FRONT SHOCK ABSORBER WITH COIL SPRING

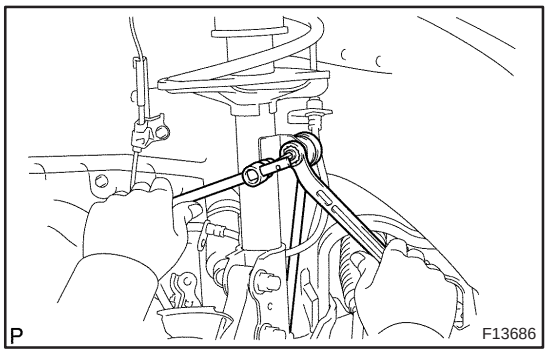
OVERHAUL

2600M–04

HINT:

- COMPONENTS: See page 26–2
- This procedure is provided for the overhaul on the LH side. Overhaul the other side by the same procedure as the LH side.

1. REMOVE FRONT WHEEL

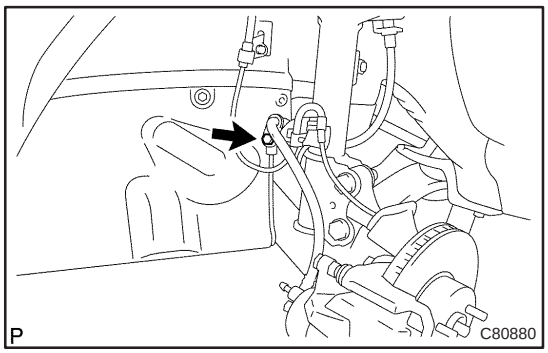


2. SEPARATE FRONT STABILIZER LINK ASSY LH

(a) Remove the nut and disconnect the stabilizer bar link from the shock absorber.

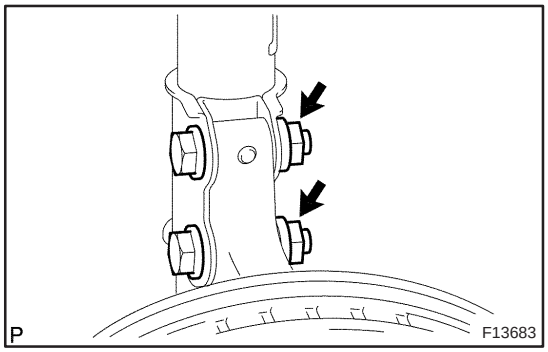
HINT:

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

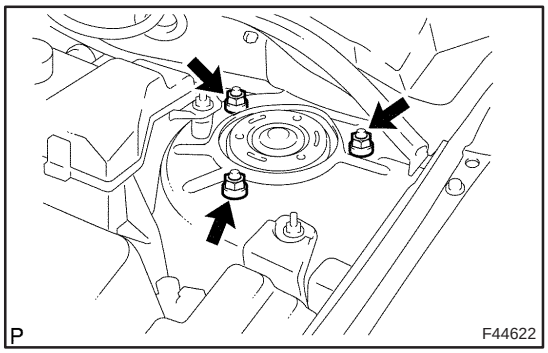


3. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING

(a) Remove the bolt, disconnect the front flexible hose and speed sensor front LH.

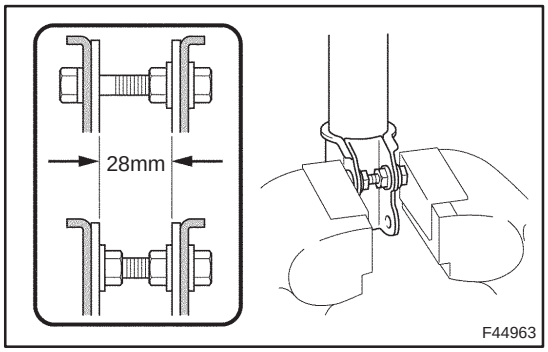


(b) Remove the 2 nuts and bolts on the lower side of the shock absorber.



(c) Remove the 3 nuts on the upper side of the shock absorber.

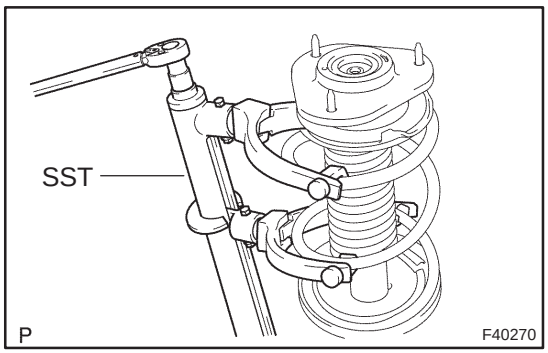
(d) Remove the shock absorber with the coil spring.



4. FIX FRONT SHOCK ABSORBER WITH COIL SPRING

(a) Install 2 nuts and a bolt to the bracket at the lower side of the shock absorber and secure it in a vise.

5. REMOVE FRONT SUSPENSION SUPPORT DUST COVER LH



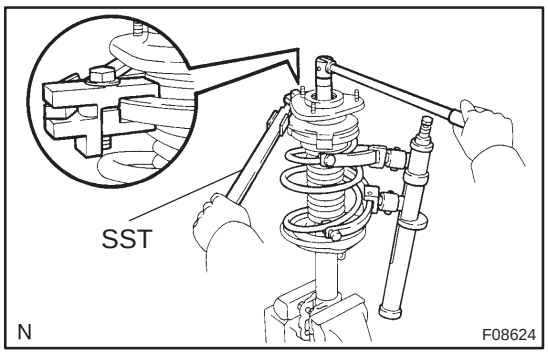
6. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER LH NUT

(a) Using SST, compress the coil spring.
SST 09727–30021

NOTICE:

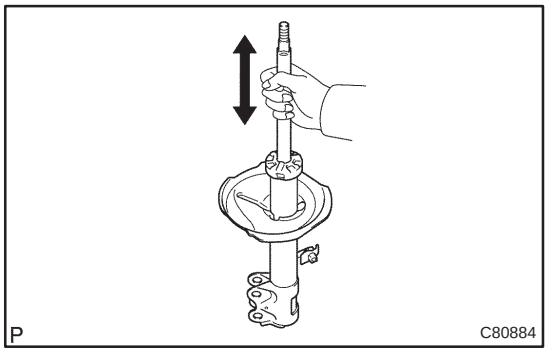
Do not use an impact wrench. It will damage the SST.

(b) Remove the front suspension support dust cover from the suspension support.



(c) Using SST to hold the spring seat, remove the nut.
SST 09729–22031

7. REMOVE FRONT SUSPENSION SUPPORT SUB–ASSY LH
8. REMOVE FRONT SUSPENSION SUPPORT LH DUST SEAL
9. REMOVE FRONT COIL SPRING SEAT UPPER LH
10. REMOVE FRONT COIL SPRING INSULATOR UPPER LH
11. REMOVE FRONT COIL SPRING LH
12. REMOVE FRONT SPRING BUMPER LH
13. REMOVE FRONT COIL SPRING INSULATOR LOWER LH



14. 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 operation.

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

NOTICE:

When disposing of the shock absorber, see DISPOSAL on page 26–15.

15. INSTALL FRONT COIL SPRING INSULATOR LOWER LH

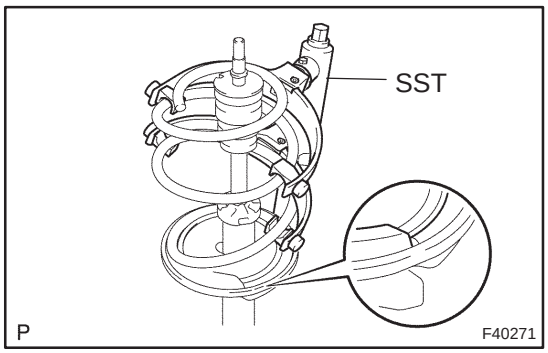
HINT:

Fit the front coil spring insulator lower into the gap of the shock absorber.

(a) Install the front coil spring insulator lower onto the shock absorber.

16. INSTALL FRONT SPRING BUMPER LH

(a) Install the spring bumper to the piston rod.



17. INSTALL FRONT COIL SPRING LH

(a) Using SST, compress the coil spring.

SST 09727–30021

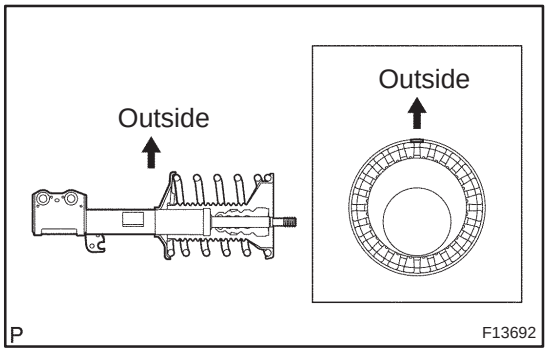
NOTICE:

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

(b) Install the coil spring to the shock absorber.

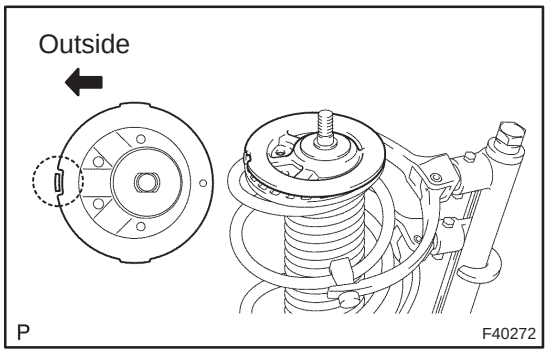
HINT:

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



18. INSTALL FRONT COIL SPRING INSULATOR UPPER LH

(a) Install the upper insulator as shown in the illustration.



