ADJUSTMENT

Whenever the axle housing or the steering knuckle is replaced, the front drive shaft alignment and knuckle bearing preload are adjusted with SST [09634-60013].

Fig. 6-31

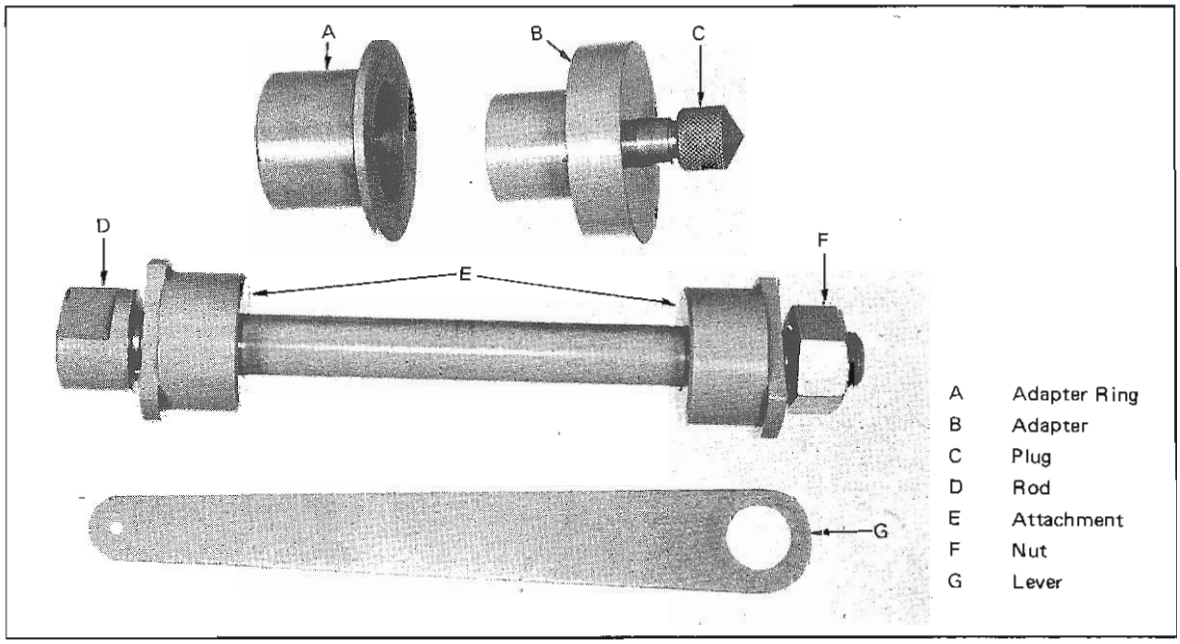
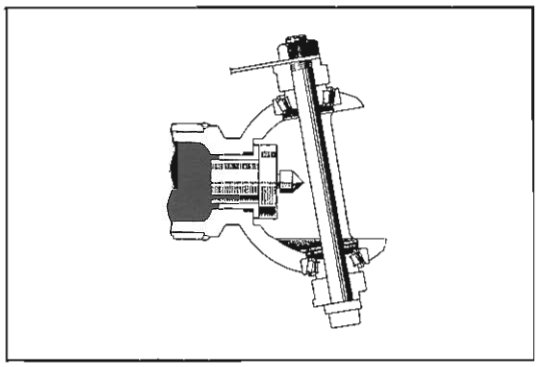


