

Front Shock Absorber

(See page SA-28)

REMOVAL OF FRONT SHOCK ABSORBER ASSEMBLY

1. DISCONNECT BRAKE HOSE

- (a) Remove the union bolt and two gaskets, and disconnect the brake hose from the disc brake caliper.
- (b) Drain the brake fluid into a container.
- (c) Remove the clip from the brake hose.
- (d) Pull off the brake hose from the brake hose bracket.

2. DISCONNECT SHOCK ABSORBER FROM STEERING KNUCKLE

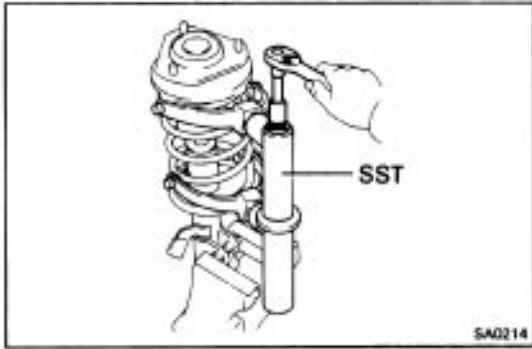
Remove the bolts and nuts, and disconnect the shock absorber from the steering knuckle.

3. REMOVE SHOCK ABSORBER FROM BODY

- (a) Remove the three nuts holding the top of the suspension support.
- (b) Remove the shock absorber from the body.
NOTICE: Cover the drive shaft boot with cloth to avoid damaging it.

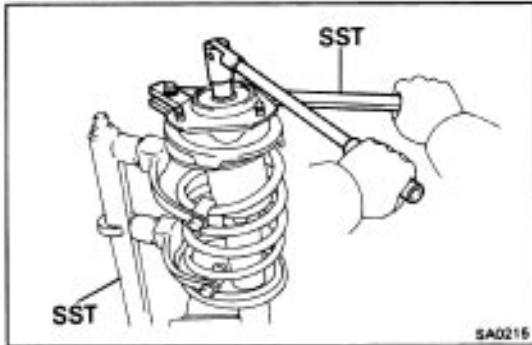
4. CLAMP SHOCK ABSORBER IN VISE

Install a bolt and two nuts to the bracket at the lower portion of the shock absorber shell and secure it in a vise.

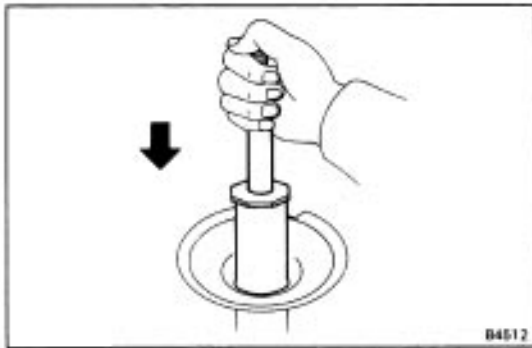


5. REMOVE COIL SPRING

- (a) Using SST, compress the coil spring.
SST 09727-30020



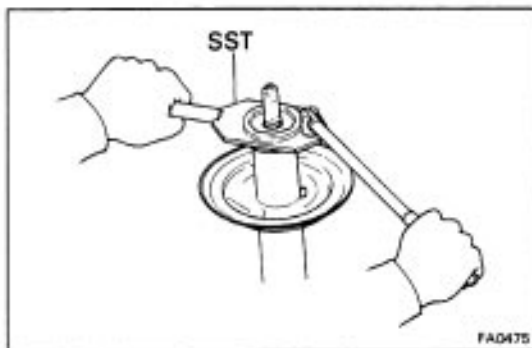
- (b) Using SST, hold the spring seat so that it will not turn, and remove the nut.
SST 09729-22031
- (c) Remove the suspension support, spring seat, dust seal, spring, insulators and bumper.



