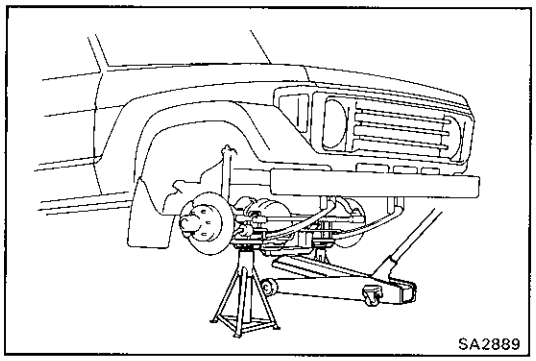
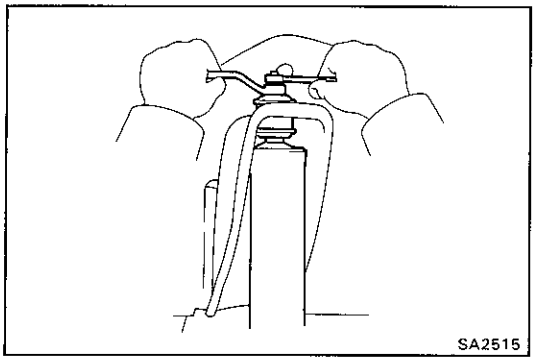

SA2889

Leaf Spring and Shock Absorber

REMOVAL OF LEAF SPRING AND SHOCK ABSORBER

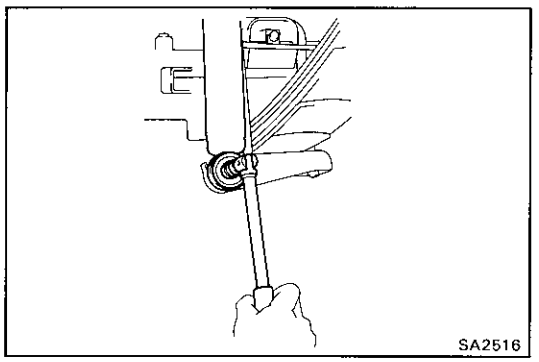
(See page SA-87)

1. **JACK UP AND SUPPORT VEHICLE WITH FRAME**
   (a) Jack up and support the frame on stands.
   (b) Lower the axle housing until the leaf spring tension is free, and keep it at this position.

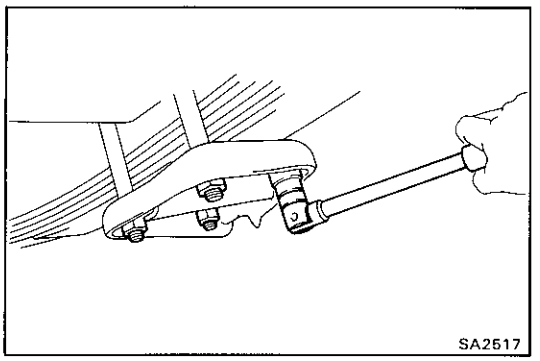

SA2515

2. **REMOVE FRONT WHEEL**

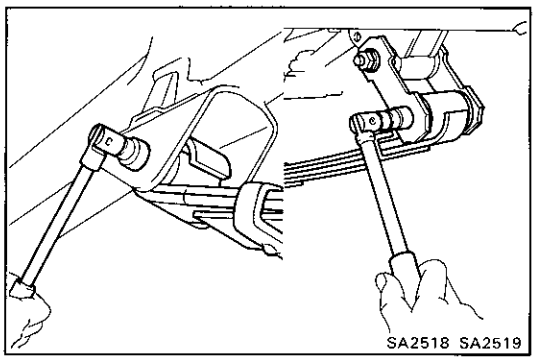
3. **REMOVE SHOCK ABSORBER**
   (a) Remove the nut.
   (b) Disconnect the shock absorber from the frame.


SA2516

   (c) Remove the bolt.
   (d) Remove the shock absorber from the spring seat.

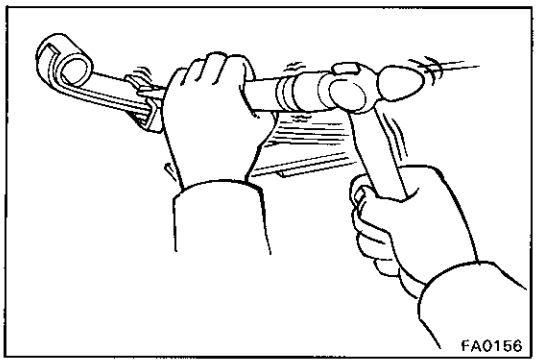

SA2517

4. **REMOVE U-BOLTS**
   (a) Remove the four U-bolt mounting nuts.
   (b) Remove the spring seat and distance plate.
   (c) Remove the two U-bolts.


