FRONT SHOCK ABSORBER WITH COIL SPRING

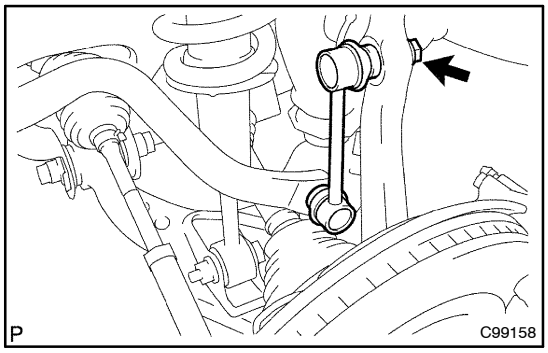
OVERHAUL

260BI–01

HINT:

COMPONENTS: See page 26–2

1. REMOVE FRONT DISC WHEEL



2. SEPARATE FRONT STABILIZER LINK ASSY LH

(a) Remove the nut and disconnect the stabilizer link from the steering knuckle.

HINT:

If the balljoint turns together with the nut, use a hexagon (6 mm) wrench to hold the stud.

3. SEPARATE FRONT STABILIZER LINK ASSY RH

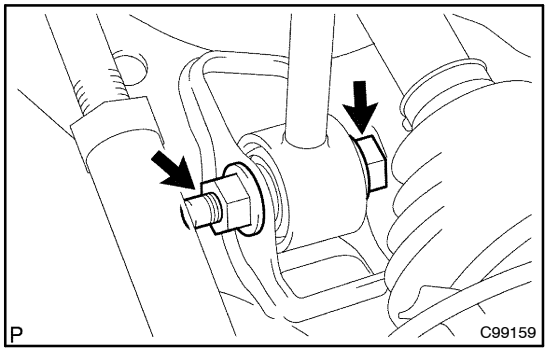
HINT:

Remove the RH side by following the same procedures with the LH side.

4. REMOVE FRONT STABILIZER BRACKET NO.1 LH (See page 26–28)

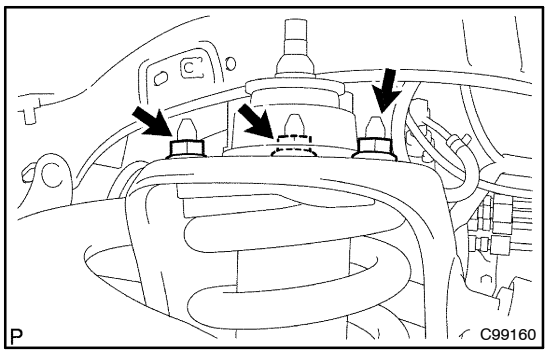
5. REMOVE FRONT STABILIZER BRACKET NO.1 RH (See page 26–28)

6. REMOVE STABILIZER BAR FRONT



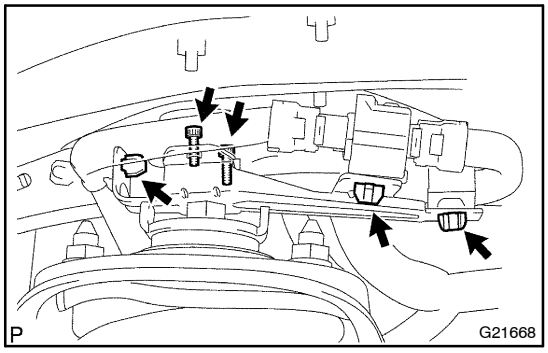
7. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING (W/O H–TEMS SUSPENSION)

(a) Remove the bolt, the nut and the washer.



(b) Remove the 3 nuts on the upper side of the front shock absorber with coil spring.

(c) Remove the front shock absorber with coil spring.



