FRONT SHOCK ABSORBER WITH COIL SPRING

OVERHAUL

260HI–03

HINT:

- COMPONENTS: See page 26–2
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT WHEEL

2. REMOVE FRONT WIPER ARM HEAD CAP (SEE PAGE 66–15)

3. REMOVE FR WIPER ARM RH (SEE PAGE 66–15)

4. REMOVE FR WIPER ARM LH (SEE PAGE 66–15)

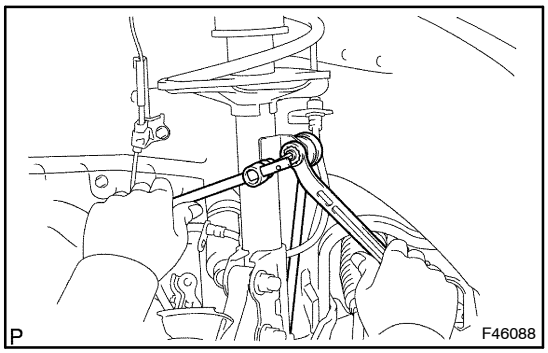
5. REMOVE HOOD TO COWL TOP SEAL (SEE PAGE 66–15)

6. REMOVE COWL TOP VENTILATOR LOUVER LH (SEE PAGE 66–15)

7. REMOVE COWL TOP VENTILATOR LOUVER RH (SEE PAGE 66–15)

8. REMOVE WINDSHIELD WIPER MOTOR & LINK ASSY (SEE PAGE 66–15)

9. REMOVE COWL TOP PANEL SUB–ASSY OUTER FRONT (SEE PAGE 32–29, 32–36)



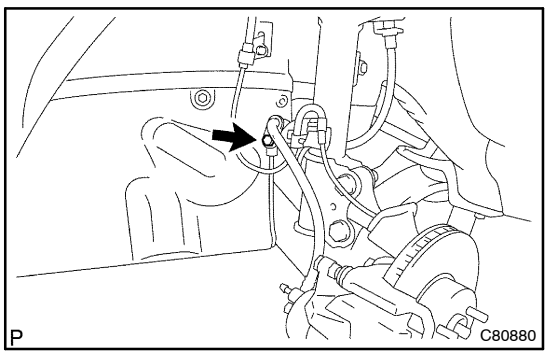
10. SEPARATE FRONT STABILIZER LINK ASSY

(a) Place a wooden block on a jack, and support the front suspension lower arm No.1 LH with the jack.

(b) Remove the nut and separate the front stabilizer link assy from the shock absorber with coil spring.

HINT:

Use a hexagon wrench (6 mm) to hold the stud if the ball joint turns together with the nut.

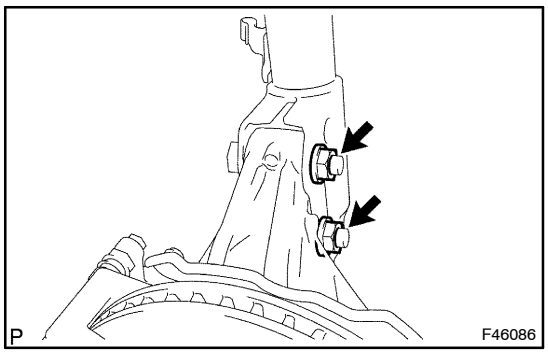


11. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING

(a) Remove the bolt and disconnect the front flexible hose No.1 and speed sensor front LH wire harness.

NOTICE:

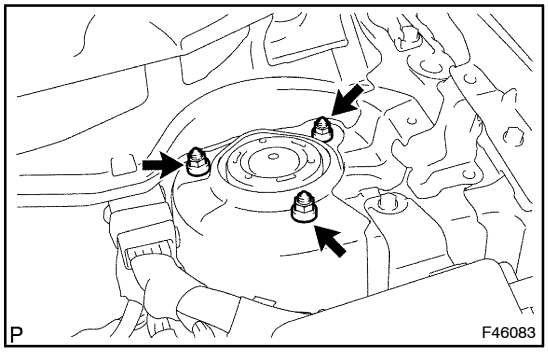
Be sure to completely disconnect the speed sensor front LH from the front shock absorber assy.