Fig. 6-32

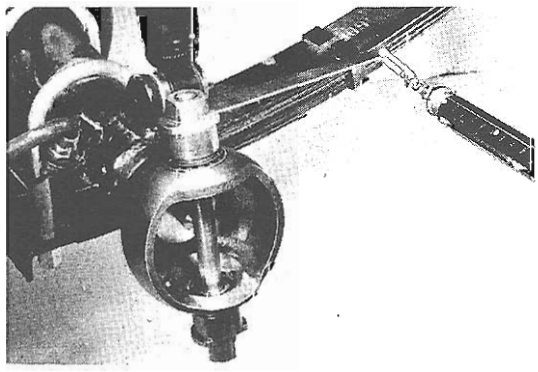


1. Mount the SST[09634-60013] on the housing.

– Note –

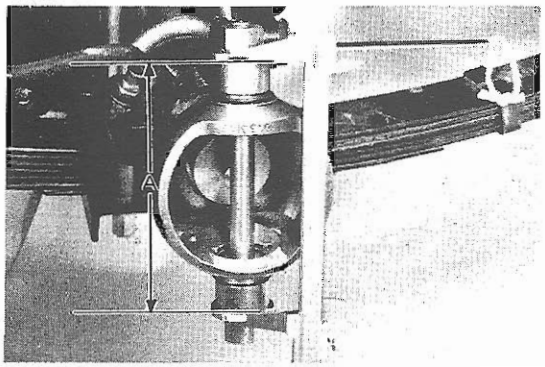
Have the knuckle bearings coated lightly with Molybdenum disulphide lithium base grease.

Fig. 6-33



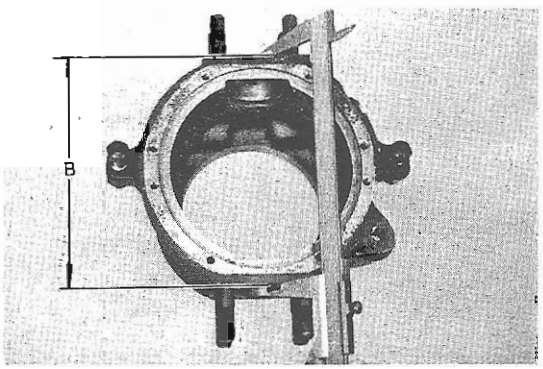
2. Tighten the nut (F) until the spring scale indicates about 2.0 – 2.5 kg (4.4 – 5.5 lb.)

Fig. 6-34



3. Measure the distance "A".

Fig. 6-35

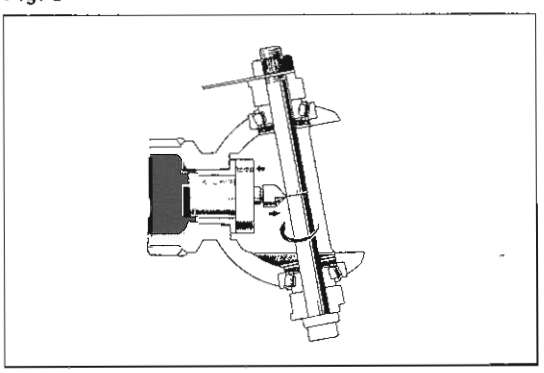


4. Measure the distance "B".
5. The difference between "A" and "B" is the total adjusting shim thickness that is required to maintain the correct bearing preload.

TOTAL SHIM THICKNESS "C"

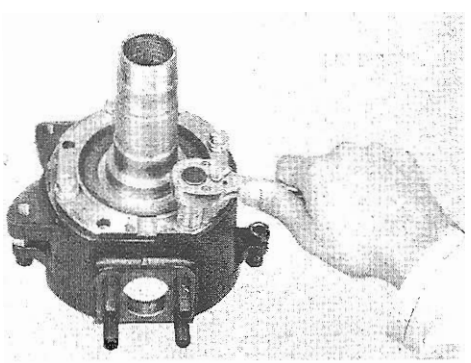
"C" = "A" - "B"

Fig. 6-36



6. Apply a light coat of red lead on the center part of rod (D).
7. Press the adapters (A) and (B) against the housing, press the plug (C) against the rod (D), and turn the lever (G) so as to have a line scribed on the rod (D).

Fig. 6-37

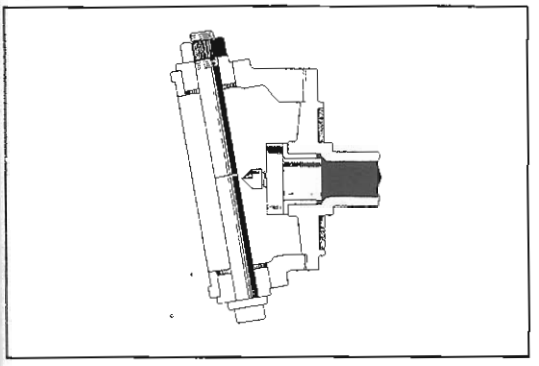


8. Bolt on the knuckle spindle to the knuckle.

– Note –

Install the bolt over two washers.

