers of side gear and pinion mate gear

Replace if seizure, flaw, abnormal wear or other defect is evident.

5) Oil seal

Replace if deformed or damaged, and at every disassembling.

6) Differential carrier

Replace if the bearing bores are worn or damaged.

7) Differential case

Replace if its sliding surfaces are worn or cracked.

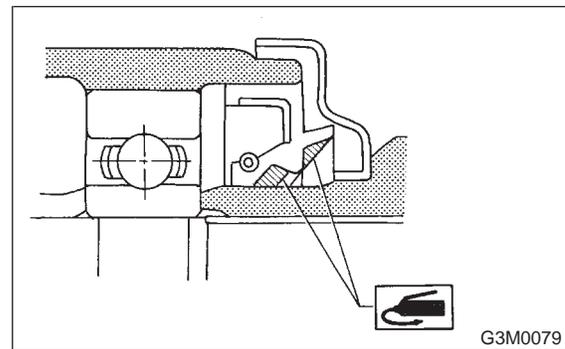
8) Companion flange

Replace if the oil seal lip contacting surfaces have flaws.

E: ASSEMBLY

1) Precautions for assembling

- Assemble in the reverse order of disassembling.
- Check and adjust each part during assembly.
- Keep the shims and washers in order, so that they are not misinstalled.
- Thoroughly clean the surfaces on which the shims, washers and bearings are to be installed.
- Apply gear oil when installing the bearings and thrust washers.
- Be careful not to mix up the right and left hand cups of the bearings.
- Replace the oil seal with new one at every disassembly. Apply chassis grease between the lips when installing the oil seal.

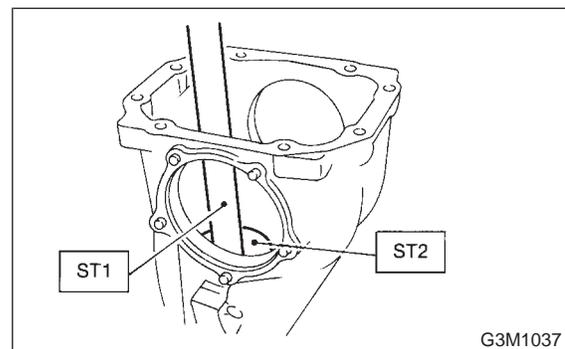


2) Adjusting preload for front and rear bearings
Adjust the bearing preload with spacer and washer between front and rear bearings. Pinion height adjusting washers are not affected by this adjustment. The adjustment must be carried out without the oil seal inserted.

(1) Press rear bearing race into differential carrier with ST1 and ST2.

ST1 398477701 HANDLE

ST2 398477703 DRIFT 2



2. Rear Differential

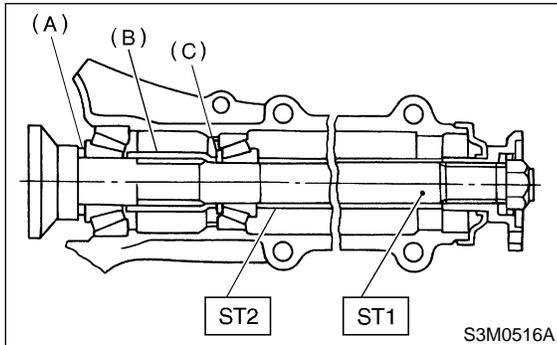
(2) Insert ST1 into case with pinion height adjusting washer and rear bearing cone fitted onto it.

CAUTION:

- Re-use the used washer if not deformed.
- Use a new rear bearing cone.

(3) Then install preload adjusting spacer and washer, front bearing cone, ST2, companion flange, and washer and drive pinion nut.

ST1 398507702 DUMMY SHAFT
ST2 398507703 DUMMY COLLAR



- (A) Pinion height adjusting shim
- (B) Preload adjusting spacer
- (C) Preload adjusting washer

(4) Turn ST1 with hand to make it seated, and tighten drive pinion nut while measuring the preload with spring balance. Select preload adjusting washer and spacer so that the specified preload is obtained when nut is tightened to the specified torque.