(b) Remove the 2 nuts on the lower side of the front shock absorber with coil spring.

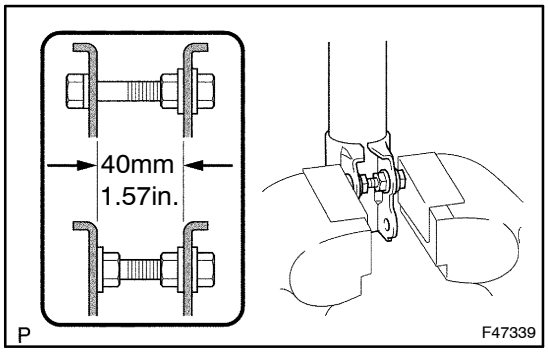
NOTICE:

Keep the bolts inserted.



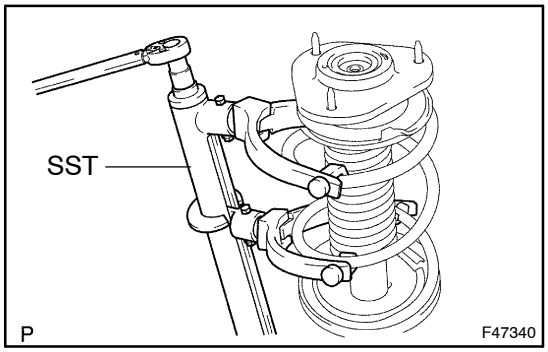
(c) Remove the 3 nuts.
(d) Lower the jack slowly. Remove the 2 bolts on the lower side and the front shock absorber with coil spring.

NOTICE:
Ensure that the speed sensor front LH is completely disconnected from the front shock absorber with coil spring.



12. FIX FRONT SHOCK ABSORBER WITH COIL SPRING

(a) Secure the front shock absorber with coil spring in a vise by clamping onto a double nutted bolt affixed to the bracket at the bottom of the absorber, as shown in the illustration to the left.



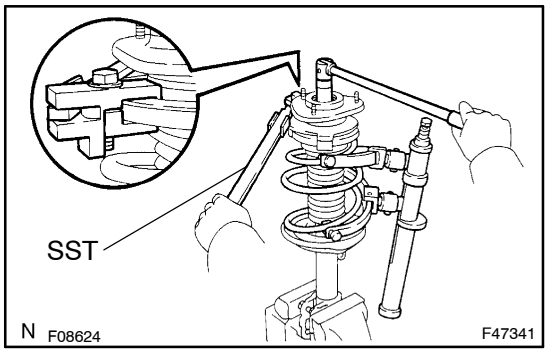
13. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER LH NUT

(a) Attach the SST to the coil spring so that the upper and lower hooks of the installed area are as wide as possible.
SST 09729–22021, (09727–00010, 09727–00021, 09727–00031)
(b) Fully compress the coil spring.

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

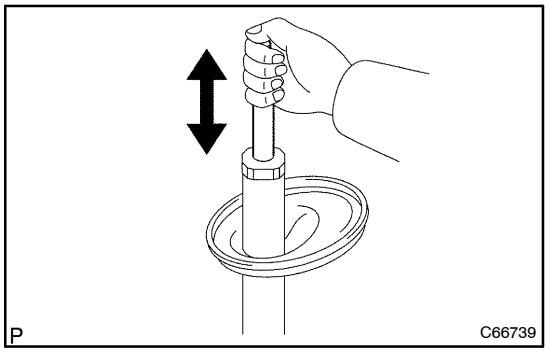
HINT:
The coil spring can also be installed/removed using the hydraulic spring compressor.