Fig. 6-38

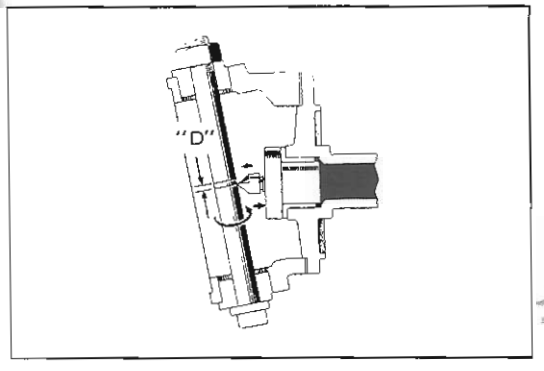


9. Dismount the SST [09634-60013] from the housing, and mount it on the knuckle.

– Caution –

1. **Use care not to erase the scribed line when dismounting and remounting the SST.**
2. **Make sure that the rod (D) is in the same vertical direction that it was when mounted on the housing.**

Fig. 6-39



10. Turn the rod (D) and scribe another line on it.
11. Measure the distance "D" between the two scribed lines.
12. The thickness of the steering knuckle lower bearing shim "E" will be the distance "D" less 3 mm (0.12 in.)

LOWER SHIM THICKNESS "E"

"E" = "D" - 3mm

13. The thickness of the steering knuckle upper bearing shim "F" will be difference between the total adjusting shim thickness "C" and the shim thickness "E".

UPPER SHIM THICKNESS "F"

"F" = "C" - "E"

– Note –

Compare "E" and "F" with the thicknesses of the shims removed at disassembly. If there should be considerable difference, remeasure "E" and "F".