ST1 398507704 BLOCK
ST2 398507702 DUMMY SHAFT

CAUTION:

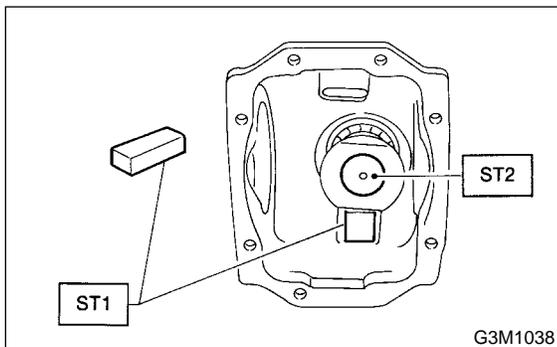
Use a new lock nut.

NOTE:

- Be careful not to give excessive preload.
- When tightening the drive pinion nut, lock ST1 with ST2 as shown in the figure.

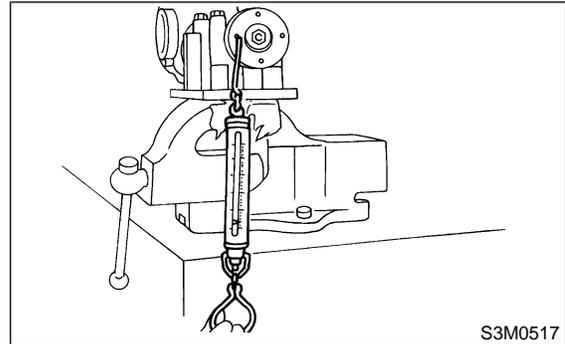
Tightening torque:

181±15 N·m (18.5±1.5 kg·m, 134±11 ft·lb)



Front and rear bearing preload

For new bearing:
17.7 — 25.5 N (1.8 — 2.6 kg, 4.0 — 5.7 lb)
at companion flange bolt hole



	Part No.	Thickness mm (in)
● Preload adjusting washer	383705200	2.59 (0.1020)
	383715200	2.57 (0.1012)
	383725200	2.55 (0.1004)
	383735200	2.53 (0.0996)
	383745200	2.51 (0.0988)
	383755200	2.49 (0.0980)
	383765200	2.47 (0.0972)
	383775200	2.45 (0.0965)
	383785200	2.43 (0.0957)
	383795200	2.41 (0.0949)
	383805200	2.39 (0.0941)
	383815200	2.37 (0.0933)
	383825200	2.35 (0.0925)
	383835200	2.33 (0.0917)
383845200	2.31 (0.0909)	
	Part No.	Length mm (in)
● Preload adjusting spacer	383695201	56.2 (2.213)
	383695202	56.4 (2.220)
	383695203	56.6 (2.228)
	383695204	56.8 (2.236)
	383695205	57.0 (2.244)
	383695206	57.2 (2.252)

3) Adjusting drive pinion height

Adjust drive pinion height with shim installed between rear bearing cone and the back of pinion gear.

- (1) Install ST1, ST2 and ST3, as shown in the figure, and apply the specified preload on the bearings.

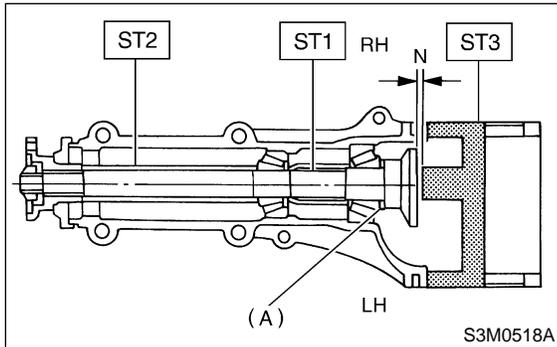
Front and rear bearing preload

For new bearing:
17.7 — 25.5 N (1.8 — 2.6 kg, 4.0 — 5.7 lb)
at companion flange bolt hole

Adjust preload for front and rear bearings.

NOTE:

At this time, install a pinion height adjusting shim which is temporarily selected or the same as that used before.



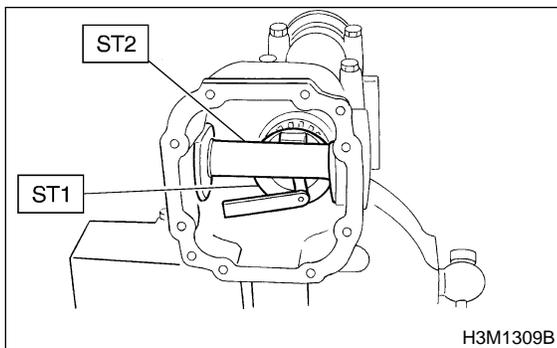
(A) Pinion height adjusting shim

(2) Measure the clearance N between the end of ST3 and the end surface of ST1 by using a thickness gauge.