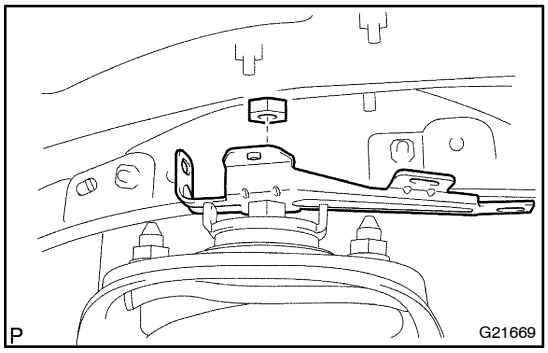
8. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING (H–TEMS SUSPENSION)

(a) Disconnect the 3 clamps and a connector.

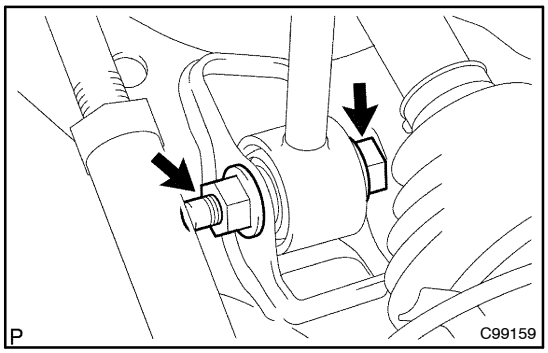
(b) Remove the 2 bolts and the absorber control actuator.

HINT:

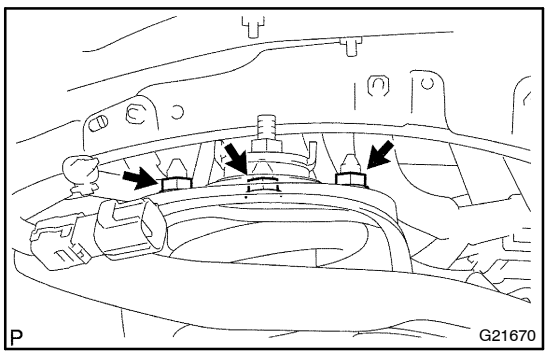
Using a hexagon wrench (4 mm), remove the 2 bolts.



(c) Remove a nut and the bracket.

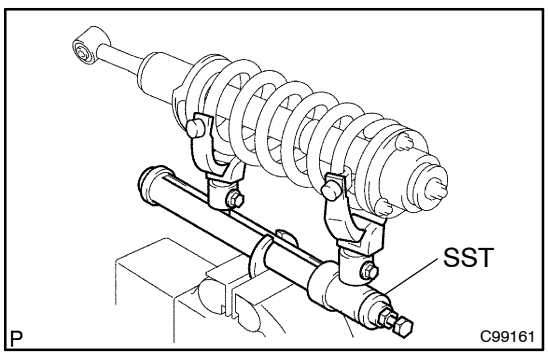


(d) Remove a bolt, the nut and the washer.



(e) Remove the 3 nuts on the upper side of the front shock absorber with coil spring.

(f) Remove the front shock absorber with coil spring.



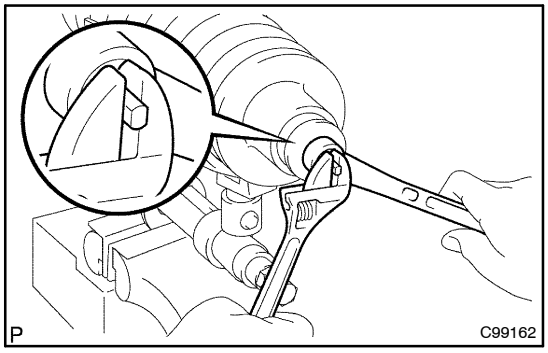
9. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

(a) Using SST, compress the coil spring.

SST 09727–30021 (09727–00010, 09727–00031) 09727–00060

NOTICE:

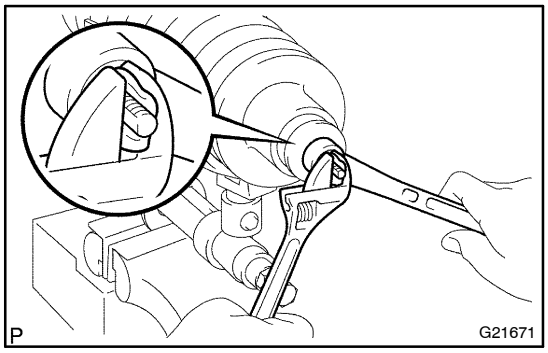
Do not use an impact wrench. It will damage the SST.



