

TROUBLESHOOTING

SAOR1-07

PROBLEM SYMPTOMS TABLE

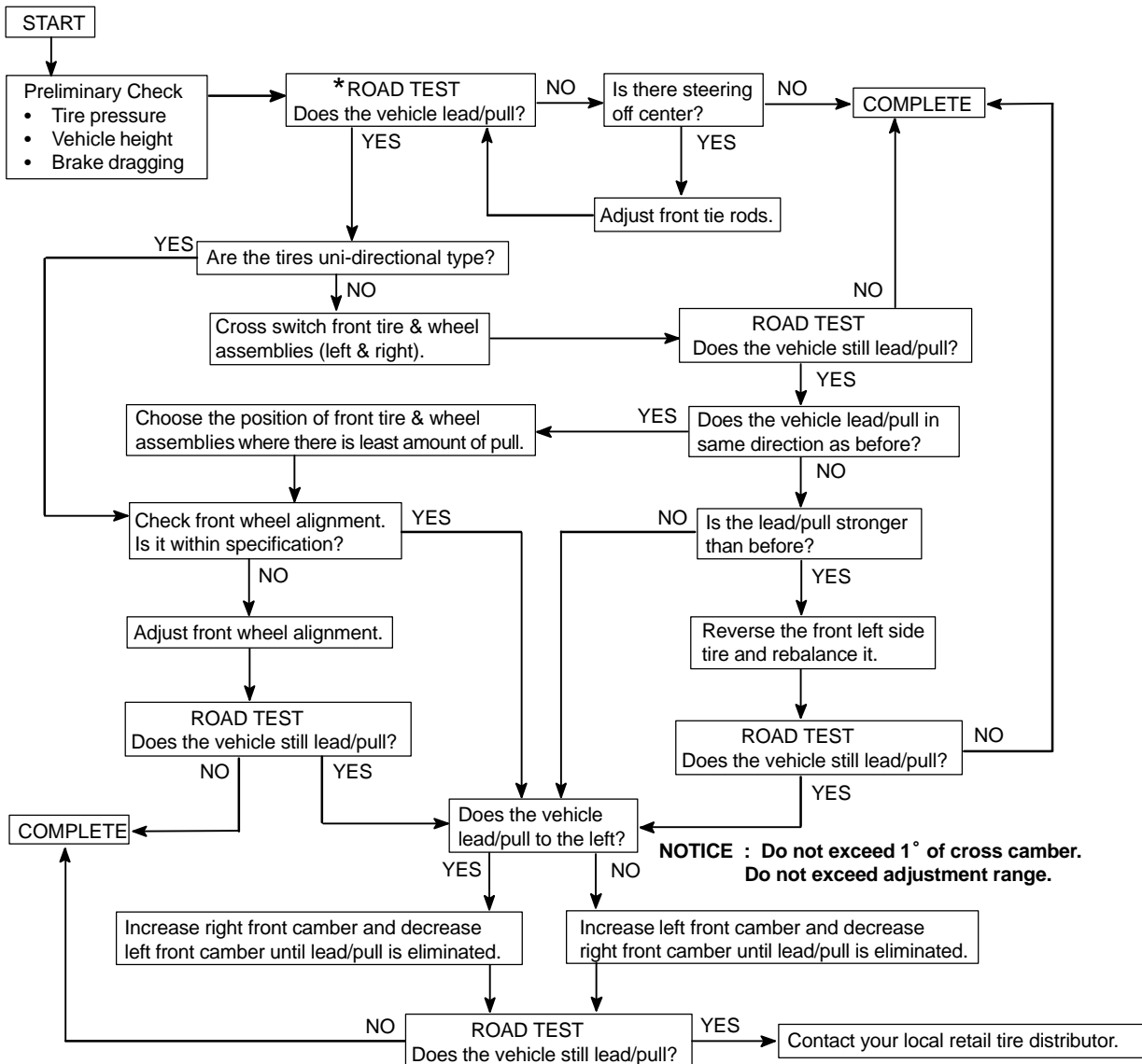
Use the table below to help you find the cause of the problem. The numbers indicate the priority of the likely cause of the problem. Check each part in order. If necessary, replace these parts.

Symptom	Suspect Area	See page
Bottoming	<ol style="list-style-type: none"> 1. Vehicle (Overloaded) 2. Spring (Weak) 3. Shock absorber (Worn) 	<p>-</p> <p>SA-19</p> <p>SA-109</p> <p>SA-23</p> <p>SA-114</p>
Sways/pitches	<ol style="list-style-type: none"> 1. Tire (Worn or improperly inflated) 2. Stabilizer bar (Bent or broken) 3. Shock absorber (Worn) 	<p>SA-3</p> <p>SA-44</p> <p>SA-130</p> <p>SA-23</p> <p>SA-114</p>
Front wheel shimmy	<ol style="list-style-type: none"> 1. Tire (Worn or improperly inflated) 2. Wheel (Out of balance) 3. Shock absorber (Worn) 4. Wheel alignment (Incorrect) 5. Ball joint (Worn) 6. Hub bearing (Loose or worn) 7. Steering linkage (Loose or worn) 8. Steering gear (Out of adjustment or broken) 	<p>SA-3</p> <p>SA-3</p> <p>SA-23</p> <p>SA-5</p> <p>SA-31</p> <p>SA-39</p> <p>SA-42</p> <p>SA-12</p> <p>-</p> <p>SR-46</p>
Abnormal tire wear	<ol style="list-style-type: none"> 1. Tire (Improperly inflated) 2. Wheel alignment (Incorrect) 3. Shock absorber (Worn) 4. Suspension parts (Worn) 	<p>SA-3</p> <p>SA-5</p> <p>SA-9</p> <p>SA-23</p> <p>SA-114</p> <p>-</p>
Noise in rear differential	<ol style="list-style-type: none"> 1. Oil level (Low or wrong grade) 2. Excessive backlash between pinion and ring gear 3. Ring, pinion or side gears (Worn or chipped) 4. Side bearing (Worn) 	<p>SA-69</p> <p>SA-76</p> <p>SA-76</p> <p>SA-76</p>
Oil leak from rear differential	<ol style="list-style-type: none"> 1. Oil level (Too high or wrong grade) 2. Drive pinion oil seal (Worn or damaged) 3. Side gear oil seal (Worn or damaged) 4. Companion flange (Loose or damaged) 5. Side gear shaft (Damaged) 	<p>SA-69</p> <p>SA-67</p> <p>SA-72</p> <p>SA-81</p> <p>SA-76</p>

REPAIR PROCEDURES

HINT:

This is a flow chart for vehicle pull.



* Select a flat road where the vehicle can be driven in a straight line for 100 meters at a constant speed of 35mph. Please confirm safety and set the steering wheel to its straight position. Drive the vehicle in a straight line for 100 meters at a constant speed of 35mph without holding the steering wheel.

(1) The vehicle can keep straight but the steering wheel has some angle. —→ STEERING OFF CENTER (See page SR-9)

(2) The vehicle cannot keep straight. —→ STEERING PULL

TIRE AND WHEEL INSPECTION

SA28G-01

1. INSPECT TIRE

(a) Check the tires for wear and proper inflation pressure.

Cold tire inflation pressure:

(SEDAN):

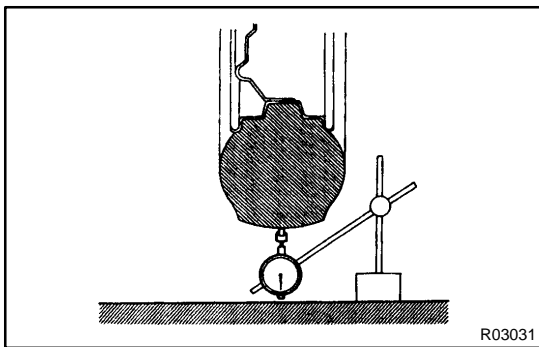
Tire size	Front kpa (kgf/cm ² ,psi)	Rear kpa (kgf/cm ² ,psi)
215/45ZR17	230 (2.3, 33) *1 300 (3.0, 44) *2	230 (2.3, 33) *1 300 (3.0, 44) *2
P205/55R16 89V	230 (2.3, 33) *1 300 (3.0, 44) *2	230 (2.3, 33) *1 300 (3.0, 44) *2

(WAGON):

Tire size	Front kpa (kgf/cm ² ,psi)	Rear kpa (kgf/cm ² ,psi)
215/45ZR17	230 (2.3, 33) *1 300 (3.0, 44) *2	-
225/45ZR17	-	240 (2.4, 35) *1 310 (3.1, 45) *2
P205/55R16 89V	230 (2.3, 33) *1 300 (3.0, 44) *2	230 (2.3, 33) *1 320 (3.2, 46) *2

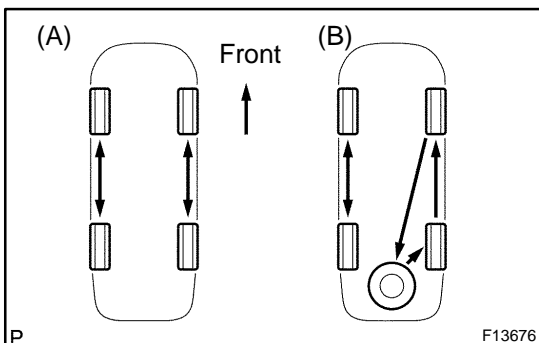
*1: For driving under 160 km/h (100 mph)

*2: For driving at 160 km/h (100 mph) or over



(b) Check the tire runout.

Tire runout: 1.4 mm (0.055 in.) or less



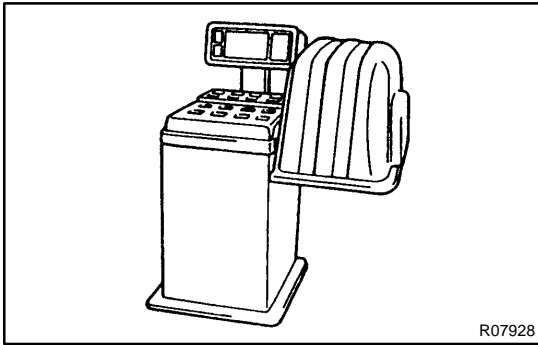
2. ROTATING TIRES

NOTICE:

Tires must not be rotated for wagon due to the difference in size between the front and rear tires.

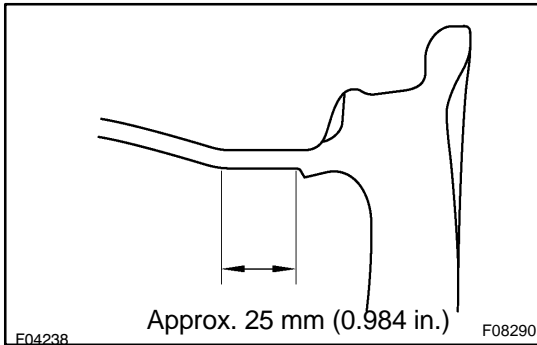
HINT:

- ◆ Rotate tires as shown in the illustration as rotation.
- ◆ Rotate as shown in (B) if the spare tire is included in the rotation.



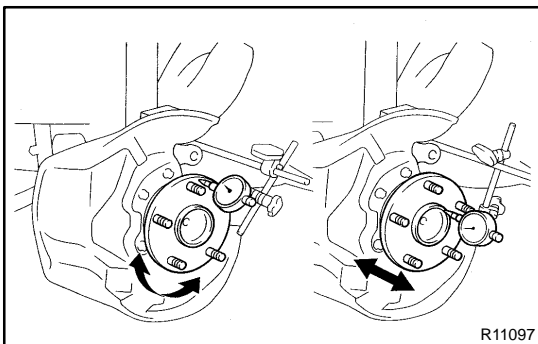
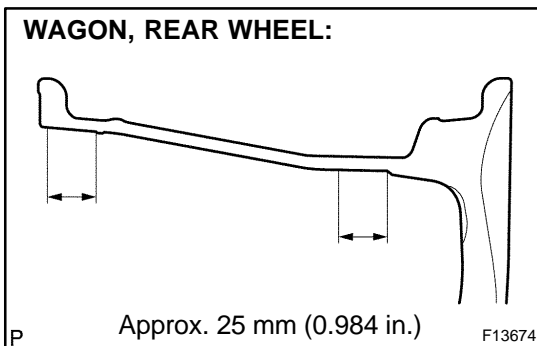
3. INSPECT WHEEL BALANCE

- (a) Check and adjust the off-the-car balance.
 - (b) If necessary, check and adjust the on-the-car balance.
- Imbalance after adjustment: 8.0 g (0.018 lb) or less**



NOTICE:

- ◆ Adhere the sticking type balance weight to the flat position as shown in the illustration.
- ◆ Push the balance weight securely with a finger to adhere it to the position.
(Pushing force: 10 kgf/more than 2 secs.)
- ◆ After cleaning the surface which the balance weight will be adhered to of dirt, oil and water with a cleaning detergent, adhere the balance weight to the surface.
- ◆ Do not touch the sticking surface of the tape.
- ◆ Do not use the once used balance weight.
- ◆ Please use the TOYOTA genuine sticking type balance weight.



4. CHECK WHEEL BEARING LOOSENESS

- (a) Check the backlash in the bearing shaft direction.
Maximum: 0.05 mm (0.0020 in.)
- (b) Check the axle hub deviation.
Maximum: 0.05 mm (0.0020 in.)

5. CHECK FRONT SUSPENSION FOR LOOSENESS

6. CHECK STEERING LINKAGE FOR LOOSENESS

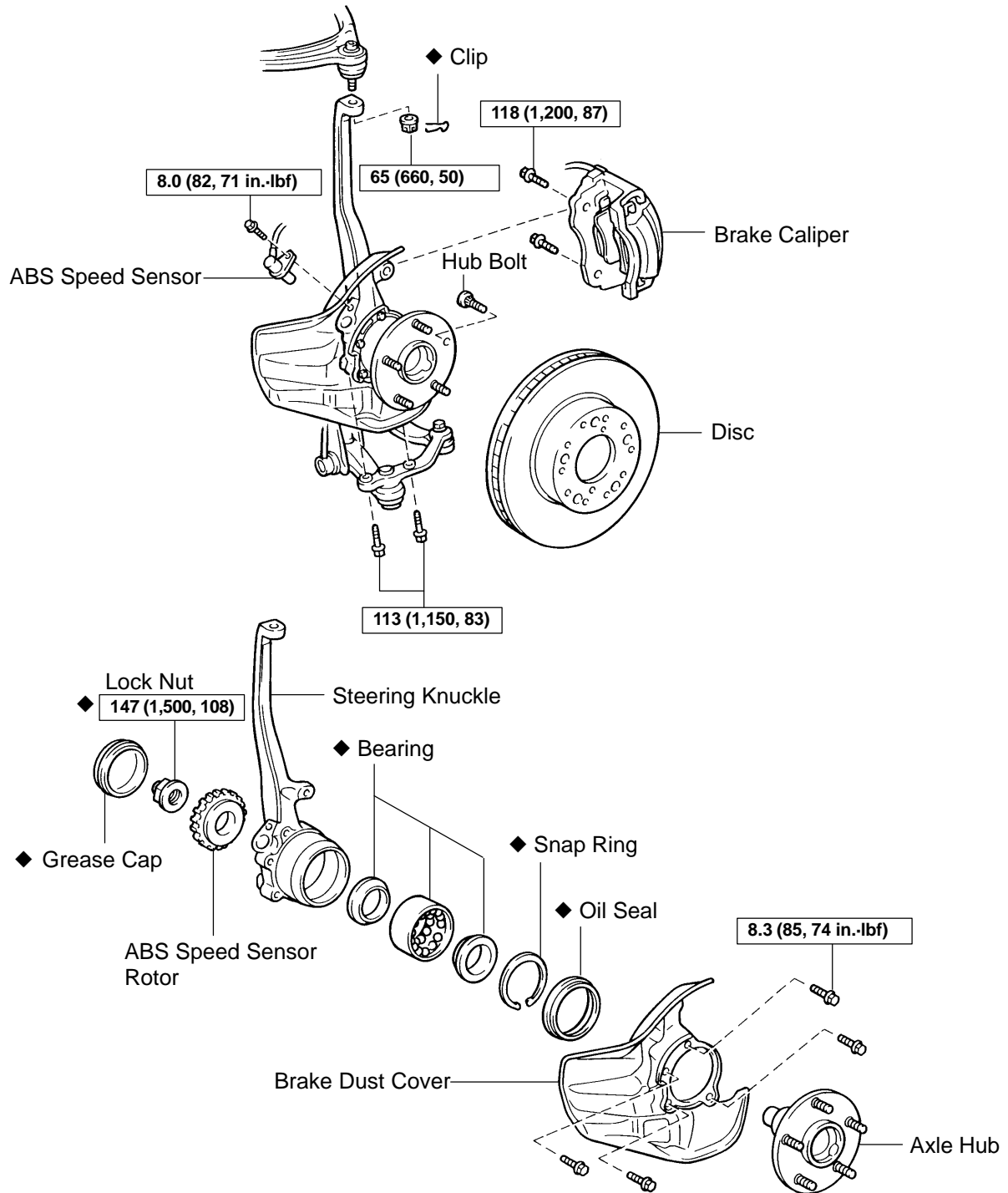
7. CHECK BALL JOINT FOR LOOSENESS AND EXCESSIVE PLAY (See page SA-39)

8. CHECK SHOCK ABSORBER WORKS PROPERLY

- ◆ Check if oil leaks
- ◆ Check mounting bushings for wear
- ◆ Bounce front and rear of the vehicle

FRONT AXLE HUB COMPONENTS

SA0R5-08



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

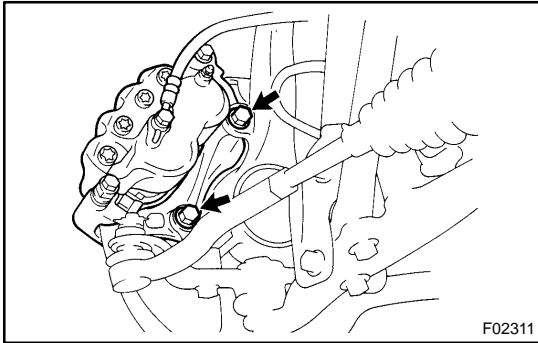
◆ Non-reusable part

N

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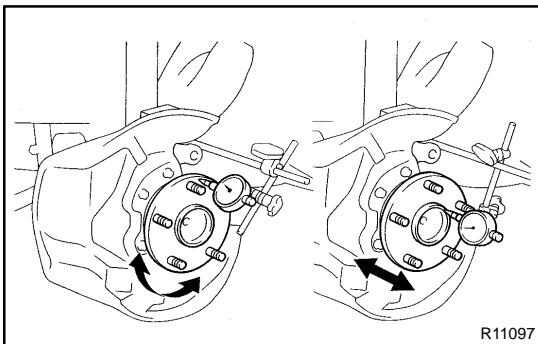
REMOVAL

1. REMOVE FRONT WHEEL



2. REMOVE FRONT BRAKE CALIPER AND DISC

- (a) Remove the 2 bolts and brake caliper from the steering knuckle.
- (b) Support the brake caliper securely.
- (c) Remove the disc.



3. CHECK BEARING BACKLASH AND AXLE HUB DEVIATION

- (a) Using a dial indicator near the center of the axle hub and check the backlash in the bearing shaft direction.
Maximum: 0.05 mm (0.0020 in.)

If the backlash exceeds the maximum, replace the bearing.

- (b) Using a dial indicator, check the deviation at the surface of the axle hub outside the hub bolt.
Maximum: 0.05 mm (0.0020 in.)

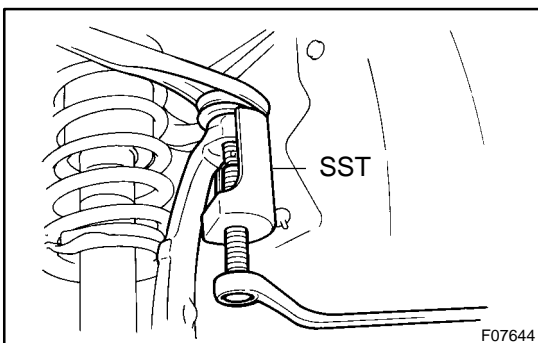
If the deviation exceeds the maximum, replace the axle hub.