INSPECTION AND REPLACEMENT OF FRONT SHOCK ABSORBER

INSPECT OPERATION OF SHOCK ABSORBER

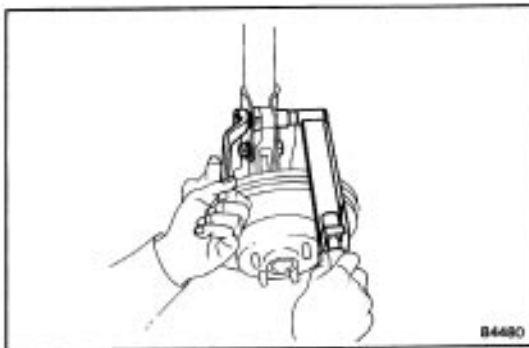
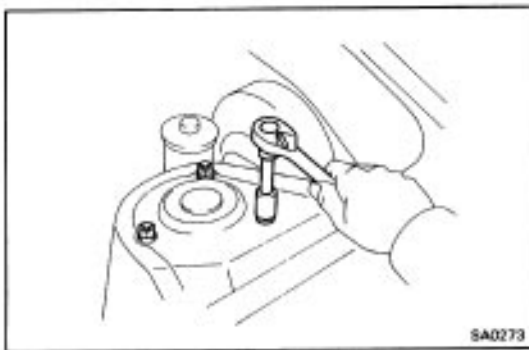
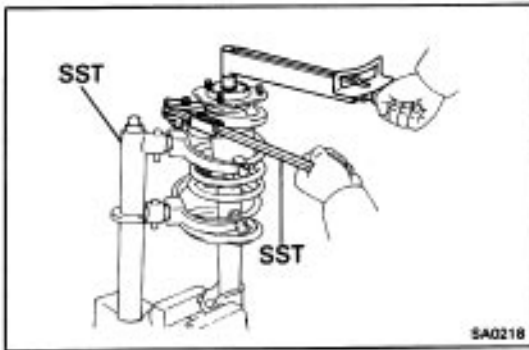
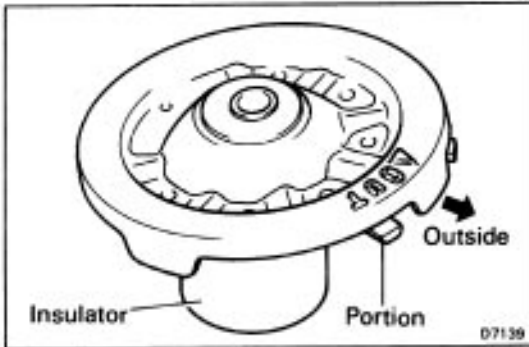
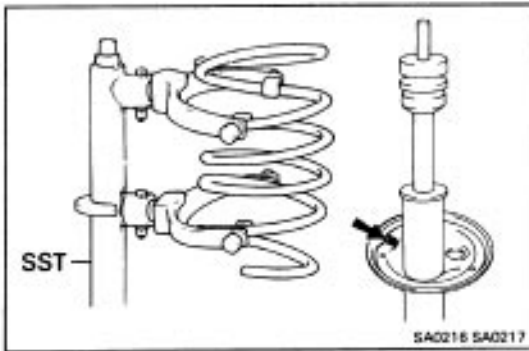
- (a) While pushing the piston rod, check that the pull throughout the stroke is even, and there is no abnormal resistance or noise.
- (b) Push the piston rod in fully and release it. Check that it returns at a constant speed throughout.



If the shock absorber operation is defective, replace the shock absorber as an assembly.

NOTICE: Before discarding the shock absorber, first loosen the ring nut 2 or 3 turns with SST to release the gas completely.

SST 09720-00012 (09721-00071)



INSTALLATION OF FRONT SHOCK ABSORBER ASSEMBLY

1. INSTALL BUMPER, COIL SPRING, INSULATORS, SPRING SEAT AND DUST SEAL

- (a) Install the spring bumper to piston rod.
- (b) Using SST, compress the coil spring.
 - SST 09727-30020
- (c) Install the lower insulator.
- (d) Align the coil spring end with the lower seat hollow and install it.
- (e) Install the upper insulator.
- (f) Face the "OUT" mark of the spring seat toward the outside of the vehicle, and install it.
- (g) Install the dust seal on the spring seat.
- (h) Install the suspension support.