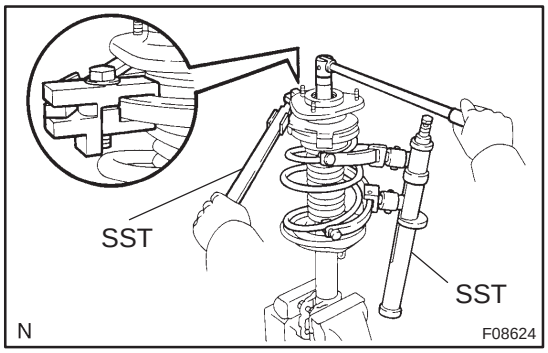
19. INSTALL FRONT COIL SPRING SEAT UPPER LH

(a) Install the spring seat to the shock absorber with the mark facing to the outside of the vehicle.

20. INSTALL FRONT SUSPENSION SUPPORT LH DUST SEAL

(a) Install a new dust seal.

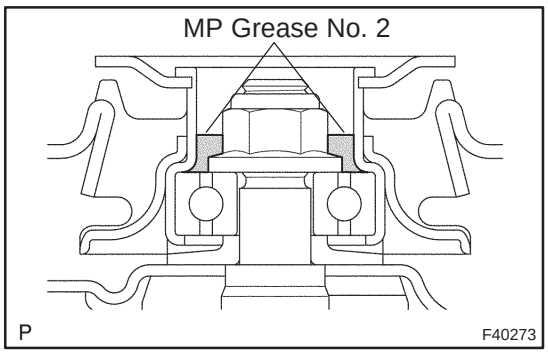
21. INSTALL FRONT SUSPENSION SUPPORT SUB–ASSY LH



22. INSTALL FRONT SUPPORT TO FRONT SHOCK ABSORBER LH NUT

(a) Using SST to hold the suspension support, install a new nut.
SST 09729–22031
Torque: 47 N·m (479 kgf·cm, 35 ft·lbf)

(b) Remove the SST.
SST 09727–30021,09729–22031

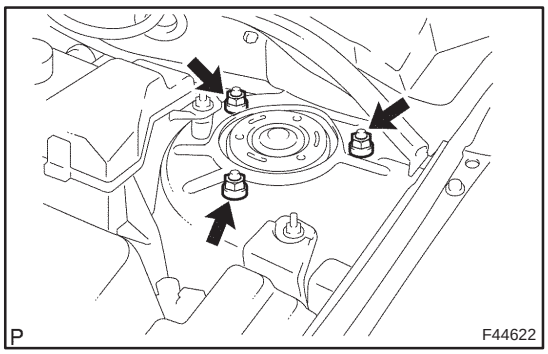


23. INSTALL FRONT SUSPENSION SUPPORT DUST COVER LH

(a) Apply MP grease No. 2 into the suspension support.

CAUTION:
Do not touch grease on rubber surface of the suspension support.

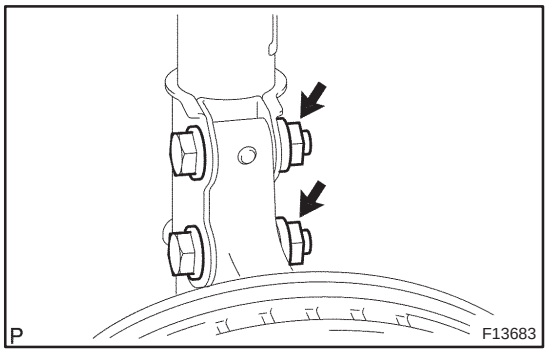
(b) Install the dust cover.



24. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

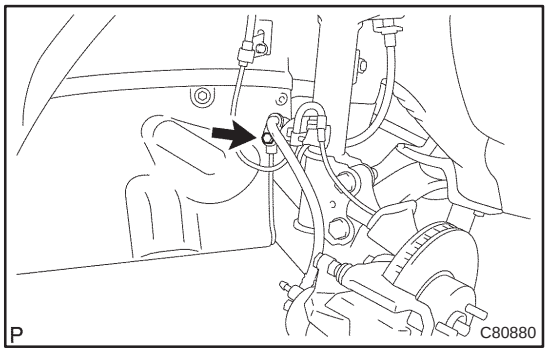
(a) Install the shock absorber with the 2 bolts.

(b) Install the 3 nuts on the upper side of shock absorber.
Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)

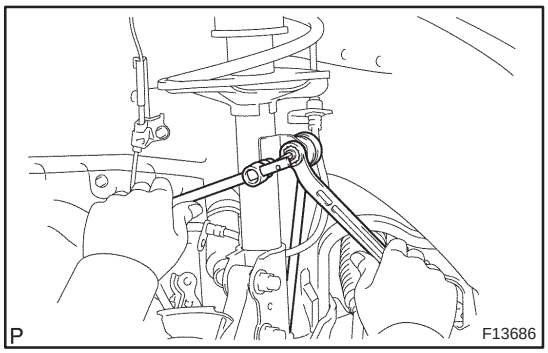


(c) Install the 2 nuts to the lower side of shock absorber.
Torque: 220 N·m (2,240 kgf·cm, 162 ft·lbf)

HINT:
Coat the threads of the nuts with engine oil.



(d) Install the flexible hose and ABS speed sensor wire harness bracket with the bolt.
Torque: 19 N·m (192 kgf·cm, 14 ft·lbf)



25. INSTALL FRONT STABILIZER LINK ASSY LH

(a) Install the stabilizer bar link with the nut.
Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)

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

26. INSTALL FRONT WHEEL
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

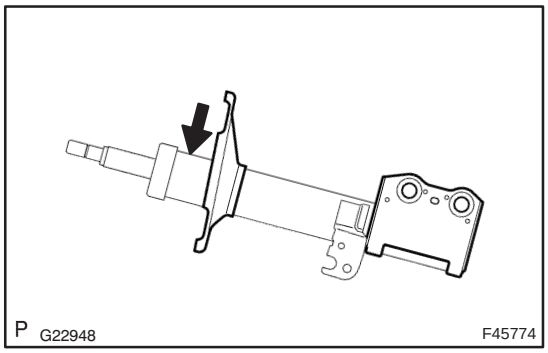
27. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT **(See page 26–6)**

2600N–04

DISPOSAL

HINT:

Dispose the RH side by the same procedures as the LH side.



1. DISPOSE OF SHOCK ABSORBER ASSY FRONT LH

(a) Fully extend the shock absorber rod.

(b) Using a drill, make a hole in the cylinder as shown in the illustration to discharge the gas inside.

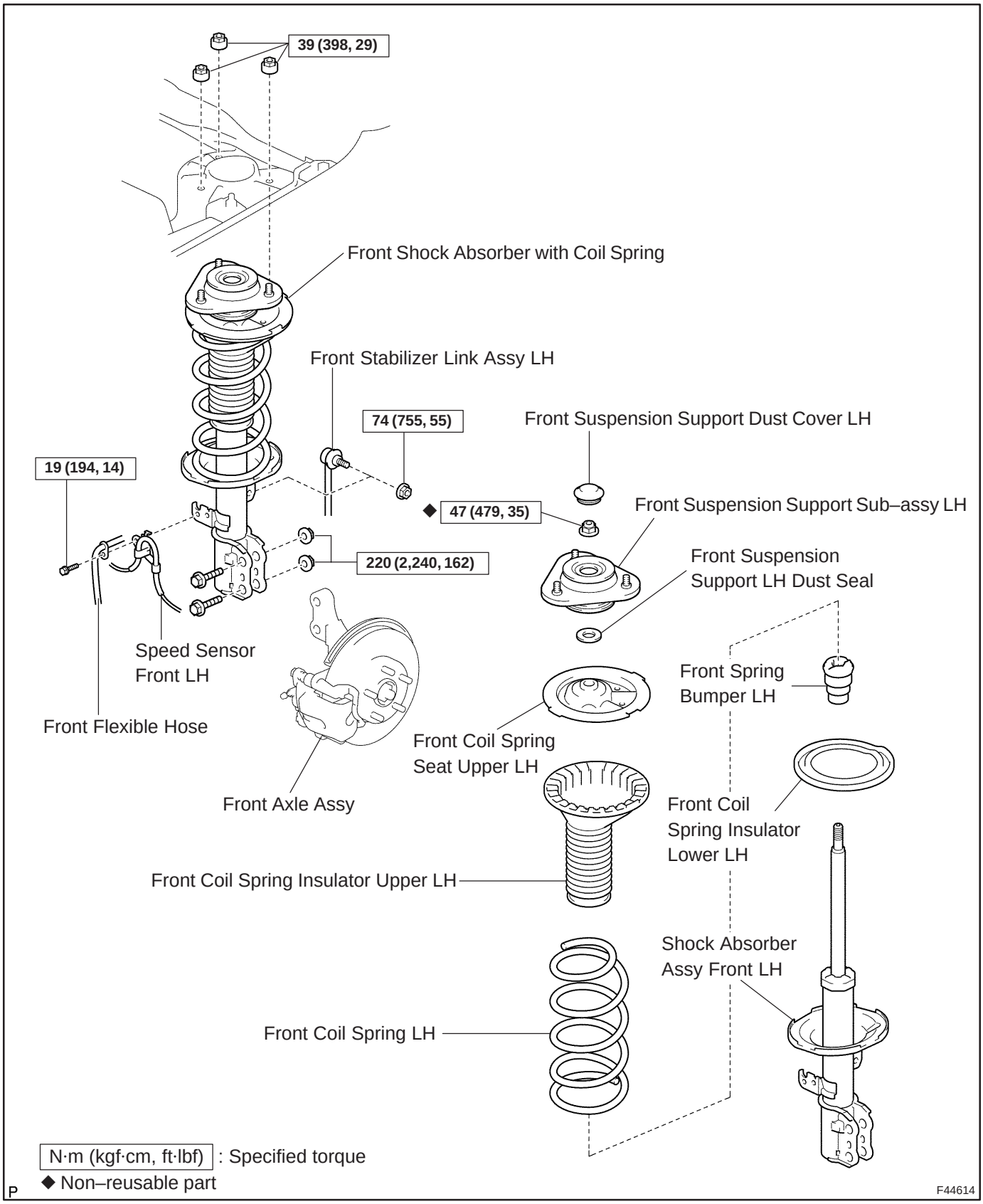
CAUTION:

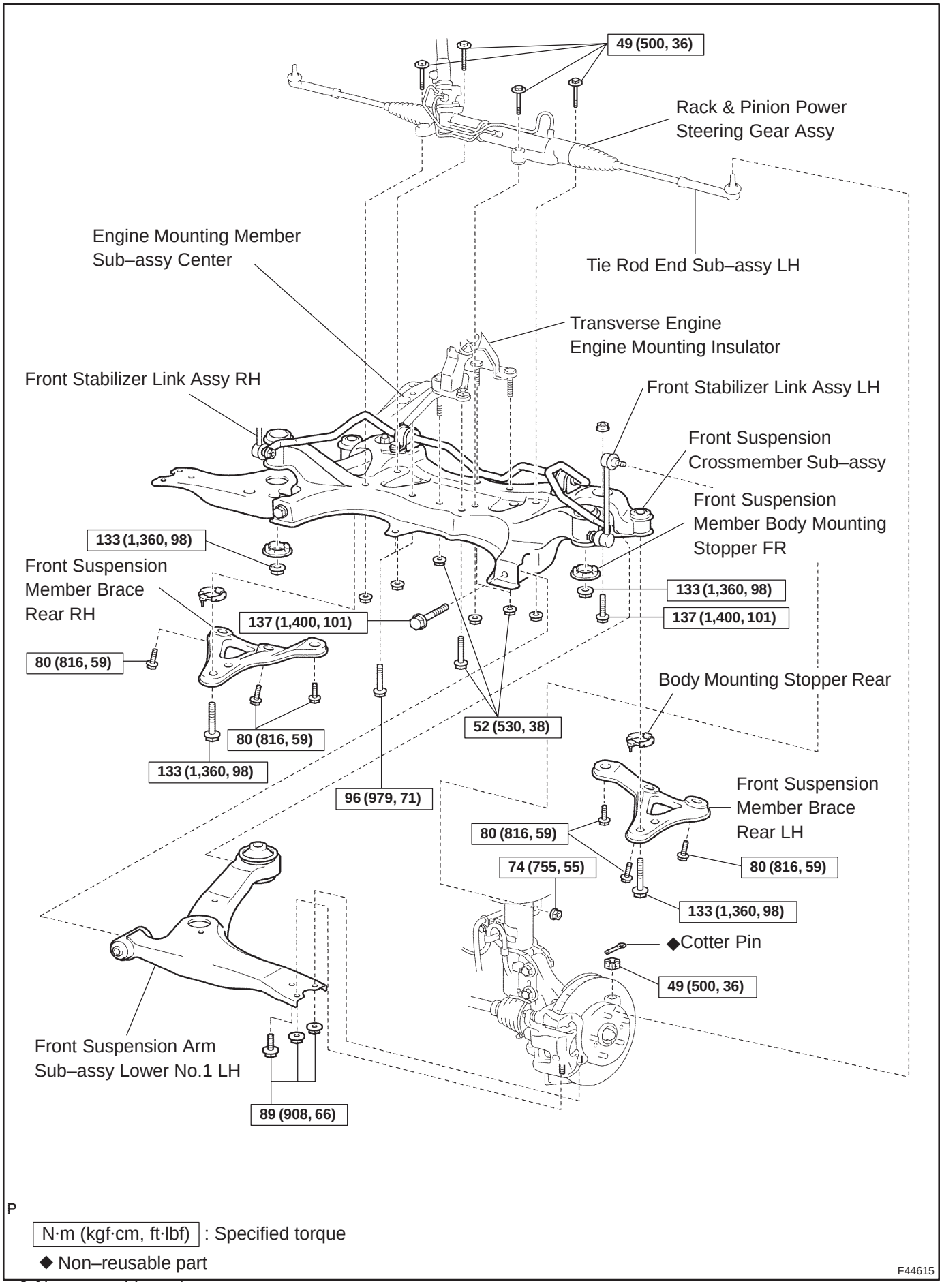
- **When drilling, chips may fly out. Work carefully.**
- **The gas is colorless, odorless and non–poisonous.**

