

DISASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT SUSPENSION SUPPORT PLATE LH

(a) Remove the plate from the shock absorber.

2. REMOVE FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Using a screwdriver, remove the dust cover from the suspension support.

HINT:

Tape the screwdriver tip before use.

3. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Install 2 nuts and 2 bolts to the bracket at the lower portion of the shock absorber and secure it with a vise.

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

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

HINT:

To prevent the coil spring from being damaged, wind vinyl tape on the coil spring.

NOTICE:

- When holding the shock absorber with the coil spring removed, do not hold it by the spring lower seat. Also, do not knock the spring lower seat.
- Do not use an impact wrench which will damage SST.

- (c) Using SST to hold the spring upper seat, remove the nut.

SST 09729-22031

4. REMOVE FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

- (a) Remove the suspension support from the shock absorber.

5. REMOVE FRONT SUSPENSION SUPPORT LH DUST SEAL

- (a) Remove the dust seal from the shock absorber.

6. REMOVE FRONT COIL SPRING SEAT UPPER LH

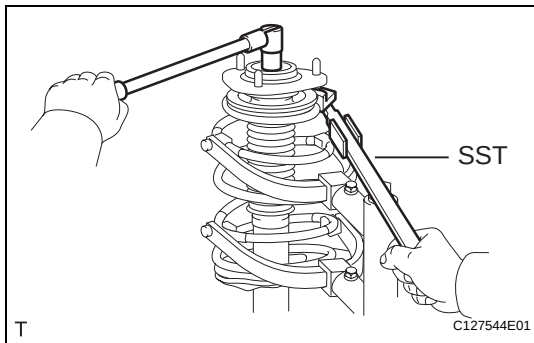
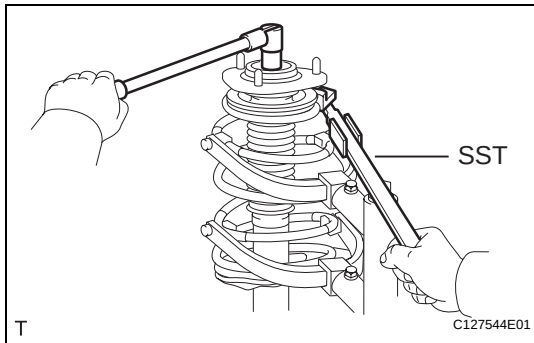
- (a) Remove the seat upper from the shock absorber.

7. REMOVE FRONT COIL SPRING INSULATOR UPPER LH

- (a) Remove the insulator upper from the shock absorber.

8. REMOVE FRONT SPRING BUMPER LH

- (a) Disengage the spring bumper from the spring seat.

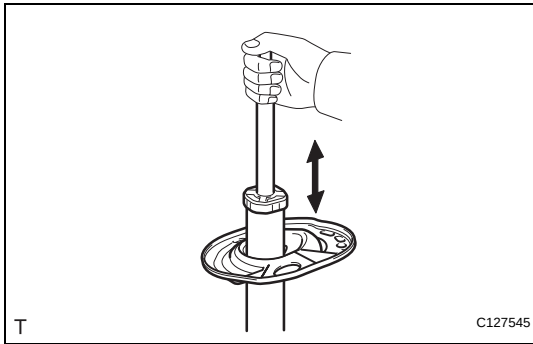


9. REMOVE FRONT COIL SPRING LH

- (a) Remove the coil spring from the shock absorber.
- (b) Remove SST from the coil spring.

10. REMOVE FRONT COIL SPRING INSULATOR LOWER LH

- (a) Remove the insulator lower from the shock absorber.

**INSPECTION****1. INSPECT FRONT SHOCK ABSORBER ASSEMBLY LH**

- (a) Compress and extend the shock absorber rod 4 times or more. Check that there is no abnormal resistance or unusual sound during the operation. If there is any abnormality, replace the shock absorber assembly with a new one.

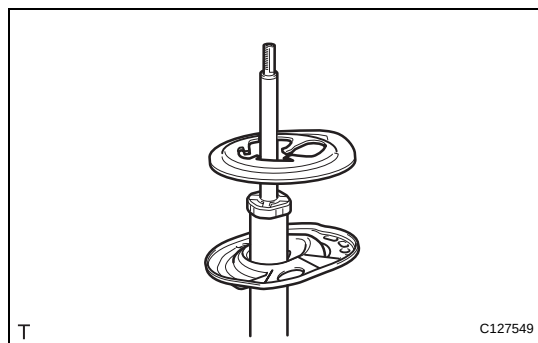
NOTICE:

When disposing of the shock absorber, see DISPOSAL (see page [SP-13](#)).

REASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

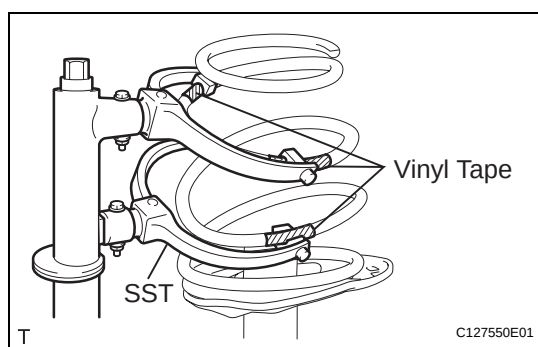


1. INSTALL FRONT COIL SPRING INSULATOR LOWER LH

- (a) Install the insulator lower to the shock absorber.

2. INSTALL FRONT SPRING BUMPER LH

- (a) Engage the spring bumper to the spring seat.



3. INSTALL FRONT COIL SPRING LH

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

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

HINT:

To prevent the coil spring from being damaged, wind vinyl tape around the coil spring.

NOTICE:

Do not use an impact wrench which will damage SST.

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

HINT:

Fit the lower end of the coil spring to the gap of the lower spring seat.

4. INSTALL FRONT COIL SPRING INSULATOR UPPER LH

- (a) Install the insulator upper to the shock absorber.

5. INSTALL FRONT COIL SPRING SEAT UPPER LH

- (a) Install the seat upper to the shock absorber.

6. INSTALL FRONT SUSPENSION SUPPORT LH DUST SEAL

- (a) Install the dust seal to the shock absorber.

7. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

- (a) Install the suspension support to the shock absorber.

8. INSTALL FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

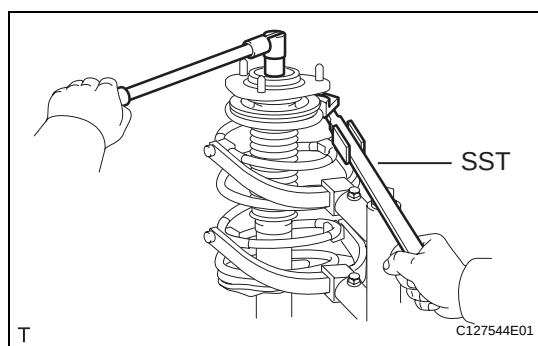
- (a) Using SST to hold the spring upper seat, install a new nut.

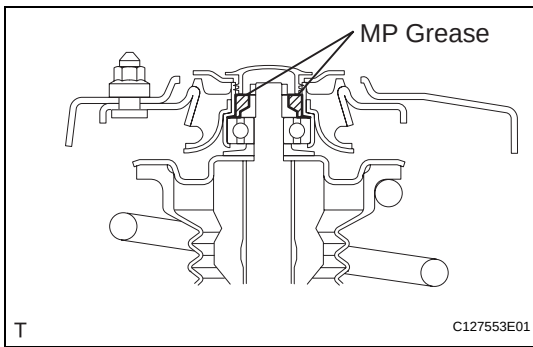
SST 09729-22031

Torque: 47 N*m (475 kgf*cm, 34 ft.*lbf)

- (b) Remove SST.

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





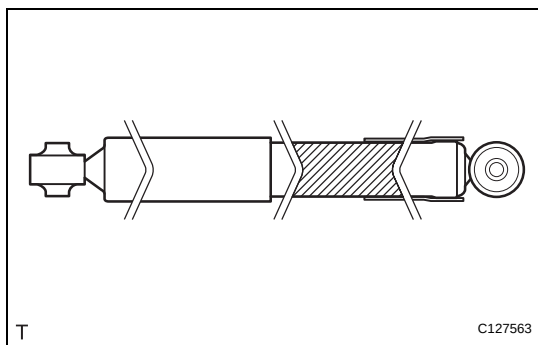
(c) Pack the suspension support with MP grease.

9. INSTALL FRONT SUSPENSION SUPPORT DUST COVER LH

(a) Install the dust cover to the shock absorber.

10. INSTALL FRONT SUSPENSION SUPPORT PLATE LH

(a) Install the support plate to the shock absorber with coil spring.



DISPOSAL

1. DISPOSE OF REAR SHOCK ABSORBER ASSEMBLY LH

- (a) Fully extend the shock absorber rod, and clamp it in a vise at an angle.
- (b) Using a drill, make a hole near the center of the cylinder in the hatched area shown in the illustration to discharge the gas inside.

CAUTION:

As metal debris may be blown outward by the gas, you must:

- Wear protective glasses.
- Cover the area being cut.

NOTICE:

The gas is colorless, odorless and harmless.

INSTALLATION

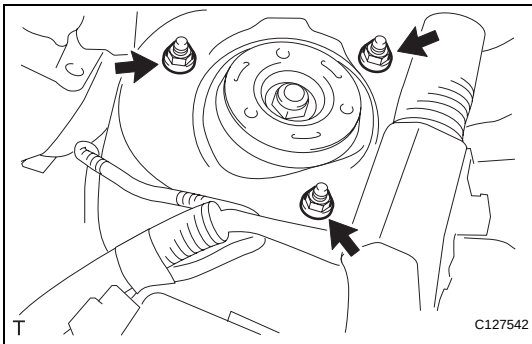
HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING LH

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

Torque: 50 N*m (510 kgf*cm, 37 ft.*lbf)



- (b) Install the front shock absorber with coil spring to the steering knuckle with the 2 bolt and 2 nuts.

Torque: 240 N*m (2,447 kgf*cm, 177 ft.*lbf)

NOTICE:

Do not tighten the bolts.

2. CONNECT FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-31](#))

3. CONNECT FRONT SPEED SENSOR LH (See page [BC-193](#))

4. INSTALL FRONT WHEEL

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

5. STABILIZE SUSPENSION

- (a) Lower the vehicle.
(b) Press down on the vehicle several times to stabilize the suspension.

6. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

- (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

DISPOSAL

1. DISPOSE OF FRONT SHOCK ABSORBER ASSEMBLY LH

- (a) Fully extend the shock absorber piston rod, and clamp it in a vise at an angle.
(b) Using a drill or similar tool, gradually make a hole in area A to discharge the gas inside of the absorber.