NOTE:

Make sure there is no clearance between the case and ST3.

- ST1 398507702 DUMMY SHAFT
- ST2 398507703 DUMMY COLLAR
- ST3 398507701 DIFFERENTIAL CARRIER GAUGE



(3) Obtain the thickness of pinion height adjusting shim to be inserted from the following formula, and replace the temporarily installed shim with this one.

$$T = T_o + N - (H \times 0.01) - 0.20 \text{ (mm)}$$

Where:

T = Thickness of pinion height adjusting shim (mm)

T_o = Thickness of shim temporarily inserted (mm)

N = Reading of thickness gauge (mm)

H = Figure marked on drive pinion head

(Example of calculation)

$$T_o = 2.20 + 1.20 = 3.40 \text{ mm}$$

$$N = 0.23 \text{ mm } H = + 1,$$

$$T = 3.40 + 0.23 - 0.01 - 0.20 = 3.42$$

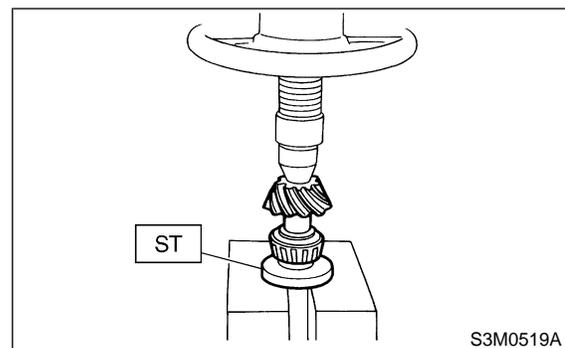
Result: Thickness = 3.42 mm

Therefore use the shim 383605200.

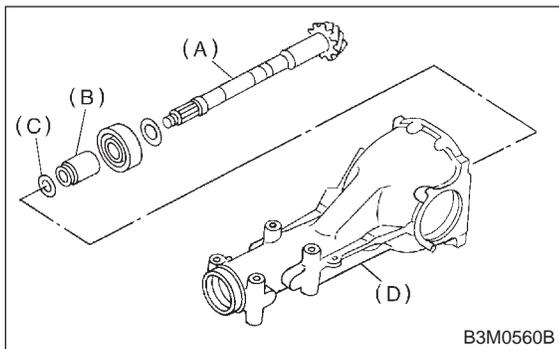
Pinion height adjusting shim	
Part No.	Thickness mm (in)
383495200	3.09 (0.1217)
383505200	3.12 (0.1228)
383515200	3.15 (0.1240)
383525200	3.18 (0.1252)
383535200	3.21 (0.1264)
383545200	3.24 (0.1276)
383555200	3.27 (0.1287)
383565200	3.30 (0.1299)
383575200	3.33 (0.1311)
383585200	3.36 (0.1323)
383595200	3.39 (0.1335)
383605200	3.42 (0.1346)
383615200	3.45 (0.1358)
383625200	3.48 (0.1370)
383635200	3.51 (0.1382)
383645200	3.54 (0.1394)
383655200	3.57 (0.1406)
383665200	3.60 (0.1417)
383675200	3.63 (0.1429)
383685200	3.66 (0.1441)

4) Install the selected pinion height adjusting shim on drive pinion, and press the rear bearing cone into position with ST.

ST 398177700 INSTALLER



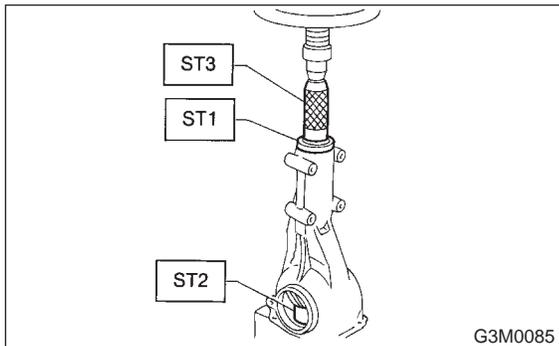
5) Insert drive pinion into differential carrier, install the previously selected bearing preload adjusting spacer and washer.