(c) Remove the front suspension support dust cover.
(d) Secure the front coil spring seat upper with SST and remove the front suspension support to front shock absorber LH nut.
SST 09727–30031



14. REMOVE FRONT SUSPENSION SUPPORT SUB–ASSY LH
15. REMOVE FRONT SUSPENSION SUPPORT LH DUST SEAL
16. REMOVE FRONT COIL SPRING SEAT UPPER LH
17. REMOVE FRONT COIL SPRING INSULATOR UPPER LH
18. REMOVE FRONT COIL SPRING LH
19. REMOVE FRONT SPRING BUMPER LH
20. REMOVE FRONT COIL SPRING INSULATOR LOWER LH

21. REMOVE SHOCK ABSORBER ASSY FRONT LH



22. INSPECT SHOCK ABSORBER ASSY FRONT LH

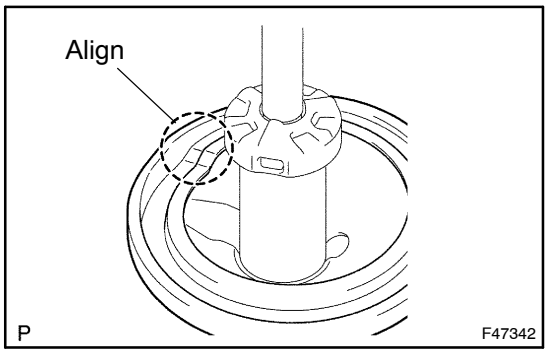
(a) Compress and extend the shock absorber rod 4 or more times. Check that there is no abnormal resistance or sound.

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 26–17.

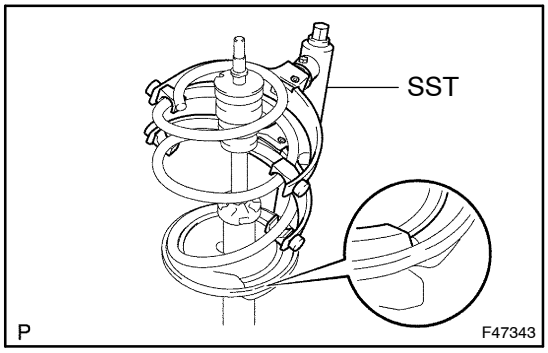
23. INSTALL SHOCK ABSORBER ASSY FRONT LH



24. INSTALL FRONT COIL SPRING INSULATOR LOWER LH

(a) Install the front coil spring insulator lower to the front shock absorber assy so that both recessed parts are aligned.

25. INSTALL FRONT SPRING BUMPER LH



26. INSTALL FRONT COIL SPRING LH

(a) Using SST, compress the coil spring.

SST 09727–30021 (09727–00010, 09727–00021, 09727–00031)

NOTICE:

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

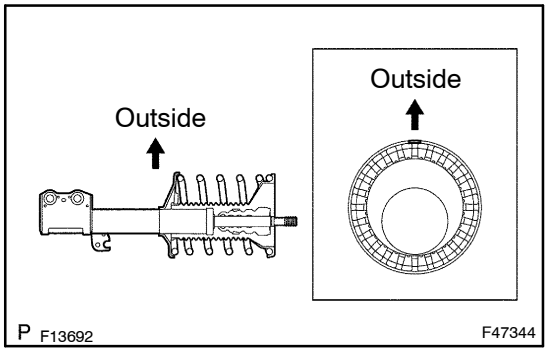
HINT:

The coil spring can also be installed/removed using the hydraulic spring compressor.

(b) Fit the lower end of the front coil spring LH into the recessed part of the spring lower seat.