(b) Hold the shock absorber rod, and remove the nut. (w/o TEMS)

NOTICE:

Do not use an impact wrench. It will damage the shock absorber rod.



(c) Hold the shock absorber rod, and remove the nut. (w/ TEMS)

NOTICE:

Do not use an impact wrench. It will damage the shock absorber rod.

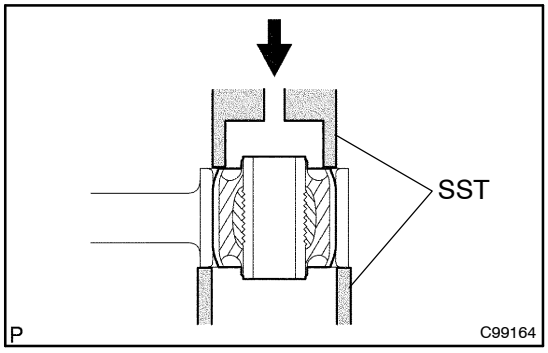
10. REMOVE FRONT SHOCK ABSORBER CUSHION RETAINER

11. REMOVE FRONT SHOCK ABSORBER CUSHION NO.1

12. REMOVE FRONT SUSPENSION SUPPORT SUB–ASSY LH

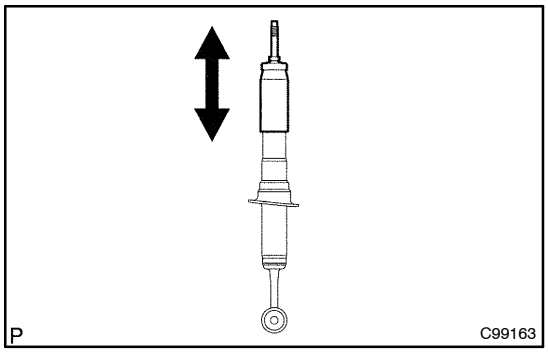
13. REMOVE FRONT SHOCK ABSORBER CUSHION RETAINER

14. REMOVE FRONT COIL SPRING LH



15. REMOVE FRONT SHOCK ABSORBER BUSH

(a) Using SST and a press, remove the absorber bush.
SST 09710–22021 (09710–01071, 09710–01081)



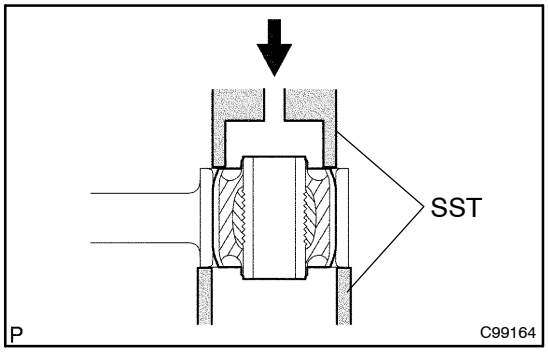
16. INSPECT SHOCK ABSORBER ASSY FRONT LH

(a) Compress and extend the shock absorber rod, and check that there is no abnormal resistance or unusual sound during the operation.

If there is any abnormality, replace the shock absorber assy front LH with a new one.

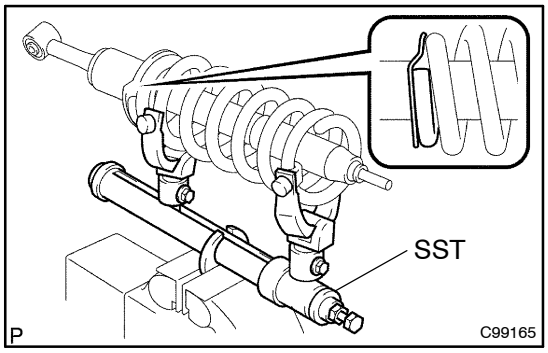
NOTICE:

When disposing of the shock absorber assy front LH, see DISPOSAL on page 26–19.