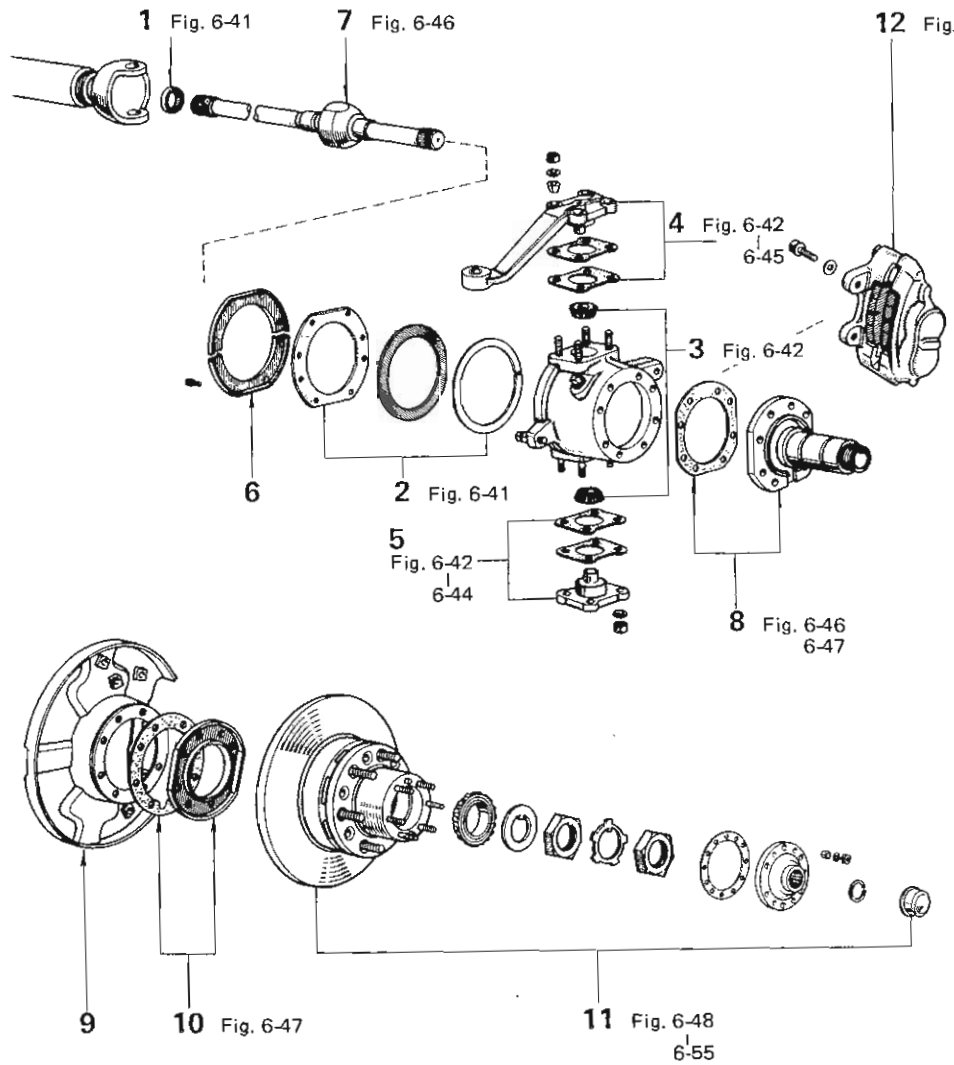
Adjusting Shim Sizes

Part No.	Thickness mm (in.)
43236–60010	0.1 (0.004)
43233–60011	0.2 (0.008)
43234–60011	0.5 (0.02)
43235–60010	1.0 (0.04)

INSTALLATION

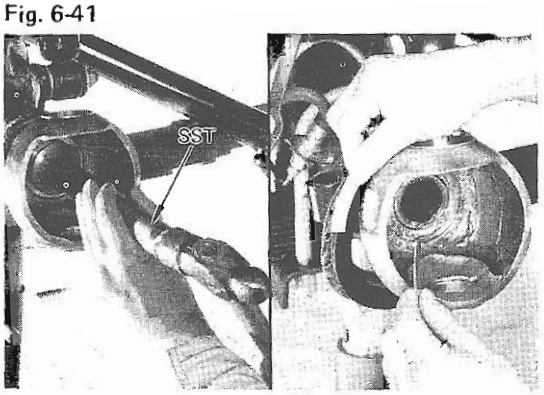
Install the parts in the order numbered below.

Fig. 6-40



1	Oil Seal	7	Drive Shaft
2	Oil Seal Set	8	Knuckle Spindle & Gasket
3	Steering Knuckle & Bearing	9	Dust Cover
4	Knuckle Arm & Shim	10	Dust Seal & Gasket
5	Bearing Cap & Shim	11	Front Axle Hub with Brake Disc
6	Oil Seal Retainer	12	Disc Brake Cylinder

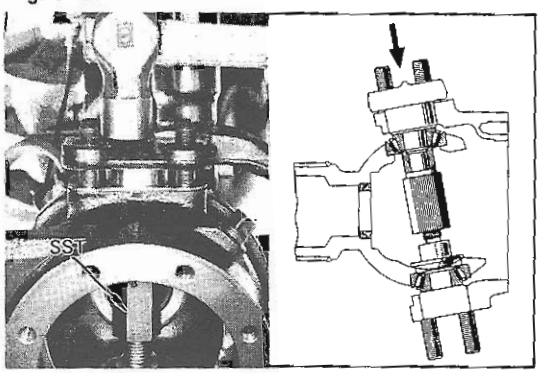
Fig. 6-41



Install the oil seal with SST.
Apply MP grease on the oil seal lip.
SST [09618-60010]

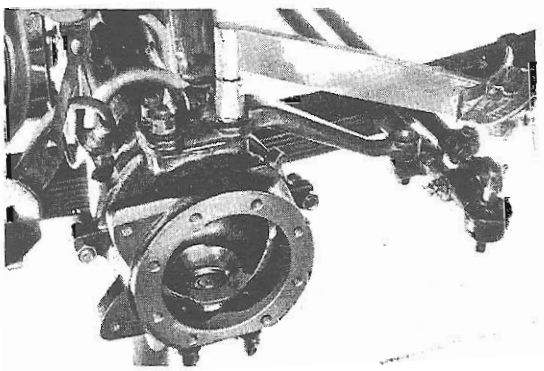
Place the oil seal set in the housing.