- (i) Using SST, install and torque a new suspension support nut.

SST 09729-22031

Torque: 475 kg-cm (34 ft-lb, 47 N-m)

2. INSTALL SHOCK ABSORBER TO BODY

Install the shock absorber in place with the three nuts.

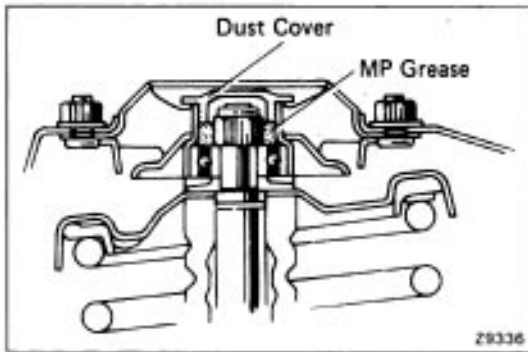
Torque: 400 kg-cm (29 ft-lb, 39 N-m)

NOTICE: Be careful not to damage the drive shaft boot.

3. INSTALL SHOCK ABSORBER TO STEERING KNUCKLE

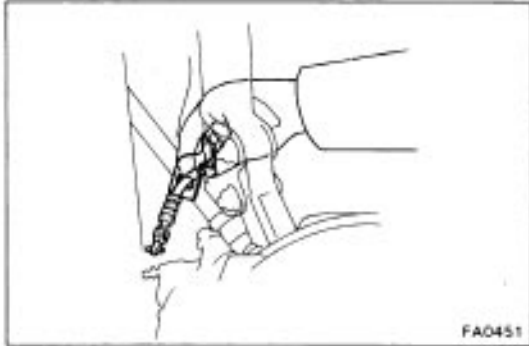
- (a) Connect the steering knuckle to the shock absorber lower bracket.
- (b) Insert the two bolts from the rear side.
- (c) Install and torque the two nuts.

Torque: 2,800 kg-cm (203 ft-lb, 275 N-m)



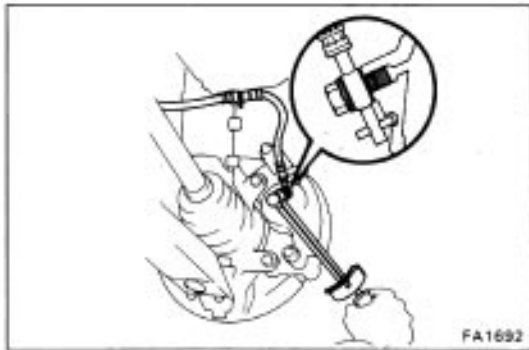
4. INSTALL DUST COVER

Pack the suspension support bearing with MP grease. Install the dust cover.



5. CONNECT FLEXIBLE HOSE

(a) Run the flexible hose through the brake hose bracket.



(b) Connect the flexible hose through the disc brake caliper with the union and new gaskets.

Torque: 310 kg-cm (22 ft-lb, 30 N-m)

HINT: When connecting the flexible hose to the caliper, connect it so that the peg aligns with the hole.

6. INSTALL CLIP

7. BLEED BRAKE SYSTEM

(See page [BR-7](#))

8. INSPECT FRONT WHEEL ALIGNMENT

(See page [SA-3](#))

Ball Joint

INSPECTION OF BALL JOINT

1. INSPECT BALL JOINT FOR EXCESSIVE LOOSENESS

- Jack up the front of the vehicle and place a wooden block with a height of 180–200 mm (7.09–7.87 in.) under one front tire.
- Lower the jack until there is about half a load on the front coil spring. Place stands under the vehicle for safety.
- Make sure the front wheels are in a straight forward position and block the wheel with chocks.
- Move the lower arm up and down, and check that the ball joint has no play.

Ball joint vertical play: 0 mm (0 in.)