17. INSTALL FRONT SHOCK ABSORBER BUSH

(a) Using SST and a press, install a new absorber bush.
SST 09710–22021 (09710–01071, 09710–01081)



18. INSTALL FRONT COIL SPRING LH

(a) Using SST, compress the front coil spring LH.
SST 09727–30021 (09727–00010, 09727–00031) 09727–00060

NOTICE:

Do not use an impact wrench. It will damage the SST.

(b) Install the front coil spring LH to the shock absorber assy front LH.

HINT:

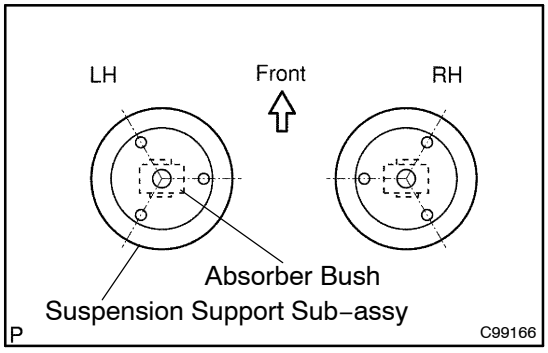
Fit the lower end of the front coil spring LH into the gap of the spring lower seat.

19. INSTALL FRONT SHOCK ABSORBER CUSHION RETAINER

20. INSTALL FRONT SUSPENSION SUPPORT SUB–ASSY LH

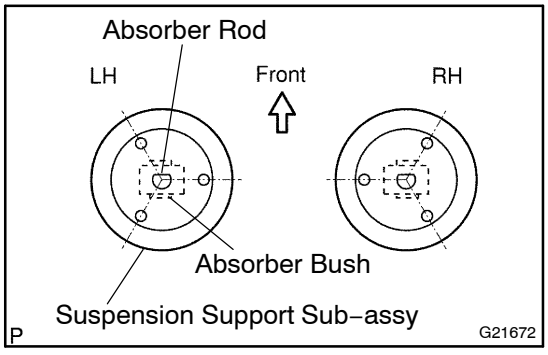
21. INSTALL FRONT SHOCK ABSORBER CUSHION NO.1

22. INSTALL FRONT SHOCK ABSORBER CUSHION RETAINER



23. INSTALL FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

(a) Align the suspension support sub–assy and the absorber bush as shown in the illustration. (w/o TEMS)



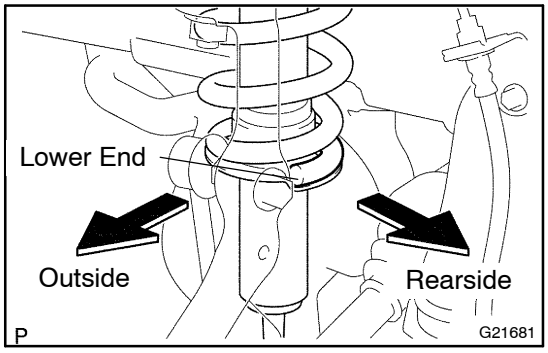
(b) Align the front suspension support sub–assy, the absorber rod and the absorber bush as shown in the illustration. (w/ TEMS)

(c) Tighten the new lock nut.
Torque: 25 N·m (260 kgf·cm, 18 ft·lbf)

NOTICE:

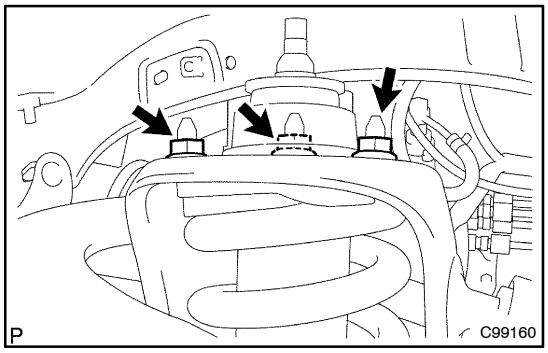
Do not use an impact wrench. It will damage the shock absorber rod.