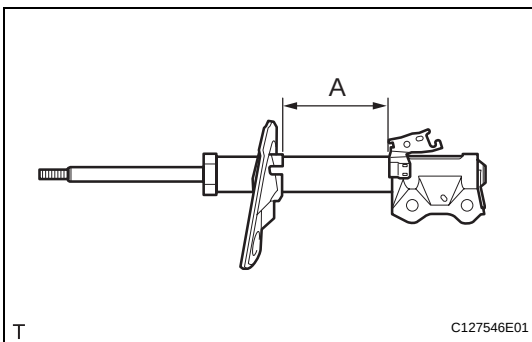
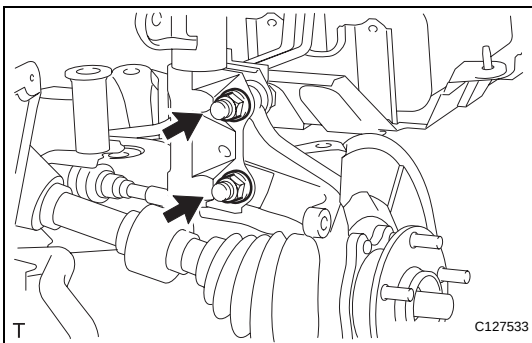
CAUTION:

As metal debris may be blown outward by the gas, you must

- Wear protective glasses.
- Cover the area being cut.

NOTICE:

The gas is colorless and harmless.



DISASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT SUSPENSION SUPPORT PLATE LH

(a) Remove the plate from the shock absorber.

2. REMOVE FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Using a screwdriver, remove the dust cover from the suspension support.

HINT:

Tape the screwdriver tip before use.

3. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Install 2 nuts and 2 bolts to the bracket at the lower portion of the shock absorber and secure it with a vise.

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

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

HINT:

To prevent the coil spring from being damaged, wind vinyl tape on the coil spring.

NOTICE:

- When holding the shock absorber with the coil spring removed, do not hold it by the spring lower seat. Also, do not knock the spring lower seat.
- Do not use an impact wrench which will damage SST.

- (c) Using SST to hold the suspension support, remove the nut.

SST 09729-22031

4. REMOVE COLLAR

- (a) Remove the collar from the suspension support.

5. REMOVE FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

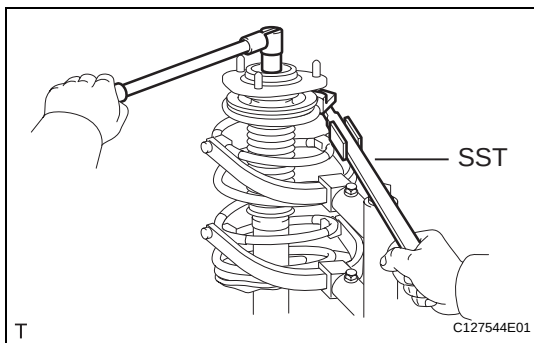
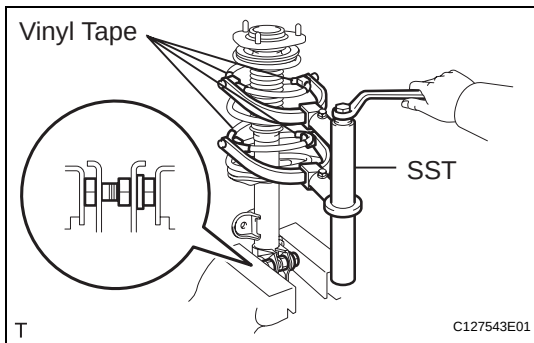
- (a) Remove the suspension support from the shock absorber.

6. REMOVE STRUT MOUNTING BEARING LH

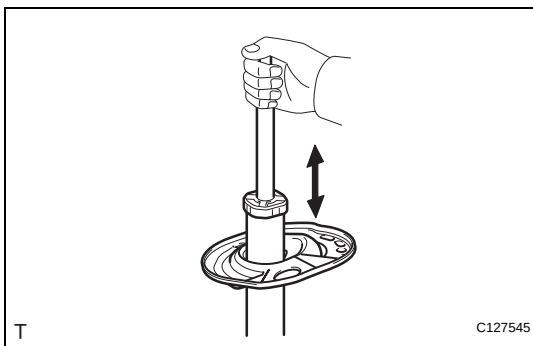
- (a) Remove the mounting bearing from the suspension support.

NOTICE:

- When removing the bearing, the suspension support may become stuck. Use a screwdriver or equivalent to remove the bearing.
- Make sure not to use excessive force when removing the bearing as it may come apart.



7. **REMOVE FRONT COIL SPRING INSULATOR UPPER LH**
 - (a) Remove the insulator upper from the shock absorber.
8. **REMOVE FRONT SPRING BUMPER LH**
 - (a) Remove the spring bumper from the shock absorber.
9. **REMOVE FRONT COIL SPRING LH**
 - (a) Remove the coil spring from the shock absorber.
 - (b) Remove SST from the coil spring.
10. **REMOVE FRONT COIL SPRING INSULATOR LOWER LH**
 - (a) Remove the insulator lower from the shock absorber.



INSPECTION

1. **INSPECT FRONT SHOCK ABSORBER ASSEMBLY LH**
 - (a) Compress and extend the shock absorber rod 4 times or more. Check that there is no abnormal resistance or unusual sound during the operation. If there is any abnormality, replace the shock absorber assembly with a new one.

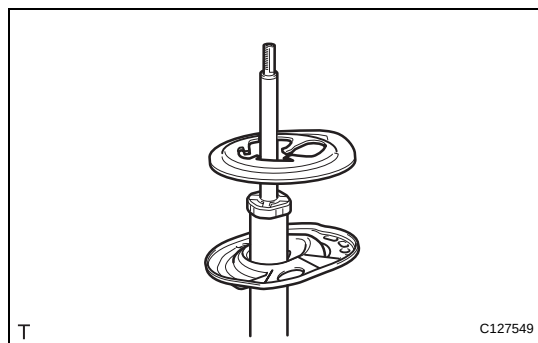
NOTICE:

When disposing of the shock absorber, see DISPOSAL (see page [SP-19](#)).

REASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

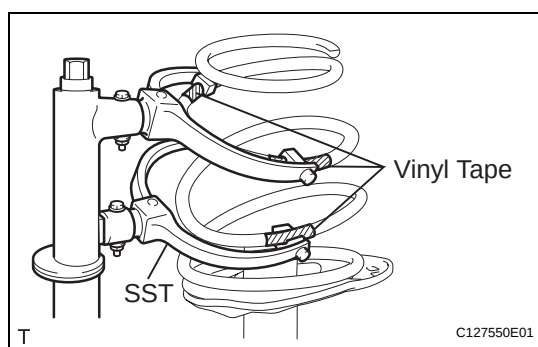


1. INSTALL FRONT COIL SPRING INSULATOR LOWER LH

- (a) Install the insulator lower to the shock absorber.

2. INSTALL FRONT SPRING BUMPER LH

- (a) Install the spring bumper to the shock absorber.



3. INSTALL FRONT COIL SPRING LH

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

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

HINT:

To prevent the coil spring from being damaged, wind vinyl tape around the coil spring.

NOTICE:

Do not use an impact wrench which will damage SST.

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

HINT:

Fit the lower end of the coil spring to the gap of the lower spring seat.

4. INSTALL FRONT COIL SPRING INSULATOR UPPER LH

- (a) Install the insulator upper to the shock absorber.

5. INSTALL STRUT MOUNTING BEARING LH

- (a) Install the mounting bearing to the insulator upper.

6. INSTALL COLLAR

- (a) Install the collar to the suspension support side.

7. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

- (a) Install the suspension support to the shock absorber.

8. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Using SST to hold the spring upper seat, install a new nut.

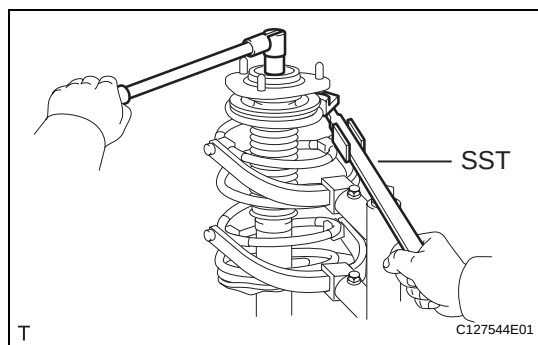
SST 09729-22031

- (b) Remove SST.

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

NOTICE:

When removing SST, make sure that the suspension support is not in an inclined position, as the bearing may come apart.



9. INSTALL FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Install the dust cover to the shock absorber.

10. INSTALL FRONT SUSPENSION SUPPORT PLATE LH

- (a) Install the support plate to the shock absorber with coil spring.

DISASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT SUSPENSION SUPPORT PLATE LH

(a) Remove the plate from the shock absorber.

2. REMOVE FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Using a screwdriver, remove the dust cover from the suspension support.

HINT:

Tape the screwdriver tip before use.

3. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Install 2 nuts and 2 bolts to the bracket at the lower portion of the shock absorber and secure it with a vise.

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

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

HINT:

To prevent the coil spring from being damaged, wind vinyl tape on the coil spring.

NOTICE:

- When holding the shock absorber with the coil spring removed, do not hold it by the spring lower seat. Also, do not knock the spring lower seat.
- Do not use an impact wrench which will damage SST.

- (c) Using SST to hold the suspension support, remove the nut.

SST 09729-22031

4. REMOVE COLLAR

- (a) Remove the collar from the suspension support.

5. REMOVE FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

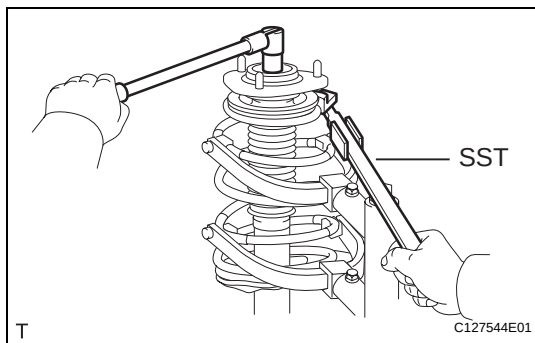
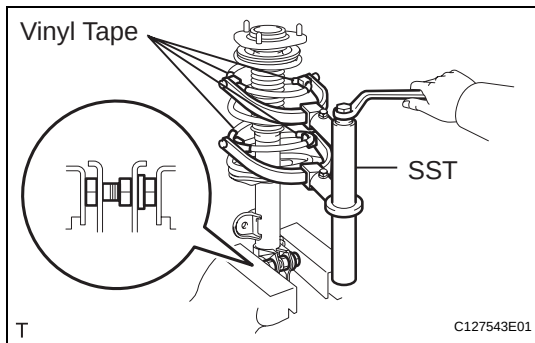
- (a) Remove the suspension support from the shock absorber.