- (A) Drive pinion
- (B) Bearing preload adjusting spacer
- (C) Bearing preload adjusting washer
- (D) Differential carrier

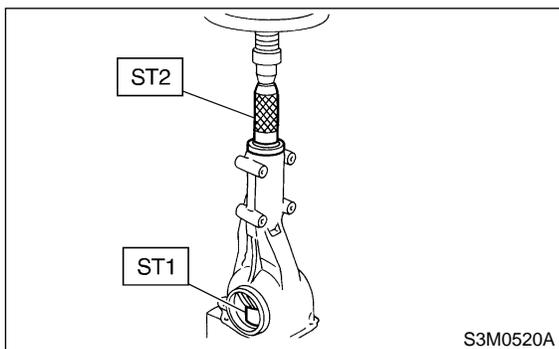
6) Press-fit front bearing cone into case with ST1, ST2 and ST3.

- ST1 398507703 DUMMY COLLAR
- ST2 399780104 WEIGHT
- ST3 899580100 INSTALLER



7) Insert spacer, then press-fit pilot bearing with ST1 and ST2.

- ST1 399780104 WEIGHT
- ST2 899580100 INSTALLER

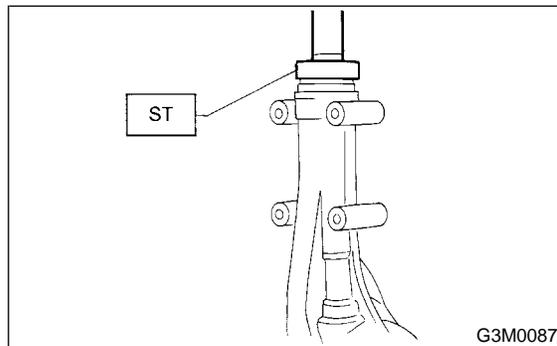


8) Fit a new oil seal with ST.

NOTE:

- Press-fit until end of oil seal is 1 mm (0.04 in) inward from end of carrier.
- Apply grease between the oil seal lips. <Ref. to 3-4 [W2E0].>

ST 498447120 OIL SEAL INSTALLER

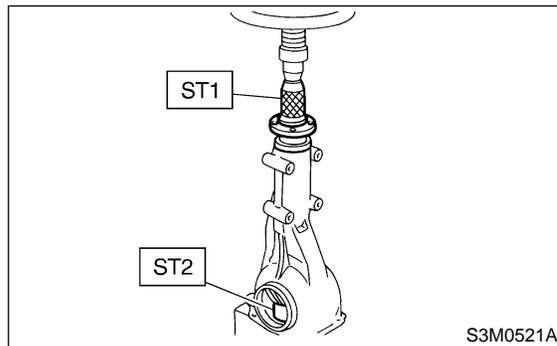


9) Press-fit companion flange with ST1 and ST2.

CAUTION:

Be careful not to damage bearing.

- ST1 899874100 INSTALLER
- ST2 399780104 WEIGHT

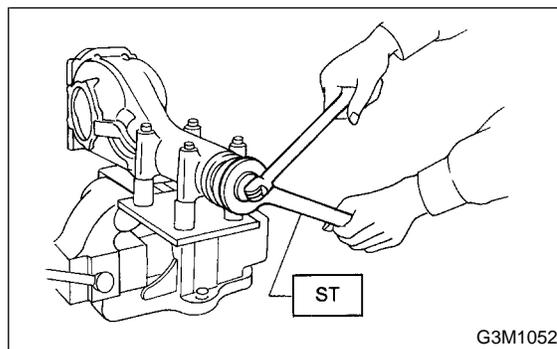


10) Install self-locking nut. Then tighten it with ST.

ST 498427200 FLANGE WRENCH

Tightening torque:

181±15 N·m (18.5±1.5 kg·m, 134±11 ft·lb)



11) Assembly of differential case

12) Install side gears and pinion mate gears, with their thrust washers and pinion mate shaft, into differential case.

CAUTION:

- Apply gear oil on both sides of the washer and on the side gear shaft before installing.
- Insert the pinion mate shaft into the differential case by aligning the lock pin holes.