(d) Release the coil spring while checking the position of the suspension support.

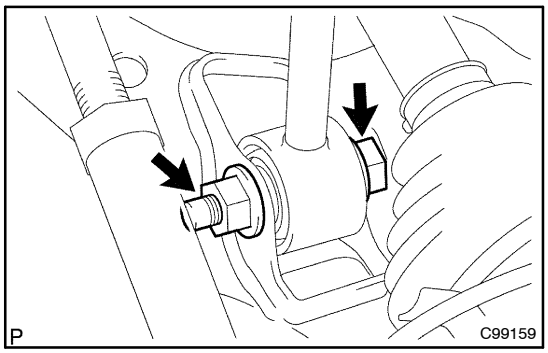


24. TEMPORARILY TIGHTEN FRONT SHOCK ABSORBER WITH COIL SPRING (W/O H–TEMS SUSPENSION)

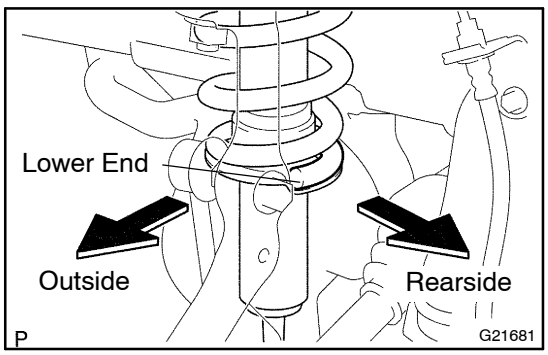
(a) Install the coil spring on the body as the lower end of the coil spring faces rear side of the vehicle.



(b) Install the 3 nuts on the upper side of the front shock absorber with coil spring.
Torque: 64 N·m (650 kgf·cm, 47 ft·lbf)

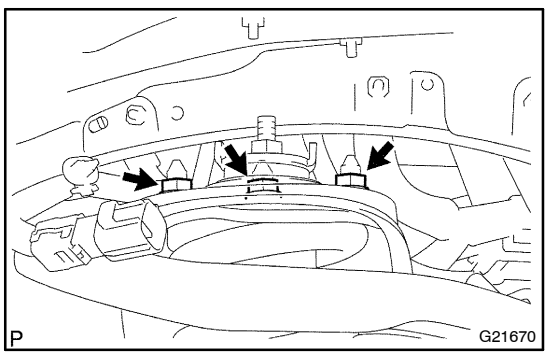


(c) Temporarily tighten the bolt, the nut and the washer as shown in the illustration.

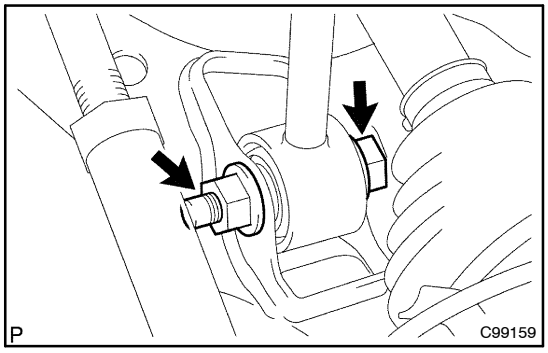


25. TEMPORARILY TIGHTEN FRONT SHOCK ABSORBER WITH COIL SPRING (H–TEMS SUSPENSION)

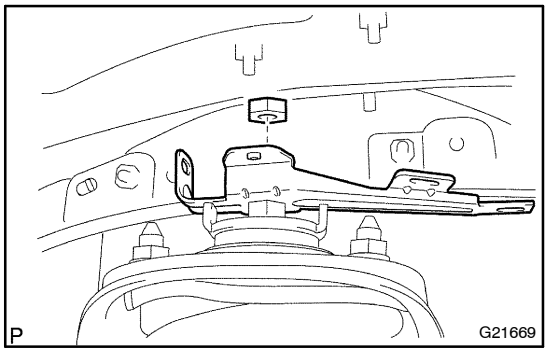
(a) Install the coil spring on the body as the lower end of the coil spring faces rear side of the vehicle.