4. REMOVE ABS SPEED SENSOR

Remove the bolt and disconnect the ABS speed sensor from the steering knuckle.

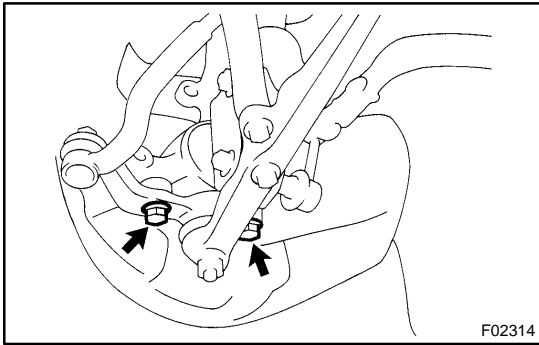
5. REMOVE STEERING KNUCKLE WITH AXLE HUB

- (a) Remove the clip and nut.



- (b) Using SST, remove the steering knuckle from the upper suspension arm.
SST 09610-20012
- (c) Temporarily install the steering knuckle to the upper suspension arm with the nut.

SUSPENSION AND AXLE - FRONT AXLE HUB

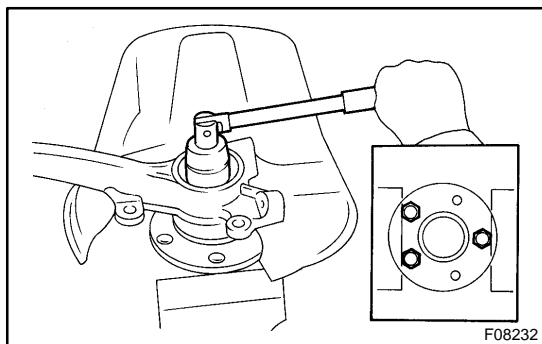


- (d) Remove the 2 bolts and disconnect the lower ball joint from the steering knuckle.
- (e) Remove the nut and steering knuckle with the axle hub from the upper suspension arm.

DISASSEMBLY

1. REMOVE GREASE CAP

Using a screwdriver and hammer, remove the grease cap from the steering knuckle.



2. REMOVE LOCK NUT

- (a) Mount the axle hub in a soft jaw vise.

HINT:

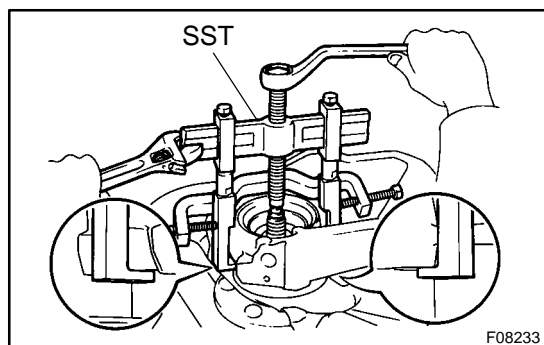
Close the vise until it holds hub bolts. Do not tighten further.

- (b) Using a chisel and hammer, loosen the staked part of the lock nut.

- (c) Using a socket wrench (32 mm), remove the lock nut.

3. REMOVE ABS SPEED SENSOR ROTOR AND AXLE HUB

- (a) Remove the 4 bolts and shift the brake dust cover toward the outside.



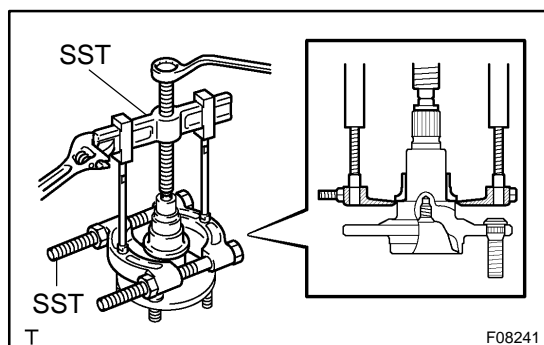
- (b) Using SST, remove the ABS speed sensor rotor and axle hub from the steering knuckle.

SST 09950-40011 (09951-04020, 09952-04010, 09953-04020, 09954-04010, 09955-04051, 09957-04010, 09958-04011)

NOTICE:

Take care not to scratch the serrations of the sensor rotor.

- (c) Remove the brake dust cover.



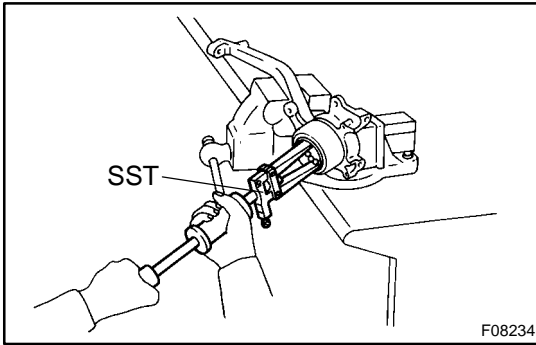
4. REMOVE INNER RACE (OUTSIDE)

Using SST, remove the inner race from the axle hub.

SST 09950-00020, 09950-40011 (09951-04020, 09953-04030, 09957-04010), 09950-50013 (09952-05010, 09954-05031, 09955-05040)

NOTICE:

Be careful not to damage the axle hub.

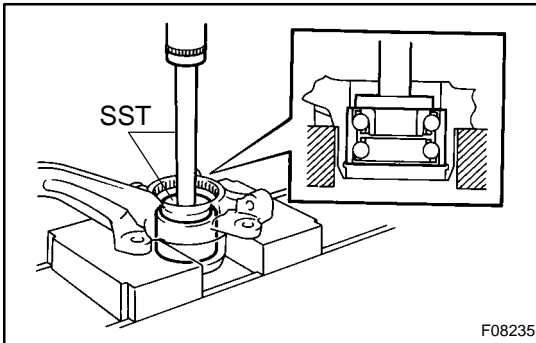
**5. REMOVE OIL SEAL**

Using SST, remove the oil seal from the steering knuckle.

SST 09308-00010

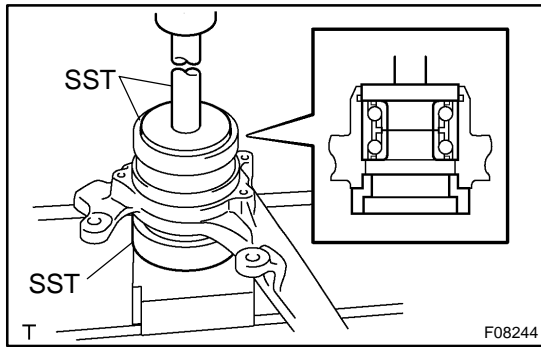
6. REMOVE BEARING

(a) Using snap ring pliers, remove the snap ring from the steering knuckle.



(b) Using SST and a press, remove the bearing from the steering knuckle.

SST 09950-60010 (09951-00560), 09950-70010
(09951-07150)



REASSEMBLY

1. INSTALL BEARING

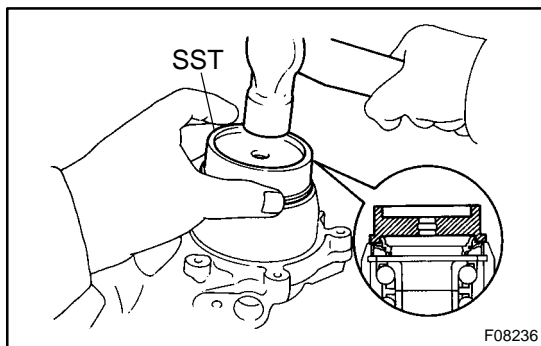
- (a) Using SST and a press, install a new bearing to the steering knuckle.

SST 09502-24010, 09950-60020 (09951-00710),
09950-70010 (09951-07150)

NOTICE:

If the inner race and balls come loose from the bearing outer race, make sure that they are installed on the same side as before.

- (b) Using snap ring pliers, install a new snap ring to the steering knuckle.



2. INSTALL OIL SEAL

- (a) Using SST and a hammer, install a new oil seal until it is flush with the end surface of the steering knuckle.

SST 09608-32010

- (b) Coat MP grease to the oil seal lip.

3. INSTALL AXLE HUB

- (a) Install the brake dust cover to the steering knuckle with the 4 bolts.

Torque: 8.3 N·m (85 kgf·cm, 74 in.-lbf)

- (b) Using SST and a press, install the axle hub to the steering knuckle.

SST 09316-60011 (09316-00011, 09316-00071),
09608-32010

4. INSTALL ABS SPEED SENSOR ROTOR

Install the speed sensor rotor to the steering knuckle with its concave surface facing to the inner side.

NOTICE:

Do not scratch the serrations of the sensor rotor.

5. INSTALL LOCK NUT

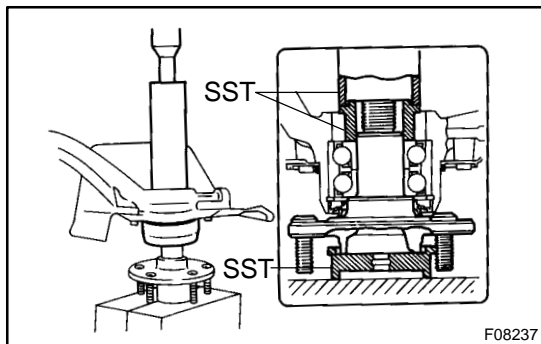
- (a) Using a socket wrench (32 mm), install a new lock nut.

Torque: 147 N·m (1,500 kgf·cm, 108 ft·lbf)

- (b) Using a chisel and hammer, stake the lock nut.

6. INSTALL GREASE CAP

Using a screwdriver and hammer, install the grease cap to the steering knuckle.



INSTALLATION

1. INSTALL STEERING KNUCKLE WITH AXLE HUB

- (a) Temporarily install the steering knuckle to the upper suspension arm with the nut.
- (b) Connect the steering knuckle to the lower ball joint with the 2 bolts.

Torque: 113 N·m (1,150 kgf·cm, 83 ft·lbf)

- (c) Torque the nut on the upper side of the steering knuckle.

Torque: 65 N·m (660 kgf·cm, 50 ft·lbf)

- (d) Install a new clip.

If the holes for the clip are not aligned, tighten the nut further up to 60°.

2. CONNECT ABS SPEED SENSOR TO STEERING KNUCKLE

Torque: 8.0 N·m (82 kgf·cm, 71 in·lbf)

3. CHECK BEARING BACKLASH AND AXLE HUB DEVIATION (See page [SA-12](#))

4. INSTALL DISC AND BRAKE CALIPER

Install the disc, brake caliper and 2 bolts.

Torque: 118 N·m (1,200 kgf·cm, 87 ft·lbf)

5. INSTALL FRONT WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

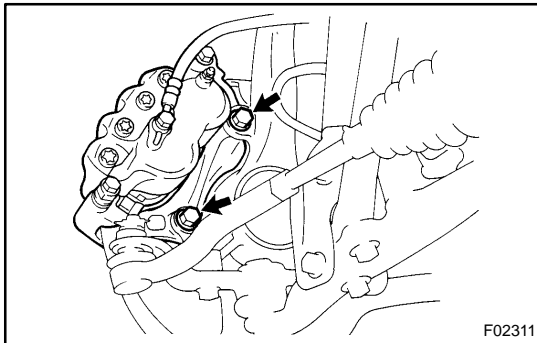
6. DEPRESS BRAKE PEDAL SEVERAL TIMES

7. CHECK FRONT WHEEL ALIGNMENT (See page [SA-5](#))

8. CHECK ABS SPEED SENSOR SIGNAL (See page [DI-437](#) or [DI-507](#))

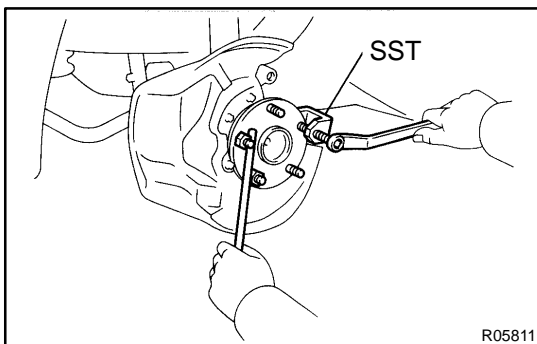
FRONT WHEEL HUB BOLT REPLACEMENT

1. REMOVE FRONT WHEEL



2. REMOVE BRAKE CALIPER AND DISC

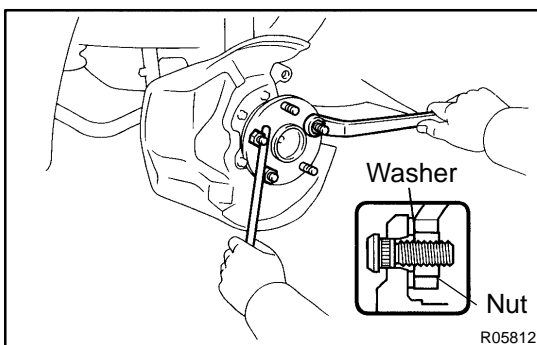
- Remove the 2 bolts and brake caliper from the steering knuckle.
- Support the brake caliper securely.
- Remove the disc.



3. REMOVE HUB BOLT

Using SST and a brass bar or an equivalent to hold, remove the hub bolt.

SST 09628-1001 1



4. INSTALL HUB BOLT

- Install a washer and nut to a new hub bolt, as shown in the illustration.
- Using a brass bar or an equivalent to hold, install the hub bolt by torquing the nut.

5. INSTALL DISC AND BRAKE CALIPER

- Install the disc.
- Install the brake caliper and 2 bolts to the steering knuckle.

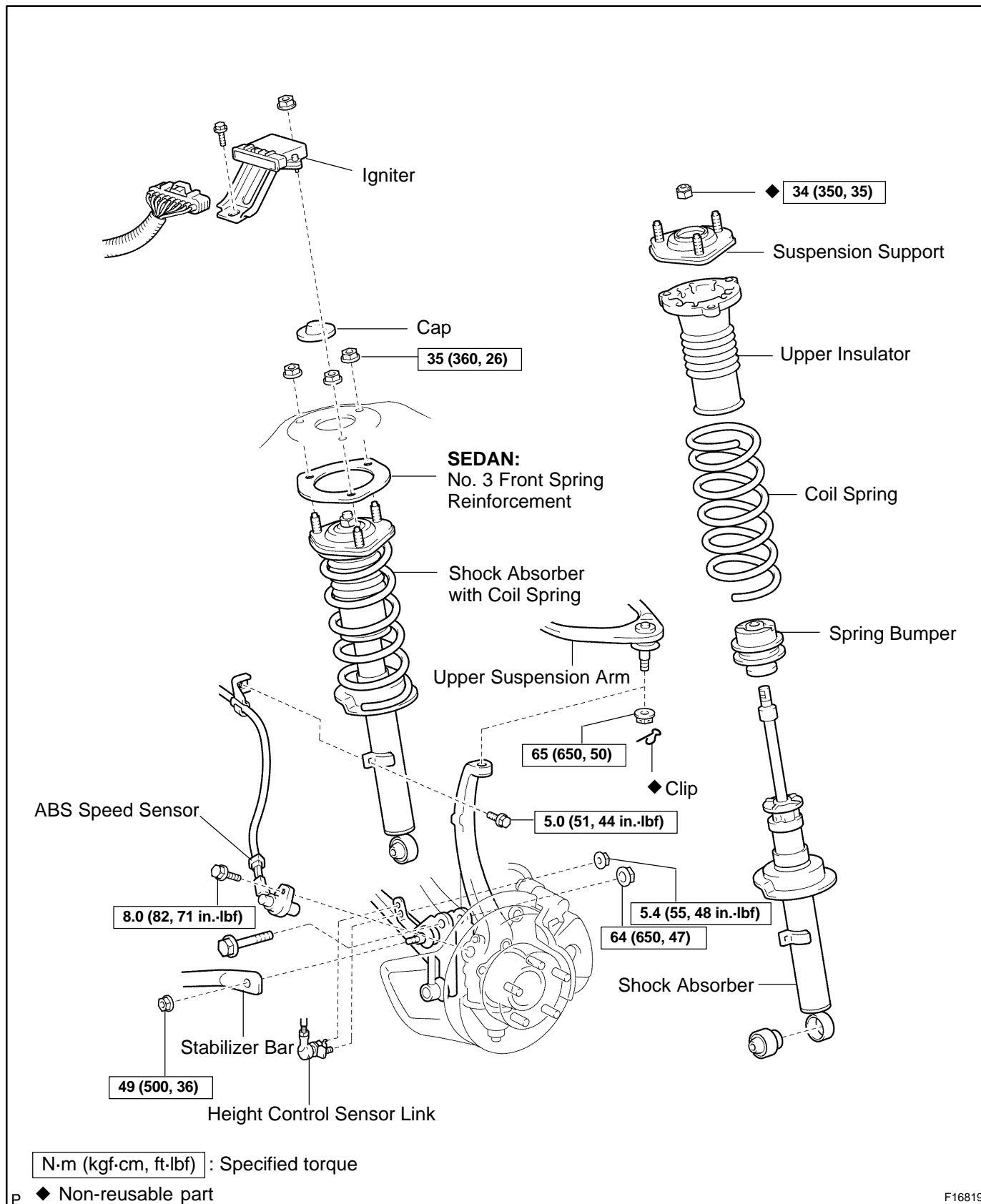
Torque: 118 N·m (1,200 kgf·cm, 87 ft·lbf)

6. INSTALL FRONT WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

FRONT SHOCK ABSORBER COMPONENTS

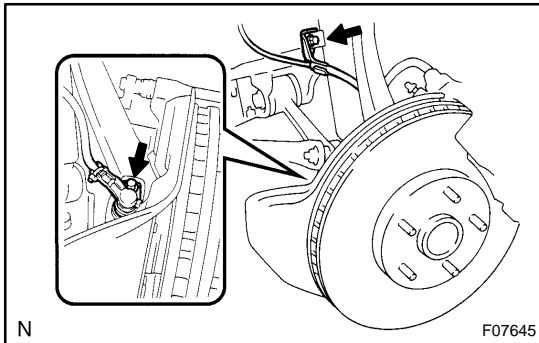
SAORB-11



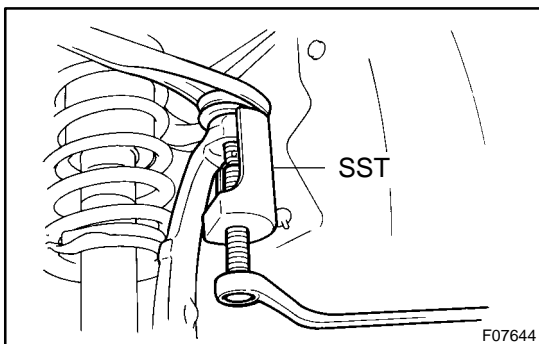
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REMOVAL

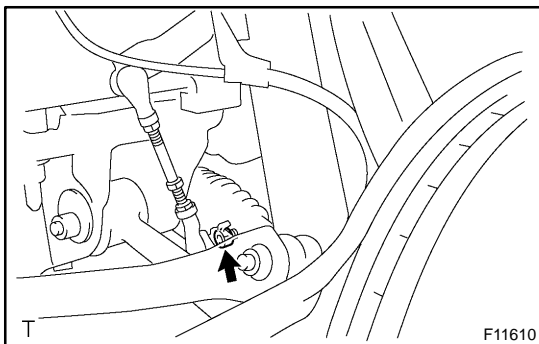
1. REMOVE FRONT WHEEL
2. REMOVE IGNITER
 - (a) Disconnect the connector.
 - (b) Remove the bolt, nut and igniter.



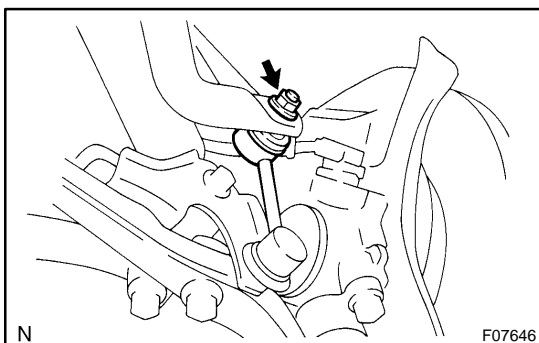
3. DISCONNECT ABS SPEED SENSOR AND WIRE HARNESS CLAMP
 - (a) Remove the bolt and disconnect the ABS speed sensor from the steering knuckle.
 - (b) Remove the bolt and disconnect the ABS speed sensor wire harness clamp from the shock absorber.
4. DISCONNECT UPPER SUSPENSION ARM FROM STEERING KNUCKLE
 - (a) Remove the clip and nut.