- (1) Measure the clearance between differential case and the back of side gear.
- (2) Adjust the clearance as specified by selecting side gear thrust washer.

Side gear backlash:

0.1 — 0.2 mm (0.004 — 0.008 in)

Part No.	Thickness mm (in)
383445201	0.75 — 0.80 (0.0295 — 0.0315)
383445202	0.80 — 0.85 (0.0315 — 0.0335)
383445203	0.85 — 0.90 (0.0335 — 0.0354)
383445204	0.90 — 0.95 (0.0354 — 0.0374)
383445205	0.95 — 1.0 (0.0374 — 0.0394)

- (3) Check the condition of rotation after applying oil to the gear tooth surfaces and thrust surfaces.
- (4) After inserting pinion shaft lock pin into differential case, stake the both sides of the hole to prevent pin from falling off.
- (5) Install crown gear on differential case.

CAUTION:

Before installing bolts, apply Lock Tite to bolt threads.

Lock Tite:

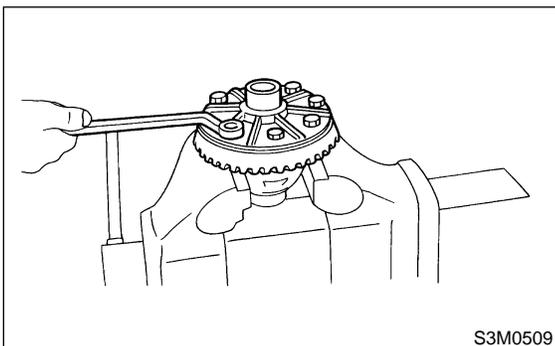
THREE BOND 1324 or equivalent

NOTE:

Tighten diagonally while tapping the bolt heads.

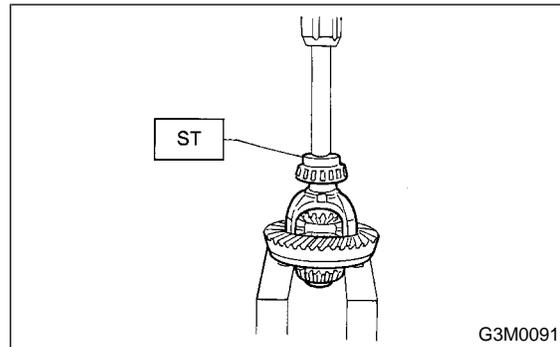
Tightening torque:

103±10 N·m (10.5±1.0 kg·m, 76±7 ft·lb)



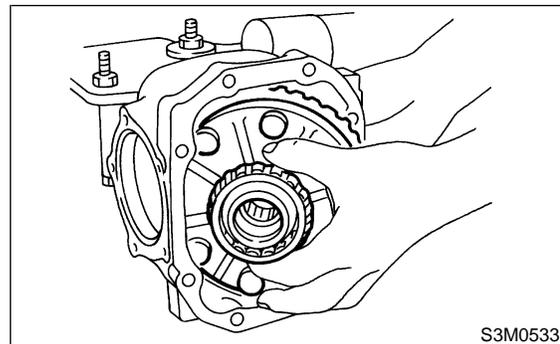
- 13) Press side bearing cone onto differential case with ST.

ST 398487700 DRIFT



- 14) Adjusting side bearing retainer shims

- (1) The driven gear backlash and side bearing preload can be determined by the side bearing retainer shim thickness.
- (2) Install the differential case assembly into differential carrier in the reverse order of disassembly.



- (3) Install side retainer shims and O-rings to the left and right retainers from which they were removed.

NOTE:

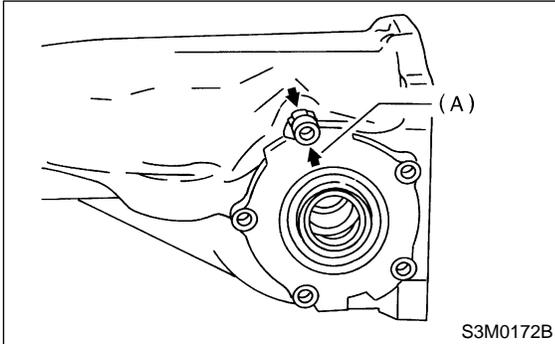
- Replace broken or cracked O-ring with new one.
- Replace broken or corroded side retainer shim with new one of same thickness.