Fig. 6-42



Apply Molybdenum disulphide lithium base grease to the bearings, and install the knuckle and the bearings.
Hold the upper bearing inner race with SST.
SST [09606-60020]
Install the knuckle arm over the shims that were originally used or were selected as described in adjustment operations.
– Note –
Use SST with a collar.
Install the lower bearing cap by the same procedure.

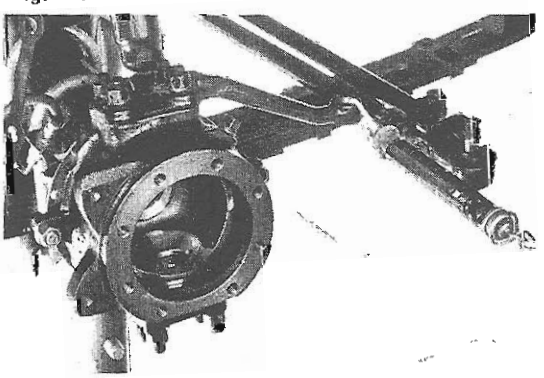
Fig. 6-43



Tighten the knuckle arm and the bearing cap.
Tightenint torque 8.5 – 11.0 kg-m (62 – 79 ft-lb)

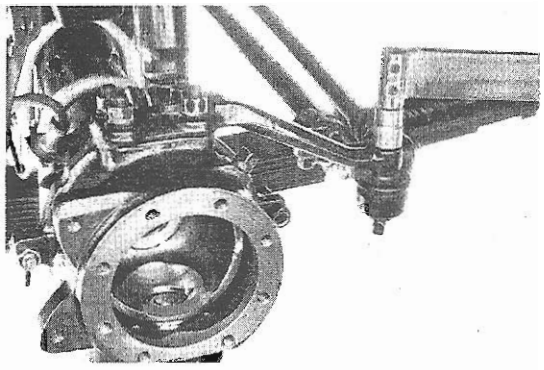
– Note –
The SST should be removed before tightening the knuckle arm and the bearing cap.
SST [09606-60020]

Fig. 6-44



Measure the knuckle bearing preload.
Preload (while rotating) 1.8 – 3.8 kg (4.0 – 8.4 lb)

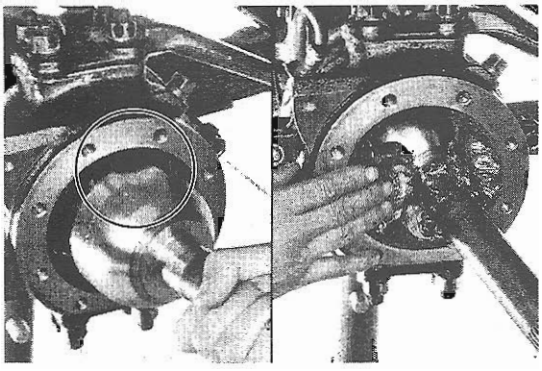
Fig. 6-45



Install the tie rod.

Tightening torque **7.5 – 11.0 kg-m (55 – 79 ft-lb)**

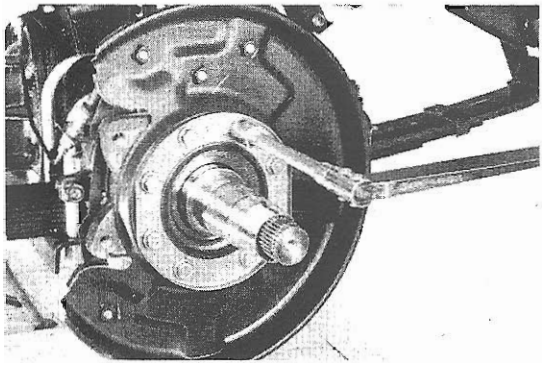
Fig. 6-46



Position one flat part of the outer shaft upward, and install the shaft.