FRONT SUSPENSION

COMPONENTS

260DP–01



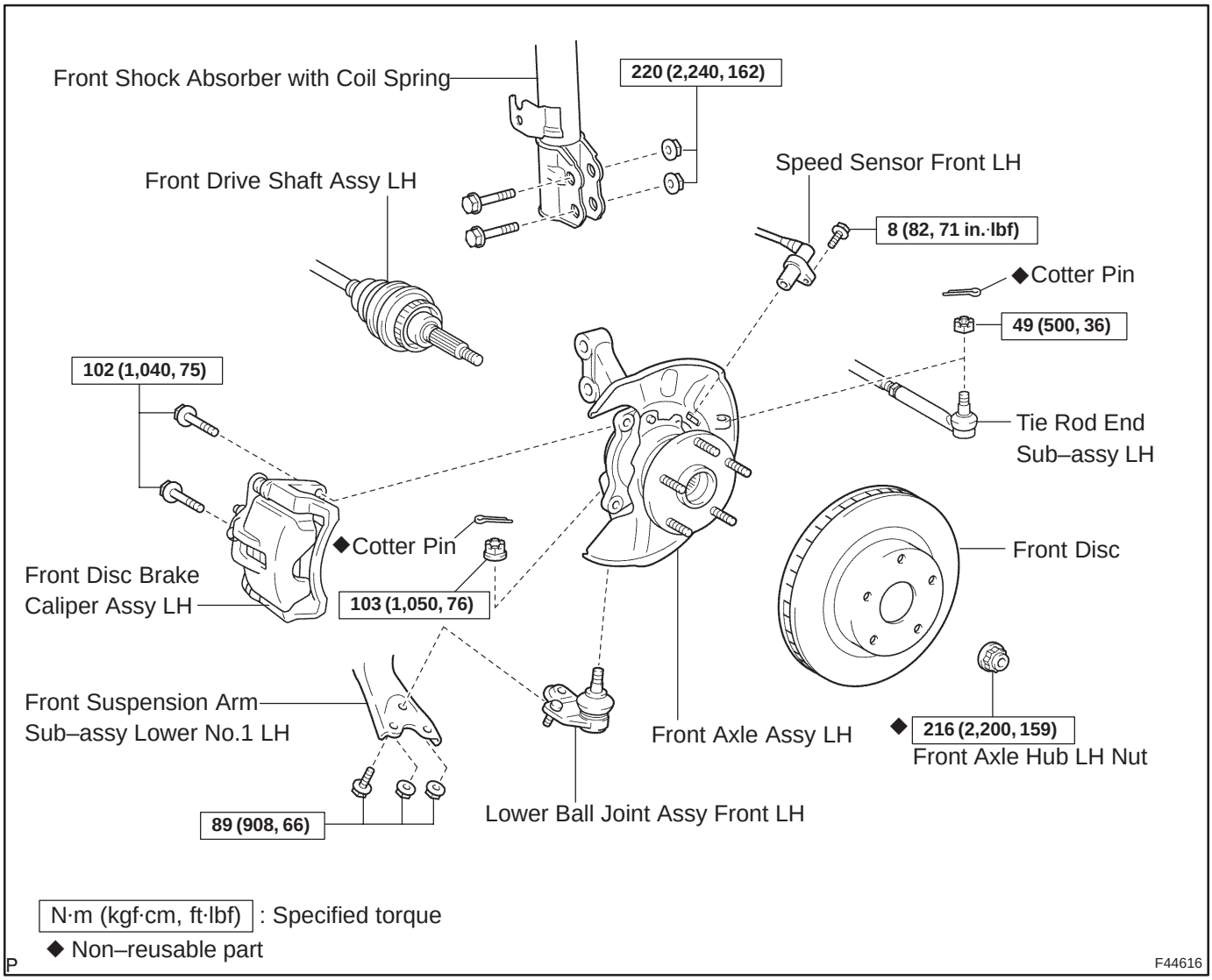


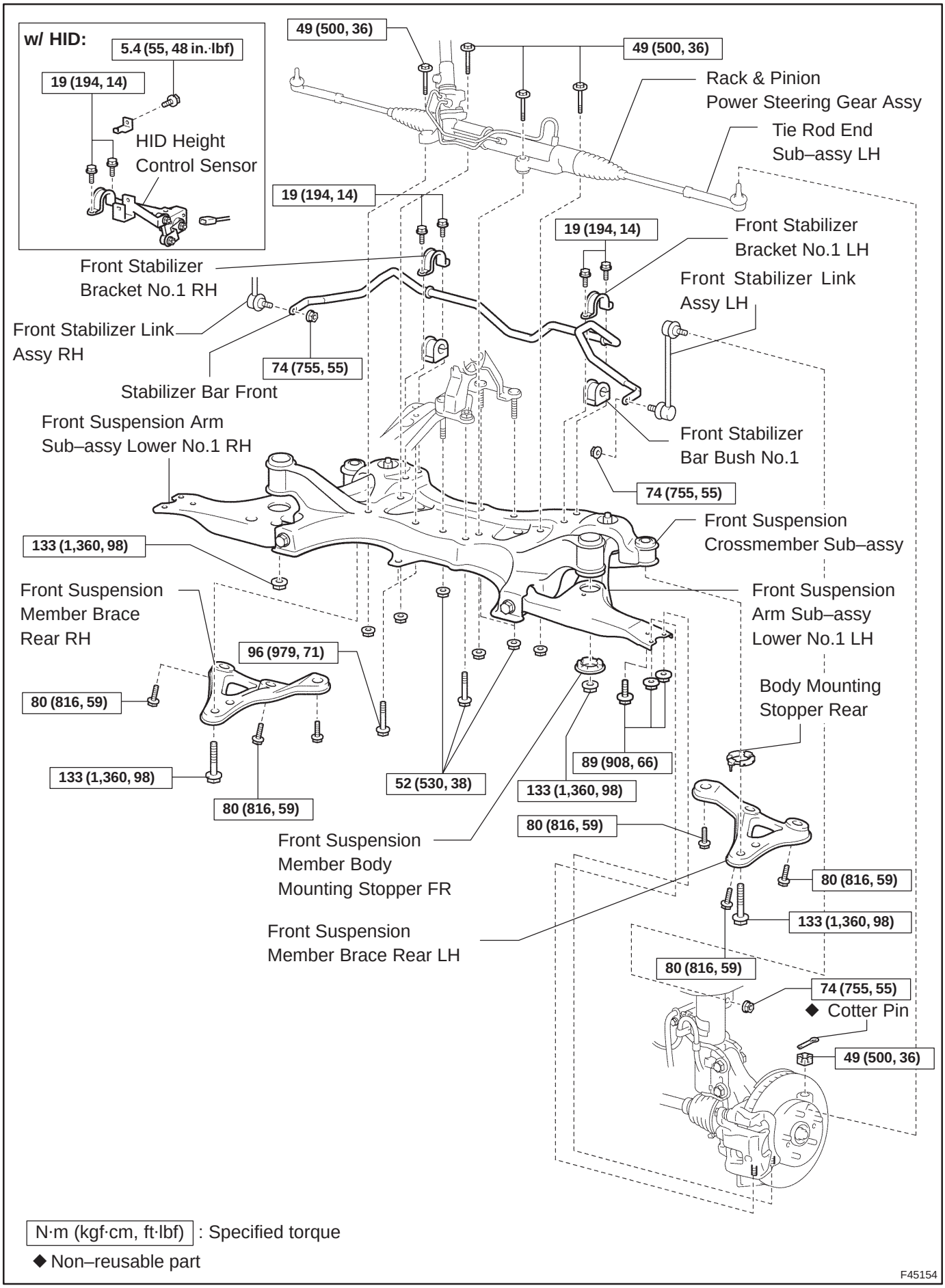
P

N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non–reusable part

F44615


Front Shock Absorber with Coil Spring
220 (2,240, 162)
Front Drive Shaft Assy LH
Speed Sensor Front LH
8 (82, 71 in.·lbf)
◆Cotter Pin
49 (500, 36)
102 (1,040, 75)
Tie Rod End
Sub–assy LH
◆Cotter Pin
Front Disc
Front Disc Brake
Caliper Assy LH
103 (1,050, 76)
Front Suspension Arm
Sub–assy Lower No.1 LH
Front Axle Assy LH
◆ 216 (2,200, 159)
Front Axle Hub LH Nut
89 (908, 66)
Lower Ball Joint Assy Front LH
N·m (kgf·cm, ft·lbf) : Specified torque
◆ Non–reusable part
F44616



N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non–reusable part

F45154

FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (ATM)

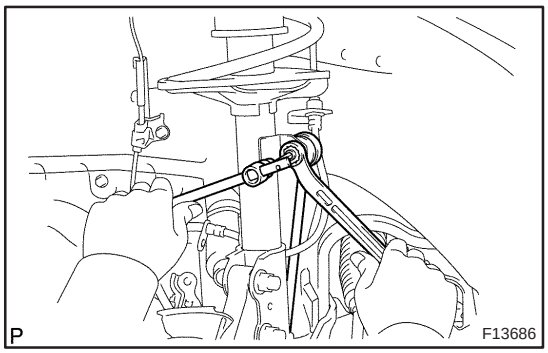
260DQ–01

REPLACEMENT

HINT:

- COMPONENTS: See page 26–2
- Replace the RH side (Engine: 1AZ) by the same procedures as the LH (ATM) side.
- Replace the RH side (Engine: 1ZZ) by the same procedures as the LH (MTM) side.

1. REMOVE FRONT WHEELS



2. SEPARATE FRONT STABILIZER LINK ASSY LH

(a) Remove the nut and disconnect the stabilizer bar link from the shock absorber.

HINT:

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

3. SEPARATE FRONT STABILIZER LINK ASSY RH

HINT:

Separate the RH side by the same procedures as the LH side.

4. SEPARATE TIE ROD END SUB–ASSY LH (See page 30–6)

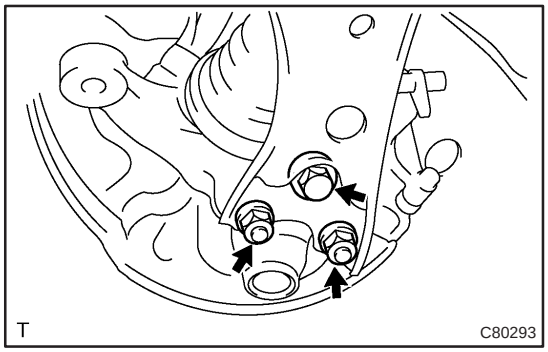
SST 09628–62011

5. SEPARATE TIE ROD END SUB–ASSY RH

SST 09628–62011

HINT:

Separate the RH side by the same procedures as the LH side.



6. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Remove the bolt and 2 nuts, and separate the front suspension arm sub–assy lower No.1 from the lower ball joint.

7. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 RH

HINT:

Separate the RH side by the same procedures as the LH side.

8. SEPARATE RACK & PINION POWER STEERING GEAR ASSY

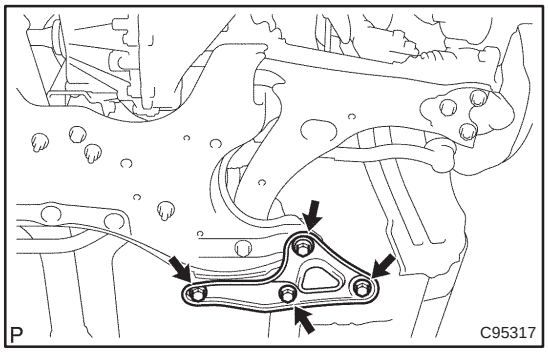
(a) Electric power steering model: See page 51–28

(b) Oil pressure power steering model: See page 51–36

9. SUSPEND ENGINE ASSY

(a) U341E: See page 40–11

(b) U241E: See page 40–25



10. REMOVE FRONT SUSPENSION MEMBER BRACE REAR LH

(a) Support the front suspension crossmember sub–assy with a transmission jack.

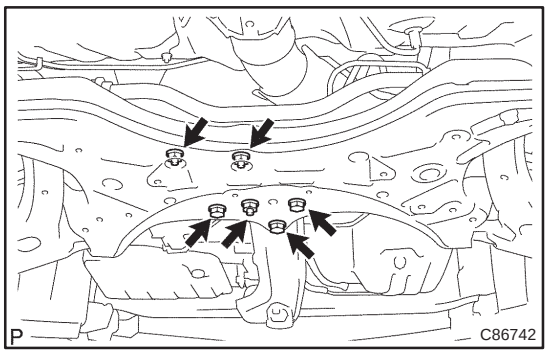
(b) Remove the 4 bolts and front suspension member brace rear LH.

(c) Remove the front suspension member body mounting stopper rear from the front suspension member brace rear LH.

11. REMOVE FRONT SUSPENSION MEMBER BRACE REAR RH

HINT:

Remove the RH side by the same procedures as the LH side.

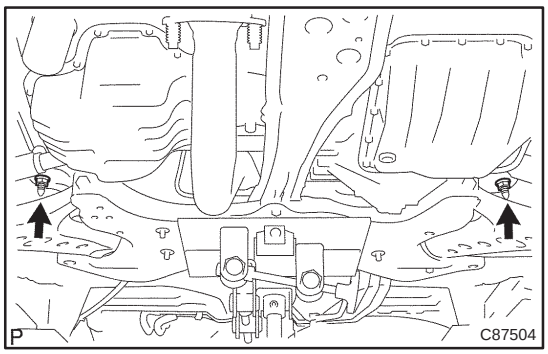


12. SEPARATE FRONT SUSPENSION CROSSMEMBER SUB–ASSY

(a) w/ HID:

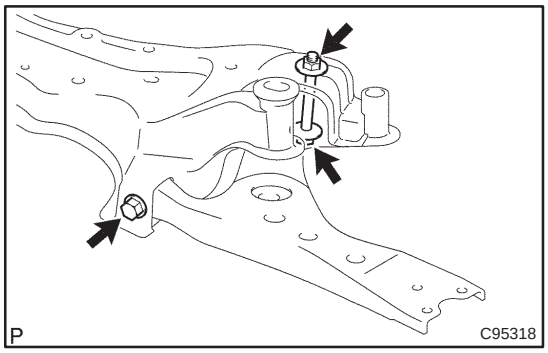
Disconnect the height control sensor (Front) connector.

(b) Remove the 3 bolts and 3 nuts, disconnect the transverse engine engine mounting insulator and engine mounting member sub–assy center from the front suspension crossmember sub–assy.



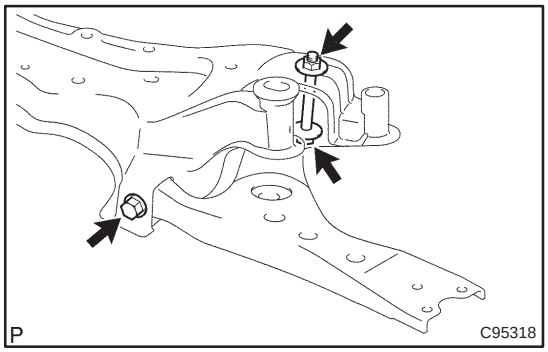
(c) Remove the 2 nuts and 2 front suspension member body mounting stoppers front.