6. REMOVE STRUT MOUNTING BEARING LH

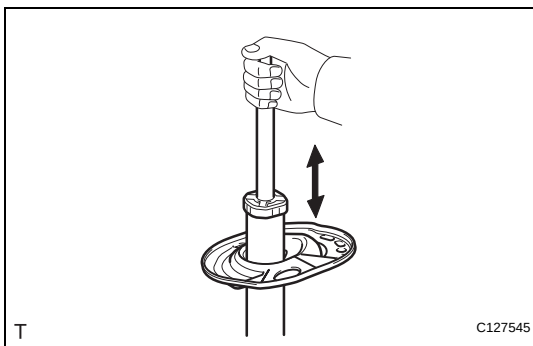
- (a) Remove the mounting bearing from the suspension support.

NOTICE:

- When removing the bearing, the suspension support may become stuck. Use a screwdriver or equivalent to remove the bearing.
- Make sure not to use excessive force when removing the bearing as it may come apart.



7. **REMOVE FRONT COIL SPRING INSULATOR UPPER LH**
 - (a) Remove the insulator upper from the shock absorber.
8. **REMOVE FRONT SPRING BUMPER LH**
 - (a) Remove the spring bumper from the shock absorber.
9. **REMOVE FRONT COIL SPRING LH**
 - (a) Remove the coil spring from the shock absorber.
 - (b) Remove SST from the coil spring.
10. **REMOVE FRONT COIL SPRING INSULATOR LOWER LH**
 - (a) Remove the insulator lower from the shock absorber.



INSPECTION

1. **INSPECT FRONT SHOCK ABSORBER ASSEMBLY LH**
 - (a) Compress and extend the shock absorber rod 4 times or more. Check that there is no abnormal resistance or unusual sound during the operation. If there is any abnormality, replace the shock absorber assembly with a new one.

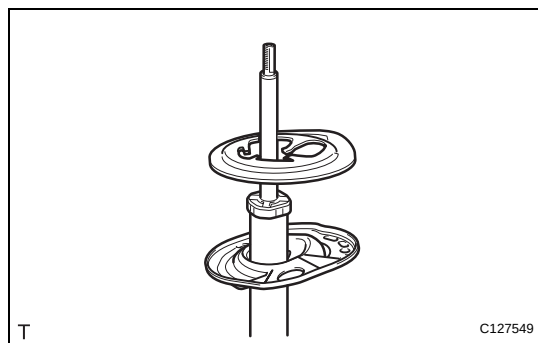
NOTICE:

When disposing of the shock absorber, see DISPOSAL (see page [SP-19](#)).

REASSEMBLY

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

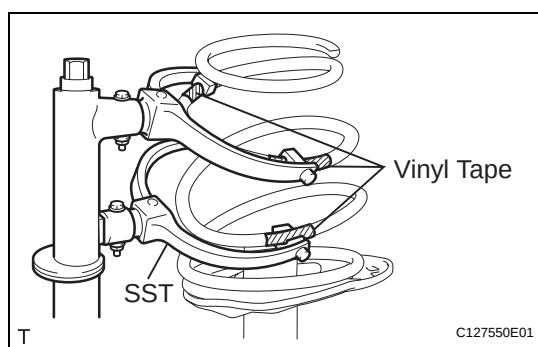


1. INSTALL FRONT COIL SPRING INSULATOR LOWER LH

- (a) Install the insulator lower to the shock absorber.

2. INSTALL FRONT SPRING BUMPER LH

- (a) Install the spring bumper to the shock absorber.



3. INSTALL FRONT COIL SPRING LH

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

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

HINT:

To prevent the coil spring from being damaged, wind vinyl tape around the coil spring.

NOTICE:

Do not use an impact wrench which will damage SST.

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

HINT:

Fit the lower end of the coil spring to the gap of the lower spring seat.

4. INSTALL FRONT COIL SPRING INSULATOR UPPER LH

- (a) Install the insulator upper to the shock absorber.

5. INSTALL STRUT MOUNTING BEARING LH

- (a) Install the mounting bearing to the insulator upper.

6. INSTALL COLLAR

- (a) Install the collar to the suspension support side.

7. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY LH

- (a) Install the suspension support to the shock absorber.

8. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

- (a) Using SST to hold the spring upper seat, install a new nut.

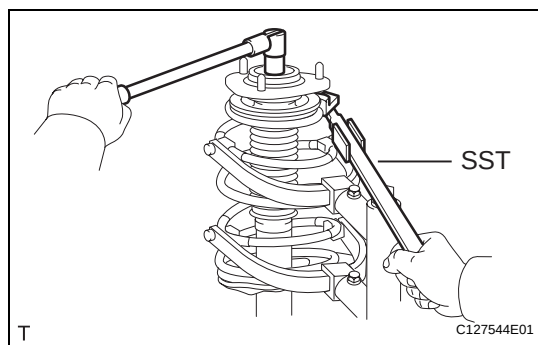
SST 09729-22031

- (b) Remove SST.

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

NOTICE:

When removing SST, make sure that the suspension support is not in an inclined position, as the bearing may come apart.



9. INSTALL FRONT SUSPENSION SUPPORT DUST COVER LH

- (a) Install the dust cover to the shock absorber.

10. INSTALL FRONT SUSPENSION SUPPORT PLATE LH

- (a) Install the support plate to the shock absorber with coil spring.

INSTALLATION

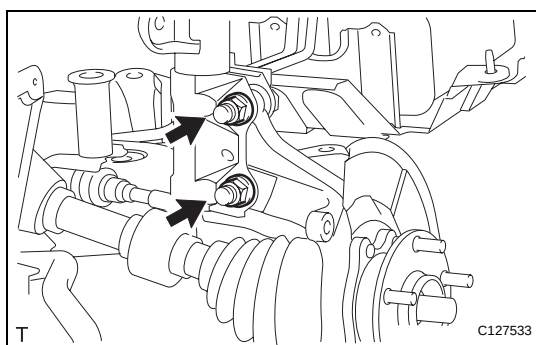
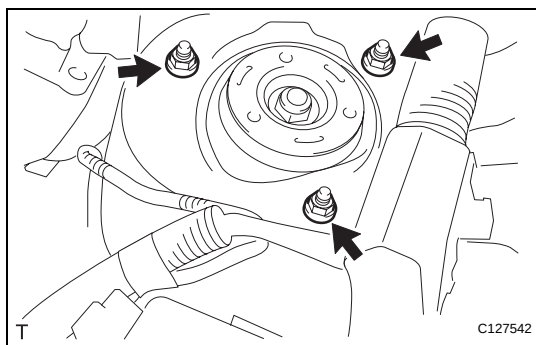
HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

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

Torque: 50 N*m (510 kgf*cm, 37 ft.*lbf)



- (b) Install the front shock absorber with coil spring to the steering knuckle with the 2 bolt and 2 nuts.

Torque: 240 N*m (2,447 kgf*cm, 177 ft.*lbf)

NOTICE:

Do not tighten the bolts.

2. INSTALL FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-31](#))

3. INSTALL FRONT SPEED SENSOR LH (See page [BC-193](#))

4. INSTALL FRONT WHEEL

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

5. STABILIZE SUSPENSION

- (a) Lower the vehicle.
(b) Press down on the vehicle several times to stabilize the suspension.

6. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

- (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

DISPOSAL

1. DISPOSE OF FRONT SHOCK ABSORBER ASSEMBLY LH

- (a) Fully extend the shock absorber piston rod, and clamp it in a vise at an angle.
(b) Using a drill or similar tool, gradually make a hole in area A to discharge the gas inside of the absorber.

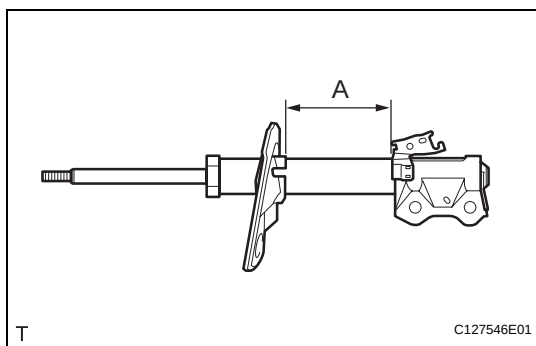
CAUTION:

As metal debris may be blown outward by the gas, you must.

- Wear protective glasses.
- Cover the area being cut.

NOTICE:

The gas is colorless and harmless.



INSTALLATION

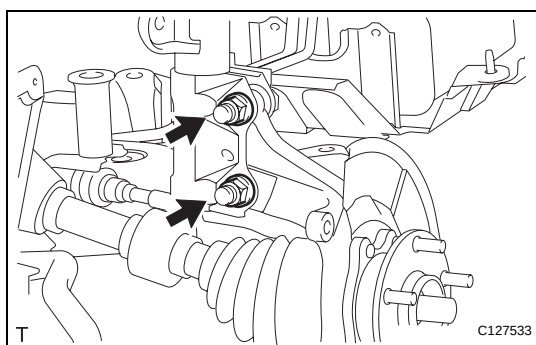
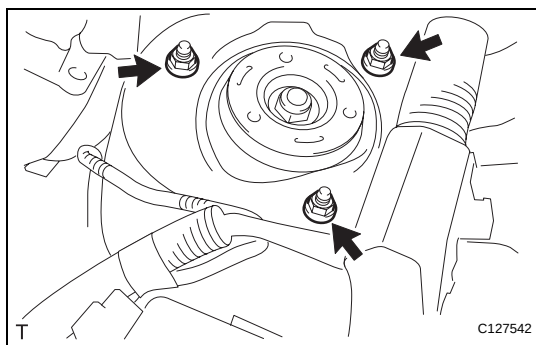
HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

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

Torque: 50 N*m (510 kgf*cm, 37 ft.*lbf)



- (b) Install the front shock absorber with coil spring to the steering knuckle with the 2 bolt and 2 nuts.

Torque: 240 N*m (2,447 kgf*cm, 177 ft.*lbf)

NOTICE:

Do not tighten the bolts.

2. INSTALL FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-31](#))

3. INSTALL FRONT SPEED SENSOR LH (See page [BC-193](#))

4. INSTALL FRONT WHEEL

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

5. STABILIZE SUSPENSION

- (a) Lower the vehicle.
(b) Press down on the vehicle several times to stabilize the suspension.

6. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

- (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

DISPOSAL

1. DISPOSE OF FRONT SHOCK ABSORBER ASSEMBLY LH

- (a) Fully extend the shock absorber piston rod, and clamp it in a vise at an angle.
(b) Using a drill or similar tool, gradually make a hole in area A to discharge the gas inside of the absorber.

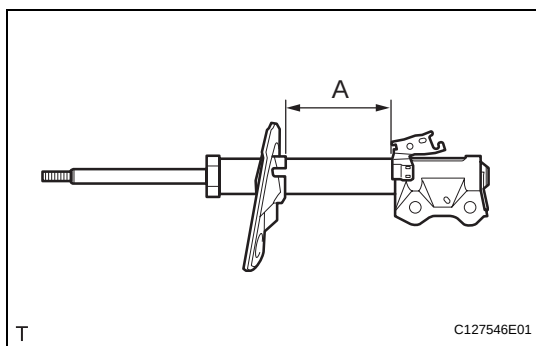
CAUTION:

As metal debris may be blown outward by the gas, you must.