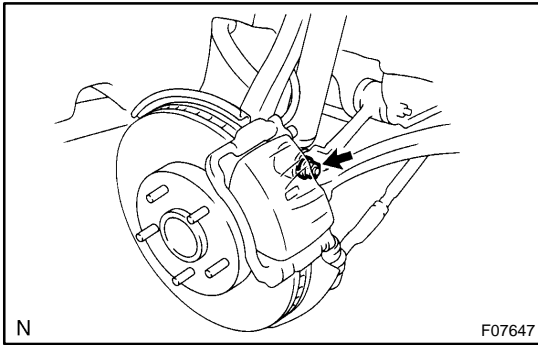
- (b) Using SST, disconnect the upper suspension arm.
SST 09610-20012
- (c) Support the steering knuckle securely.



5. DISCONNECT HEIGHT CONTROL SENSOR LINK
Remove the nut and disconnect the height control sensor link from lower arm.

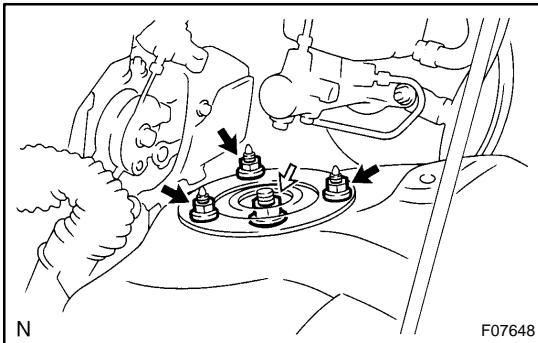


6. DISCONNECT STABILIZER BAR LINK FROM STABILIZER BAR
Remove the nut and disconnect the stabilizer bar link.
HINT:
If the ball joint turns together with the nut, use a 5 mm hexagon wrench to hold the stud.



7. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING

- (a) Remove the nut and bolt, and disconnect the shock absorber from the shock absorber bracket.
- (b) Remove the cap from the suspension support.



- (c) Loosen the nut in the center of the suspension support.

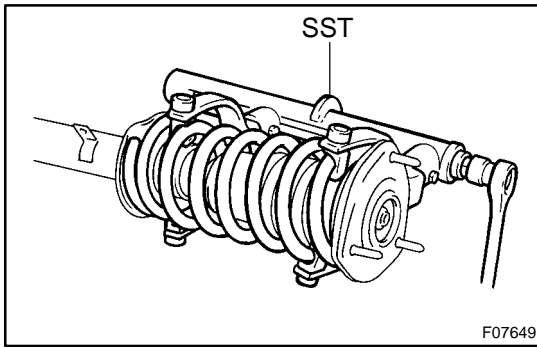
NOTICE:

Do not remove it.

HINT:

If not disassembling the shock absorber, it is not necessary to loosen the nut.

- (d) Remove the 3 nuts and shock absorber with coil spring from the body.
- (e) **SEDAN:**
Remove the No. 3 front spring reinforcement from the shock absorber.



DISASSEMBLY

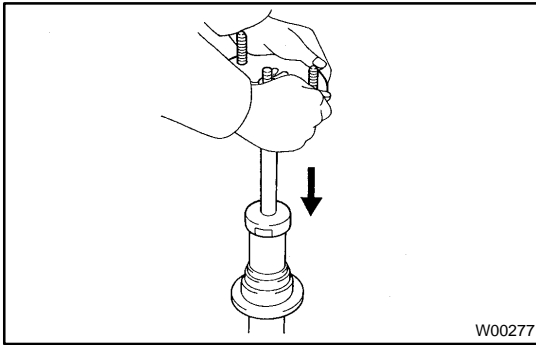
REMOVE SUSPENSION SUPPORT AND COIL SPRING

- (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.

- (b) Remove the suspension support nut.
(c) Remove the suspension support, upper insulator, coil spring and spring bumper from the shock absorber.



INSPECTION

INSPECT SHOCK ABSORBER

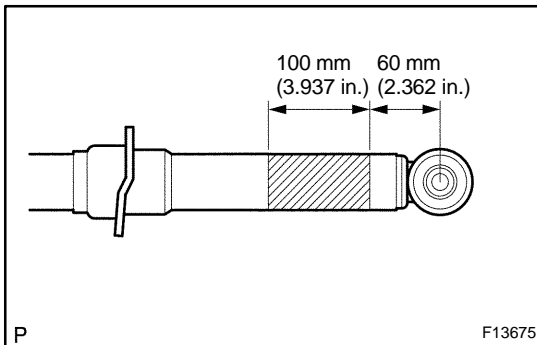
Compress and extend the shock absorber rod and check that there is no abnormal resistance or unusual operation sounds. If there is any abnormality, replace the shock absorber with a new one.

NOTICE:

When discarding the shock absorber, see **DISPOSAL** on page [SA-24](#).

DISPOSAL

1. FULLY EXTEND SHOCK ABSORBER PISTON ROD

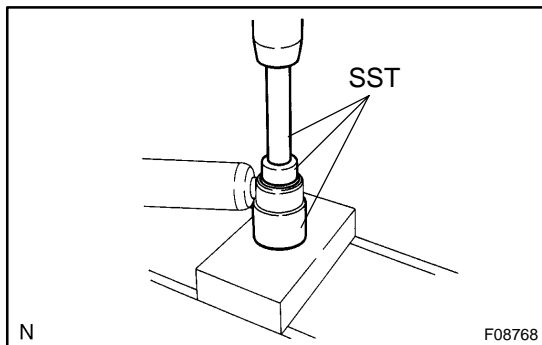


2. DRILL HOLE TO DISCHARGE GAS FROM CYLINDER

- (a) Place the shock absorber horizontally to prevent the oil from coming out.
- (b) Using a drill, make a hole on the top of the shell as shown to discharge the gas inside.

CAUTION:

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

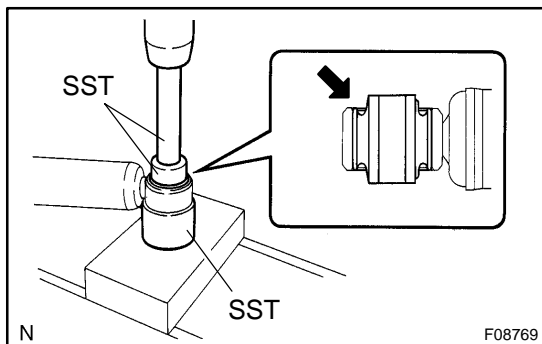


REPLACEMENT

1. REMOVE BUSHING

Using SST and a press, remove the bushing.

SST 09710-28021 (09710-08031),
09710-30021 (09710-03131),
09950-70010 (09951-07100)



2. INSTALL BUSHING

Using SST and a press, install a new bushing.

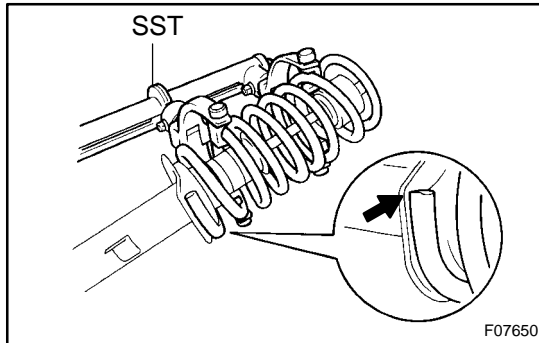
SST 09710-28021 (09710-08031),
09710-30021 (09710-03131),
09950-70010 (09951-07100)

HINT:

Install the bushing until it is flush with the bushing bracket of the shock absorber.

REASSEMBLY

1. INSTALL SPRING BUMPER TO PISTON ROD



2. INSTALL COIL SPRING

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

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

NOTICE:

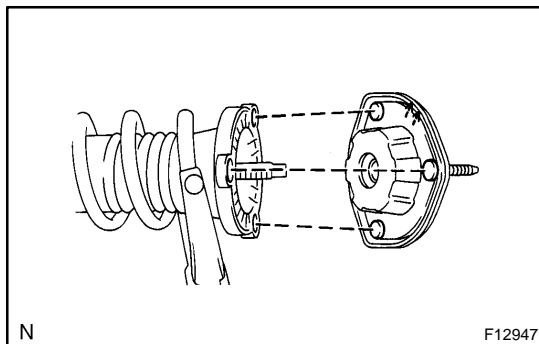
Do not use an impact wrench. It will damage the SST.

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

HINT:

Fit the lower end of the coil spring into the gap of the spring seat of the shock absorber.

3. INSTALL UPPER INSULATOR TO SHOCK ABSORBER



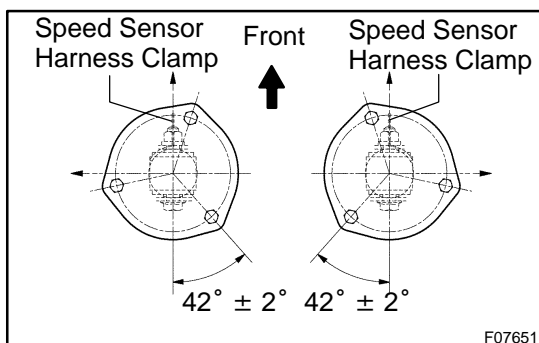
4. INSTALL SUSPENSION SUPPORT

- (a) Install the suspension support to the shock absorber, as shown in the illustration.

HINT:

Align the bolt of the suspension support with the cut-out of the upper insulator.

- (b) Temporarily tighten a new lock nut.



- (c) Align the suspension support with the shock absorber lower bolt as shown in the illustration.

5. REMOVE SST

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

HINT:

After removing the SST, recheck the direction of the suspension support.

INSTALLATION

1. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

(a) SEDAN:

Install the No. 3 front spring reinforcement to the shock absorber.

(b) Install the shock absorber to the body with the 3 nuts.

Torque: 35 N·m (360 kgf-cm, 26 ft-lbf)

(c) Connect the shock absorber to the shock absorber bracket with the bolt and nut.

Torque: 64 N·m (650 kgf-cm, 47 ft-lbf)

HINT:

After stabilizing the suspension, torque the nut.

(d) Torque the nut in the center of the suspension support.

Torque: 34 N·m (350 kgf-cm, 25 ft-lbf)

HINT:

If the shock absorber has not been disassembled, it is not necessary to torque the nut.

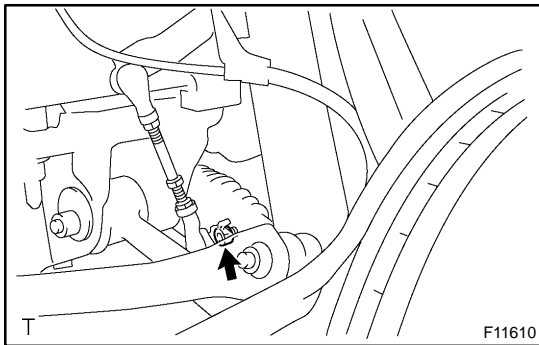
(e) Install the cap to the suspension support.

2. CONNECT STABILIZER BAR LINK TO STABILIZER BAR

Torque: 49 N·m (500 kgf-cm, 36 ft-lbf)

HINT:

If the ball joint turns together with the nut, use a 5 mm hexagon wrench to hold the stud.



3. CONNECT HEIGHT CONTROL SENSOR LINK

(a) Set the lower arm to the vehicle height.

(b) Install the sensor link to the lower arm bracket with a nut.

Torque: 5.4 N·m (55 kgf-cm, 48 in.-lbf)

NOTICE:

- Be careful not to brake the link fixing pin until the above operation is completed.
- The pin can be broken after completion of the above, however, the sensor arm rotation angle shall not exceed the range of $\pm 70^\circ$ from the standard vehicle height.

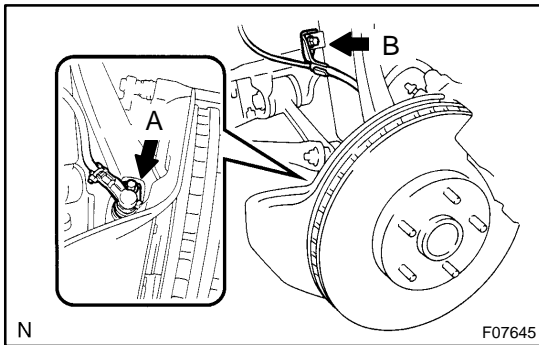
4. CONNECT UPPER SUSPENSION ARM TO STEERING KNUCKLE

(a) Connect the upper suspension arm with the nut.

Torque: 65 N·m (660 kgf-cm, 50 ft-lbf)

(b) Install a new clip.

If the holes for the clip are not aligned, tighten the nut further up to 60° .



5. CONNECT ABS SPEED SENSOR AND WIRE HARNESS CLAMP

Torque:

Bolt A: 8.0 N·m (82 kgf·cm, 71 in.-lbf)

Bolt B: 5.0 N·m (51 kgf·cm, 44 in.-lbf)

6. INSTALL IGNITER

(a) Install the bolt, nut and igniter.

(b) Connect the connector.

7. INSTALL FRONT WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

8. CHECK FRONT WHEEL ALIGNMENT

(See page [SA-5](#))

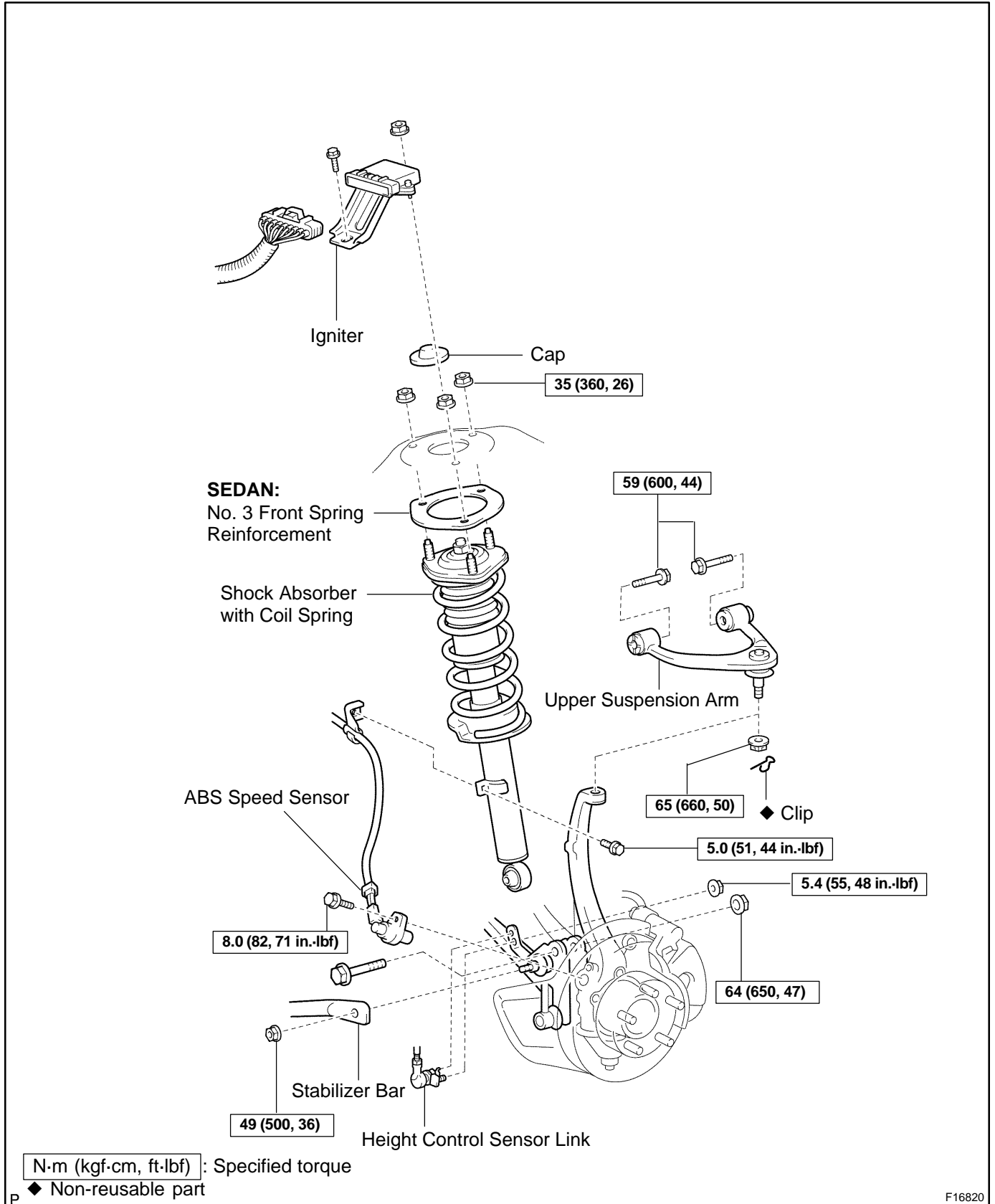
9. CHECK ABS SPEED SENSOR SIGNAL

w/ VSC (See page [DI-507](#))

w/o VSC (See page [DI-437](#))

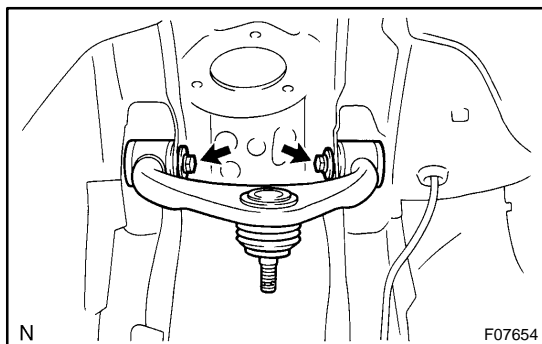
FRONT UPPER SUSPENSION ARM COMPONENTS

SAORI-09



REMOVAL

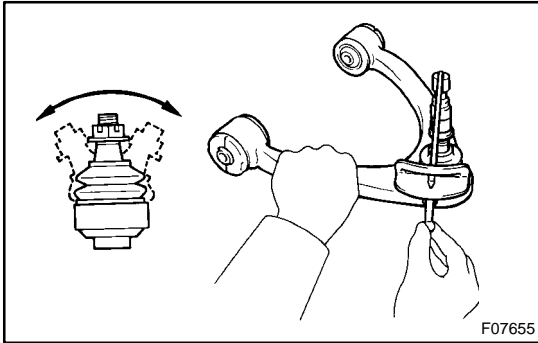
1. REMOVE FRONT WHEEL
2. REMOVE FRONT SHOCK ABSORBER
(See page [SA-20](#))



3. REMOVE UPPER SUSPENSION ARM
Remove the 2 bolts and upper suspension arm from the body.

INSPECTION

1. INSPECT UPPER SUSPENSION ARM BALL JOINT BOOT FOR DAMAGE



2. INSPECT UPPER SUSPENSION ARM BALL JOINT FOR ROTATION CONDITION

- (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 1 turn per 2 - 4 seconds and take the torque reading on the 5th turn.

Turning torque:

1.0 - 3.4 N·m (10 - 35 kgf·cm, 9 - 30 in.-lbf)

INSTALLATION

1. INSTALL UPPER SUSPENSION ARM TO BODY

Torque: 59 N·m (600 kgf·cm, 44 ft·lbf)

HINT:

After stabilizing the suspension, torque the bolt.