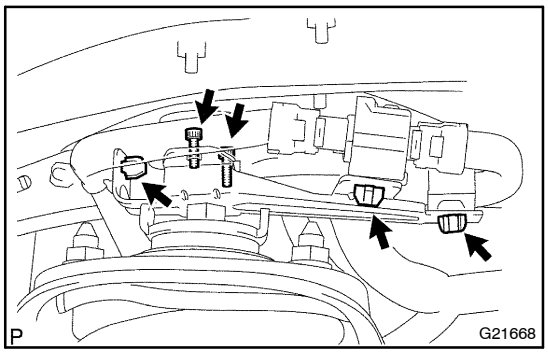
(b) Install the 3 nuts on the upper side of the front shock absorber with coil spring.
Torque: 64 N·m (650 kgf·cm, 47 ft·lbf)



(c) Temporarily tighten the bolt, the nut and the washer as shown in the illustration.



(d) Install the bracket with a nut.
Torque: 15 N·m (153 kgf·cm, 11 ft·lbf)



(e) Install the absorber control actuator with the 2 bolts.
Torque: 7.8 N·m (80 kgf·cm, 69 in.·lbf)

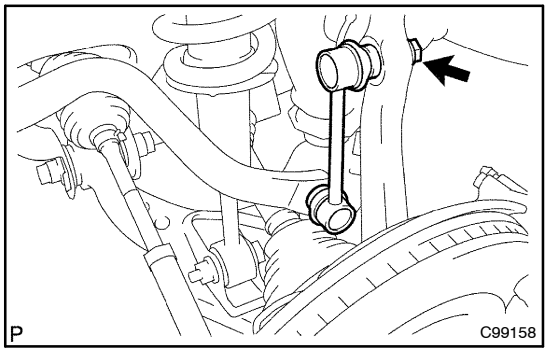
HINT:
Using a hexagon wrench (4 mm), install the 2 bolts.

(f) Connect the 3 clamp and a connector.

26. INSTALL STABILIZER BAR FRONT

27. INSTALL FRONT STABILIZER BRACKET NO.1 LH (See page 26–28)

28. INSTALL FRONT STABILIZER BRACKET NO.1 RH (See page 26–28)



29. INSTALL FRONT STABILIZER LINK ASSY LH

(a) Connect the stabilizer link with the nut to the steering knuckle.
Torque: 70 N·m (710 kgf·cm, 52 ft·lbf)

HINT:
If the balljoint turns together with the nut, use a hexagon (6 mm) wrench to hold the stud.

30. INSTALL FRONT STABILIZER LINK ASSY RH

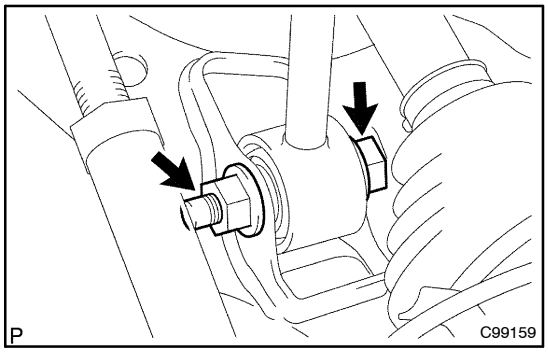
HINT:
Install the RH side by following the same procedures with the LH side.

31. INSTALL FRONT DISC WHEEL
Torque: 112 N·m (1,140 kgf·cm, 83 ft·lbf)

32. STABILIZE SUSPENSION

(a) Jack down the vehicle.

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



33. FULLY TIGHTEN FRONT SHOCK ABSORBER WITH COIL SPRING

(a) Fully tighten the nut.

Torque: 135 N·m (1,380 kgf·cm, 100 ft·lb)

34. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (See page 26–6)