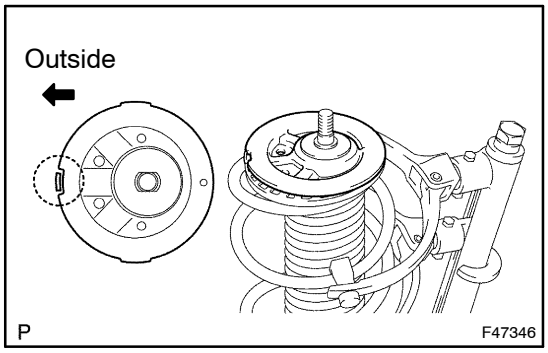
HINT:

Install the spring with the smaller diameter on top.



27. INSTALL FRONT COIL SPRING INSULATOR UPPER LH

(a) Install the front coil spring insulator upper to the front shock absorber assy with the protruding part facing to the outside of the vehicle.



28. INSTALL FRONT COIL SPRING SEAT UPPER LH

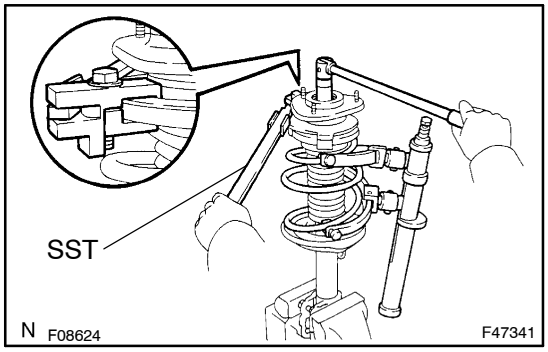
(a) Install the front coil spring seat upper with the recess facing to the outside of the vehicle.

NOTICE:

- **Fit the protruding part of the front coil spring insulator upper LH to the recess of the front coil spring seat upper LH.**
- **Ensure that the width across flats of the piston rod and the front coil spring seat upper LH are fitted.**

29. INSTALL FRONT SUSPENSION SUPPORT LH DUST SEAL

30. INSTALL FRONT SUSPENSION SUPPORT SUB–ASSY LH



31. INSTALL FRONT SUPPORT TO FRONT SHOCK ABSORBER LH NUT

(a) Secure the front coil spring seat upper with SST and tighten it with a new nut.

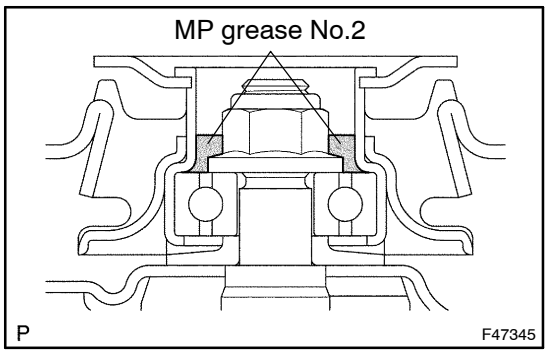
Torque: 47 N·m (479 kgf·cm, 35 ft·lbf)

(b) Release the SST while aligning the protruding part of the front coil spring insulator upper, the recess of the spring front coil spring seat upper and the shock absorber lower bracket and then remove the SST from the coil spring.

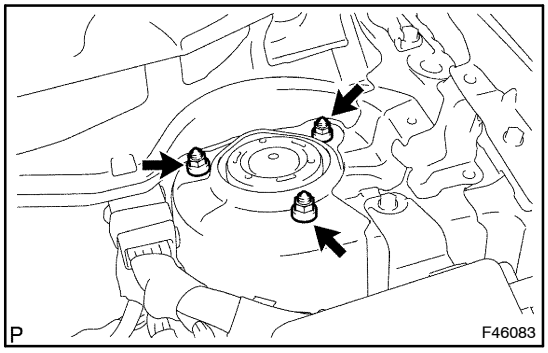
SST 09729–22031

NOTICE:

Do not use an impact wrench when removing the SST.



(c) Apply MP grease No.2 to the parts indicated in the illustration and install the front suspension support dust cover.