Side bearing retainer shim	
Part No.	Thickness mm (in)
383475201	0.20 (0.0079)
383475202	0.25 (0.0098)
383475203	0.30 (0.0118)
383475204	0.40 (0.0157)
383475205	0.50 (0.0197)

(4) Align arrow marked on differential carrier with that marked on side retainer during installation.

CAUTION:

Be careful that side bearing outer race is not damaged by bearing roller.



(A) Arrow mark

(5) Tighten side bearing retainer bolts.

CAUTION:

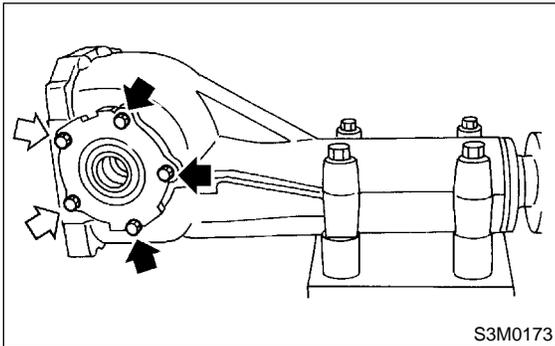
Before tightening the two side bearing retainer bolts, apply Lock Tite to bolt threads.

⇒ **Lock Tite:**

THREE BOND 1105 or equivalent

Tightening torque:

10.3±1.5 N·m (1.05±0.15 kg·m, 7.6±1.1 ft·lb)

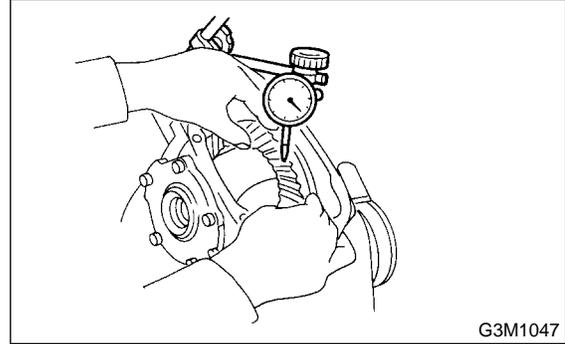


(6) Measure the crown gear-to-drive pinion backlash.

Set magnet base on differential carrier. Align contact point of dial gauge with tooth face of crown gear, and move crown gear while holding drive pinion still. Read value indicated on dial gauge.

Backlash:

0.10 — 0.20 mm (0.0039 — 0.0079 in)



(7) At the same time, measure the turning resistance of drive pinion. Compared with the resistance when differential case is not installed, if the increase of the resistance is not within the specified range, readjust side bearing retainer shims.

NOTE:

If measured backlash is not within specified range, repeat procedure for adjustment of side bearing retainer shims.

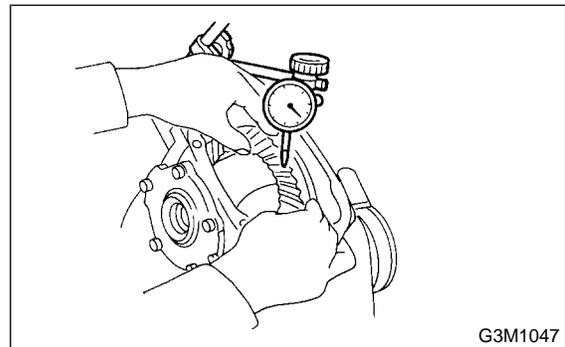
Turning resistance increase:

2.9 — 10.8 N (0.3 — 1.1 kg, 0.7 — 2.4 lb)

15) Re-check crown gear-to-pinion backlash.

Backlash:

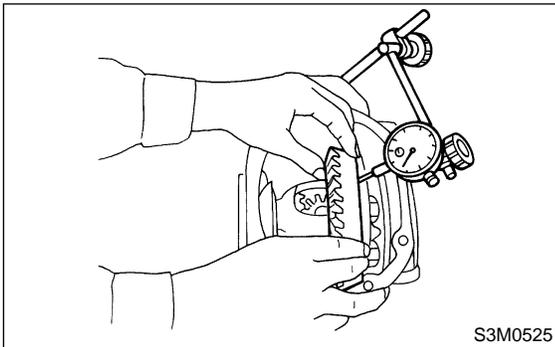
0.10 — 0.20 mm (0.0039 — 0.0079 in)



16) Check the crown gear runout on its back surface, and make sure pinion and crown gear rotate smoothly.