SA2518 SA2519

5. **REMOVE LEAF SPRING**
   (a) Remove the hanger pin mounting nut and washer.
   (b) Remove shackle pin mounting nuts, washers and inner plate.
   (c) Remove the bolt and hanger pin.
   (d) Remove the shackle pin and leaf spring.
   (e) Remove the bushings from the leaf spring.

6. **REMOVE SPRING BUMPER**
   Remove the two bolt and the spring bumber.

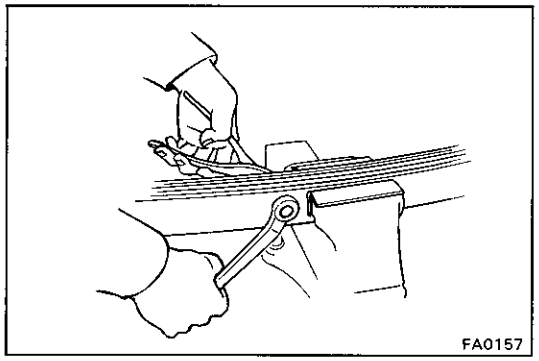


REPLACEMENT OF LEAF SPRING

(See page SA-89)

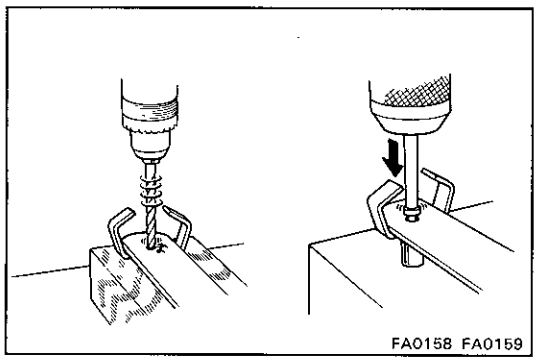
1. BEND OPEN SPRING CLIP

Using a chisel and hammer, pry out the spring clip.



2. REMOVE CENTER BOLT

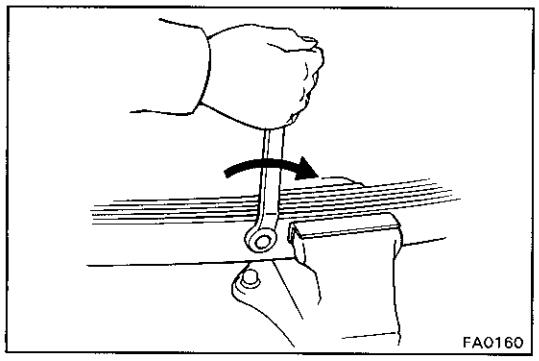
Hold the spring near the center bolt in a vise and remove the center bolt.



3. IF NECESSARY, REPLACE SPRING CLIP

(a) Drill off the head of the rivet and drive it out.

(c) Install a new rivet into the holes of the leaf spring and clip. Then rivet with a press.



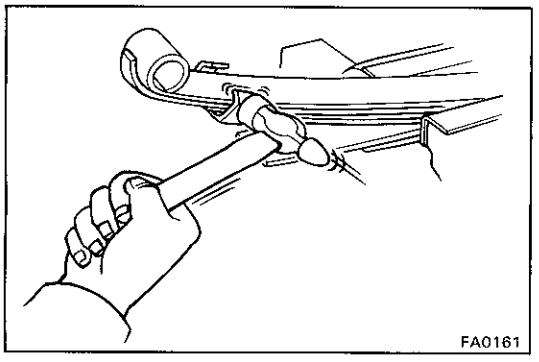
4. INSTALL SPRING CENTER BOLT

(a) Attach the spring silencer.

(b) Align the leaf holes and secure the leaves with a vise.

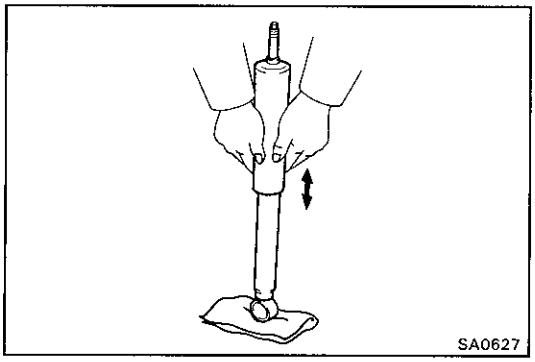
(c) Install and torque the spring center bolt.