(d) Lower the transmission jack, remove the front suspension crossmember sub–assy.



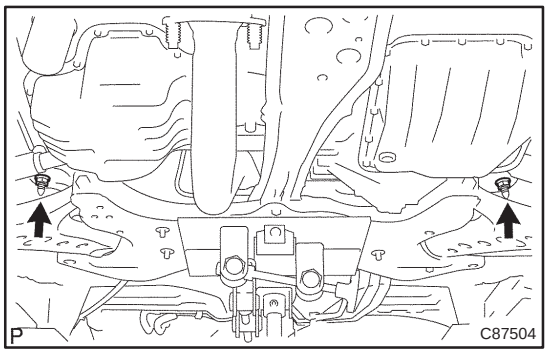
13. REMOVE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Remove the 2 bolts, nut and lower suspension arm sub–assy lower No.1 LH from the front suspension crossmember sub–assy.



14. TEMPORARILY TIGHTEN FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Install the lower suspension arm sub–assy lower No.1 LH, and temporarily tighten the 2 bolts and nut.

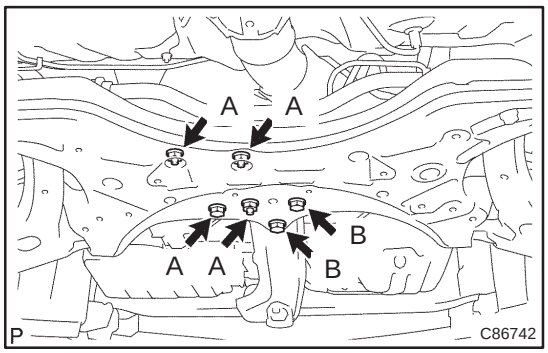


15. INSTALL FRONT SUSPENSION CROSSMEMBER SUB–ASSY

(a) Support the front suspension crossmember sub–assy with a transmission jack.

(b) Install the 2 front suspension member body mounting stoppers front and 2 nuts.

Torque: 133 N·m (1,360 kgf·cm, 98 ft·lbf)

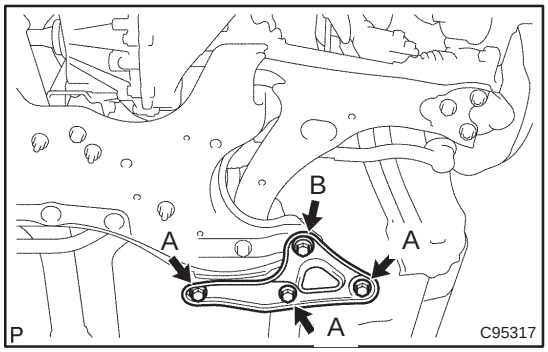


(c) Connect the transverse engine engine mounting insulator and engine mounting member sub–assy center to the front suspension crossmember sub–assy.

(d) Install the 3 bolts and 3 nuts.

Torque:
Bolt A: 52 N·m (530 kgf·cm, 38 ft·lbf)
Bolt B: 96 N·m (979 kgf·cm, 71 ft·lbf)

(e) w/ HID:
Connect the height control sensor (Front) connector.



16. INSTALL FRONT SUSPENSION MEMBER BRACE REAR LH

(a) Install the front suspension member body mounting stopper rear to the front suspension member brace rear LH.

(b) Install the 4 bolts and front suspension member brace rear LH.

Torque:
Bolt A: 80 N·m (816 kgf·cm, 59 ft·lbf)
Bolt B: 133 N·m (1,360 kgf·cm, 98 ft·lbf)

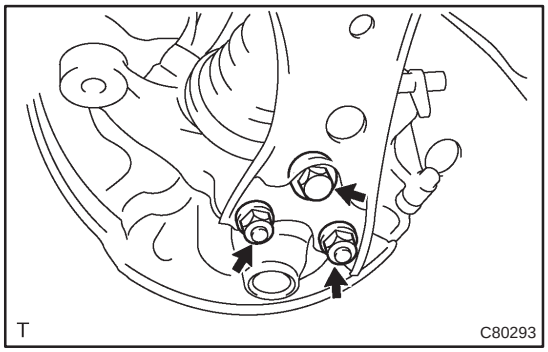
17. INSTALL FRONT SUSPENSION MEMBER BRACE REAR RH

HINT:
Install the RH side by the same procedures as the LH side.

18. CONNECT RACK & PINION POWER STEERING GEAR ASSY

(a) Electric power steering model: See page 51–28

(b) Oil pressure power steering model: See page 51–36



19. CONNECT FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Connect the lower suspension arm to the lower ball joint with the 2 nuts and bolt.
Torque: 89 N·m (908 kgf·cm, 66 ft·lbf)

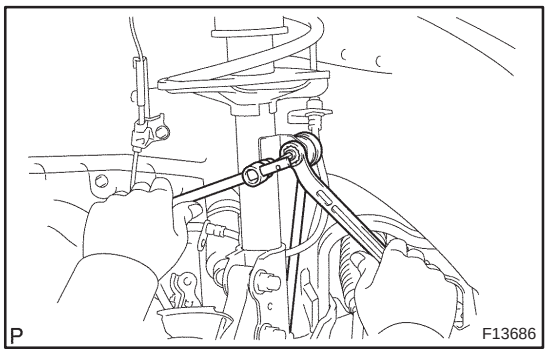
20. CONNECT FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 RH

HINT:
Connect the RH side by the same procedures as the LH side.

21. INSTALL TIE ROD END SUB–ASSY LH (See page 30–6)

22. INSTALL TIE ROD END SUB–ASSY RH

HINT:
Connect the RH side by the same procedures as the LH side.



23. CONNECT FRONT STABILIZER LINK ASSY LH

(a) Install the stabilizer bar link with the nut.
Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)

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

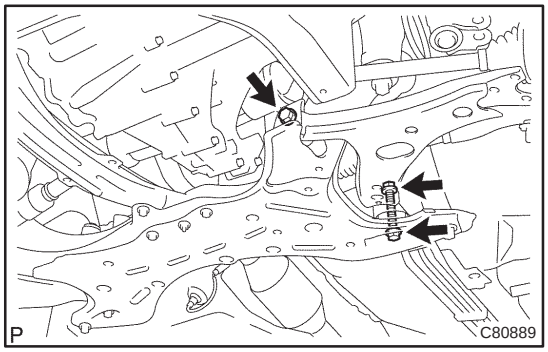
24. CONNECT FRONT STABILIZER LINK ASSY RH

HINT:
Install the RH side by the same procedures as the LH side.

25. STABILIZE SUSPENSION

(a) Install the front wheel and jack down the vehicle.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

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



26. FULLY TIGHTEN FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Fully tighten the 2 bolts and nut.
Torque: 137 N·m (1,400 kgf·cm, 101 ft·lbf)

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

FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (MTM)

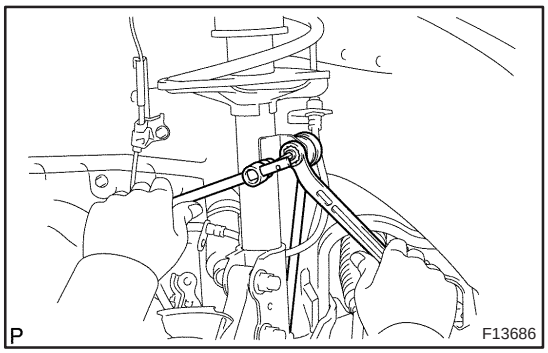
260DR–01

REPLACEMENT

HINT:

- COMPONENTS: See page 26–2
- Replace the RH side (Engine: 1AZ) by the same procedures as the LH (ATM) side.
- Replace the RH side (Engine: 1ZZ, 3ZZ, 1CD) by the same procedures as the LH (MTM) side.

1. REMOVE FRONT WHEELS



2. SEPARATE FRONT STABILIZER LINK ASSY LH

(a) Remove the nut and disconnect the stabilizer bar link from the shock absorber.

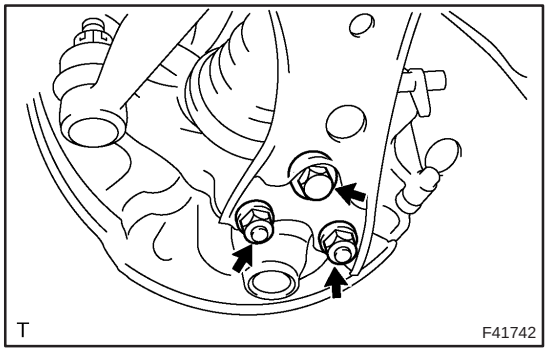
HINT:

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

3. SEPARATE FRONT STABILIZER LINK ASSY RH

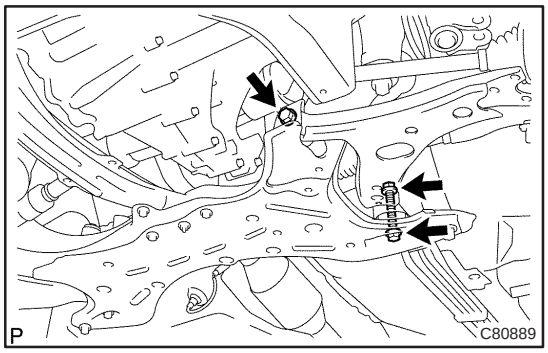
HINT:

Separate the RH side by the same procedures as the LH side.



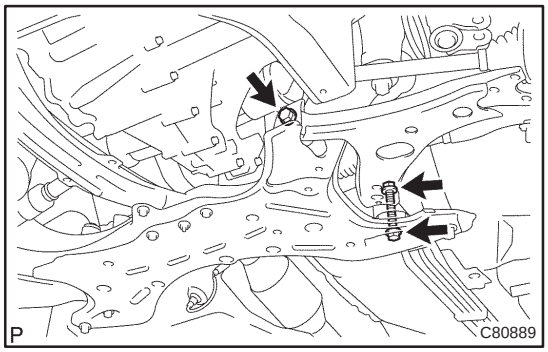
4. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Remove the bolt and 2 nuts, and separate the lower suspension arm from the lower ball joint.