Pack Molibdenum disulphide lithium base grease into the knuckle to about three fourth of the knuckle volume.

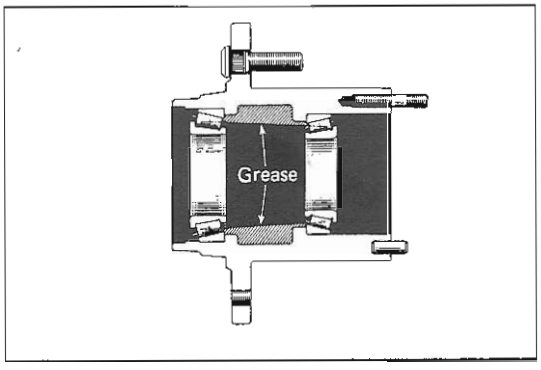
Fig. 6-47



Tighten the bolts.

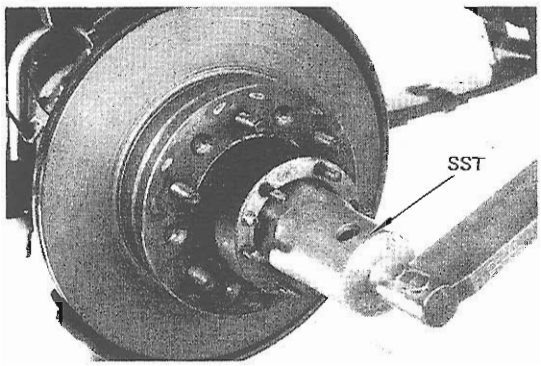
Tightening torque **4.0 – 5.5 kg-m (29 – 39 ft-lb)**

Fig. 6-48



Pack MP grease into the hub.

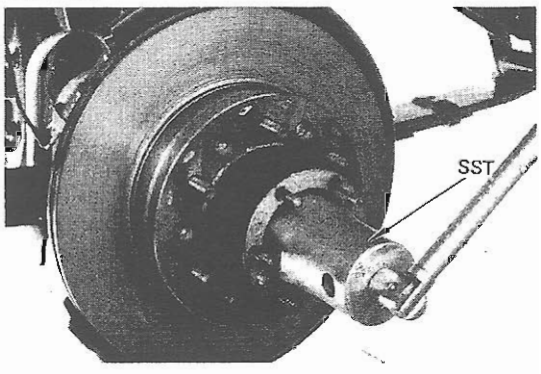
Fig. 6-49



Tighten the adjusting nut with SST and turn the hub left and right two or three times.
SST [09607-60020]

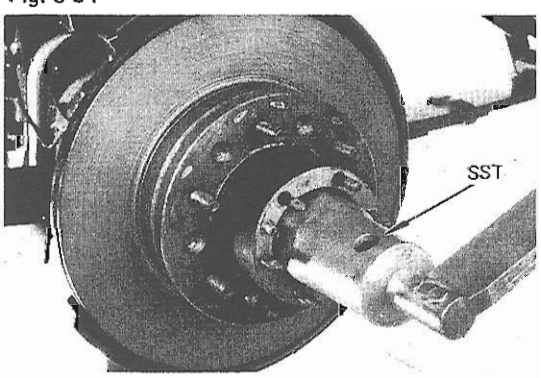
Tightening torque 6.0 kg-m (43 ft-lb)

Fig. 6-50



Loosen the adjusting nut.

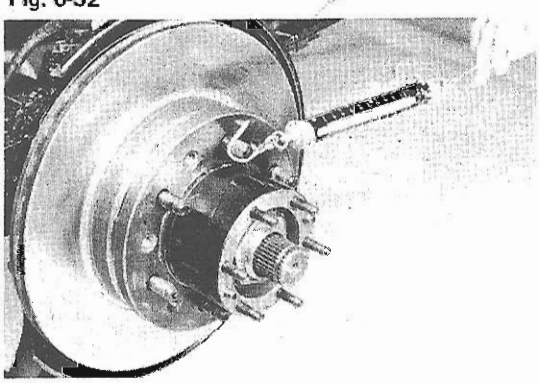
Fig. 6-51



Tighten the adjusting nut again.