Toque: 360 kg-cm (26 ft-lb, 35 N·m)



5. BEND SPRING CLIP

Using a hammer, bend the spring clip into the position.

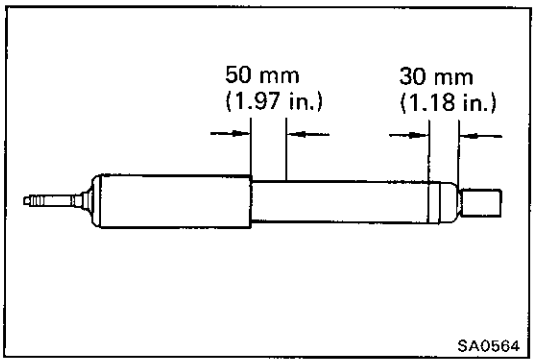

SA0627

INSPECTION OF FRONT SHOCK ABSORBER

1. INSPECT OPERATION OF SHOCK ABSORBER

(a) While pushing the shock absorber, check that the pull throughout the stroke is even, and there is no abnormal resistance or noise.

(b) Push the shock absorber in fully and release it. Check that it returns at a constant speed throughout.



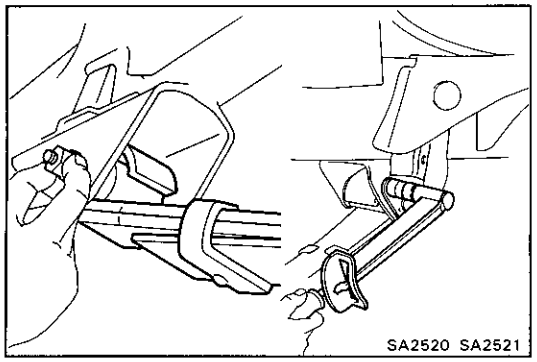
SA0564

2. IN NECESSARY, DISCARD SHOCK ABSORBER

Before discarding the shock absorber, drill a hole 2 — 3 mm (0.079 — 0.118 in.) in diameter at the location shown in the illustration to release the gas inside.

NOTICE:

- **When drilling, chips may fly out, so work carefully.**
- **The gas is colorless, odorless, and non-poisonous.**


SA2520 SA2521

INSTALLATION OF LEAF SPRING

(See page SA-87)

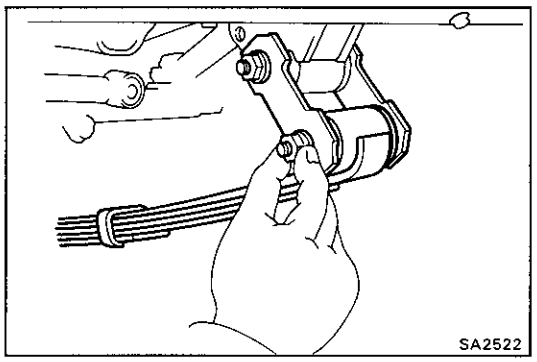
1. INSTALL LEAF SPRING

(a) Insert the bushings into the frame and into both ends of the leaf spring.

(b) Place the leaf spring in the position.

(c) Install the hanger pin and torque the bolt.

Torque: 240 kg-cm (17 ft-lb, 24 N·m)


SA2522

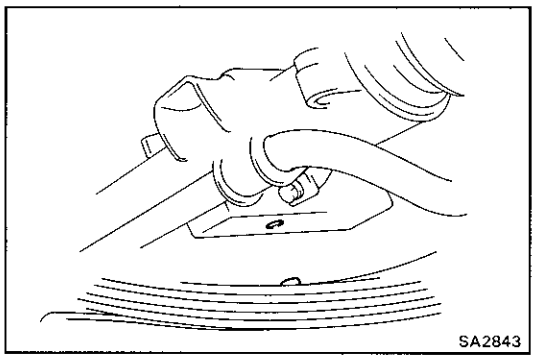
(d) Install the shackle pin.

(e) Install the inner plate, and provisionally install the washers and nuts.