2. INSTALL FRONT SHOCK ABSORBER (See page [SA-27](#))

3. INSTALL FRONT WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

4. CHECK FRONT WHEEL ALIGNMENT (See page [SA-5](#))

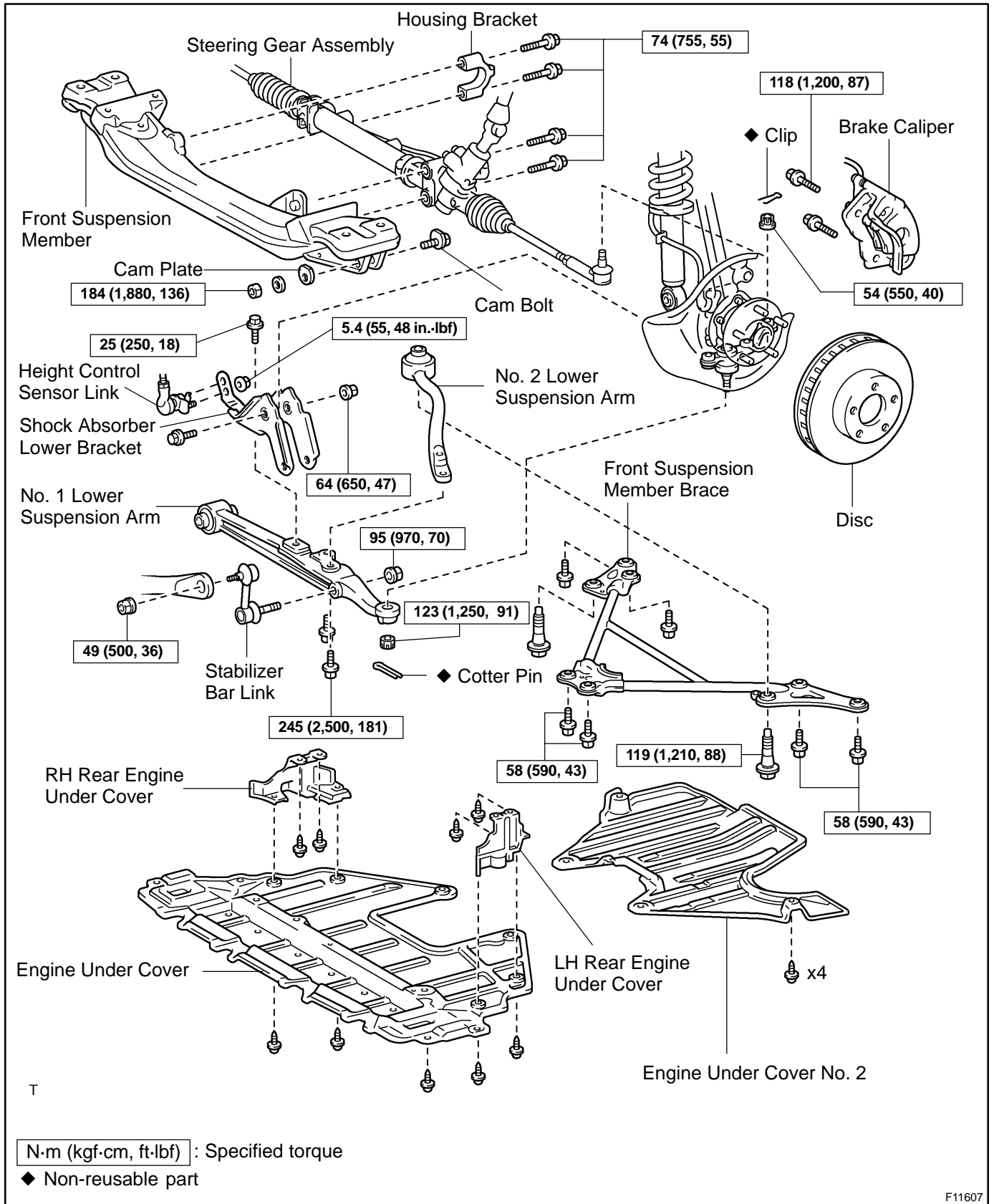
5. CHECK ABS SPEED SENSOR SIGNAL

w/ VSC (See page [DI-507](#))

w/o VSC (See page [DI-437](#))

FRONT LOWER SUSPENSION ARM COMPONENTS

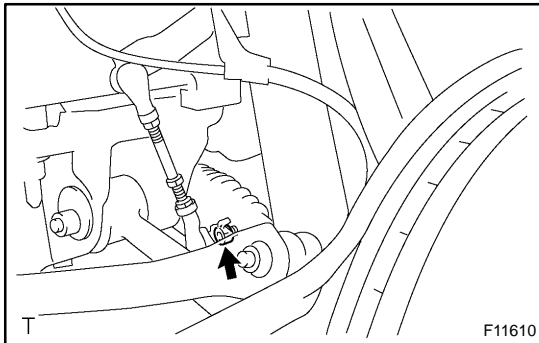
SAORM-08



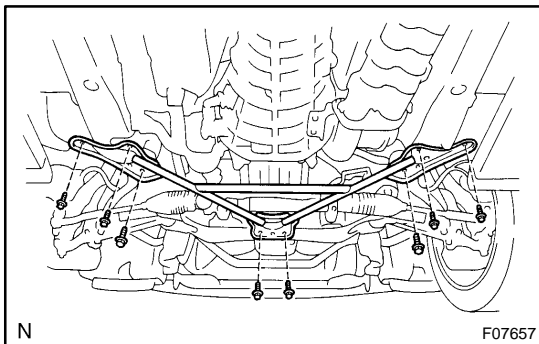
F11607

REMOVAL

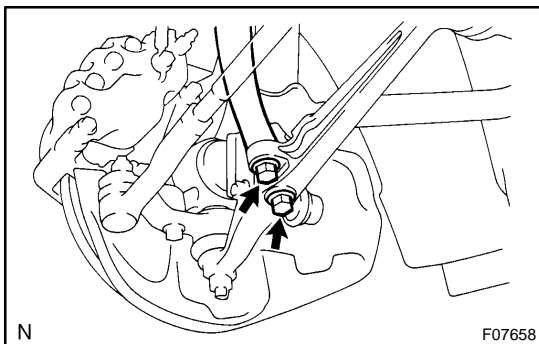
1. REMOVE FRONT WHEEL
2. REMOVE ENGINE UNDER COVER AND ENGINE UNDER COVER NO. 2
3. REMOVE RH AND LH REAR ENGINE UNDER COVER



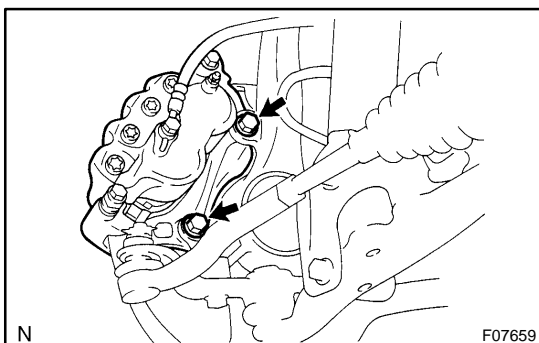
4. **DISCONNECT HEIGHT CONTROL SENSOR LINK**
Remove the nut and disconnect the height control sensor link from lower arm.



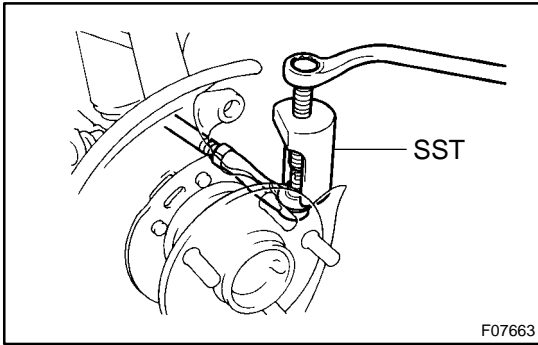
5. **REMOVE FRONT SUSPENSION MEMBER BRACE**
Remove the 8 bolts and suspension member brace.



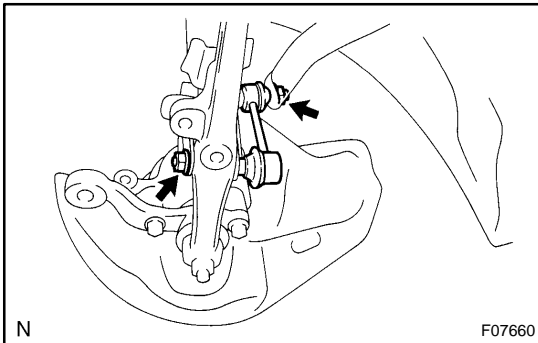
6. **REMOVE NO. 2 LOWER SUSPENSION ARM**
Remove the 2 bolts and No. 2 lower suspension arm from the No. 1 lower suspension arm.



7. **REMOVE BRAKE CALIPER AND DISC**
 - (a) Remove the 2 bolts and brake caliper from the steering knuckle.
 - (b) Support the brake caliper securely.
 - (c) Remove the disc.
8. **DISCONNECT TIE ROD END FROM LOWER BALL JOINT**
 - (a) Remove the clip and nut.



- (b) Using SST, disconnect the tie rod end.
SST 09610-20012

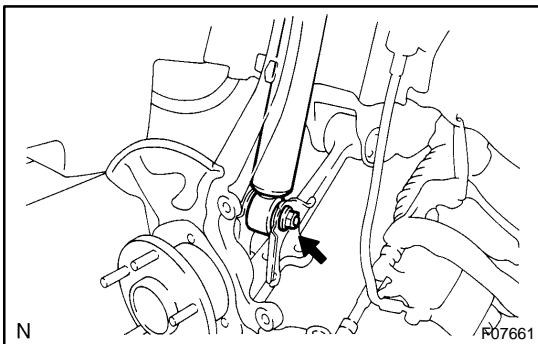


9. REMOVE STABILIZER BAR LINK

Remove the 2 nuts and stabilizer bar link.

HINT:

If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

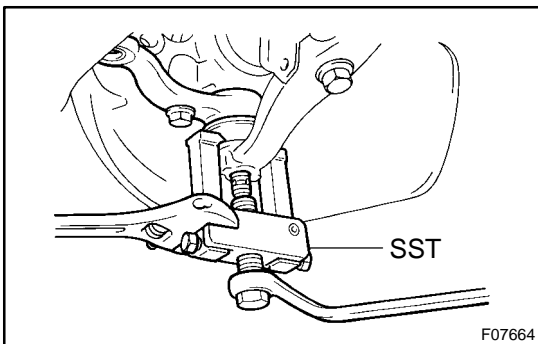


10. DISCONNECT SHOCK ABSORBER FROM SHOCK ABSORBER BRACKET

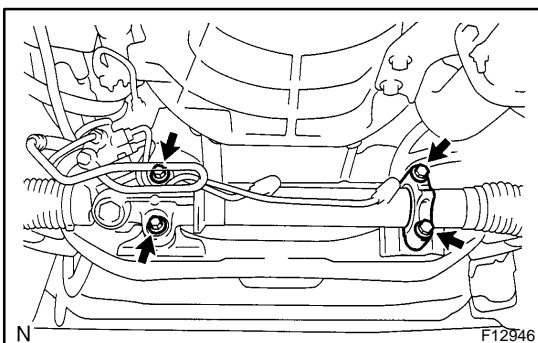
Remove the nut and bolt and disconnect the shock absorber.

11. DISCONNECT LOWER BALL JOINT FROM NO. 1 LOWER SUSPENSION ARM

- (a) Remove the cotter pin and nut.



- (b) Using SST, disconnect the lower ball joint.
SST 09628-6201 1



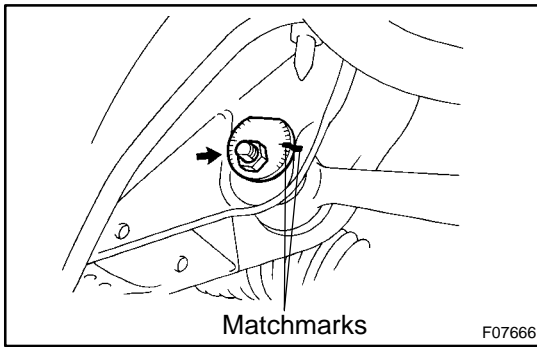
12. DISCONNECT STEERING GEAR ASSEMBLY

- (a) Remove the 4 bolts, housing bracket and disconnect the steering gear assembly.

NOTICE:

Be careful not to damage the return tube and pressure feed tube.

- (b) Support the steering gear assembly securely.

**13. REMOVE NO. 1 LOWER SUSPENSION ARM**

- (a) Place matchmarks on the cam plate and suspension member.
- (b) Remove the nut, washer, cam plate, cam bolt and No.1 lower suspension arm from the suspension member.

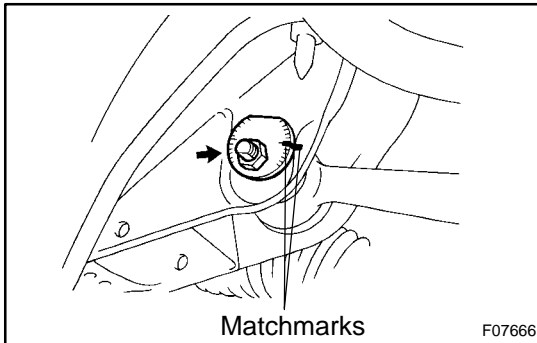
14. REMOVE SHOCK ABSORBER LOWER BRACKET

Remove the bolt and shock absorber lower bracket from the No. 1 lower suspension arm.

INSTALLATION

1. INSTALL SHOCK ABSORBER LOWER BRACKET TO NO. 1 LOWER SUSPENSION ARM

Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)



2. INSTALL NO. 1 LOWER SUSPENSION ARM

- (a) Install the No. 1 lower suspension arm to the suspension member with the cam bolt, cam plate, washer and nut.

Torque: 184 N·m (1,880 kgf·cm, 136 ft·lbf)

HINT:

After stabilizing the suspension, align the matchmarks on the cam plate and suspension member, and torque the nut.

- (b) Connect the lower ball joint to the No. 1 lower suspension arm with the nut.

Torque: 123 N·m (1,250 kgf·cm, 91 ft·lbf)

- (c) Install a new cotter pin.

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

3. CONNECT STEERING GEAR ASSEMBLY

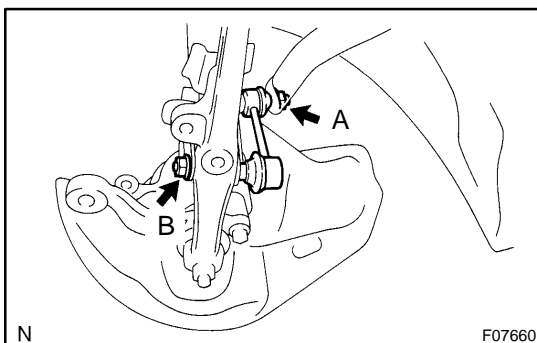
Torque: 74 N·m (755 kgf·cm, 55 ft·lbf)

NOTICE:

Be careful not to damage the return tube and pressure feed tube.

4. CONNECT SHOCK ABSORBER TO FRONT SHOCK ABSORBER BRACKET

Torque: 64 N·m (650 kgf·cm, 47 ft·lbf)



5. INSTALL STABILIZER BAR LINK

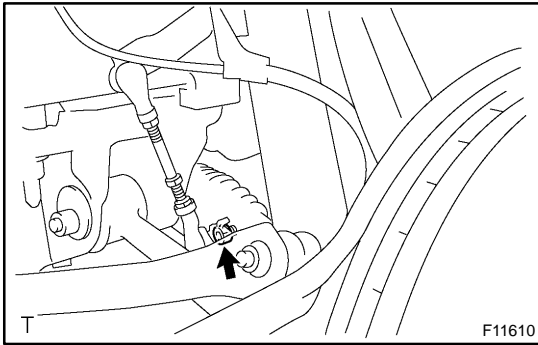
Torque:

Nut A: 49 N·m (500 kgf·cm, 36 ft·lbf)

Nut B: 95 N·m (970 kgf·cm, 70 ft·lbf)

HINT:

If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

**6. CONNECT HEIGHT CONTROL SENSOR LINK**

- (a) Set the lower arm to the vehicle height.
- (b) Install the sensor link to the lower arm bracket with a nut.
Torque: 5.4 N·m (55 kgf·cm, 48 in.-lbf)

NOTICE:

- Be careful not to brake the link fixing pin until the above operation is completed.
- The pin can be broken after completion of the above, however, the sensor arm rotation angle shall not exceed the range of $\pm 70^\circ$ from the standard vehicle height.

7. CONNECT TIE ROD END TO LOWER BALL JOINT

- (a) Connect the tie rod end to the lower ball joint with the nut.
Torque: 54 N·m (550 kgf·cm, 40 ft·lbf)
- (b) Install a new clip.

HINT:

If the holes for the clip are not aligned, tighten the nut further up to 60° .

8. INSTALL DISC AND BRAKE CALIPER

Install the disc, brake caliper and 2 bolts.

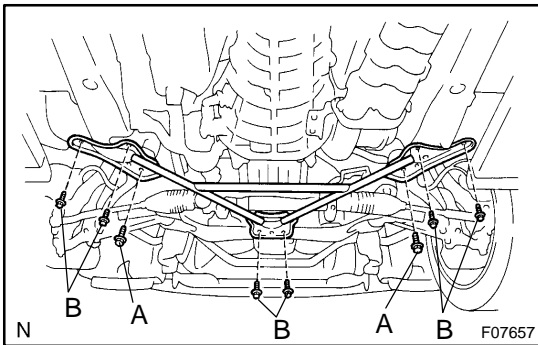
Torque: 118 N·m (1,200 kgf·cm, 87 ft·lbf)

9. CONNECT NO. 2 LOWER SUSPENSION ARM TO NO. 1 LOWER SUSPENSION ARM

Torque: 245 N·m (2,500 kgf·cm, 181 ft·lbf)

HINT:

After stabilizing the suspension, torque the bolt.

**10. INSTALL FRONT SUSPENSION MEMBER BRACE**

Torque:

Bolt A: 119 N·m (1,210 kgf·cm, 88 ft·lbf)

Bolt B: 58 N·m (590 kgf·cm, 43 ft·lbf)

HINT:

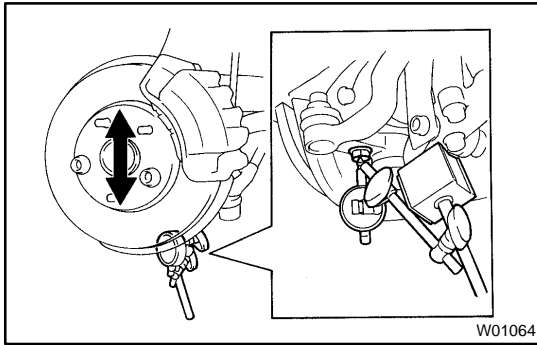
- Install the bolt A through the No.2 lower suspension arm.
- After stabilizing the suspension, torque the bolt A.