Tightening torque 0.4 – 0.7 kg-m (2.9 – 5.0 ft-lb)

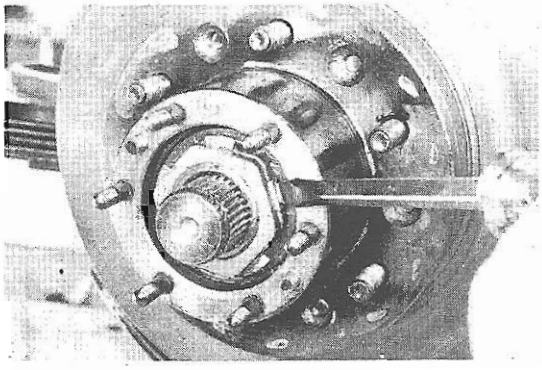
Fig. 6-52



Measure the revolving weight at the hub bolt.

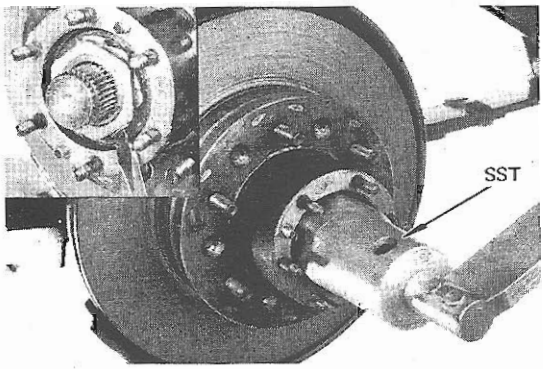
Preload (at starting) 2.8 – 5.7 kg (6.2 – 12.6 lb)

Fig. 6-53



Lock the adjusting nut by bending one of the lock washer teeth inward.

Fig. 6-54



Tighten the lock nut with SST.
SST [09607-60020]

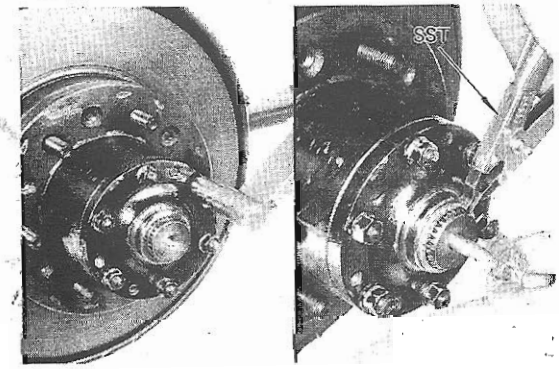
Tightening torque **8.0 – 10.0 kg-m (58 – 72 ft-lb)**

Recheck the revolving weight.

Preload (at starting) **2.8 – 5.7 kg (6.2 – 12.6 lb)**

Lock the lock nut by bending one of the lock washer teeth outward.

Fig. 6-55



Install the flange.

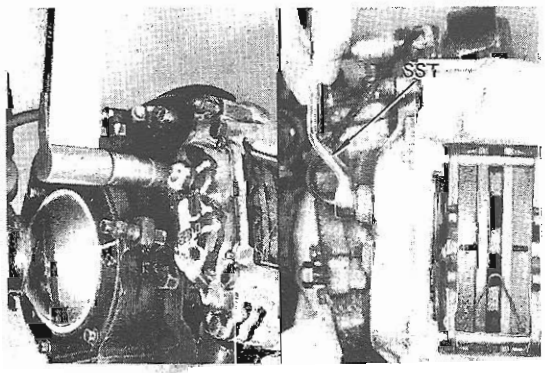
Tightening torque **2.8 – 3.5 kg-m (21 – 25 ft-lb)**

Install the snap ring with SST.
SST [09905-00012]

– Note –

Grip the bolt and pull out the axle shaft to install the snap ring.

Fig. 6-56



Tighten the caliper mount bolts.

Tightening torque **7.5 – 10.5 kg-m (55 – 75 ft-lb)**

Connect the brake tube with SST.
SST [09751-36011]

Tightening torque **1.3 – 1.8 kg-m (10 – 13 ft-lb)**