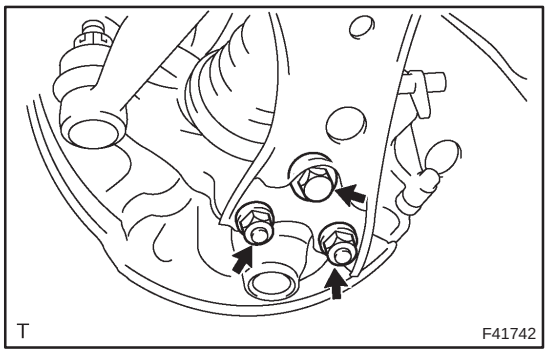
5. REMOVE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Remove the 2 bolts, nut and lower suspension arm sub–assy lower No.1 LH from the front suspension crossmember sub–assy.



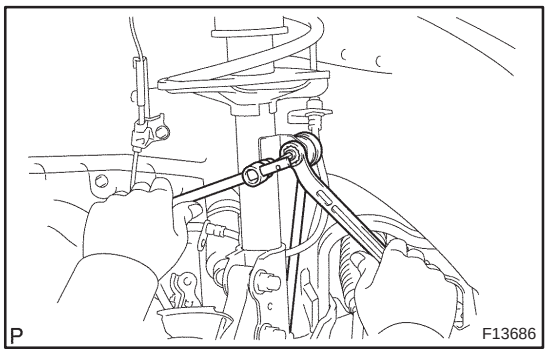
6. TEMPORARILY TIGHTEN FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Install the lower suspension arm, temporary tighten the 2 bolts and nut.



7. CONNECT FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Connect the lower suspension arm to the lower ball joint with the 2 nuts and bolt.
Torque: 89 N·m (908 kgf·cm, 66 ft·lbf)



8. CONNECT FRONT STABILIZER LINK ASSY LH

(a) Install the stabilizer bar link with the nut.
Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)

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

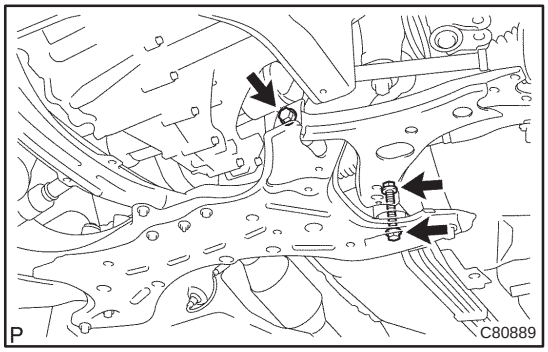
9. CONNECT FRONT STABILIZER LINK ASSY RH

HINT:
Install the RH side by the same procedures as the LH side.

10. STABILIZE SUSPENSION

(a) Install the front wheel and jack down the vehicle.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

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



11. FULLY TIGHTEN FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Fully tighten the 2 bolts and nut.
Torque: 137 N·m (1,400 kgf·cm, 101 ft·lbf)

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

FRONT SUSPENSION SYSTEM

2600K–06

PROBLEM SYMPTOMS TABLE

Use the table below to help you find the cause of the problem. The numbers indicate the priority of the likely cause of the problem. Check each part in order. If necessary, replace these parts.

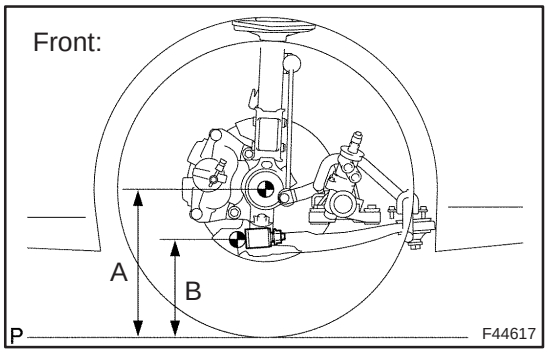
Symptom	Suspect Area	See page
Wander/pulls	4. Tire (Worn or improperly inflated)	28–1
	5. Wheel alignment (Incorrect)	26–6
	6. Steering linkage (Loose or worn)	–
	7. Hub bearing (Worn)	30–2
	8. Steering gear (Out of adjustment or broken)	51–28 51–36
	9. Suspension parts (Worn)	–
Bottoming	1. Vehicle (Overloaded)	–
	2. Spring (Weak)	26–10
	3. Shock absorber (Worn)	26–10
Sways/pitches	1. Tire (Worn or improperly inflated)	28–1
	2. Stabilizer bar (Bent or broken)	26–26
	3. Shock absorber (Worn)	26–10
Front wheel shimmy	1. Tire (Worn or improperly inflated)	28–1
	2. Wheel (Out of balance)	28–1
	3. Shock absorber (Worn)	26–10
	4. Wheel alignment (Incorrect)	26–6
	5. Ball joint (Worn)	26–24
	6. Hub bearing (Worn)	30–2
	7. Steering linkage (Loose or worn)	–
	8. Steering gear (Out of adjustment or broken)	51–28 51–36
Abnormal tire wear	1. Tire (Worn or improperly inflated)	28–1
	2. Wheel alignment (Incorrect)	26–6
	3. Shock absorber (Worn)	26–10
	4. Suspension parts (Worn)	–

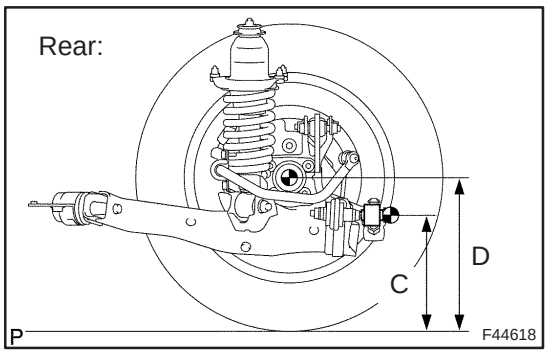
FRONT WHEEL ALIGNMENT

2600L–02

ADJUSTMENT

1. INSPECT TIRE (See page 28–1)





2. MEASURE VEHICLE HEIGHT

Vehicle height:

(Normal package)

Front	A – B: 92 mm (3.62 in.)
Rear	D – C: 61 mm (2.40 in.)

(Rough road package)

Front	A – B: 72 mm (2.83 in.)
Rear	D – C: 41 mm (1.61 in.)

Measuring points:

A: Ground clearance of front wheel center

B: Ground clearance of lower suspension arm front bolt center

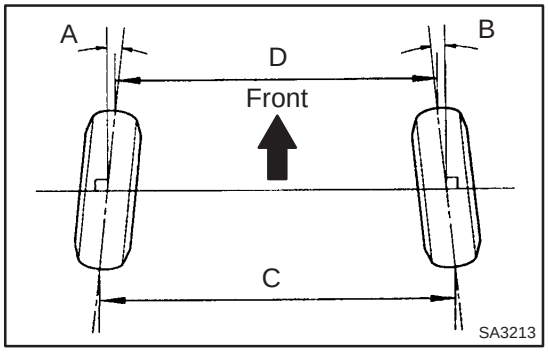
C: Ground clearance of toe control arm inner bolt center

D: Ground clearance of rear wheel center

NOTICE:

Before inspecting the wheel alignment, adjust the vehicle height to the specified value.

If the vehicle height is not the specified value, adjust it by pushing down or lifting the body.



3. INSPECT TOE–IN

Toe–in:

Toe–in (total)	A + B: 0°06' ± 12' (0.1° ± 0.2°) C – D: 1 ± 2 mm (0.04 ± 0.08 in.)

If the toe–in is not within the specified value, adjust it at the rack ends.

4. ADJUST TOE–IN

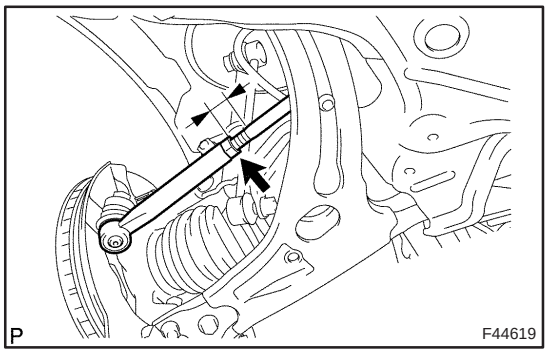
(a) Remove the rack boot set clips.

(b) Loosen the tie rod end lock nuts.

(c) Turn the right and left rack ends by an equal amount to adjust the toe–in.

HINT:

Adjust the toe–in to the center of the specified value as much as possible.



(d) Make sure that the lengths of the right and left rack ends are the same.

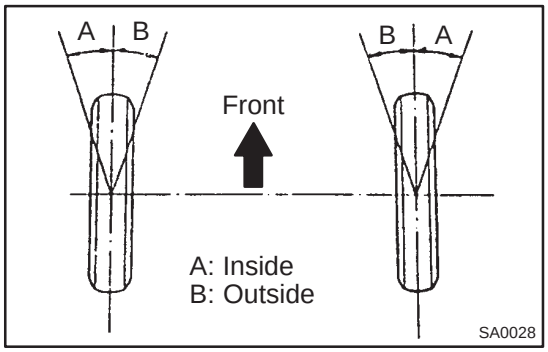
(e) Torque the tie rod end lock nuts.

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

(f) Place the boots on the seats and install the clips.

HINT:

Make sure that the boots are not twisted.



5. INSPECT WHEEL ANGLE

(a) Turn the steering wheel fully and measure the turning angle.