11. INSTALL RH AND LH REAR ENGINE UNDER COVER**12. INSTALL ENGINE UNDER COVER AND ENGINE UNDER COVER NO. 2****13. INSTALL FRONT WHEEL**

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

14. DEPRESS BRAKE PEDAL SEVERAL TIMES**15. CHECK FRONT WHEEL ALIGNMENT**

(See page [SA-5](#))



FRONT LOWER BALL JOINT ON-VEHICLE INSPECTION

SAORP-06

INSPECT LOWER BALL JOINT EXCESSIVE PLAY ON-VEHICLE

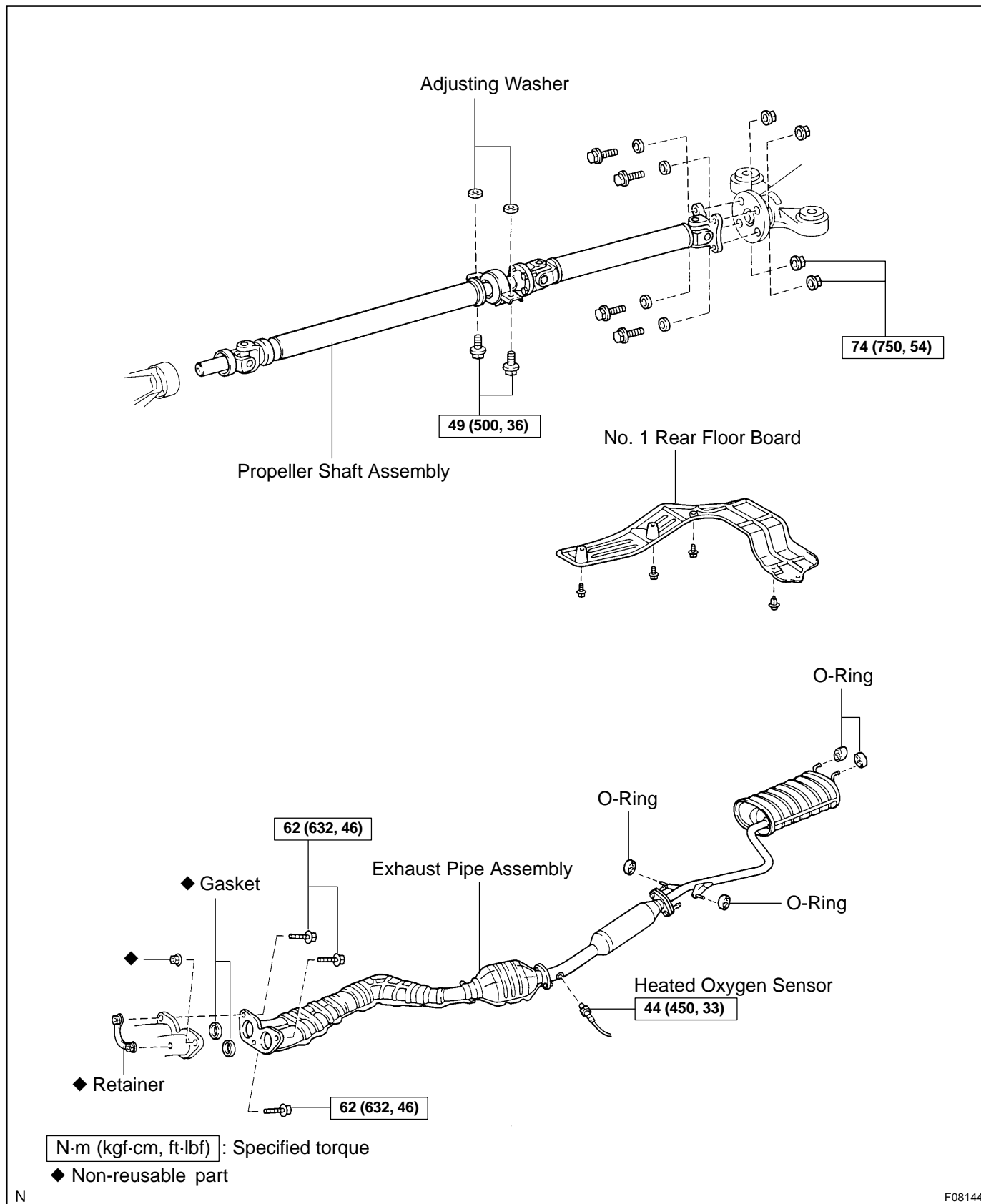
- (a) Remove the front wheel and install the hub nuts to the disc.
- (b) Using a dial indicator, check the lower ball joint for excessive play when you push the hub nuts up and down with a force of 294 N (30 kgf, 66 lbf).

Maximum: 0.9 mm (0.035 in.)

If it is not within the specified value, replace the lower ball joint.

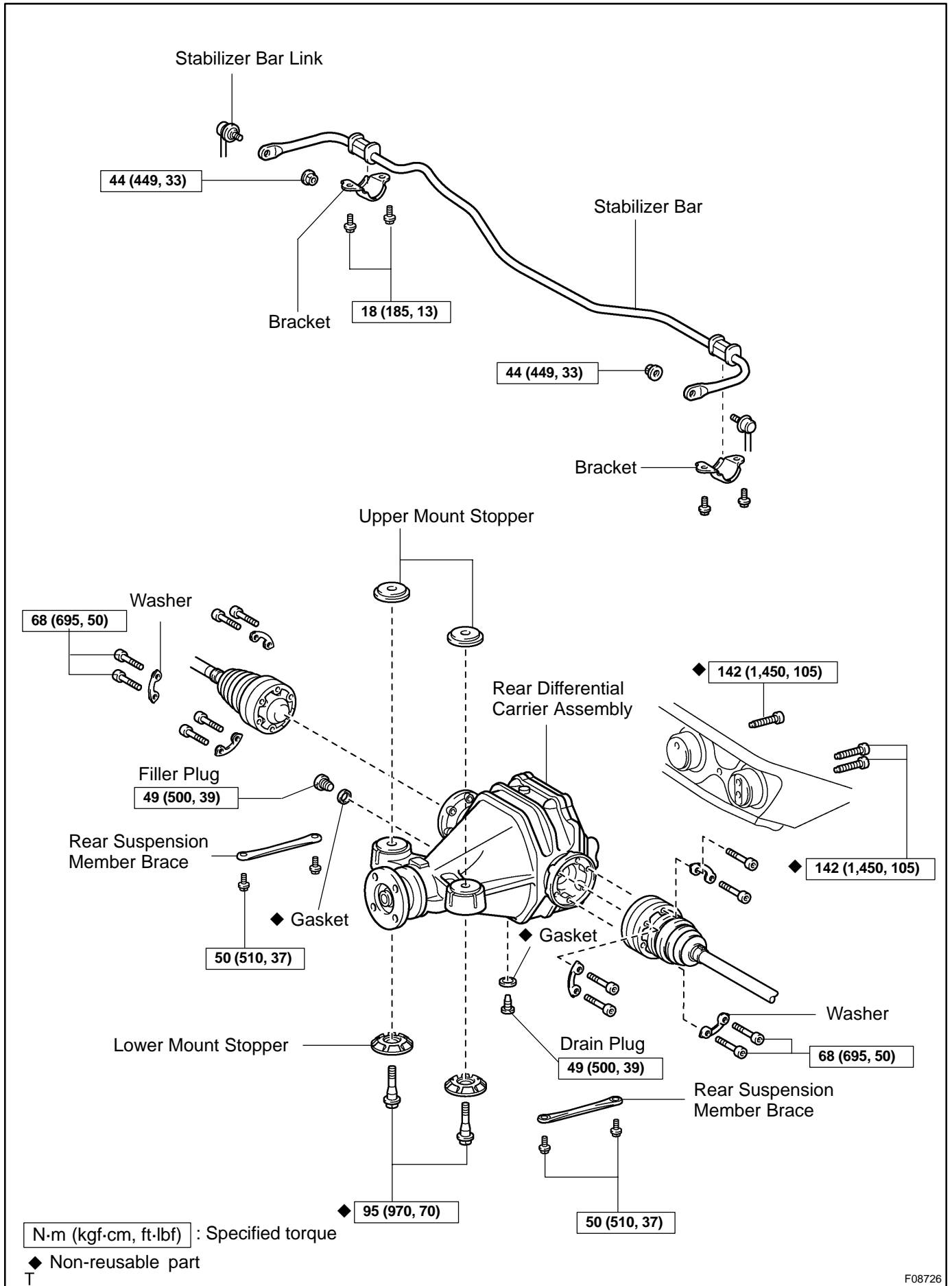
DIFFERENTIAL MOUNTING CUSHION COMPONENTS

SA1JH-05

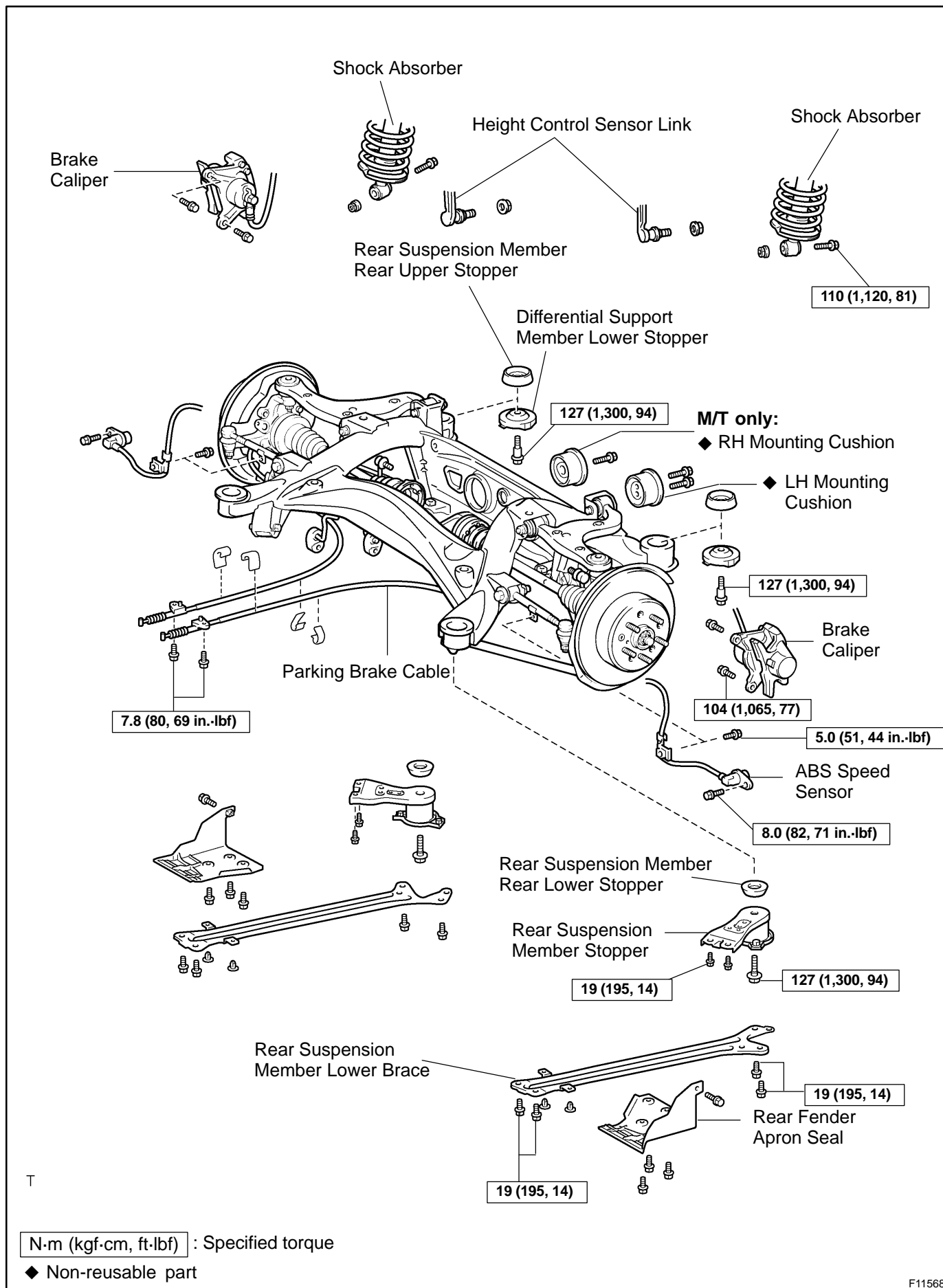


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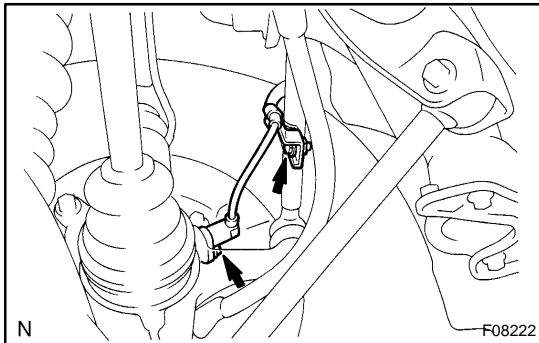
F08726



F11568

REPLACEMENT

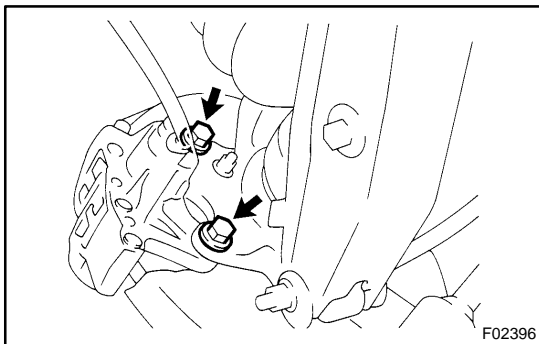
1. REMOVE REAR WHEELS
2. REMOVE REAR DIFFERENTIAL CARRIER ASSEMBLY (See page SA-79)



3. DISCONNECT RH AND LH ABS SPEED SENSORS AND WIRE HARNESS

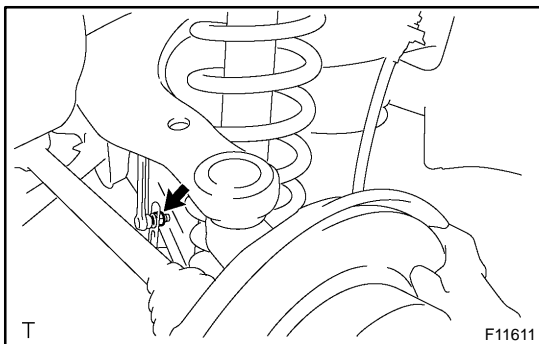
- (a) Remove the bolt and disconnect the ABS speed sensor from the rear axle carrier.
- (b) Remove the bolt and disconnect the ABS speed sensor wire harness clamp from the toe control link.
- (c) Employ the same manner described above to the other side.

4. REMOVE RH AND LH REAR FENDER APRON SEALS



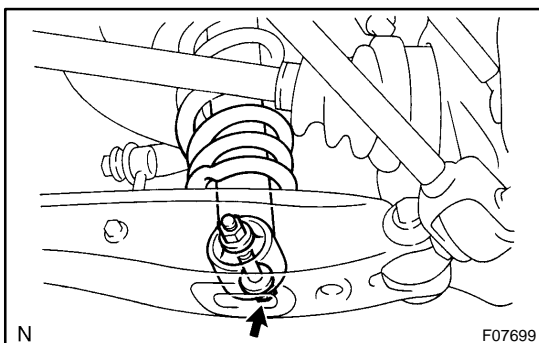
5. REMOVE RH AND LH BRAKE CALIPERS

- (a) Remove the 2 bolts and brake caliper from the axle carrier.
- (b) Support the brake caliper securely.
- (c) Employ the same manner described above to the other side.



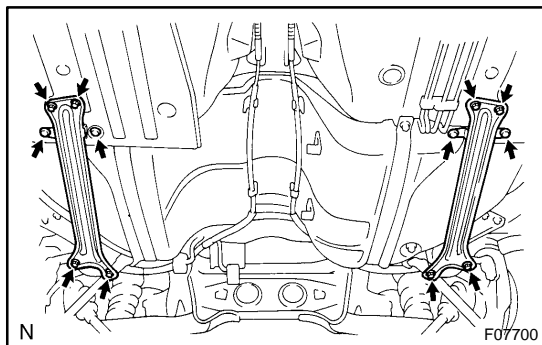
6. DISCONNECT HEIGHT CONTROL SENSOR LINK

Remove the nut and disconnect the height control sensor link from lower arm bracket.



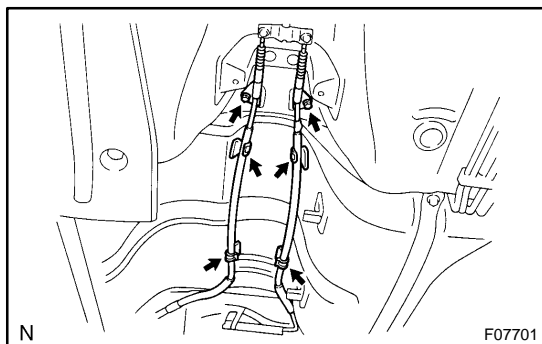
7. DISCONNECT RH AND LH SHOCK ABSORBERS FROM NO. 2 LOWER SUSPENSION ARMS

- (a) Remove the nut and bolt, and disconnect the shock absorber.
- (b) Employ the same manner described above to the other side.



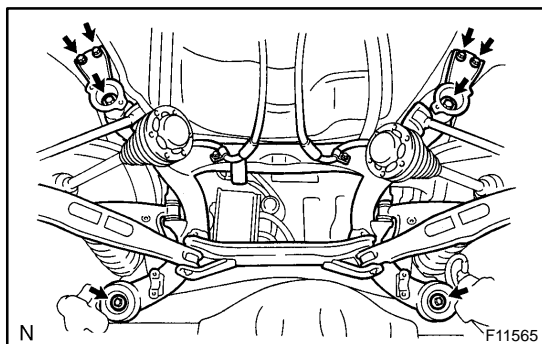
8. REMOVE RH AND LH REAR SUSPENSION MEMBER LOWER BRACES

Remove the 8 bolts, 4 clips and 2 lower braces.



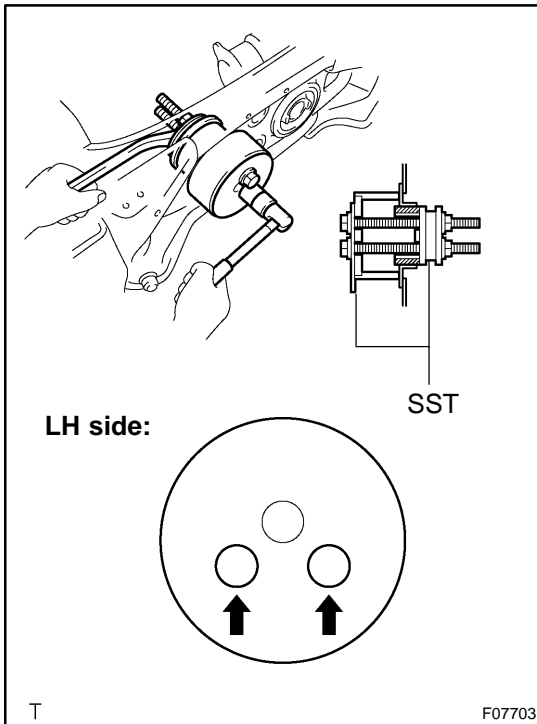
9. DISCONNECT PARKING BRAKE CABLE

- (a) Disconnect the parking brake cable from the 4 clamps.
- (b) Remove the 2 bolts and disconnect the parking brake cable.



10. REMOVE REAR SUSPENSION MEMBER

- (a) Support the rear suspension member with a jack.
- (b) Remove the 8 bolts, 2 rear suspension member stoppers and 2 differential support member lower stoppers.
- (c) Lower the rear suspension member.
- (d) Remove the rear suspension member rear upper and lower stoppers from the rear suspension member.



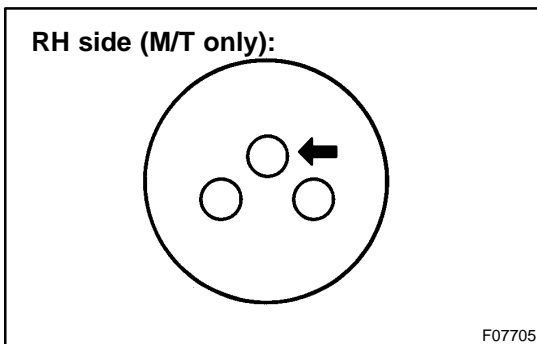
11. REMOVE DIFFERENTIAL MOUNTING CUSHION

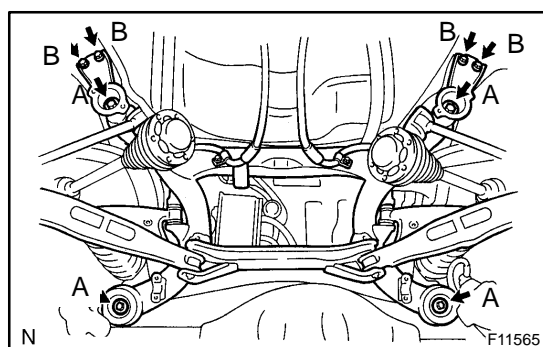
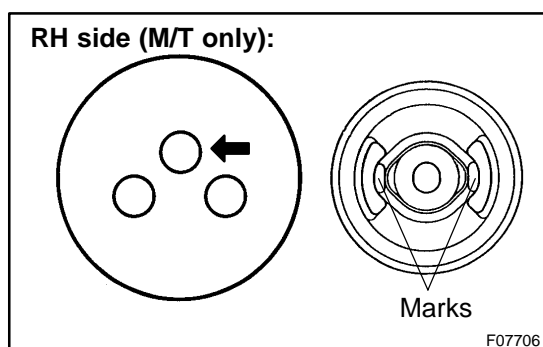
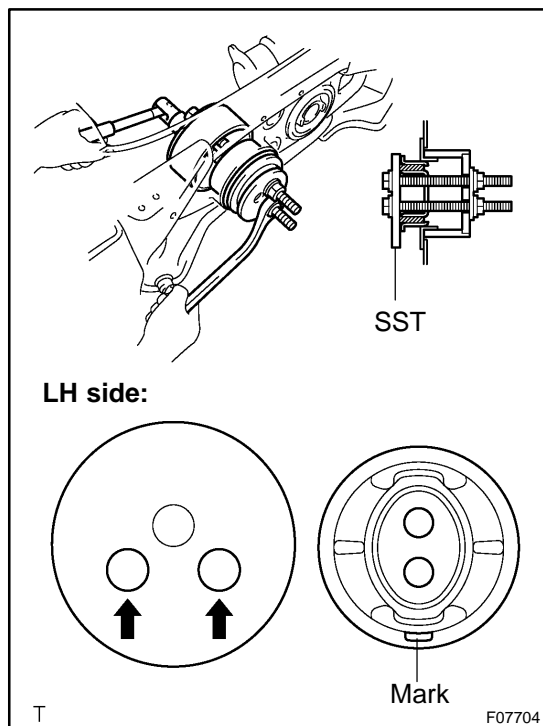
Using SST, remove the differential mounting cushion.