Limit of runout:

Less than 0.05 mm (0.0020 in)



17) Checking and adjusting tooth contact of crown gear

(1) Apply an even coat of red lead on both sides of three or four teeth on the crown gear. Check the contact pattern after rotating crown gear several revolutions back and forth until a definite contact pattern appears on the crown gear.

(2) When the contact pattern is incorrect, readjust according to the instructions given in "TOOTH CONTACT PATTERN".

NOTE:

Be sure to wipe off red lead completely after adjustment is completed.

18) If proper tooth contact is not obtained, once again adjust the drive pinion height, changing RH and LH side bearing retainer shims and the hypoid gear backlash.

(1) Drive pinion height

ST1 398507702 DUMMY SHAFT

ST2 398507701 DIFFERENTIAL CARRIER GAUGE

$$T = To + N - (H \times 0.01) - 0.20 \text{ (mm)}$$

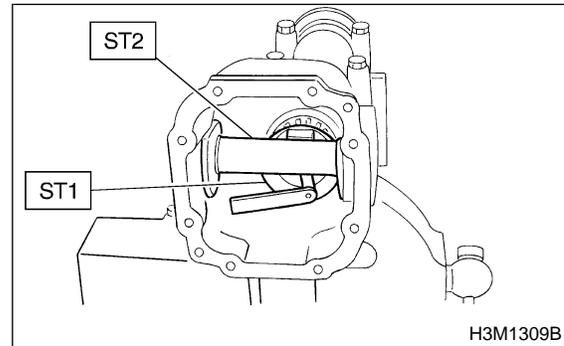
Where:

T = Thickness of pinion height adjusting shim (mm)

To = Thickness of shim temporarily inserted (mm)

N = Reading of thickness gauge (mm)

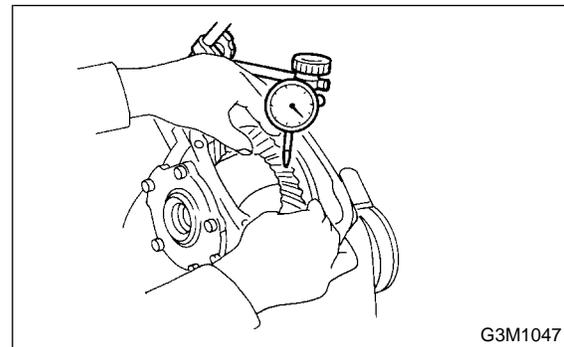
H = Figure marked on drive pinion head



(2) Hypoid gear backlash

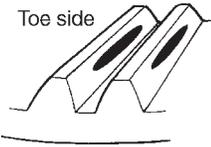
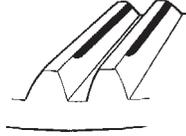
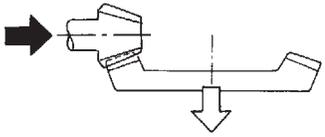
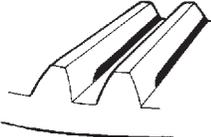
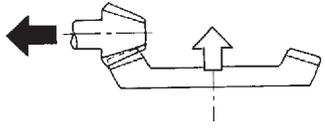
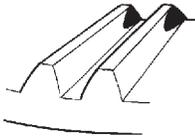
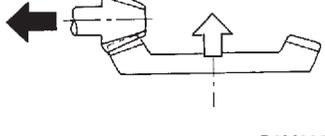
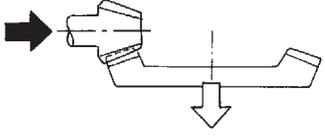
Backlash:

0.10 — 0.20 mm (0.0039 — 0.0079 in)