- Wear protective glasses.
- Cover the area being cut.

NOTICE:

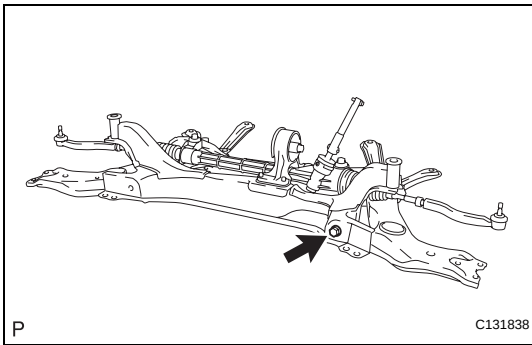
The gas is colorless and harmless.



INSTALLATION

1. TEMPORARILY INSTALL FRONT SUSPENSION LOWER NO. 1 ARM LH

- (a) Temporarily install the lower arm with the bolt and nut to the front side.



- (b) Temporarily install the lower arm with the bolt and nut to the rear side.

2. TEMPORARILY INSTALL FRONT SUSPENSION NO. 1 LOWER ARM SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

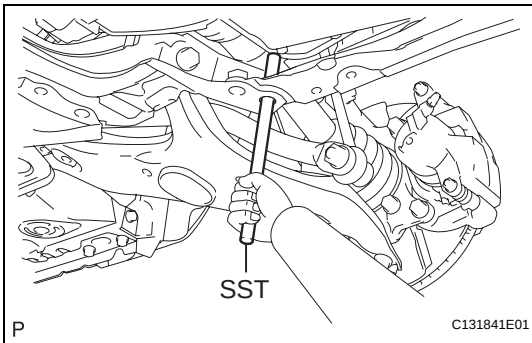
3. CONNECT FRONT CROSSMEMBER SUB-ASSEMBLY

- (a) Slowly raise the crossmember jack, and connect the crossmember to the body.

- (b) Using SST, align the holes of the suspension member and body.

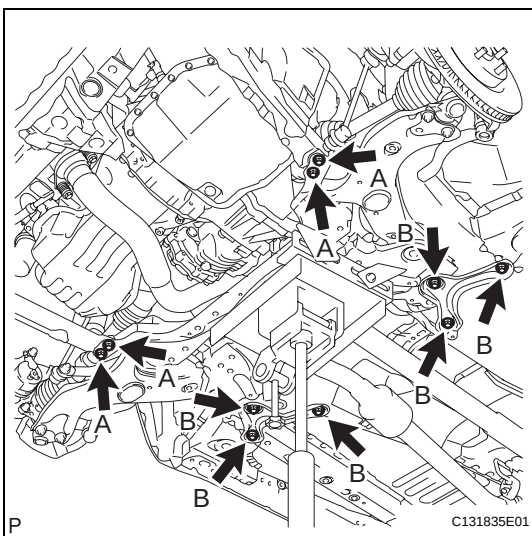
SST 09670-00020

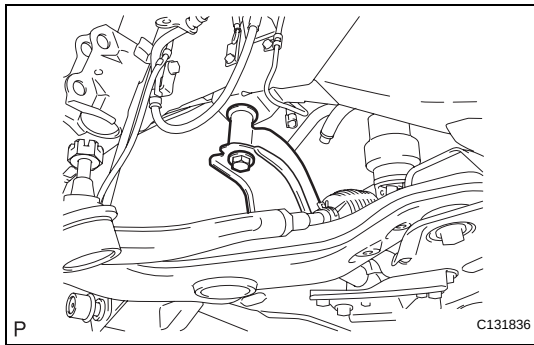
- (c) Perform the procedure above on the other side.



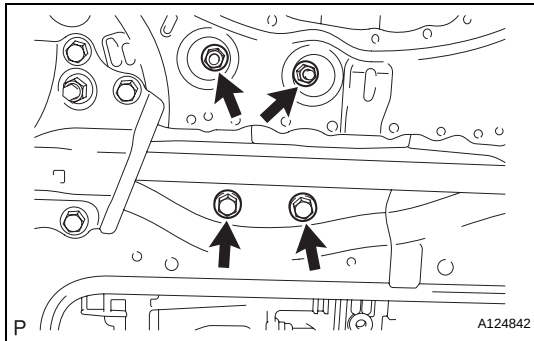
- (d) Install the member reinforcement with the 4 bolts labeled A.

- (e) Install the suspension member brace with the 6 bolts labeled B.





- (f) Install the suspension member with the bolt to the body.
- (g) Perform the procedure above on the other side.



- (h) Install the engine mounting insulator rear with the 2 nuts and 2 bolts.

4. INSTALL FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-30](#))

5. CONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH

- (a) Connect the lower arm with the 2 bolts and nut to the ball joint.

Torque: 92 N*m (938 kgf*cm, 68 ft.*lbf)

6. INSTALL FRONT WHEEL

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

7. STABILIZE SUSPENSION (See page [SP-12](#))

8. TIGHTEN FRONT CROSS MEMBER SUB-ASSEMBLY

- (a) Tighten the bolts and nuts.

Torque: 87 N*m (887 kgf*cm, 64 ft.*lbf) for bolt A

93 N*m (948 kgf*cm, 69 ft.*lbf) for bolt B

145 N*m (1,479 kgf*cm, 107 ft.*lbf) for body

95 N*m (969 kgf*cm, 70 ft.*lbf) for engine mounting insulator

9. TIGHTEN FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH

- (a) Using SST, and tighten the bolt on the front side.

SST 09961-01270

Torque: 223 N*m (2,376 kgf*cm, 172 ft.*lbf) for use without SST

175 N*m (1,785 kgf*cm, 129 ft.*lbf) for use with SST

NOTICE:

Do not tighten the nut.

- (b) Fix the nut in place and tighten the bolt on the rear side.

Torque: 223 N*m (2,376 kgf*cm, 172 ft.*lbf)

NOTICE:

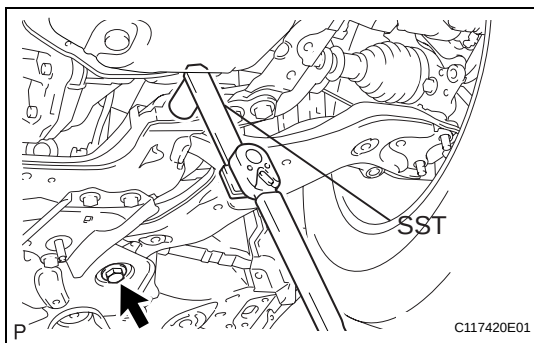
Do not tighten the nut.

10. TIGHTEN FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

11. INSTALL HOOD SUB-ASSEMBLY (See page [ED-7](#))



12. INSPECT AND ADJUST HOOD SUB-ASSEMBLY

- (a) Inspect and adjust the hood (see page [ED-5](#)).

13. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

- (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

INSTALLATION

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL FRONT LOWER BALL JOINT ASSEMBLY LH

- (a) Install the ball joint with the 2 bolts and nut to the lower arm.

Torque: 92 N*m (938 kgf*cm, 68 ft.*lbf)

- (b) Install the lower ball joint with the nut to the steering knuckle.

Torque: 133 N*m (1,360 kgf*cm, 98 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°.

2. INSTALL STEERING KNUCKLE WITH AXLE HUB (See page [AH-9](#))

3. CONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH (See page [AH-10](#))

4. CONNECT TIE ROD END SUB-ASSEMBLY LH (See page [PS-45](#))

5. INSTALL FRONT DISC (See page [BR-43](#))

6. INSTALL FRONT DISC BRAKE CYLINDER ASSEMBLY LH (See page [BR-46](#))

7. INSTALL FRONT AXLE HUB NUT (See page [AH-10](#))

8. INSTALL FRONT SPEED SENSOR LH (See page [BC-193](#))

9. INSTALL FRONT WHEEL

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

10. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

- (a) Inspect and adjust the front wheel alignment (see page [SP-3](#)).

INSTALLATION

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. INSTALL REAR COIL SPRING INSULATOR LOWER LH

- (a) Install the insulator lower to the suspension No. 2 arm.

2. REMOVE REAR COIL SPRING LH

- (a) Install the coil spring to the suspension No. 2 arm.

3. INSTALL REAR COIL SPRING INSULATOR UPPER LH

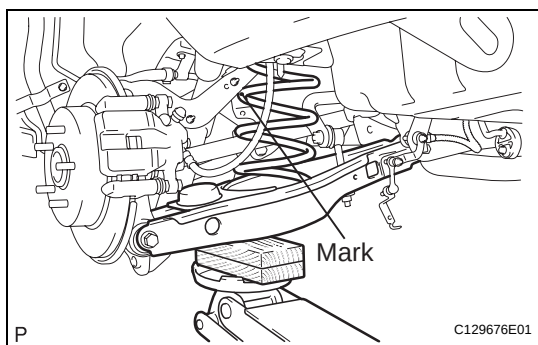
- (a) Align the stopper part of the insulator upper with the coil spring tip, and install the insulator upper.

4. TEMPORARILY INSTALL REAR SUSPENSION NO. 2 ARM ASSEMBLY LH

- (a) Slowly raise the suspension No. 2 arm with a jack, and connect the suspension No. 2 arm to the axle carrier.
- (b) Install the bolt and nut.

NOTICE:

Install the arm so that the coil spring's distinguishing mark is on the outer side of the vehicle.



5. INSTALL REAR STABILIZER LINK ASSEMBLY LH (See page [SP-50](#))

6. CONNECT NO. 2 PARKING BRAKE CABLE ASSEMBLY (See page [PB-9](#))

7. INSTALL SKID CONTROL SENSOR WIRE (for 2WD) (See page [BC-201](#))

8. INSTALL REAR SPEED SENSOR LH (for 4WD) (See page [BC-206](#))

9. INSTALL REAR WHEEL

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

10. STABILIZE SUSPENSION (See page [SP-37](#))

11. TIGHTEN REAR SUSPENSION NO. 2 ARM ASSEMBLY LH (See page [SP-46](#))

12. CHECK SPEED SENSOR SIGNAL

- (a) Check the speed sensor signal (see page [BC-44](#)).

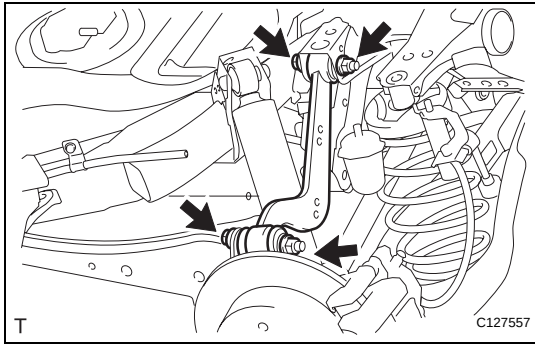
13. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

- (a) Inspect and adjust the rear wheel alignment (see page [SP-7](#)).