SST 09316-12010, 09570-24010

NOTICE:

- When driving out the mounting cushion, be careful not to touch the suspension member with the SST.
- Align the SST straight so that the bolt of the SST is parallel with the center line of the mounting cushion.
- When installing the bolts to the RH and LH differential mounting cushions, make sure that the bolts are passed through the correct holes in the SST, as shown in the illustration.





12. INSTALL DIFFERENTIAL MOUNTING CUSHION

Using SST, install the cushion so that the marks are positioned, as shown in the illustration.

SST 09570-24010

NOTICE:

- Be careful not to confuse RH and LH sides, and its top and bottom.
- Set the SST after temporarily installing the differential mounting cushion into the member so as not to install at an angle.
- To confirm that the differential mounting cushion is aligned straight in relation to the member, check that the SST is fully in contact with all of the cushion.

13. INSTALL REAR SUSPENSION MEMBER

- (a) Install the rear suspension member rear upper and lower stoppers to the rear suspension member.

- (b) Install the 2 differential support member lower stopper, rear suspension member stopper with the 8 bolts.

Torque:

A bolt: 127 N·m (1,300 kgf·cm, 94 ft·lbf)

B bolt: 19 N·m (195 kgf·cm, 14 ft·lbf)

- (c) Lower the jack.

14. CONNECT PARKING BRAKE CABLE

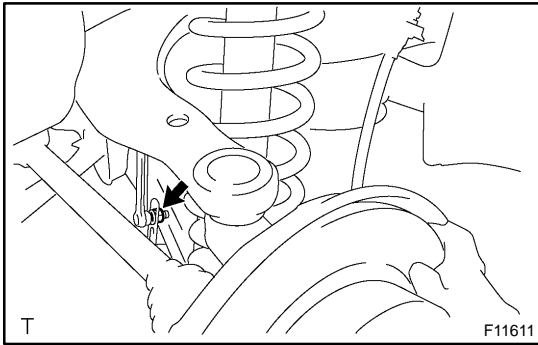
Torque: 7.8 N·m (80 kgf·cm, 69 in.-lbf)

15. INSTALL RH AND LH REAR SUSPENSION MEMBER LOWER BRACES

Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)

16. CONNECT RH AND LH SHOCK ABSORBERS TO NO. 2 LOWER SUSPENSION ARMS

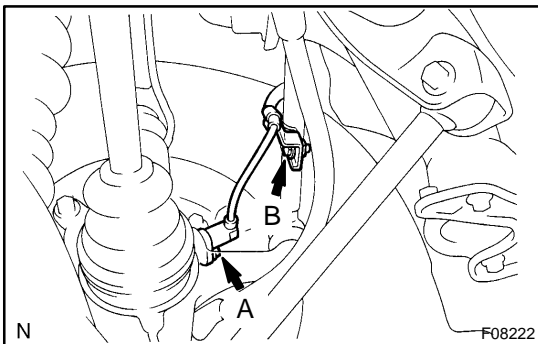
Torque: 110 N·m (1,120 kgf·cm, 81 ft·lbf)

**17. CONNECT HEIGHT CONTROL SENSOR LINK**

- (a) Set the lower arm to the vehicle height.
- (b) Install the sensor link to the lower arm bracket with a nut.
Torque: 5.4 N·m (55 kgf·cm, 48 in.-lbf)

NOTICE:

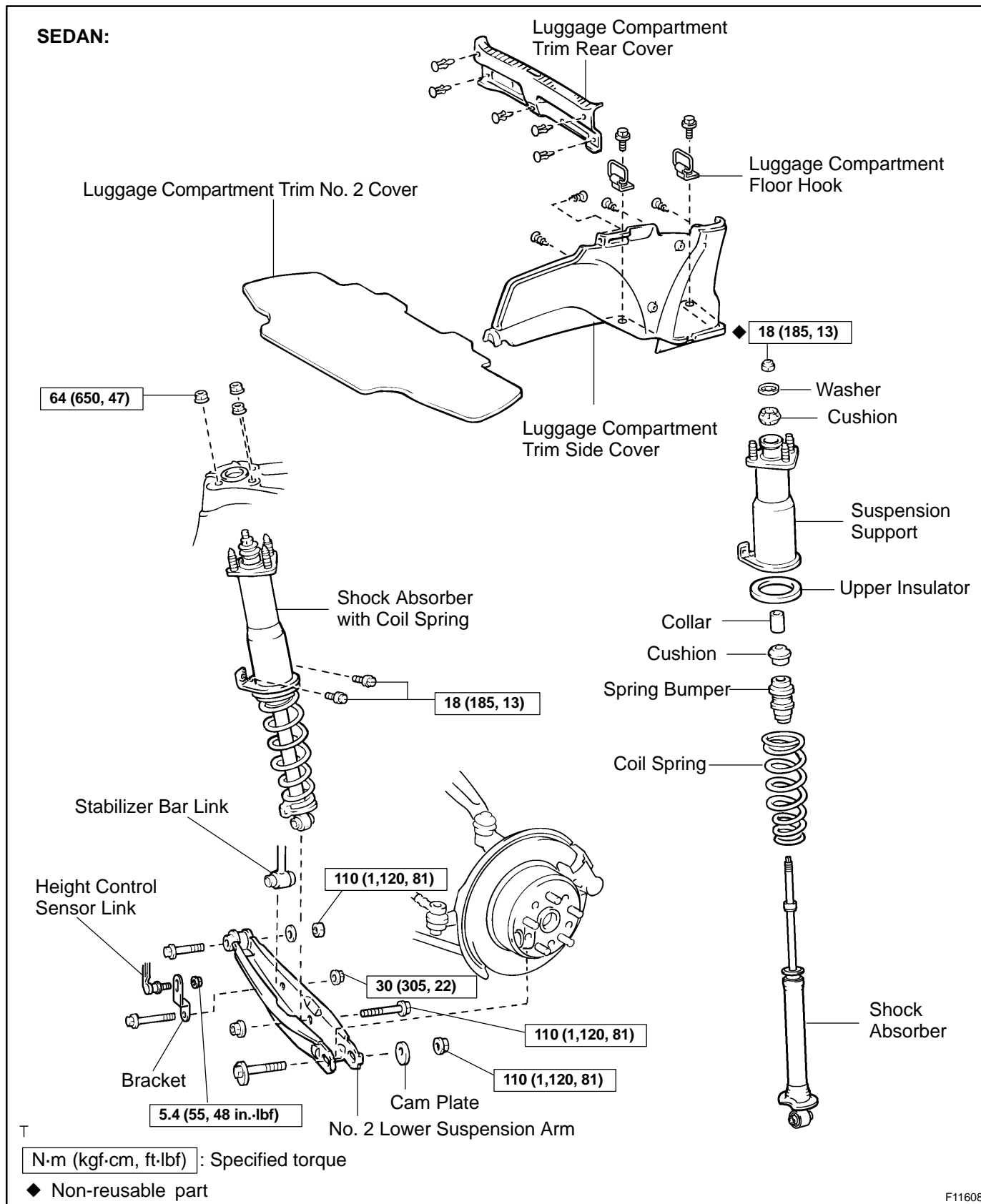
- Be careful not to brake the link fixing pin until the above operation is completed.
 - The pin can be broken after completion of the above, however, the sensor arm rotation angle shall not exceed the range of $\pm 70^\circ$ from the standard vehicle height.
- 18. INSTALL RH AND LH BRAKE CALIPERS TO STEERING KNUCKLES**
Torque: 104 N·m (1,065 kgf·cm, 77 ft·lbf)
 - 19. INSTALL RH AND LH REAR FENDER APRON SEALS**

**20. CONNECT RH AND LH ABS SPEED SENSORS AND WIRE HARNESS****Torque:****Bolt A: 8.0 N·m (82 kgf·cm, 71 in.-lbf)****Bolt B: 5.0 N·m (51 kgf·cm, 44 in.-lbf)**

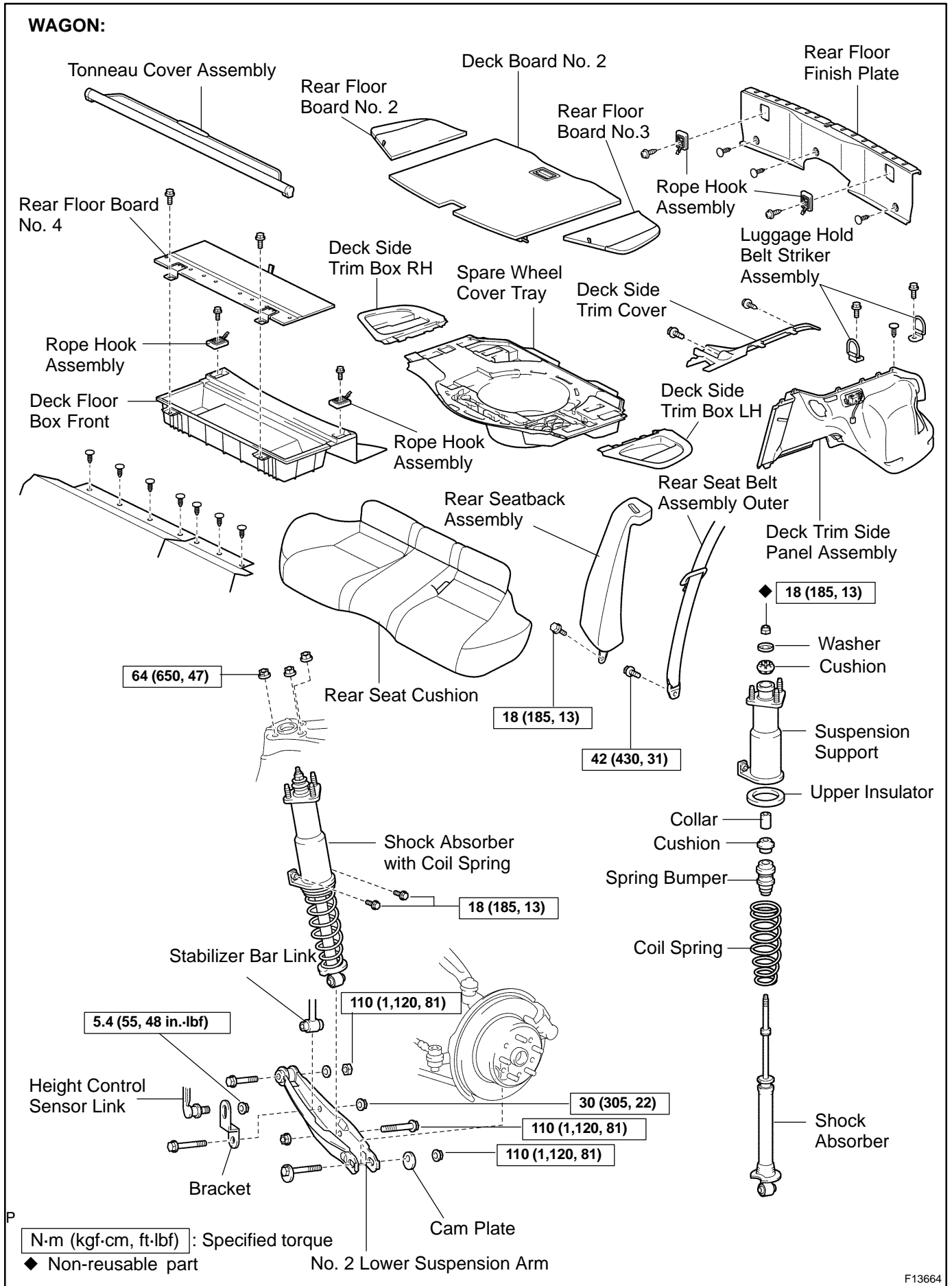
- 21. INSTALL REAR DIFFERENTIAL CARRIER ASSEMBLY**
(See page [SA-99](#))
- 22. INSTALL REAR WHEELS**
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)
- 23. DEPRESS BRAKE PEDAL SEVERAL TIMES**
- 24. CHECK REAR WHEEL ALIGNMENT**
(See page [SA-9](#))
- 25. CHECK ABS SPEED SENSOR SIGNAL**
w/o VSC (See page [DI-437](#))
w/VSC (See page [DI-507](#))

REAR SHOCK ABSORBER COMPONENTS

SA281-02



F11608

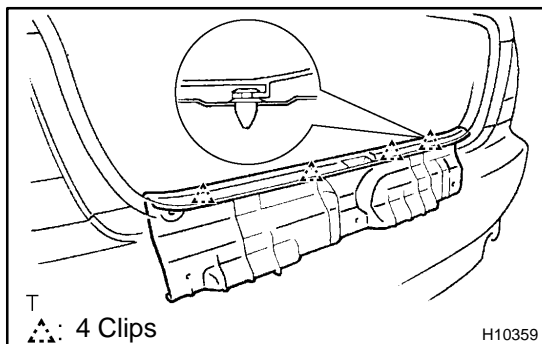


F13664

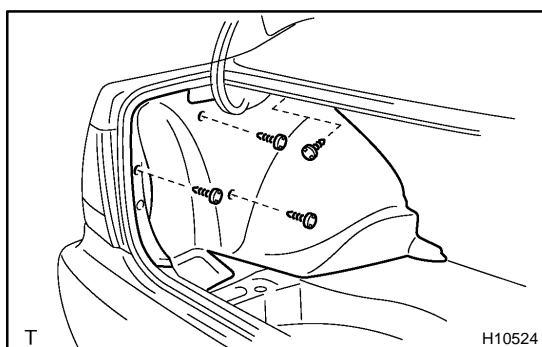
REMOVAL

1. REMOVE REAR WHEEL
2. **SEDAN:**
REMOVE LUGGAGE COMPARTMENT TRIM SIDE COVER

(a) Remove the luggage compartment trim No. 2 cover.



- (b) Remove the luggage compartment trim rear cover.
(c) Remove the 2 bolts and 2 luggage compartment floor hooks.



(d) Remove the 4 screws and luggage compartment trim side cover.

3. **WAGON:**
REMOVE DECK TRIM SIDE PANEL ASSEMBLY

(a) Remove the rear seat cushion. (See page [BO-204](#))

(b) Remove the tonneau cover assembly.

(c) Remove the bolt and rear seat belt assembly outer.

(d) Remove the side seatback assembly.

(See page [BO-204](#))

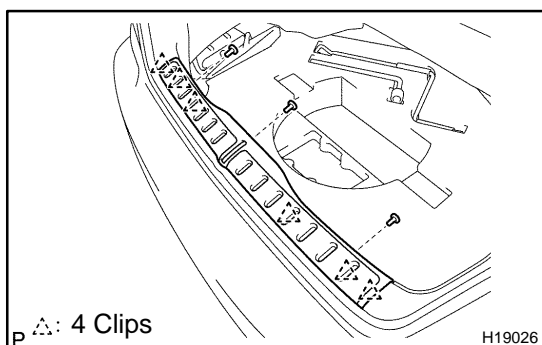
(e) Remove the seat board carpets.

(f) Remove the 2 bolts and rear floor board No. 4.

(g) Remove 2 bolts, 2 rope hook assemblies and deck floor box front.

(h) Remove the rear floor board No. 2, No. 3 and deck board No. 2.

(i) Remove the deck side trim box LH, RH and the spare wheel cover tray.



(j) Remove the 2 bolts and 2 rope hook assemblies.

(k) Remove the 3 clips.

(l) Using a screwdriver, remove the rear floor finish plate.

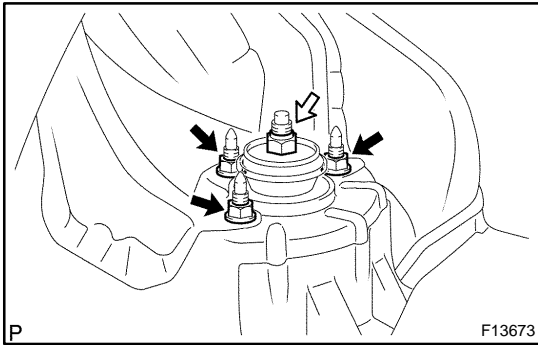
HINT:

Tape the screwdriver tip before use.

(m) Remove the deck trim side panel assembly.

(See page [BO-164](#))

4. **REMOVE NO. 2 LOWER SUSPENSION ARM**
(See page [SA-34](#))



5. REMOVE REAR SHOCK ABSORBER WITH COIL SPRING

- (a) Loosen the nut in the center of the suspension support.

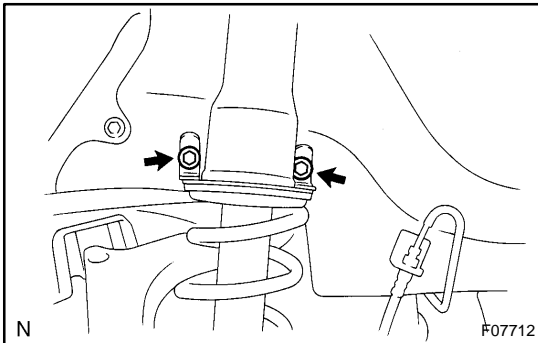
NOTICE:

Do not remove it.

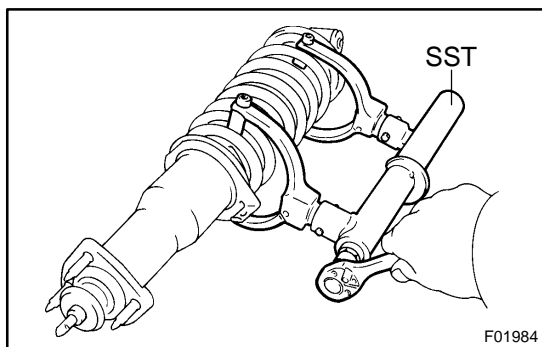
HINT:

If not disassembling the shock absorber, it is not necessary to loosen the nut.

- (b) Remove the 3 nuts from the body.



- (c) Remove the 2 bolts and shock absorber with the coil spring from the body.



DISASSEMBLY

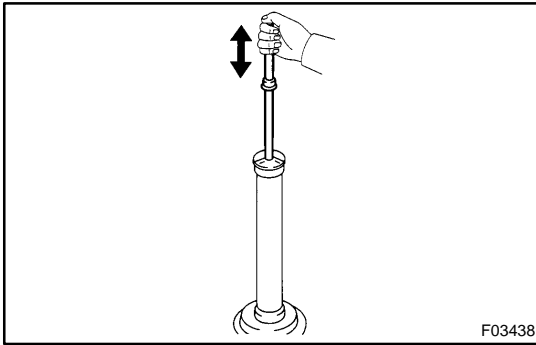
REMOVE SUSPENSION SUPPORT AND COIL SPRING

- (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.

- (b) Remove the suspension support nut.
(c) Remove the washer, cushion, suspension support, upper insulator, coil spring, collar, cushion and spring bumper.



INSPECTION

INSPECT SHOCK ABSORBER

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

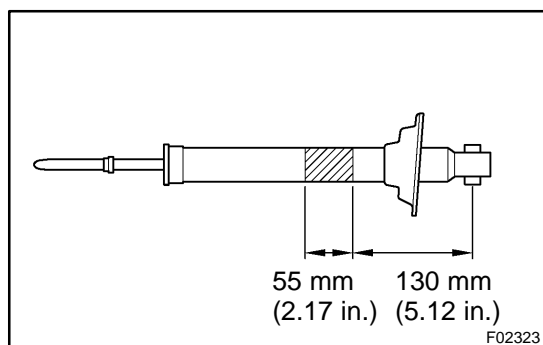
If there is any abnormality, replace the shock absorber with a new one.