➡ : Adjusting direction of drive pinion

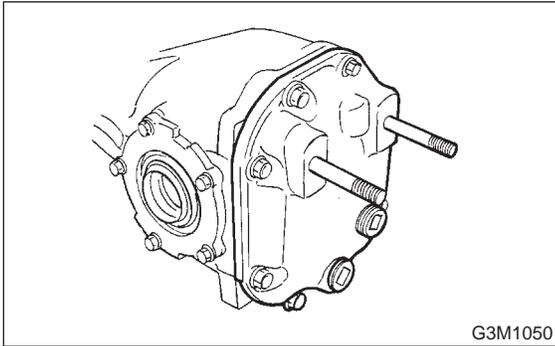
⇨ : Adjusting direction of crown gear

TOOTH CONTACT PATTERN		
Condition	Contact pattern	Adjustment
<p>Correct tooth contact Tooth contact pattern slightly shifted towards toe under no load rotation. (When loaded, contact pattern moves toward heel.)</p>	<p>Toe side</p>  <p>Heel side</p> <p>B3M0317A</p>	<p>—</p>
<p>Face contact Backlash is too large.</p>	<p>This may cause noise and chipping at tooth ends.</p>  <p>B3M0319</p>	<p>Increase thickness of drive pinion height adjusting shim in order to bring drive pinion closer to crown gear center.</p>  <p>B3M0323</p>
<p>Flank contact Backlash is too small.</p>	<p>This may cause noise and stepped wear on surfaces.</p>  <p>B3M0320</p>	<p>Reduce thickness of drive pinion height adjusting shim in order to move drive pinion away from crown gear.</p>  <p>B3M0324</p>
<p>Toe contact Contact area is small.</p>	<p>This may cause chipping at toe ends.</p>  <p>B3M0321</p>	<p>Adjust as for flank contact.</p>  <p>B3M0324</p>
<p>Heel contact Contact area is small.</p>	<p>This may cause chipping at heel ends.</p>  <p>B3M0322</p>	<p>Adjust as for face contact.</p>  <p>B3M0323</p>

19) Install rear cover and tighten bolts to specified torque.

Tightening torque:

29±5 N·m (3.0±0.5 kg·m, 21.7±3.6 ft-lb)



F: INSTALLATION

To install, reverse the removal sequence.

1) Install the air breather cap tapping with a plastic hammer.

CAUTION:

Be sure to install new air breather cap.

2) Position front member on body by passing it under parking brake cable and securing to rear differential.

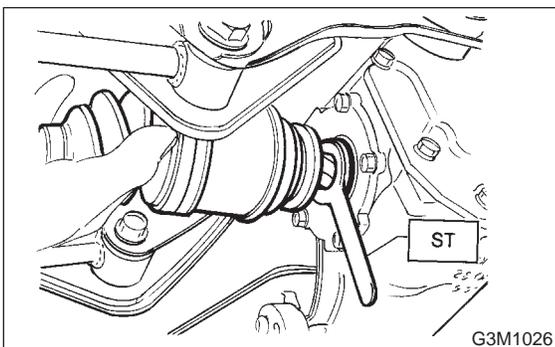
NOTE:

When installing rear differential front member, do not confuse the installation sequence of the upper and lower stoppers.

3) Install DOJ of rear drive shaft into rear differential.

<Ref. to 3-4 [W2A2].>

ST 28099PA090 SIDE OIL SEAL PROTECTOR



4) Install in the reverse order of removal.

5) After installation, fill differential carrier with gear oil to the upper plug level.

CAUTION:

Apply fluid packing to plug.

Fluid packing:

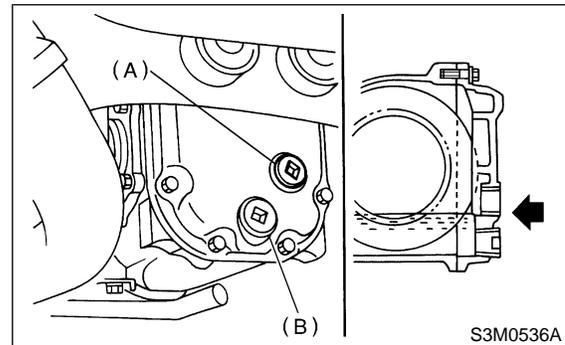
THREE BOND 1205 or equivalent

Oil capacity:

0.8 l (0.8 US qt, 0.7 Imp qt)

Tightening torque:

49.0±9.8 N·m (5.0±1.0 kg·m, 36.2±3.6 ft-lb)



- (A) Filler plug
- (B) Drain plug