INSTALLATION

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

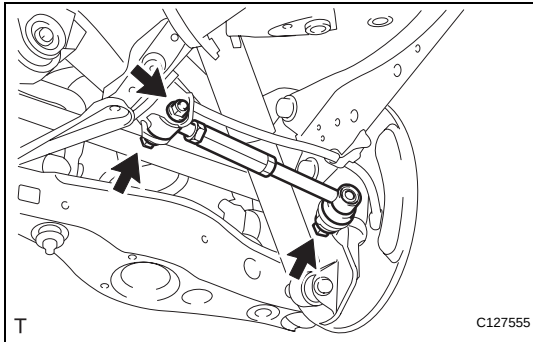


- 1. TEMPORARILY INSTALL REAR UPPER CONTROL ARM LH**
 - (a) Temporarily install the control arm with the 2 bolts and 2 nut.
HINT:
Fix the nuts in place and temporarily tighten the bolts.
- 2. CONNECT SKID CONTROL SENSOR WIRE (for 2WD)**
(See page [BC-201](#))
- 3. CONNECT REAR SPEED SENSOR LH (for 4WD)** (See page [BC-206](#))
- 4. INSTALL REAR WHEEL**
 - (a) Install the wheel.
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
- 5. TIGHTEN REAR UPPER CONTROL ARM ASSEMBLY LH**
 - (a) Fix the 2 nuts in place and tighten the 2 bolts.
Torque: 90 N*m (918 kgf*cm, 66 ft.*lbf)

INSTALLATION

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.



1. TEMPORARILY TIGHTEN REAR NO. 1 SUSPENSION ARM ASSEMBLY LH

- (a) Temporarily install the suspension arm with the bolt and 2 nuts to the suspension member and axle carrier.

2. INSTALL REAR WHEEL

- (a) Install the wheel.
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)

3. TIGHTEN REAR NO. 1 SUSPENSION ARM ASSEMBLY LH

- (a) Install the nut and 2 bolts.
Torque: 90 N*m (918 kgf*cm, 66 ft.*lbf) for bolt
100 N*m (1,020 kgf*cm, 74 ft.*lbf) for nut

NOTICE:

For the nut on the rear suspension member side, do not tighten the nut.

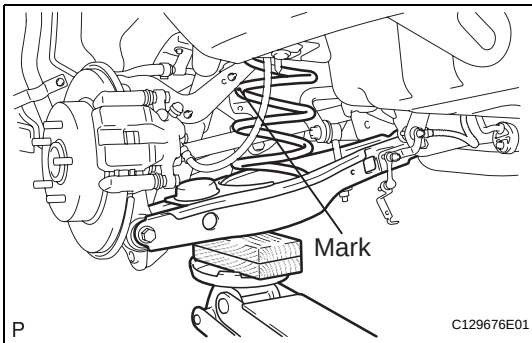
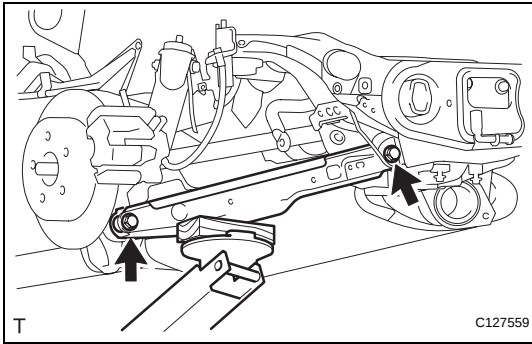
4. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

- (a) Inspect and adjust the rear wheel alignment (see page [SP-7](#)).

INSTALLATION

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.



1. TEMPORARILY INSTALL REAR NO. 2 SUSPENSION ARM ASSEMBLY LH

- (a) Temporarily install the No. 2 suspension arm with the bolt and nut to the suspension member.

2. INSTALL REAR COIL SPRING INSULATOR LOWER LH (See page [SP-34](#))

3. INSTALL REAR COIL SPRING LH (See page [SP-34](#))

4. INSTALL REAR COIL SPRING INSULATOR UPPER LH (See page [SP-34](#))

5. INSTALL REAR NO. 2 SUSPENSION ARM ASSEMBLY LH

- (a) Slowly raise the jack, and install the No. 2 suspension arm to the axle carrier.

NOTICE:

Install the arm so that the coil spring's distinguishing mark is on the outer side of the vehicle.

6. INSTALL REAR STABILIZER LINK ASSEMBLY LH (See page [SP-52](#))

7. CONNECT SKID CONTROL SENSOR WIRE (for 2WD) (See page [BC-198](#))

8. CONNECT REAR SPEED SENSOR LH (for 4WD) (See page [BC-205](#))

9. CONNECT NO. 2 PARKING BRAKE CABLE ASSEMBLY (See page [PB-8](#))

10. INSTALL REAR WHEEL

- (a) Install the wheel.
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)

11. STABILIZE SUSPENSION (See page [SP-37](#))

12. TIGHTEN REAR NO. 2 SUSPENSION ARM ASSEMBLY LH

- (a) Install the 2 nuts and 2 bolts.
Torque: 90 N*m (918 kgf*cm, 66 ft.*lbf)

NOTICE:

Do not tighten the nuts.

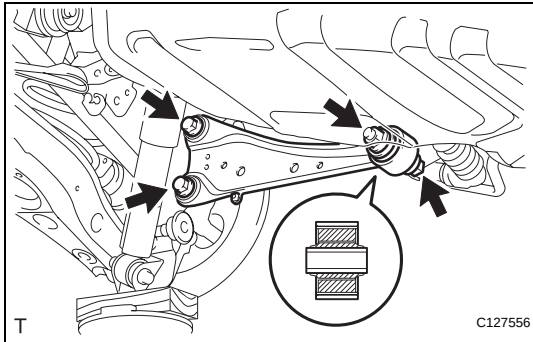
13. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

- (a) Inspect and adjust the rear wheel alignment (see page [SP-7](#)).

INSTALLATION

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.



1. TEMPORARILY TIGHTEN REAR TRAILING ARM ASSEMBLY LH

- (a) Temporarily install the trailing arm with the 3 bolts and nut to the axle carrier and suspension arm bracket.

HINT:

While fixing the nut in place, tighten the bolt.

2. INSTALL NO. 2 PARKING BRAKE CABLE ASSEMBLY (See page [PB-9](#))

3. INSTALL REAR WHEEL

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

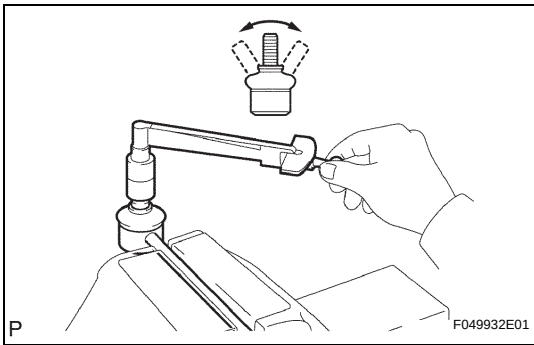
4. TIGHTEN REAR TRAILING ARM ASSEMBLY LH

- (a) Tighten the 3 bolts and nut.

Torque: 200 N*m (2,039 kgf*cm, 148 ft.*lbf) for axle carrier
150 N*m (1,530 kgf*cm, 111 ft.*lbf) for suspension arm bracket

5. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

- (a) Inspect and adjust the rear wheel alignment (see page [SP-7](#)).



INSPECTION

1. INSPECT REAR STABILIZER LINK ASSEMBLY LH

- As shown in the illustration, move the ball joint stud back and forth 5 times before installing the nut.
- Using a torque wrench, turn the nut continuously at a rate of 3 to 5 seconds per turn and take the torque reading on the fifth turn.

Turning torque:

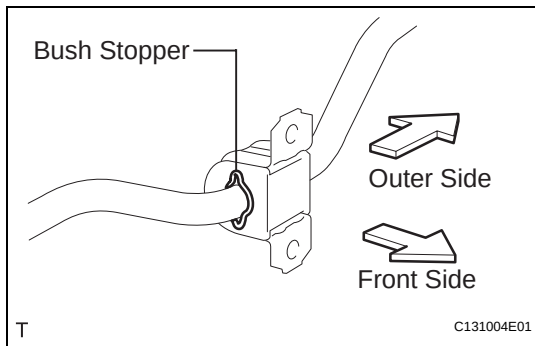
0.05 to 1.96 N*m, (0.5 to 20 kgf*cm, 0.4 to 17 in.*lbf) or less

- Check for any cracks and grease leaks on the ball joint dust cover.

INSTALLATION

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.



1. INSTALL REAR STABILIZER BUSH

- (a) Install the 2 bushes.

HINT:

- Install each bush to the outer side of the bush stopper on each stabilizer bar.
- Install each bush with its slit facing the vehicle front side.

2. INSTALL REAR STABILIZER BAR

- (a) Install the stabilizer bar to the vehicle.

NOTICE:

When installing the stabilizer bar, make sure not to damage the sensor wires, brake hoses, etc.

3. INSTALL REAR NO. 1 STABILIZER BAR BRACKET

- (a) Install the bracket with the 2 nuts.

Torque: 60 N*m (612 kgf*cm, 44 ft.*lbf)

4. INSTALL REAR COIL SPRING INSULATOR LOWER LH (See page [SP-34](#))

5. INSTALL REAR COIL SPRING LH (See page [SP-34](#))

6. INSTALL REAR COIL SPRING INSULATOR UPPER LH (See page [SP-34](#))

7. INSTALL REAR COIL SPRING INSULATOR LOWER RH

HINT:

Use the same procedures described for the LH side.

8. INSTALL REAR COIL SPRING RH

HINT:

Use the same procedures described for the LH side.

9. INSTALL REAR COIL SPRING INSULATOR UPPER RH

HINT:

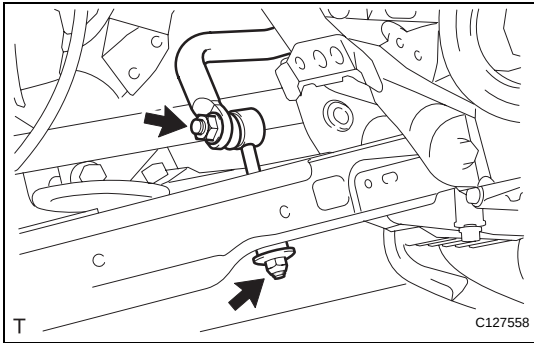
Use the same procedures described for the LH side.