NOTICE:

When discarding the shock absorber, see DISPOSAL on page SA-1 15.

DISPOSAL

1. FULLY EXTEND SHOCK ABSORBER ROD

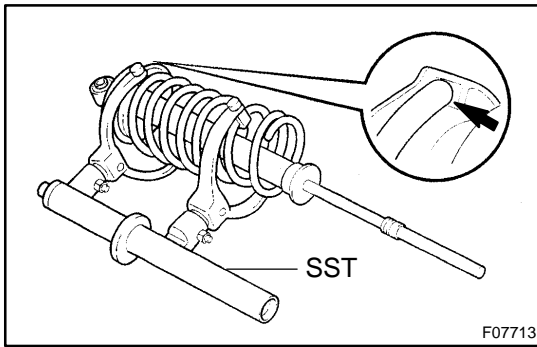


2. DRILL HOLE TO DISCHARGE GAS FROM CYLINDER

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

CAUTION:

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



REASSEMBLY

INSTALL SUSPENSION SUPPORT AND COIL SPRING

- (a) Using SST, compress the coil spring.
 SST 09727-30021 (09727-00010, 09727-00021, 09727-00031)

NOTICE:

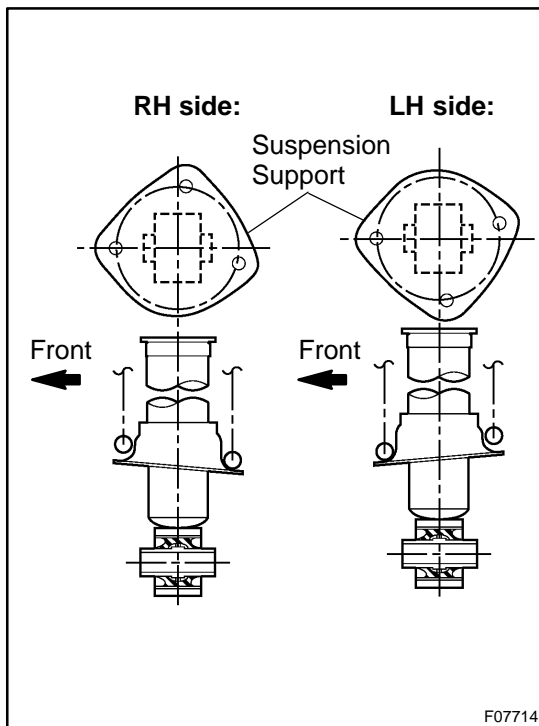
Do not use an impact wrench. It will damage the SST.

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

HINT:

Fit the lower end of the coil spring into the gap of the spring seat of the shock absorber.

- (c) Install the spring bumper, cushion, collar, upper insulator, suspension support, cushion and washer to the shock absorber and temporarily tighten a new nut.



- (d) Rotate the suspension support, as shown in the illustration.

- (e) Remove the SST.

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

HINT:

After removing the SST, recheck the direction of the suspension support.

INSTALLATION

1. INSTALL REAR SHOCK ABSORBER WITH COIL SPRING

- (a) Install the suspension support to the body with the 3 nuts.
Torque: 64 N·m (650 kgf·cm, 47 ft·lbf)
- (b) Connect the shock absorber with coil spring to the body with the 2 bolts.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)
- (c) Torque the nut in the center of the suspension support.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)

HINT:

If the shock absorber has not been disassembled, it is not necessary to torque the nut.

2. INSTALL NO. 2 LOWER SUSPENSION ARM (See page [SA-125](#))

3. SEDAN:

INSTALL LUGGAGE COMPARTMENT TRIM SIDE COVER

- (a) Install the 4 screws and luggage compartment trim side cover.
- (b) Install the 2 bolts and 2 luggage compartment floor hooks.
- (c) Install the luggage compartment trim rear cover and luggage compartment trim No. 2 cover.

4. WAGON:

INSTALL DECK TRIM SIDE PANEL ASSEMBLY

- (a) Install the deck trim side panel assembly. (See page [BO-169](#))
- (b) Install the rear floor finish plate with 3 clips.
- (c) Install the 2 rope hook assemblies and 2 bolts.
- (d) Install the deck side trim box LH, RH and the spare wheel cover tray.
- (e) Install the rear floor board No. 2, No. 3 and deck board No. 2.
- (f) Install the 2 bolts, 2 rope hook assemblies and deck floor box front.
- (g) Install the rear floor board No. 4 with 2 bolts.
- (h) Install the seat board carpets.
- (i) Install the side seatback assembly. (See page [BO-210](#))
- (j) Install the rear seat belt assembly outer with the bolt.
- (k) Install the tonneau cover assembly.
- (l) Install the rear seat cushion. (See page [BO-210](#))

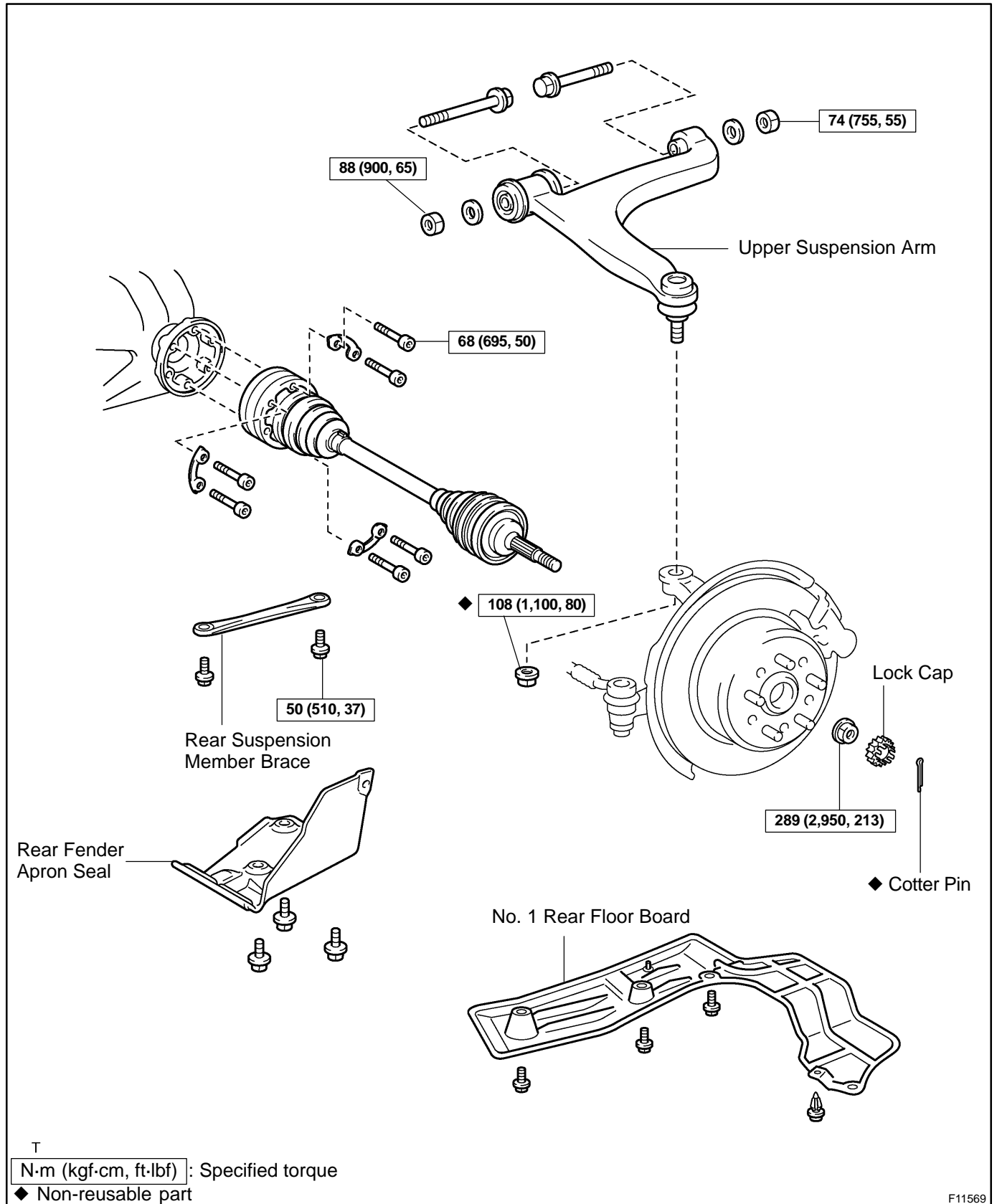
5. INSTALL REAR WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

6. CHECK REAR WHEEL ALIGNMENT (See page [SA-9](#))

REAR UPPER SUSPENSION ARM COMPONENTS

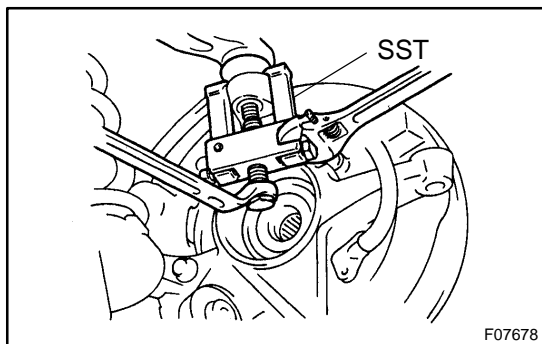
SAOSP-08



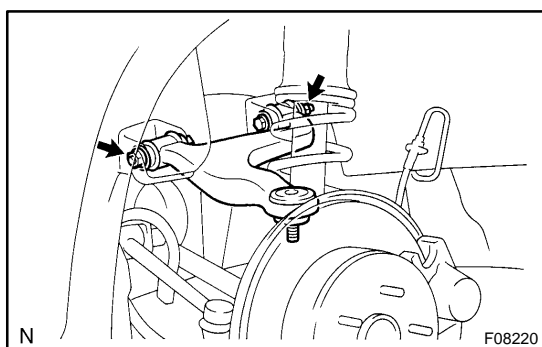
F11569

REMOVAL

1. REMOVE REAR WHEEL
2. REMOVE DRIVE SHAFT (See page SA-59)
3. REMOVE UPPER SUSPENSION ARM
 - (a) Remove the nut.



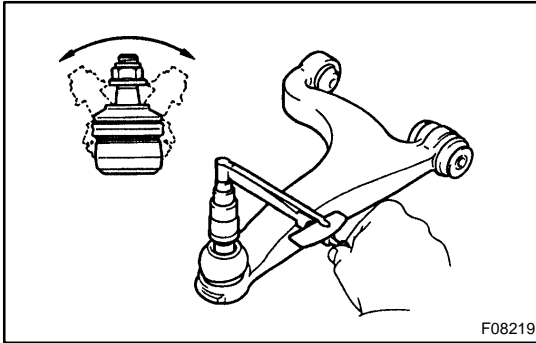
- (b) Using SST, disconnect the upper suspension arm from the axle carrier.
SST 09628-6201 1
 - (c) Support the axle carrier securely.



- (d) Remove the 2 nuts, washers, bolts and upper suspension arm from the body.

INSPECTION

1. INSPECT UPPER SUSPENSION ARM BALL JOINT BOOT FOR DAMAGE

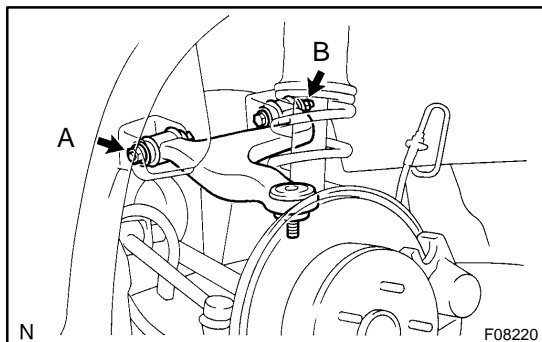


2. INSPECT UPPER SUSPENSION ARM BALL JOINT FOR ROTATION CONDITION

- (a) As shown in the illustration, flip the ball joint stud back and forth 5 times, before installing the nut.
- (b) Using torque wrench, turn the nut continuously 1 turn per 2 - 4 seconds and take the torque reading on the 5th turn.

Turning torque:

1.0 - 2.9 N·m (10 - 30 kgf·cm, 9 - 26 in.-lbf)



INSTALLATION

1. INSTALL UPPER SUSPENSION ARM

- (a) Install the upper suspension arm to the body with the 2 bolts, washers and 2 nuts.

Torque:

Nut A: 88 N·m (900 kgf·cm, 65 ft·lbf)

Nut B: 74 N·m (755 kgf·cm, 55 ft·lbf)

HINT:

After stabilizing the suspension arm, torque the nut.

- (b) Connect the upper suspension arm to the axle carrier with a new nut.

Torque: 108 N·m (1,100 kgf·cm, 80 ft·lbf)

2. INSTALL DRIVE SHAFT (See page SA-66)

3. INSTALL REAR WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

4. CHECK REAR WHEEL ALIGNMENT

(See page SA-9)

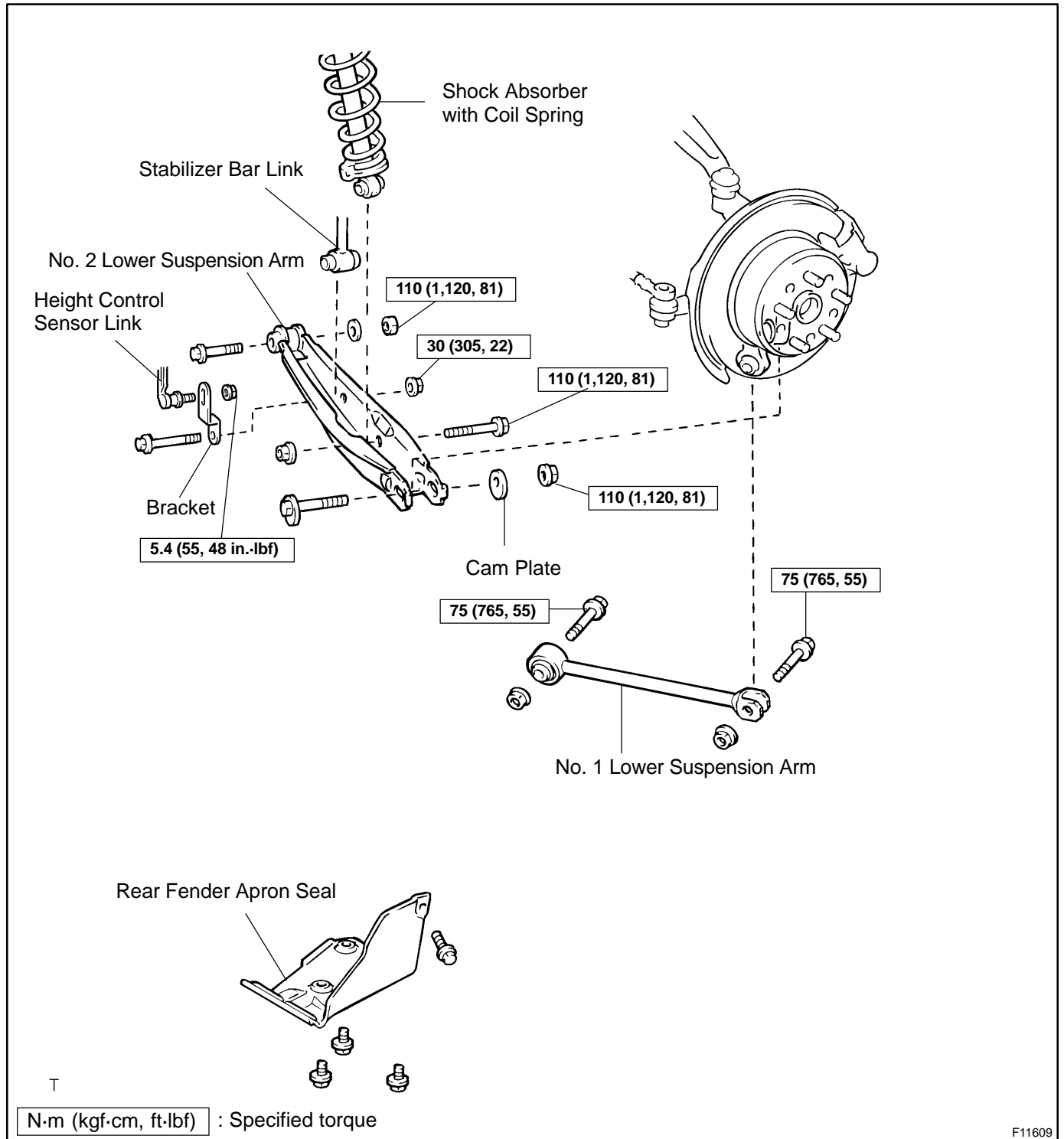
5. CHECK ABS SPEED SENSOR SIGNAL

w/ VSC (See page DI-507)

w/o VSC (See page DI-437)

REAR LOWER SUSPENSION ARM COMPONENTS

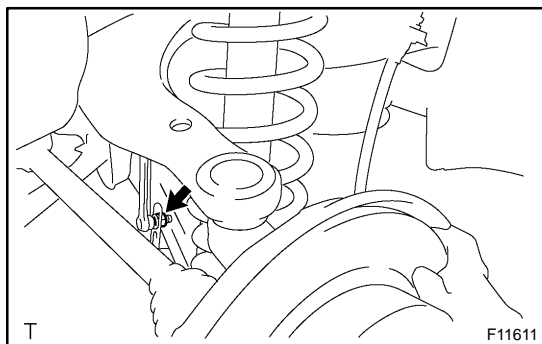
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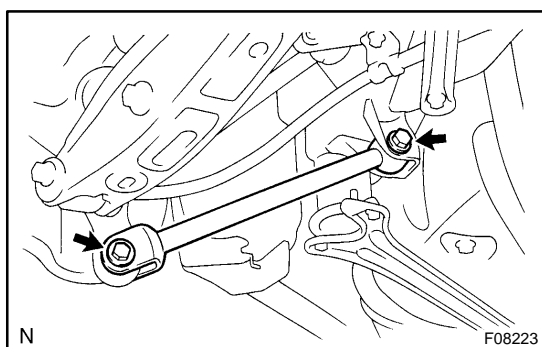
REMOVAL

1. REMOVE REAR WHEEL
2. REMOVE REAR FENDER APRON SEAL



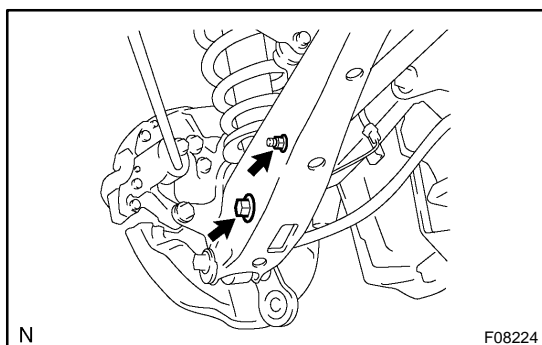
3. DISCONNECT HEIGHT CONTROL SENSOR LINK

Remove the nut and disconnect the height control sensor link from lower arm bracket.



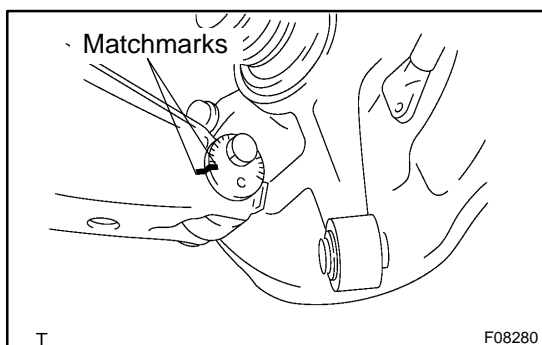
4. REMOVE NO. 1 LOWER SUSPENSION ARM

Remove the 2 bolts, nuts, and No. 1 lower suspension arm.