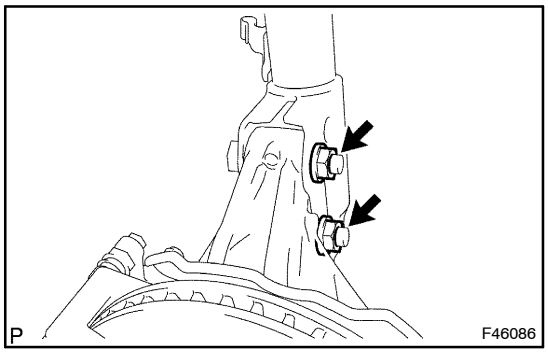
32. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

(a) Insert the 2 bolts from the front side of the vehicle and install the front shock absorber with coil spring to the steering knuckle assy.

(b) Place a wooden block between the front shock absorber with coil spring and a jack. Slowly raise the jack and install the front shock absorber with coil spring (upper side) to the vehicle.

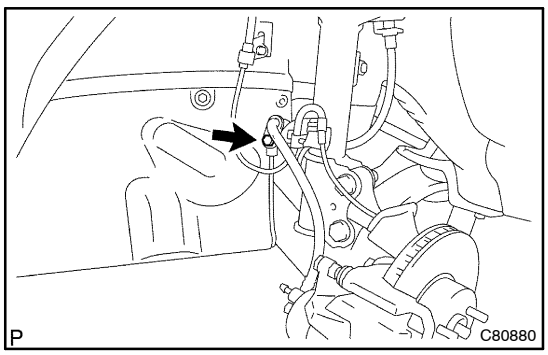
(c) Install the front shock absorber with coil spring (upper side) with the 3 nuts.

Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)



(d) Install the front shock absorber with coil spring to the steering knuckle with the 2 nuts.

Torque: 153 N·m (1560 kgf·cm, 113 ft·lbf)

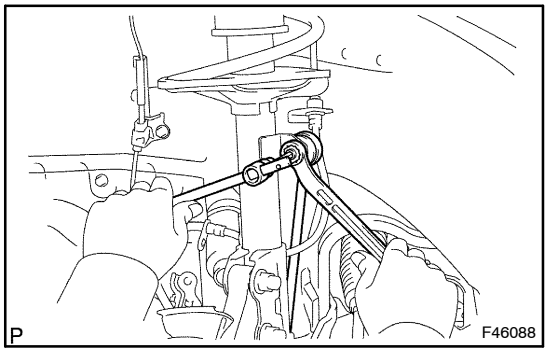


(e) Connect the front flexible hose No.1 and the speed sensor front LH to the shock absorber assy with the bolt.

Torque: 19 N·m (192 kgf·cm, 14 ft·lbf)

NOTICE:

Do not twist the speed sensor front while installing.



33. CONNECT FRONT STABILIZER LINK ASSY

(a) Connect the front stabilizer link assy to the front shock absorber with coil spring with the nut.

Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)

HINT:

Use a hexagon wrench (6 mm) to hold the stud if the ball joint turns together with the nut.

34. INSTALL COWL TOP PANEL SUB-ASSY OUTER FRONT (SEE PAGE 32–29, 32–36)

35. INSTALL WINDSHIELD WIPER MOTOR & LINK ASSY (SEE PAGE 66–15)

36. INSTALL COWL TOP VENTILATOR LOUVER RH

37. INSTALL COWL TOP VENTILATOR LOUVER LH

38. INSTALL HOOD TO COWL TOP SEAL

39. INSTALL FR WIPER ARM LH (SEE PAGE 56–15)
40. INSTALL FR WIPER ARM RH (SEE PAGE 56–15)
41. INSTALL FRONT WIPER ARM HEAD CAP
42. INSTALL FRONT WHEEL
    Torque: 103 N·m (1050 kgf·cm, 76 ft·lbf)
43. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (SEE PAGE 26–5)