10. TEMPORARILY INSTALL REAR NO. 2 SUSPENSION ARM ASSEMBLY LH (See page [SP-46](#))

11. TEMPORARILY INSTALL REAR NO. 2 SUSPENSION ARM ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.



- 12. INSTALL REAR STABILIZER LINK ASSEMBLY LH**
 - (a) Install the stabilizer link with the 2 nuts.
Torque: 74 N*m (755 kgf*cm, 55 ft.*lbf) for stabilizer bar
30 N*m (306 kgf*cm, 22 ft.*lbf) for suspension No. 2 arm
- 13. INSTALL REAR STABILIZER LINK ASSEMBLY RH**

HINT:
Use the same procedures described for the LH side.
- 14. INSTALL REAR WHEEL**

Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
- 15. STABILIZE SUSPENSION (See page [SP-37](#))**
- 16. TIGHTEN REAR NO. 2 SUSPENSION ARM ASSEMBLY LH (See page [SP-46](#))**
- 17. TIGHTEN REAR NO. 2 SUSPENSION ARM ASSEMBLY RH**

HINT:
Use the same procedures described for the LH side.
- 18. INSPECT AND ADJUST REAR WHEEL ALIGNMENT**
 - (a) Inspect and adjust the rear wheel alignment (see page [SP-7](#)).
- 19. CHECK SPEED SENSOR SIGNAL**
 - (a) Check the speed sensor signal (see page [BC-44](#)).

SUSPENSION SYSTEM

PROBLEM SYMPTOMS TABLE

HINT:

Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Suspension system

Symptom	Suspected area	See page
Vehicle/pulls	1. Tire (worn or improperly inflated)	TW-1
	2. Front wheel alignment (incorrect)	SP-3
	3. Rear wheel alignment (incorrect)	SP-7
	4. Steering linkage (loose or worn)	-
	5. Front hub bearing (worn)	AH-6
	6. Rear hub bearing (worn)	AH-15
	7. Steering gear (out of adjustment or broken)	PS-44
	8. Suspension parts (worn)	-
Bottoming	1. Vehicle (overloaded)	-
	2. Front coil spring (weak)	SP-9
	3. Front coil spring for sports package (weak)	SP-15
	4. Rear coil spring (weak)	SP-33
	5. Front shock absorber (worn)	SP-10
	6. Front shock absorber for sports package (worn)	SP-17
	7. Rear shock absorber (worn)	SP-36
Sway/pitches	1. Tire (worn or improperly inflated)	TW-1
	2. Front stabilizer bar (bent or broken)	SP-30
	3. Rear stabilizer bar (bent or broken)	SP-51
	4. Front shock absorber (worn)	SP-10
	5. Front shock absorber for sports package (worn)	SP-17
	6. Rear shock absorber (worn)	SP-36
Wheel shimmy	1. Tire (worn or improperly inflated)	TW-1
	2. Wheel (out of balance)	TW-1
	3. Front shock absorber (worn)	SP-10
	4. Front shock absorber for sports package (worn)	SP-17
	5. Rear shock absorber (worn)	SP-36
	6. Front wheel alignment (incorrect)	SP-3
	7. Rear wheel alignment (incorrect)	SP-7
	8. Front lower ball joint (worn)	SP-27
	9. Front hub bearing (worn)	AH-6
	10. Rear hub bearing (worn)	AH-15
	11. Steering linkage (loose or worn)	-
	12. Steering gear (out of adjustment or broken)	PS-44

Symptom	Suspected area	See page
Abnormal tire wear	1. Tire (worn or improperly inflated)	TW-1
	2. Front wheel alignment (incorrect)	SP-3
	3. Rear wheel alignment (incorrect)	SP-7
	4. Front shock absorber (worn)	SP-10
	5. Front shock absorber for sports package (worn)	SP-17
	6. Rear shock absorber (worn)	SP-36
	7. Suspension parts (worn)	-

FRONT WHEEL ALIGNMENT

ADJUSTMENT

1. INSPECT TIRES

- (a) Inspect the tires (see page [TW-1](#)).

2. MEASURE VEHICLE HEIGHT

NOTICE:

Before inspecting the wheel alignment, adjust the vehicle height to the specification.

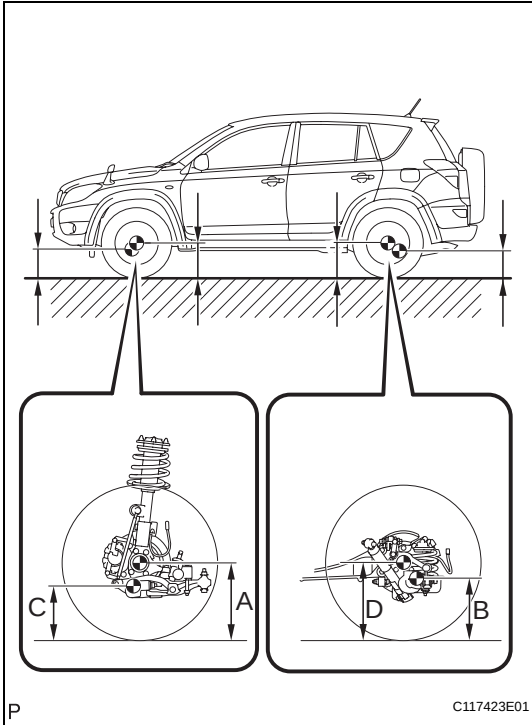
- (a) Press down on the vehicle several times to stabilize the suspension, and measure the vehicle height.
- (b) Measure the front vehicle height.
- (1) Measure the distance from the ground to the center of the lower suspension arm front mounting bolt.
- (c) Measure the rear vehicle height.
- (1) Rear Measure the distance from the ground to the center of the body side No. 2 suspension arm mounting bolt.

Standard vehicle height (unloaded vehicle)

Tire Size	Front C - A	Rear D - B
215/70R16	89 mm (3.50 in.)	57 mm (2.24 in.)
225/65R17 235/55R18	97 mm (3.82 in.)	65 mm (2.56 in.)
225/65R17*	97 mm (3.82 in.)	54 mm (2.13 in.)

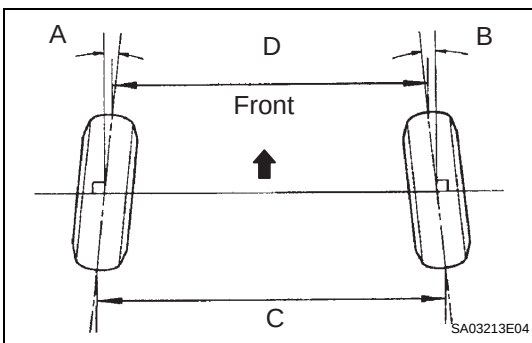
HINT:

- *: w/ 3rd seat.
- If the vehicle height is not as specified, press down on the vehicle several times to stabilize the suspension. Then measure the vehicle height again.



P

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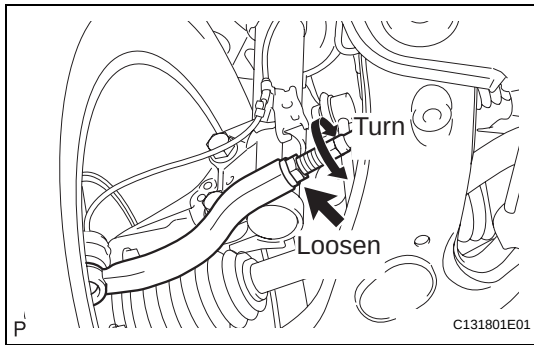
3. INSPECT TOE-IN

Standard toe-in (unloaded vehicle)

Tire Size	Front A + B Rear C - D
215/70R16	A + B: 0°05' +10' (0.08°+0.16°)
225/65R17 235/55R18	C - D: 1.0 +-2.0 mm (0.04 +-0.08 in.)

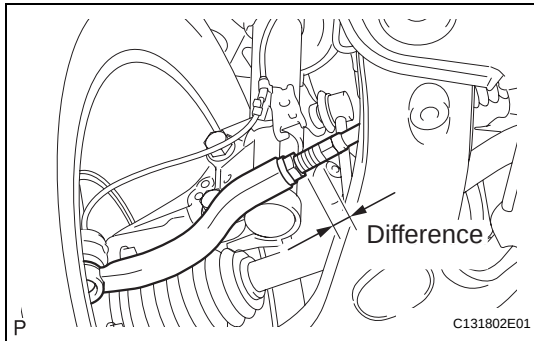
If the toe-in is not as specified, adjust it at the rack ends.

SP



4. ADJUST TOE-IN

- Remove the boot clips.
- Loosen the tie rod end lock nuts.
- Turn the right and left rack ends by an equal amount to adjust the toe-in to the center value.



- Make sure that the length of the right and left rack ends are approximately the same.

Standard difference:

1.5 mm (0.059 in.) or less

- Tighten the tie rod end lock nuts.
- Place the boots on the seats and install the clips.

HINT:

Make sure that the boots are not twisted.

5. INSPECT WHEEL ANGLE

- Turn the steering wheel to the left and right full lock positions, and measure the turning angle.

Standard wheel angle (unloaded vehicle)

Tire Size	Inside Wheel Angle	Outside Wheel Angle (Reference)
215/70R16	38°55' (36°55' to 40°55') (38.9°{36.9° to 40.9°})	32°20' (32.3°)
225/65R17 235/55R18	35°50' (33°55' to 37°55') (35.8°{33.8° to 37.9°})	30°29' (30.5°)

If the angles are not as specified, check and adjust the right and left rack end lengths.

6. INSPECT CAMBER, CASTER AND STEERING AXIS INCLINATION

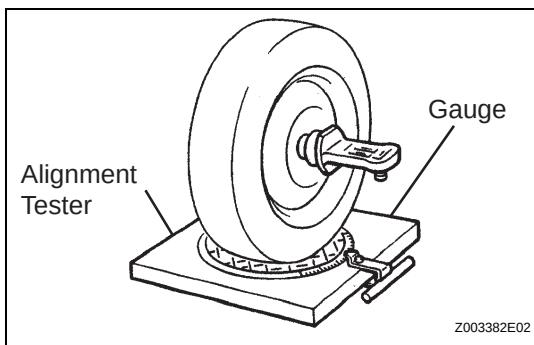
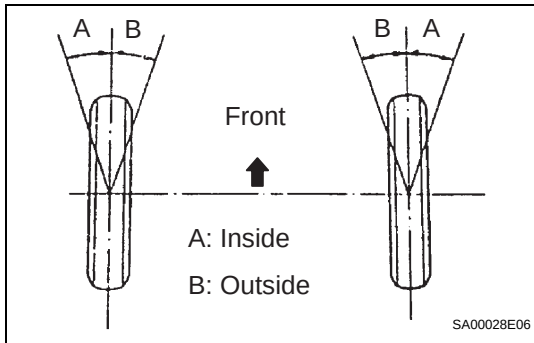
- Install the camber-caster-kingpin gauge or place the front wheels on the center of the wheel alignment tester.
- Inspect the camber, caster and steering axis inclination.