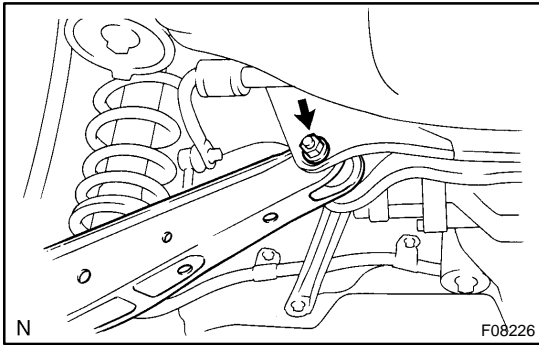


5. REMOVE NO. 2 LOWER SUSPENSION ARM

- (a) Remove the nut, bolt and bracket, and disconnect the stabilizer bar link from the No. 2 lower suspension arm.
- (b) Remove the bolt and nut, and disconnect the shock absorber from the No. 2 lower suspension arm.



- (c) Place matchmarks on the cam bolt and No. 2 lower suspension arm.
- (d) Remove the nut, cam plate and cam bolt, and disconnect the axle carrier.



- (e) Remove the nut, washer, bolt and No. 2 lower suspension arm from the rear suspension member.

INSTALLATION

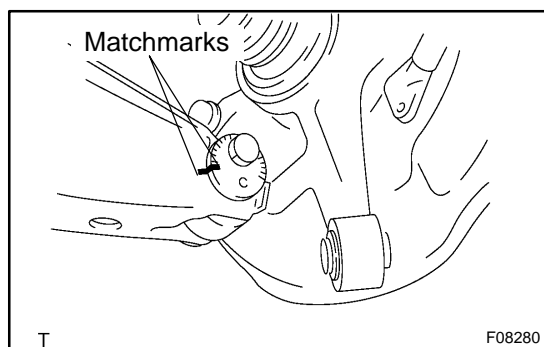
1. INSTALL NO. 2 LOWER SUSPENSION ARM

- (a) Install the No. 2 lower suspension arm to the rear suspension member with bolt, washer and nut.

Torque: 110 N·m (1,120 kgf·cm, 81 ft·lbf)

HINT:

After stabilizing the suspension, torque the nut.



- (b) Connect the No. 2 lower suspension arm to the axle carrier with the cam bolt, cam plate and nut.

Torque: 110 N·m (1,120 kgf·cm, 81 ft·lbf)

HINT:

After stabilizing the suspension, align the matchmarks on the cam bolt and No. 2 lower suspension arm, and torque the nut.

- (c) Connect the shock absorber to the No. 2 lower suspension arm with the bolt and nut.

Torque: 110 N·m (1,120 kgf·cm, 81 ft·lbf)

HINT:

After stabilizing the suspension, torque the nut.

- (d) Connect the stabilizer bar link to the No. 2 lower suspension arm with the bracket, bolt and nut.

Torque: 30 N·m (305 kgf·cm, 22 ft·lbf)

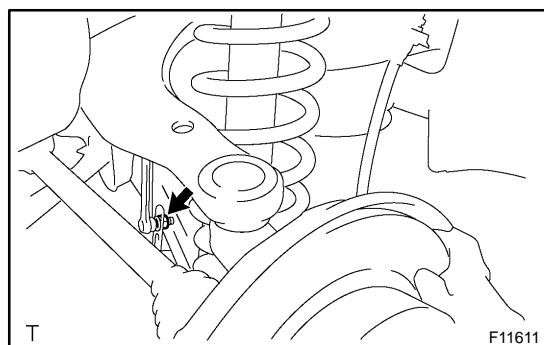
2. INSTALL NO. 1 LOWER SUSPENSION ARM

Install the No. 1 lower suspension arm with the 2 bolts and nuts.

Torque: 75 N·m (765 kgf·cm, 55 ft·lbf)

HINT:

After stabilizing the suspension, torque the bolt.



3. CONNECT HEIGHT CONTROL SENSOR LINK

- (a) Set the lower arm to the vehicle height.
 (b) Install the sensor link to the lower arm bracket with a nut.

Torque: 5.4 N·m (55 kgf·cm, 48 in.-lbf)

NOTICE:

- Be careful not to brake the link fixing pin until the above operation is completed.
- The pin can be broken after completion of the above, however, the sensor arm rotation angle shall not exceed the range of $\pm 70^\circ$ from the standard vehicle height.

4. INSTALL REAR FENDER APRON SEAL

5. INSTALL REAR WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

6. CHECK REAR WHEEL ALIGNMENT

(See page [SA-9](#))

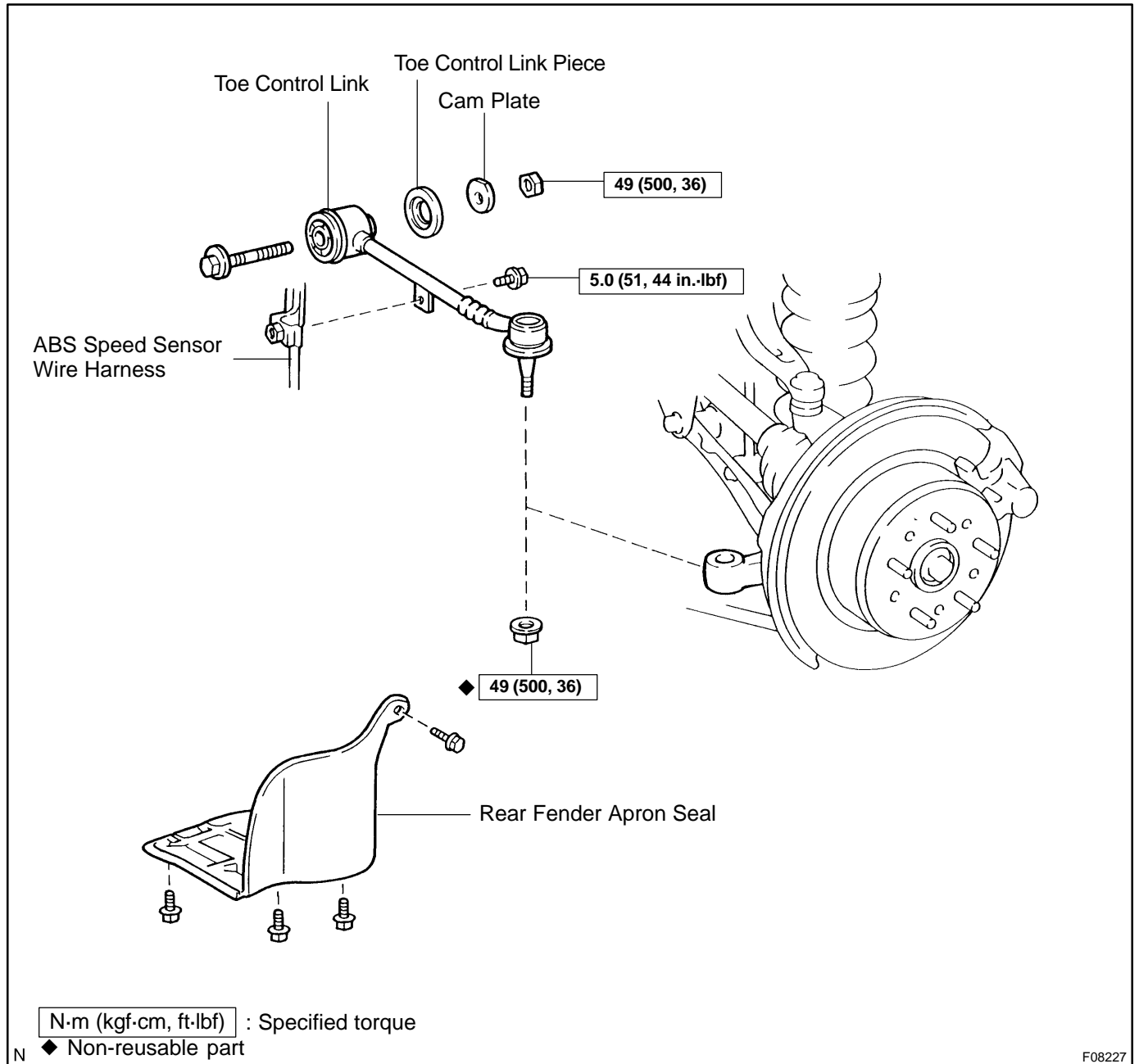
7. CHECK ABS SPEED SENSOR SIGNAL

w/ VSC (See page [DI-507](#))

w/o VSC (See page [DI-437](#))

TOE CONTROL LINK COMPONENTS

SAOSW-07



F08227

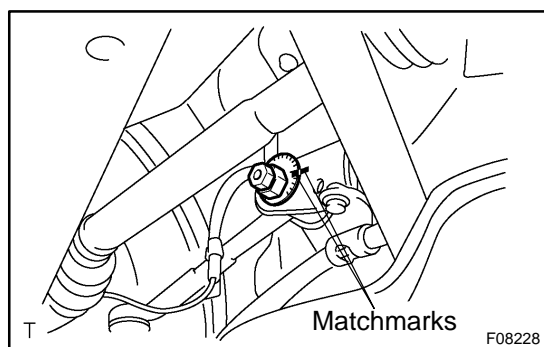
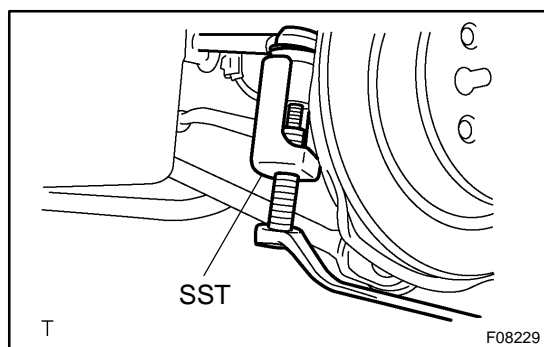
REMOVAL

1. REMOVE REAR WHEEL
2. REMOVE REAR FENDER APRON SEAL
3. DISCONNECT ABS SPEED SENSOR WIRE HARNESS FROM TOE CONTROL LINK

Remove the bolt and disconnect the ABS speed sensor wire harness.

4. REMOVE TOE CONTROL LINK

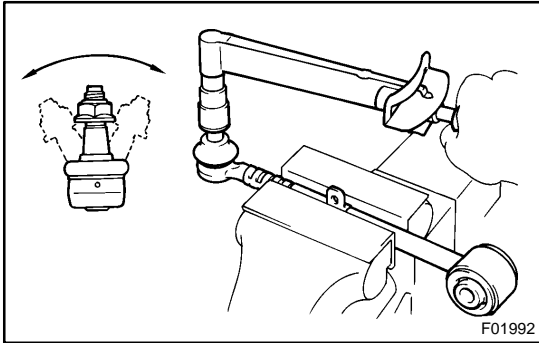
- (a) Remove the nut.
- (b) Using SST, disconnect the toe control link from the axle carrier.
SST 09610-20012



- (c) Place matchmarks on the cam plate and rear suspension member.
- (d) Remove the nut, cam plate, cam bolt, toe control link piece and toe control link from the axle carrier.

INSPECTION

1. INSPECT TOE CONTROL LINK BALL JOINT BOOT FOR DAMAGE

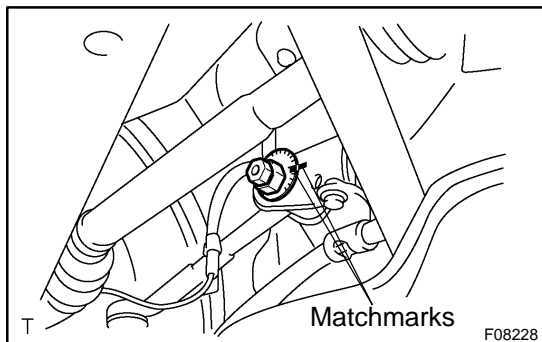


2. INSPECT TOE CONTROL LINK BALL JOINT FOR ROTATION CONDITION

- (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 1 turn per 2 - 4 seconds and take the torque reading on the 5th turn.

Turning torque:

1.0 - 2.5 N·m (10 - 25 kgf·cm, 9 - 22 in.-lbf)



INSTALLATION

1. INSTALL TOE CONTROL LINK

- (a) Install the toe control link, toe control link piece to the rear suspension member with the cam bolt, cam plate and nut.
Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

HINT:

After stabilizing the suspension arm, align the matchmarks on the cam plate and rear suspension member, and torque the nut.

- (b) Connect the toe control link to the axle carrier with a new nut.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

2. CONNECT ABS SPEED SENSOR WIRE HARNESS TO TOE CONTROL LINK

Torque: 5.0 N·m (51 kgf·cm, 44 in.-lbf)

3. INSTALL REAR FENDER APRON SEAL

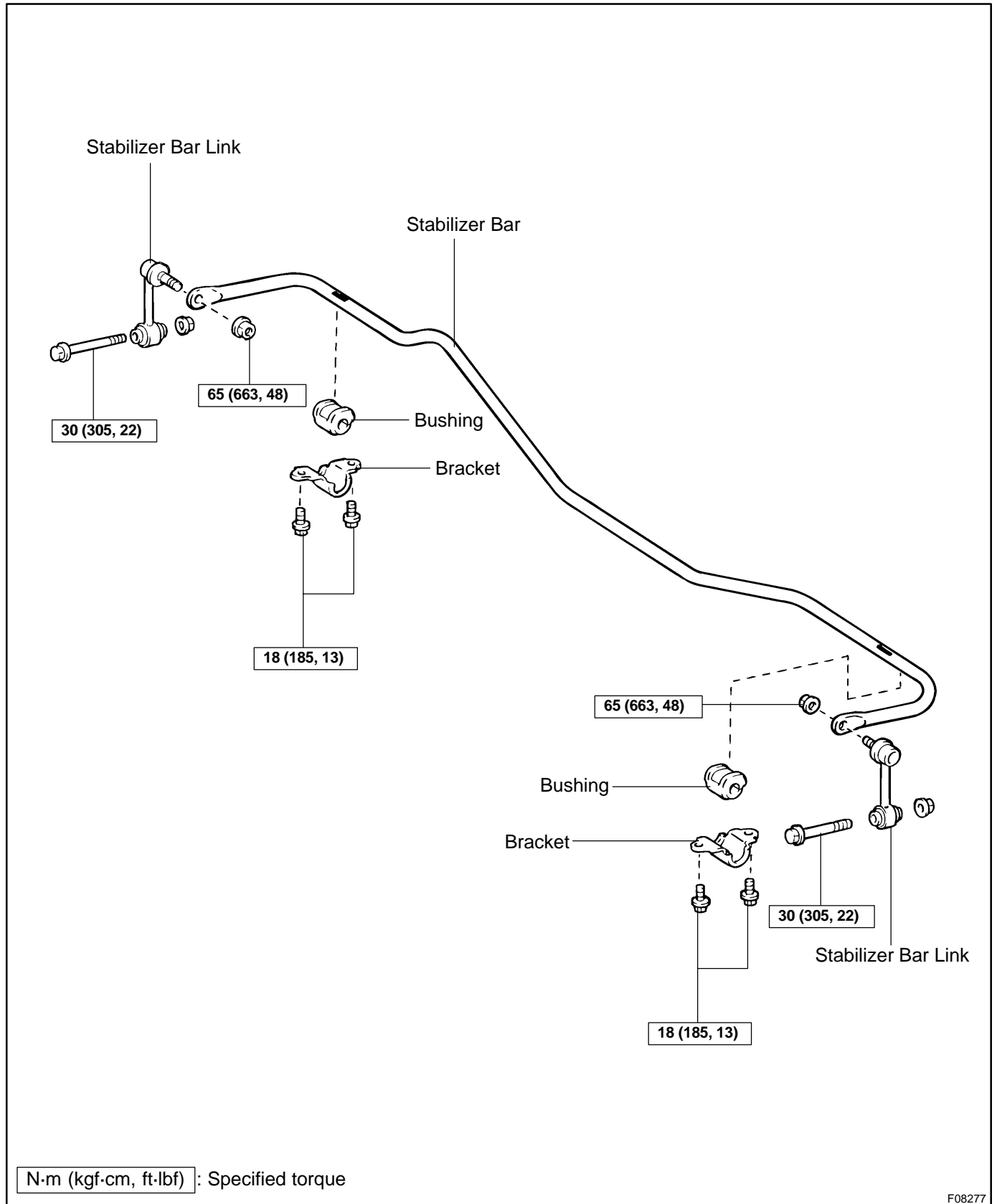
4. INSTALL REAR WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

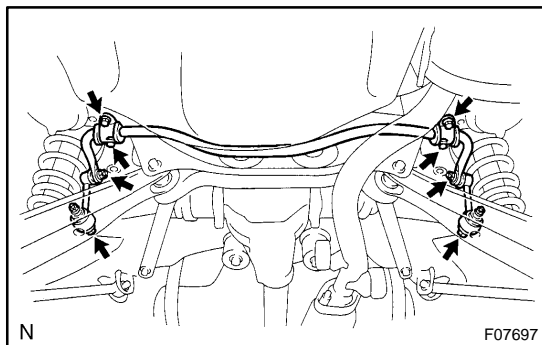
5. CHECK REAR WHEEL ALIGNMENT (See page [SA-9](#))

REAR STABILIZER BAR COMPONENTS

SA0T0-08



F08277



REMOVAL

1. REMOVE STABILIZER BAR

(a) Remove the 4 nuts, 2 bolts and stabilizer bar links.

HINT:

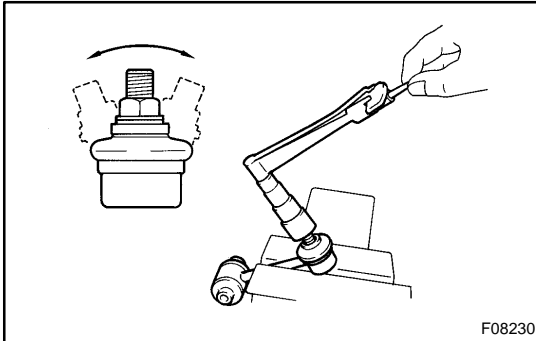
If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

(b) Remove the 4 bolts and stabilizer bar.

2. REMOVE 2 BRACKETS AND BUSHINGS FROM STABILIZER BAR

INSPECTION

1. **INSPECT STABILIZER BAR LINK BALL JOINT BOOT FOR DAMAGE**

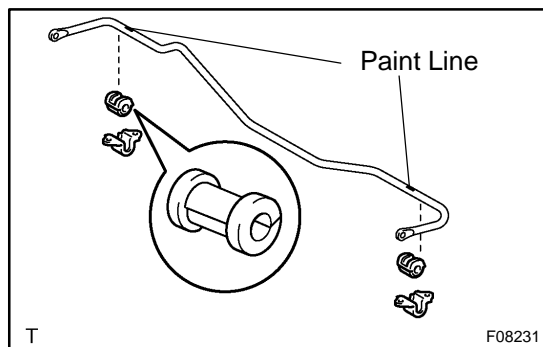


2. **INSPECT STABILIZER BAR LINK BALL JOINT FOR ROTATION CONDITION**

- (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 1 turn per 2 - 4 seconds and take the torque reading on the 5th turn.

Turning torque:

0.05 - 1.0 N·m (0.5 - 10 kgf·cm, 0.4 - 9.0 in.-lbf)

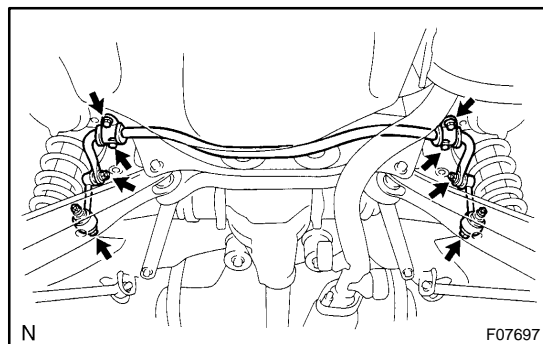


INSTALLATION

1. INSTALL 2 BUSHINGS AND BRACKETS TO STABILIZER BAR

HINT:

- Install the bushing to the outside of the paint line on the stabilizer bar.
- Install the bushing to the stabilizer bar so that the cutout of the bushing faces the rear of the vehicle, as shown in the illustration.



2. INSTALL STABILIZER BAR

- Install the stabilizer bar to the body with the 4 bolts.
Torque: 18 N·m (185 kgf·cm, 13 ft·lbf)
- Install the 2 stabilizer bar links with the 2 bolts and 4 nuts.
Torque:
Bolt: 30 N·m (305 kgf·cm, 22 ft·lbf)
Nut: 65 N·m (663 kgf·cm, 48 ft·lbf)

HINT:

If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.