Wheel turning angle:

(Normal package)

Inside wheel	38°17' ± 2° (38.28° ± 2°) *1 35°47' ± 2° (35.78° ± 2°) *2
Outside wheel: Reference	32°52' (32.87°) *1 31°15' (31.25°) *2

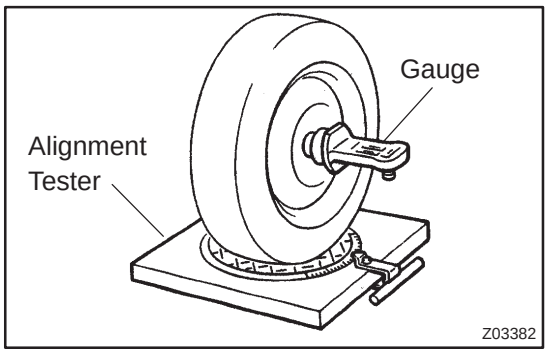
(Rough road package)

Inside wheel	38°42' ± 2° (38.70° ± 2°) *1 36°09' ± 2° (36.15° ± 2°) *2
Outside wheel: Reference	33°16' (33.27°) *1 31°38' (31.63°) *2

***1: Electric motor power steering models**

***2: Oil pressure power steering models**

If the right and left inside wheel angles differ from the specified value, check the right and left rack end lengths.



6. INSPECT CAMBER, CASTER AND STEERING AXIS INCLINATION

(a) Install the camber–caster–kingpin gauge or position the vehicle on the wheel alignment tester.

(b) Inspect the camber, caster and steering axis inclination.

Camber, caster and steering axis inclination:

(Normal package)

Camber	–0°34' ± 45' (–0.57° ± 0.75°)
Right–left error	45' (0.75°) or less
Caster	2°54' ± 45' (2.90° ± 0.75°)
Right–left error	45' (0.75°) or less
Steering axis inclination	12°27' ± 45' (12.45° ± 0.75°)
Right–left error	45' (0.75°) or less

(Rough road package)

Camber	–0°19' ± 45' (–0.32° ± 0.75°)
Right–left error	45' (0.75°) or less
Caster	2°40' ± 45' (2.67° ± 0.75°)
Right–left error	45' (0.75°) or less
Steering axis inclination	11°56' ± 45' (11.93° ± 0.75°)
Right–left error	45' (0.75°) or less

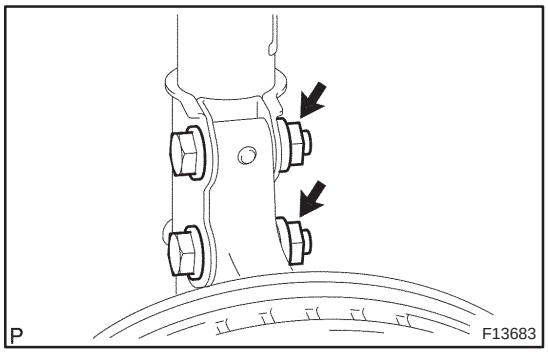
If the caster and steering axis inclination are not within the specified values, after the camber has been correctly adjusted, recheck the suspension parts for damaged and/or worn out parts.

7. ADJUST CAMBER

NOTICE:

After the camber has been adjusted, inspect the toe–in.

(a) Remove the front wheel.

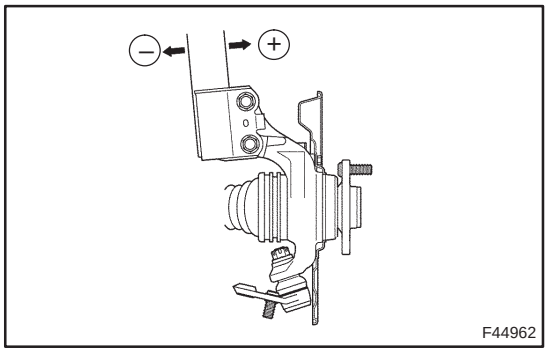


(b) Remove the 2 bolts and nuts on the lower side of the shock absorber.

If reusing the bolts and/or nuts, coat the threads of nuts with engine oil.

(c) Clean the installation surfaces of the shock absorber and the steering knuckle.

(d) Temporarily install the 2 bolts and nuts.

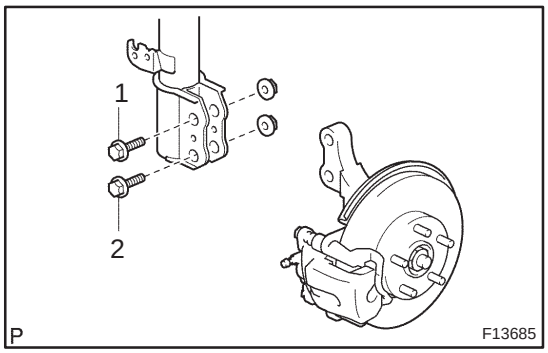


(e) Adjust the camber by pushing or pulling the lower side of the shock absorber in the direction in which the camber adjustment is required.

(f) Tighten the nuts.
Torque: 220 N·m (2,240 kgf·cm, 162 ft·lbf)

(g) Install the front wheel.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

(h) Check the camber.



HINT:

- Adjust the camber to the center of the specified value as much as possible.
- Adjusting value for the set bolts is 6' – 30' (0.1° – 0.5°).

If the camber is not within the specified value, using the following table, estimate how much additional camber adjustment will be required, and select the camber adjusting bolt.

NOTICE:
Tighten the adjusting bolt with a washer and a new nut.

Bolt / Adjusting Value	Set Bolt		Adjusting Bolt					
	90105–17008		90105–17009		90105–17010		90105–17011	
			1 Dot		2 Dots		3 Dots	
	1	2	1	2	1	2	1	2
–1°30'––1°15'							●	●
–1°15'––1°00'					●			●
–1°00'––45'			●					●
–45'––30'	●							●
–30'––15'	●					●		
–15'–0'	●			●				
0'–15'	●			●				
15'–30'	●					●		
30'–45'	●							●
45'–1°00'			●					●
1°00'–1°15'					●			●
1°15'–1°30'							●	●

N
F12938

(i) Perform the procedure mentioned above again. At step (b), replace 1 or 2 selected bolts.

HINT:
When replacing the 2 bolts, replace 1 bolt for each time.

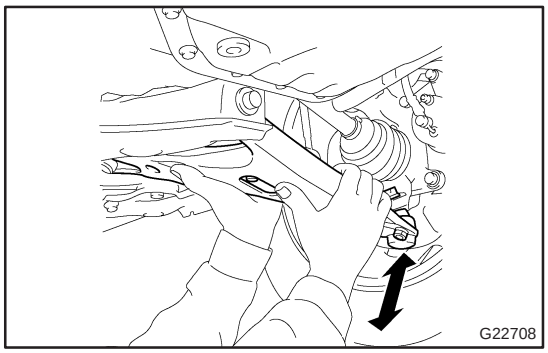
LOWER BALL JOINT ASSY FRONT LH

260DS–01

REPLACEMENT

HINT:

- COMPONENTS: See page 26–2
- Replace the RH side by the same procedures as the LH side.



1. INSPECT LOWER BALL JOINT ASSY FRONT LH

(a) Jack up front side of the vehicle.

(b) Check that there is no looseness on the ball joint by shaking the lower arm up and down with a force of 294 N (30 kgf, 66 lbf).

2. REMOVE FRONT WHEEL

3. SEPARATE FRONT AXLE HUB LH NUT (See page 30–6)

SST 09930–00010

4. DISCONNECT SPEED SENSOR FRONT LH (See page 30–6)

5. SEPARATE FRONT DISC BRAKE CALIPER ASSY LH (See page 30–22)

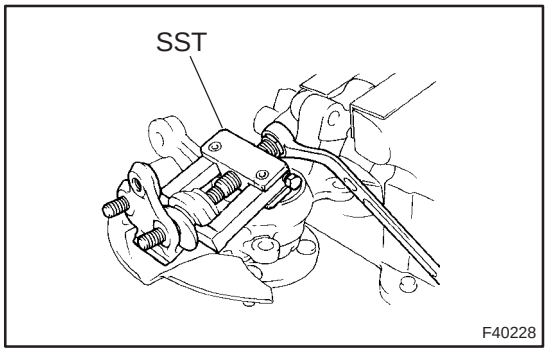
6. REMOVE FRONT DISC

7. SEPARATE TIE ROD END SUB–ASSY LH (See page 30–22)

SST 09628–62011

8. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (See page 30–22)

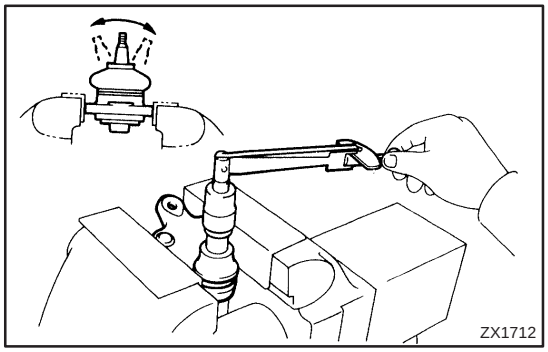
9. REMOVE FRONT AXLE ASSY LH (See page 30–22)



10. REMOVE LOWER BALL JOINT ASSY FRONT LH

(a) Remove the cotter pin and nut.

(b) Using SST, remove the lower ball joint assy front LH.



11. INSPECT LOWER BALL JOINT ASSY FRONT LH

(a) As shown in the illustration, flip the ball joint stud back and forth 5 times, before installing the nut.

(b) Using a torque wrench, turn the nut continuously at a rate of 3 – 5 seconds per 1 turn and take the torque reading on the 5th turn.

Turning torque:

0.98 – 4.9 N·m (10 – 50 kgf·cm, 9 – 43 in.·lbf)

12. INSTALL LOWER BALL JOINT ASSY FRONT LH

(a) Install the lower ball joint assy front LH, and torque the nut.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

(b) Install a new cotter pin.