Standard camber inclination (unloaded vehicle)

Tire Size	Camber Inclination
215/70R16	-0°08' + -45' (-0.13°+0.75°)
225/65R17 235/55R18	-0°11' + -45' (-0.18°+0.75°)

Standard caster inclination (unloaded vehicle)

Tire Size	Caster Inclination
215/70R16	5°43' + -45' (5.72°+0.75°)
225/65R17 235/55R18	5°50' + -45' (5.83°+0.75°)
225/65R17*	5°37' + -45' (5.62°+0.75°)



HINT:
*: w/ 3rd seat
Standard steering axis inclination (unloaded vehicle)

Tire Size	Steering Axis Inclination
215/70R16	11°16' +-30' (11.27°+-0.50°)
225/65R17 235/55R18	11°26' +-30' (11.43°+-0.50°)

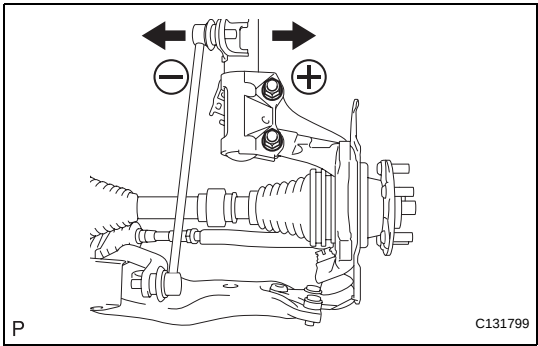
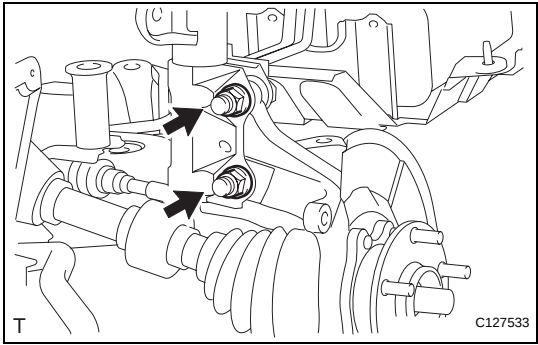
7. ADJUST CAMBER AND CASTER

NOTICE:

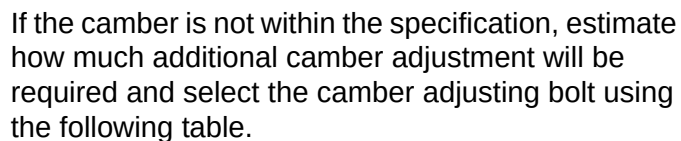
After the camber has been adjusted, inspect the toe-in.

- (a) Remove the front wheel.
- (b) Remove the 2 nuts on the lower side of the shock absorber.
- (c) Coat the threads of the nuts with engine oil.
- (d) Temporarily install the 2 nuts.

SP



- (e) Adjust the camber by pushing or pulling the lower side of the shock absorber in the direction where the camber adjustment is required.
- (f) Tighten the 2 nuts.
Torque: 240 N*m (2,447 kgf*cm, 177 ft.*lbf)
- (g) Install the front wheel.
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
- (h) Check the camber.
If the measured value is not within the specified range, calculate the required adjustment amount using the formula below.



Adjusting Value	Bolt		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	2	1	2
15'												
30'												
45'												
1°00'												
1°15'												
1°30'												

(i) Repeat the steps mentioned above. When temporarily installing the 2 nuts, replace 1 or 2 selected bolts.
HINT:
Replace 1 bolt at a time when replacing 2 bolts.

REAR WHEEL ALIGNMENT

ADJUSTMENT

1. INSPECT TIRE

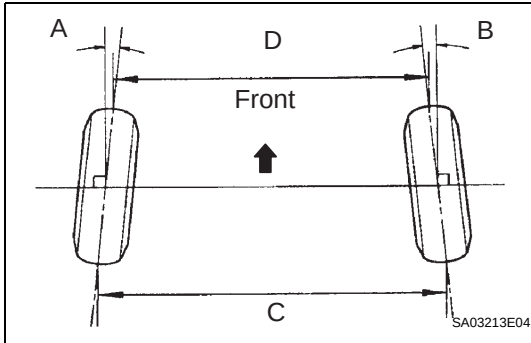
(a) Inspect the tire (see page [TW-1](#)).

2. MEASURE VEHICLE HEIGHT

(a) Measure the vehicle height (see page [SP-3](#)).

3. INSPECT TOE-IN

Standard toe-in



Item	Specified Condition
Toe-in (total)	A + B: $0^{\circ}11' \pm 10'$ ($0.18^{\circ} \pm 0.17^{\circ}$) C - D: 2.3 $\pm$ 1 mm (0.09 $\pm$ 0.04 in.)

If the toe-in is not within the specified range, inspect the suspension parts and replace them if necessary.

4. INSPECT CAMBER

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

(b) Inspect the camber.

Standard camber

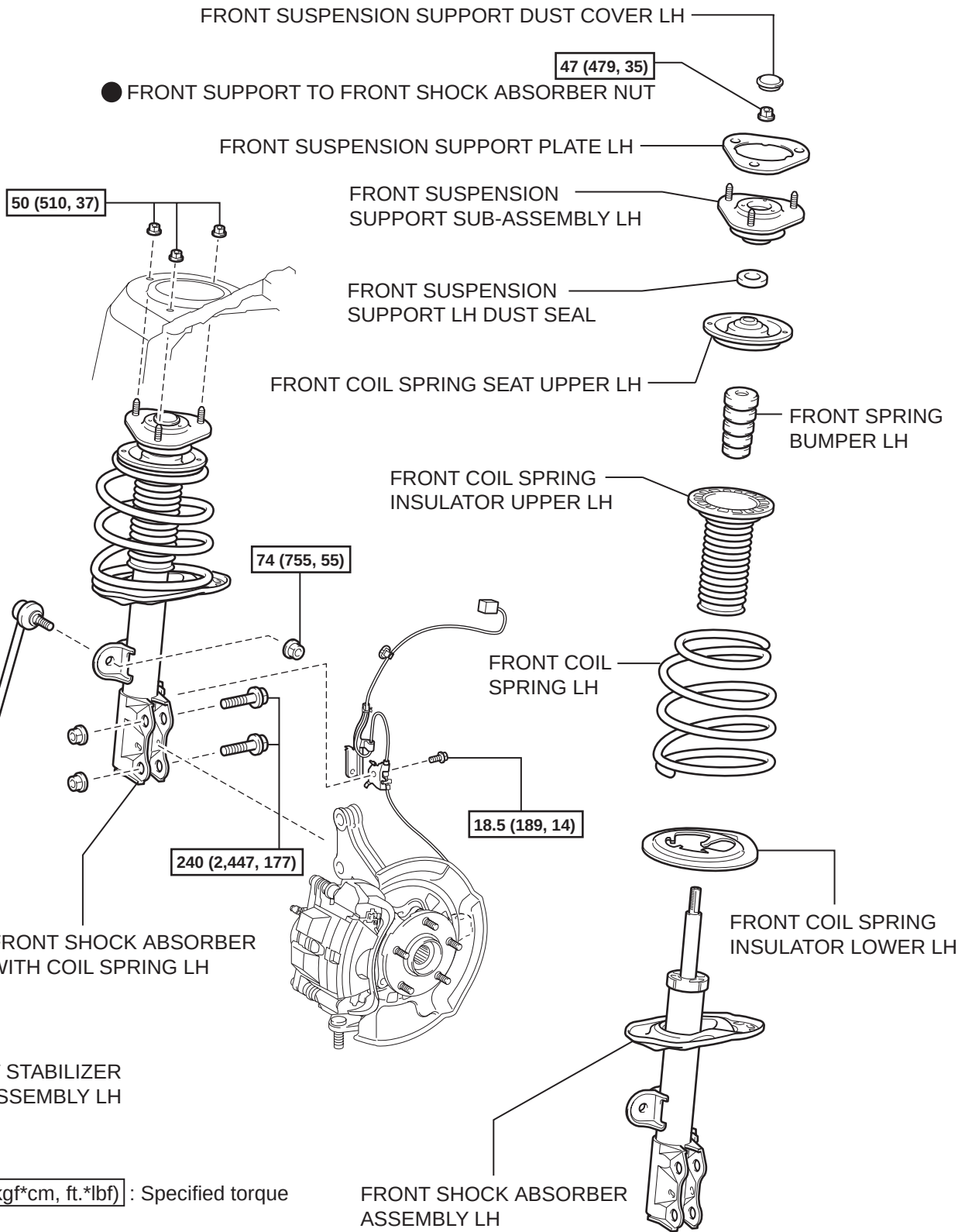
Item	Specified Condition
Camber Right-left error	Tire Size: 215/70R16 $-0^{\circ}55' \pm 45'$ ($-0.92 \pm 0.75^{\circ}$) 30' (0.5°) or less
	Tire Size: 225/65R17 Tire Size: 235/55R18 $-1^{\circ}04' \pm 45'$ ($-1.07 \pm 0.75^{\circ}$) 30' (0.5°) or less
	Tire Size: 225/65R17* $-0^{\circ}52' \pm 45'$ ($-0.87 \pm 0.75^{\circ}$) 30' (0.5°) or less

HINT:

- *: w/ 3rd seat
- Camber is not adjustable. If the measurement is not within the specified range, inspect the suspension parts for damage and/or wear, and replace them if necessary.

FRONT SHOCK ABSORBER WITH COIL SPRING

COMPONENTS



REMOVAL

HINT:

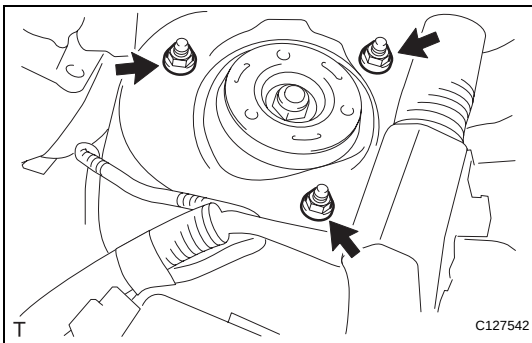
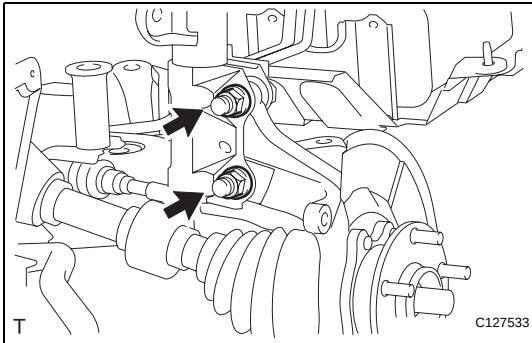
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT WHEEL
2. DISCONNECT FRONT SPEED SENSOR LH
3. DISCONNECT FRONT STABILIZER LINK ASSEMBLY LH
4. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING LH

- (a) Remove the 2 bolts and 2 nuts, and disconnect the shock absorber from the steering knuckle.