2. INSTALL SPRING BUMPER

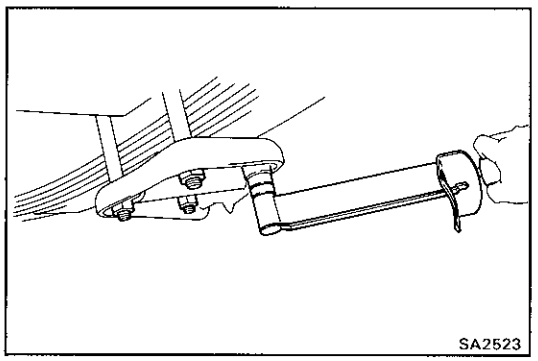
Install the spring bumper to the frame with the two bolt.

Torque: 290 kg-cm (21 ft-lb, 28 N·m)


SA2843

3. INSTALL U-BOLTS

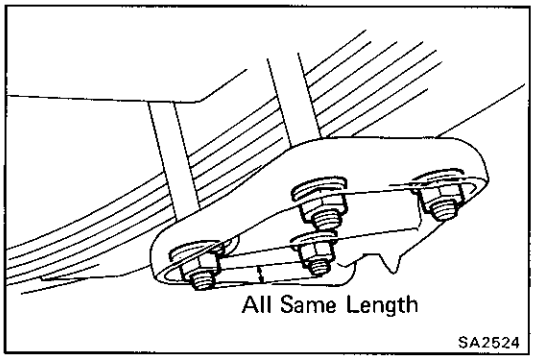
(a) Insert the head of the leaf spring center bolt into the hole in the axle housing bracket and install.


SA2523

(b) Install the two U-bolts onto the leaf springs.

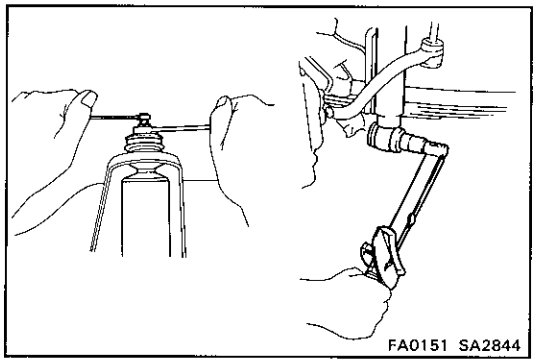
(c) Install the distance plate and spring seat. Install and torque the four U-bolts mounting nuts.

Torque: 1,450 kg-cm (105 ft-lb, 142 N·m)



SA2524

HINT: Torque the two U-bolts so that the lengths of all the two U-bolts under the spring seat are the same.



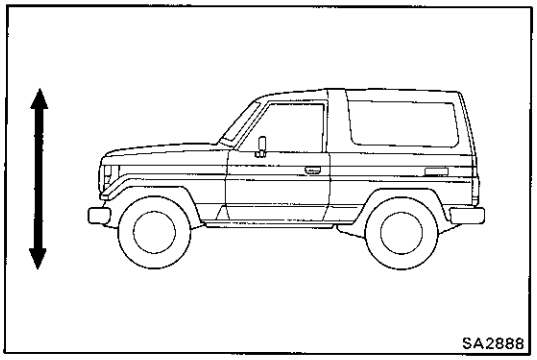
4. INSTALL SHOCK ABSORBER

(a) Position the shock absorber and install the bushings, retainers and nut.

Torque: 320 kg-cm (23 ft-lb, 31 N·m)

(b) Install the bushings, retainer and lower mounting bolt.

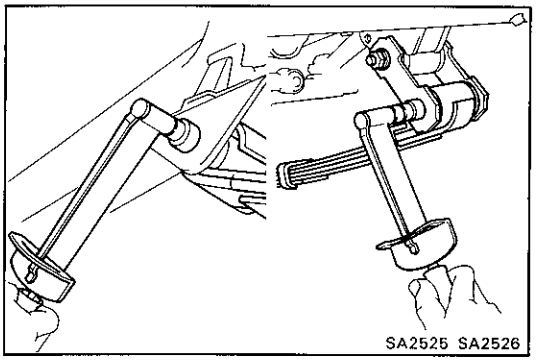
Torque: 650 kg-cm (47 ft-lb, 64 N·m)



5. INSTALL FRONT WHEEL AND STABILIZE SUSPENSION

(a) Install the wheel and lower the vehicle.

(b) Bounce the vehicle up and down to stabilize the suspension.



6. TORQUE HANGER PIN AND SHACKLE PIN

(a) Torque the hanger pin nut.

Torque: 1,250 kg-cm (90 ft-lb, 123 N·m)

(b) Torque the shackle pin nut.

Torque: 925 kg-cm (67 ft-lb, 91 N·m)