NOTICE:
If the holes for the cotter pin are not aligned, tighten the nut further up to 60°.

13. INSTALL FRONT AXLE ASSY LH (See page 30–22)
14. INSTALL FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (See page 30–22)
15. INSTALL TIE ROD END SUB–ASSY LH (See page 30–22)
16. INSTALL FRONT DISC
17. INSTALL FRONT DISC BRAKE CALIPER ASSY LH (See page 30–22)
18. CONNECT SPEED SENSOR FRONT LH (See page 30–6)
19. INSTALL FRONT AXLE HUB LH NUT (See page 30–6)
20. INSTALL FRONT WHEEL
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
21. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (See page 26–6)
22. CHECK ABS SPEED SENSOR SIGNAL

(a) w/o VSC: See page 05–699
(b) w/ VSC: See page 05–756

STABILIZER BAR FRONT

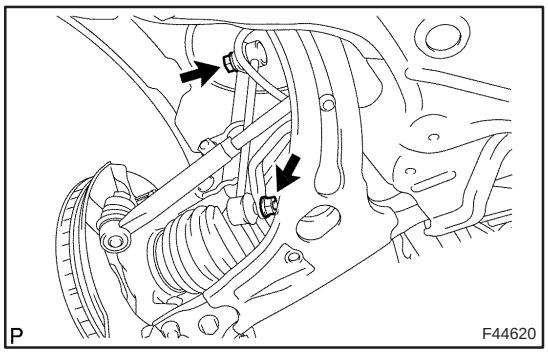
REPLACEMENT

2600P–03

HINT:

COMPONENTS: See page 26–2

1. REMOVE FRONT WHEEL



2. REMOVE FRONT STABILIZER LINK ASSY LH

(a) Remove the 2 nuts and front stabilizer link assy LH.

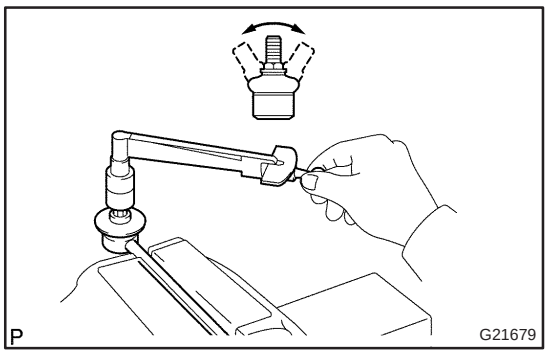
HINT:

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

3. REMOVE FRONT STABILIZER LINK ASSY RH

HINT:

Remove the RH side by the same procedures as the LH side.



4. INSPECT FRONT STABILIZER LINK ASSY LH

(a) As shown in the illustration, flip the ball joint stud back and forth 5 times, before installing the nut.

(b) Using a torque wrench, turn the nut continuously at a rate of 3 – 5 seconds per 1 turn and take the torque reading on the 5th turn.

Turning torque:

0.05 – 1.96 N·m (0.5 – 20 kgf·cm, 0.4 – 17 in.·lbf)

5. SEPARATE TIE ROD END SUB–ASSY LH (See page 30–6)

SST 09628–62011

6. SEPARATE TIE ROD END SUB–ASSY RH

SST 09628–62011

HINT:

Separate the RH side by the same procedures as the LH side.

7. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (See page 30–6)

8. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 RH

HINT:

Separate the RH side by the same procedures as the LH side.

9. SEPARATE RACK & PINION POWER STEERING GEAR ASSY

(a) Electric power steering model: See page 51–28

(b) Oil pressure power steering model: See page 51–36

10. SUSPEND ENGINE ASSY

(a) 1ZZ, 3ZZ Engine: See page 41–15

(b) 1AZ Engine: See page 41–24

(c) 1CD Engine: See page 41–33

11. REMOVE FRONT SUSPENSION MEMBER BRACE REAR LH (See page 26–16)

12. REMOVE FRONT SUSPENSION MEMBER BRACE REAR RH

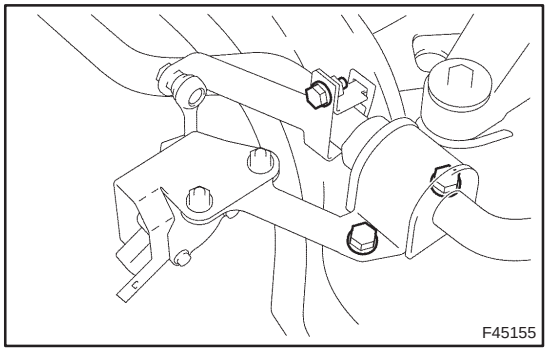
HINT:

Remove the RH side by the same procedures as the LH side.

13. SEPARATE FRONT SUSPENSION CROSSMEMBER SUB–ASSY (See page 26–16)

14. REMOVE FRONT STABILIZER BRACKET NO.1 LH

(a) Remove the 2 bolts and the front stabilizer bracket No.1 LH.



15. REMOVE FRONT STABILIZER BRACKET NO.1 RH

(a) w/ HID:
Remove the 3 bolts, the front stabilizer bracket No.1 RH and the height control sensor (Front).

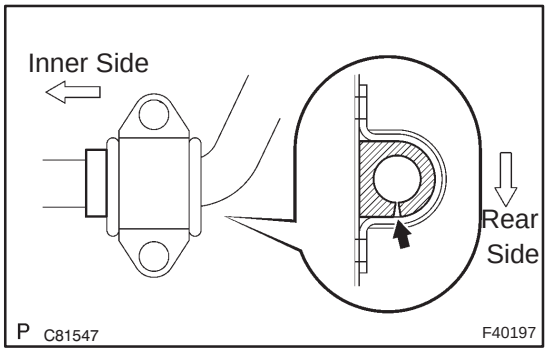
(b) w/o HID:
Remove the 2 bolts and the front stabilizer bracket No.1 RH.

16. REMOVE FRONT STABILIZER BAR BUSH NO.1

(a) Remove the 2 bushings from the stabilizer bar.

17. REMOVE STABILIZER BAR FRONT

18. INSTALL STABILIZER BAR FRONT



19. INSTALL FRONT STABILIZER BAR BUSH NO.1

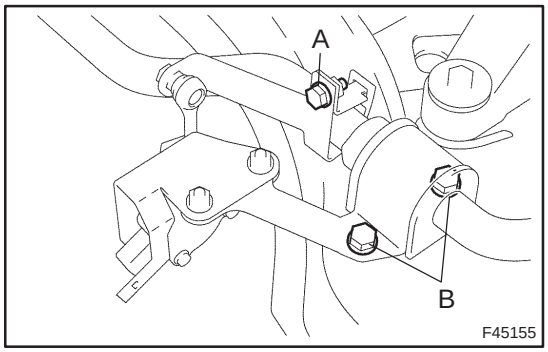
(a) Install the 2 front stabilizer bar bush No.1 to the stabilizer bar front as shown in the illustration.

HINT:

Install the bushing to the outer side of the bushing stopper on the stabilizer bar.

20. INSTALL FRONT STABILIZER BRACKET NO.1 LH

(a) Install the front stabilizer bracket No.1 LH with the 2 bolts.
Torque: 19 N·m (194 kgf·cm, 14 ft·lbf)



21. INSTALL FRONT STABILIZER BRACKET NO.1 RH

(a) w/ HID:
Install the front stabilizer bracket No.1 RH and the height control sensor (Front) with the 3 bolts.
Torque:
Bolt A: 5.4 N·m (55 kgf·cm, 48 in.·lbf)
Bolt B: 19 N·m (194 kgf·cm, 14 ft·lbf)

(b) w/o HID:
Install the front stabilizer bracket No.1 RH with the 2 bolts.
Torque: 19 N·m (194 kgf·cm, 14 ft·lbf)

22. INSTALL FRONT SUSPENSION CROSSMEMBER SUB–ASSY (See page 26–16)

23. INSTALL FRONT SUSPENSION MEMBER BRACE REAR LH (See page 26–16)

24. INSTALL FRONT SUSPENSION MEMBER BRACE REAR RH

HINT:
Install the RH side by the same procedures as the LH side.

25. INSTALL RACK & PINION POWER STEERING GEAR ASSY

(a) Electric power steering model: See page 51–28
(b) Oil pressure power steering model: See page 51–36

26. INSTALL FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (See page 30–6)

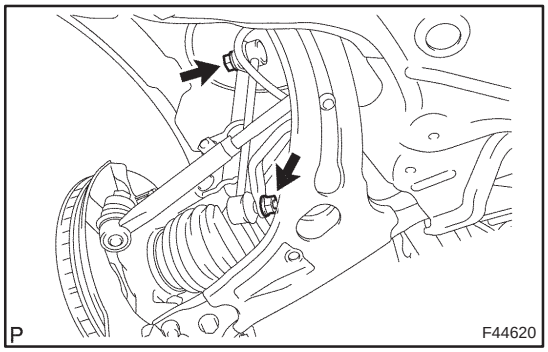
27. INSTALL FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 RH

HINT:
Connect the RH side by the same procedures as the LH side.

28. INSTALL TIE ROD END SUB–ASSY LH (See page 30–6)

29. INSTALL TIE ROD END SUB–ASSY RH

HINT:
Connect the RH side by the same procedures as the LH side.



30. INSTALL FRONT STABILIZER LINK ASSY LH

(a) Install the front stabilizer link assy LH with the 2 nuts.
Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)

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

31. INSTALL FRONT STABILIZER LINK ASSY RH

HINT:
Install the RH side by the same procedures as the LH side.

32. INSTALL FRONT WHEEL
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

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

34. HEADLIGHT AIM ONLY (W/ DISCHARGE HEAD LAMP) (See page 65–19)