HINT:

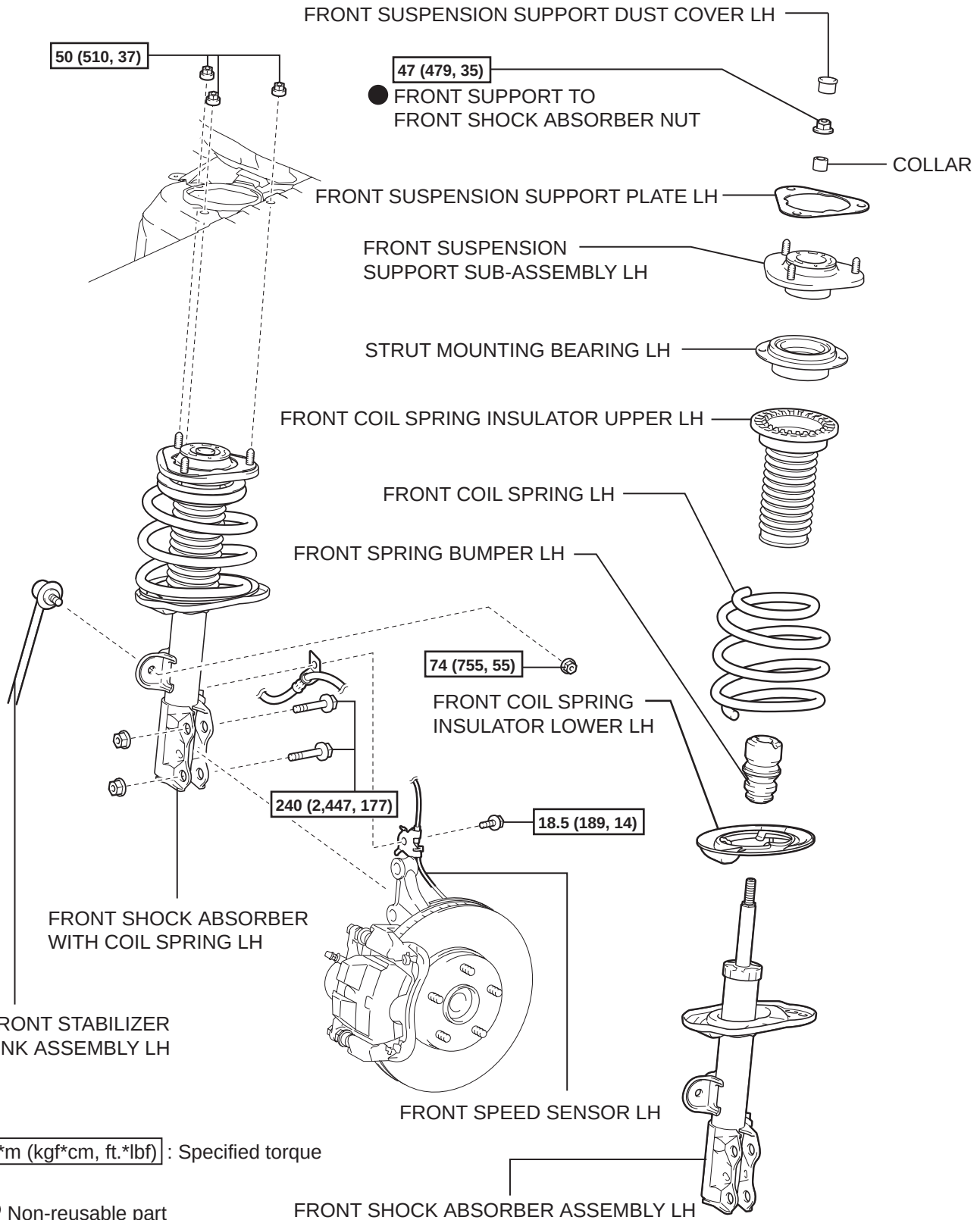
While fixing the nuts in place, loosen and remove the bolts.



- (b) Remove the 3 nuts and shock absorber with coil spring.

FRONT SHOCK ABSORBER WITH COIL SPRING (for Sport Package)

COMPONENTS



REMOVAL

HINT:

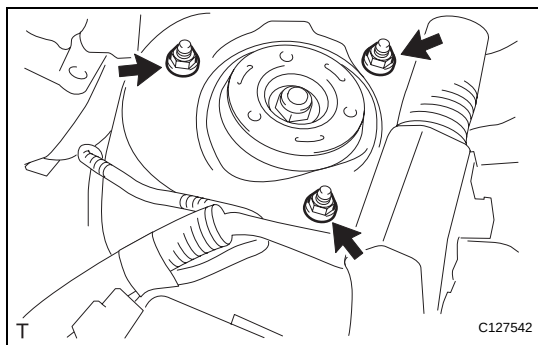
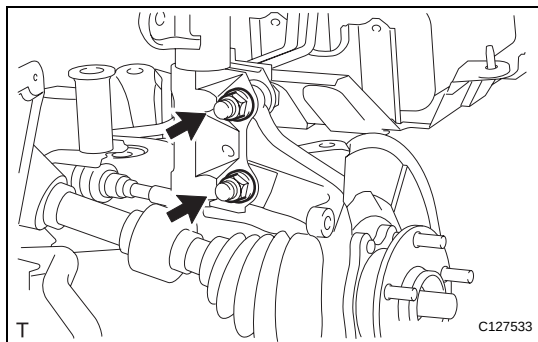
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT WHEEL
2. REMOVE FRONT SPEED SENSOR LH (See page [BC-191](#))
3. REMOVE FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-30](#))
4. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING LH

- (a) Remove the 2 bolts and 2 nuts, and disconnect the shock absorber from the steering knuckle.

HINT:

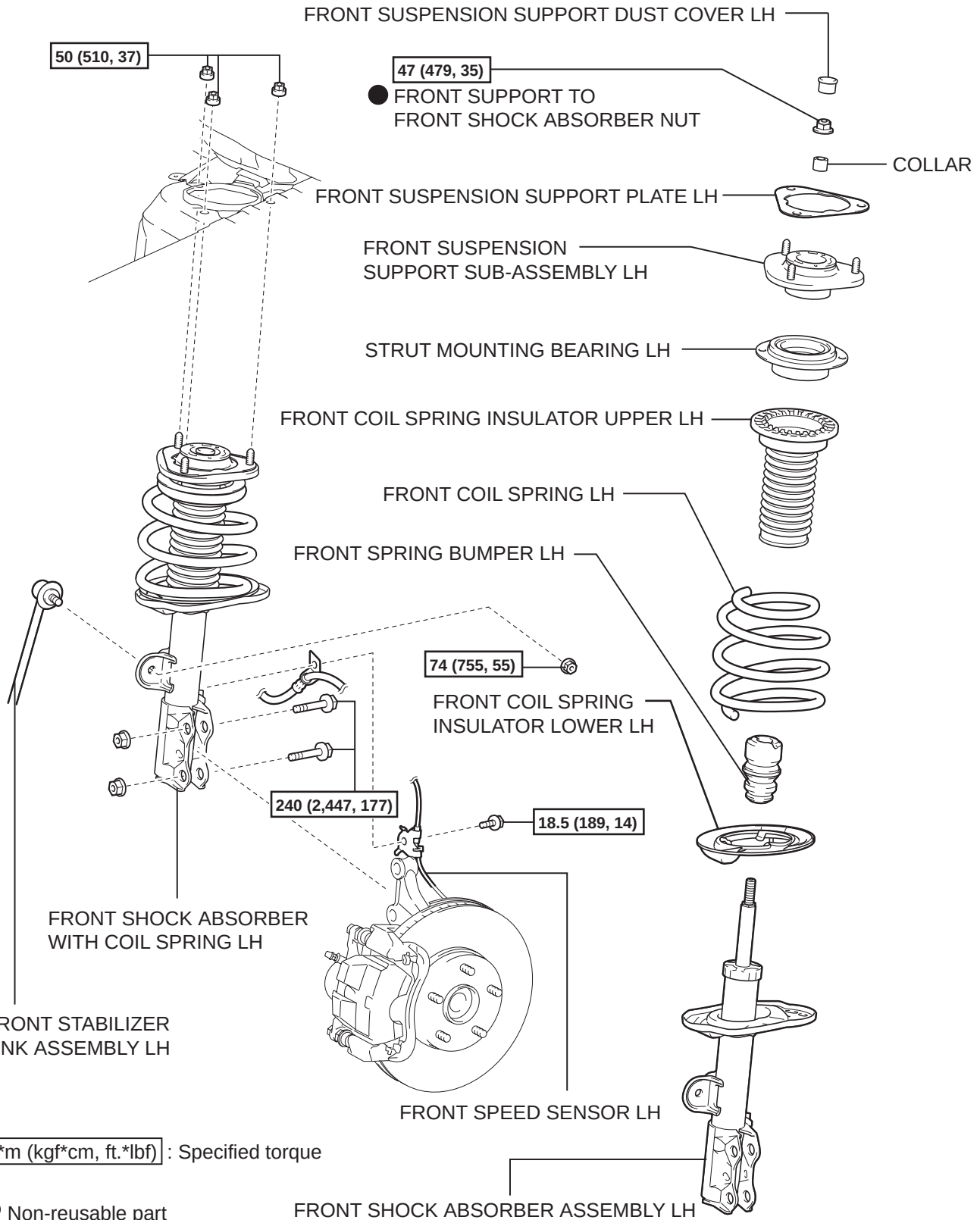
While fixing the nuts in place, loosen and remove the bolts.

SP

- (b) Remove the 3 nuts and shock absorber with coil spring.

FRONT SHOCK ABSORBER WITH COIL SPRING (for Sport Package)

COMPONENTS



REMOVAL

HINT:

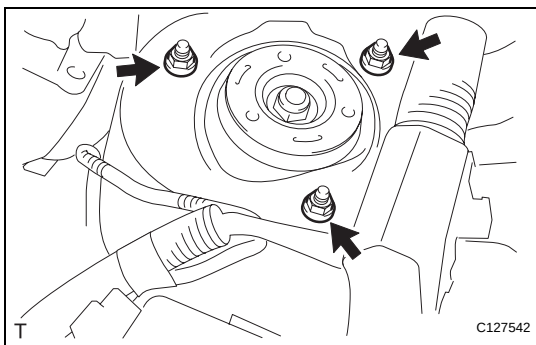
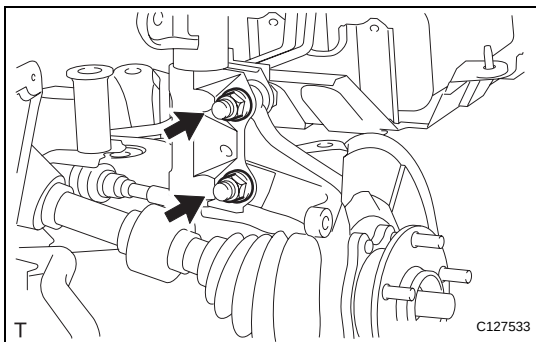
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT WHEEL
2. REMOVE FRONT SPEED SENSOR LH (See page [BC-191](#))
3. REMOVE FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-30](#))
4. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING LH

- (a) Remove the 2 bolts and 2 nuts, and disconnect the shock absorber from the steering knuckle.

HINT:

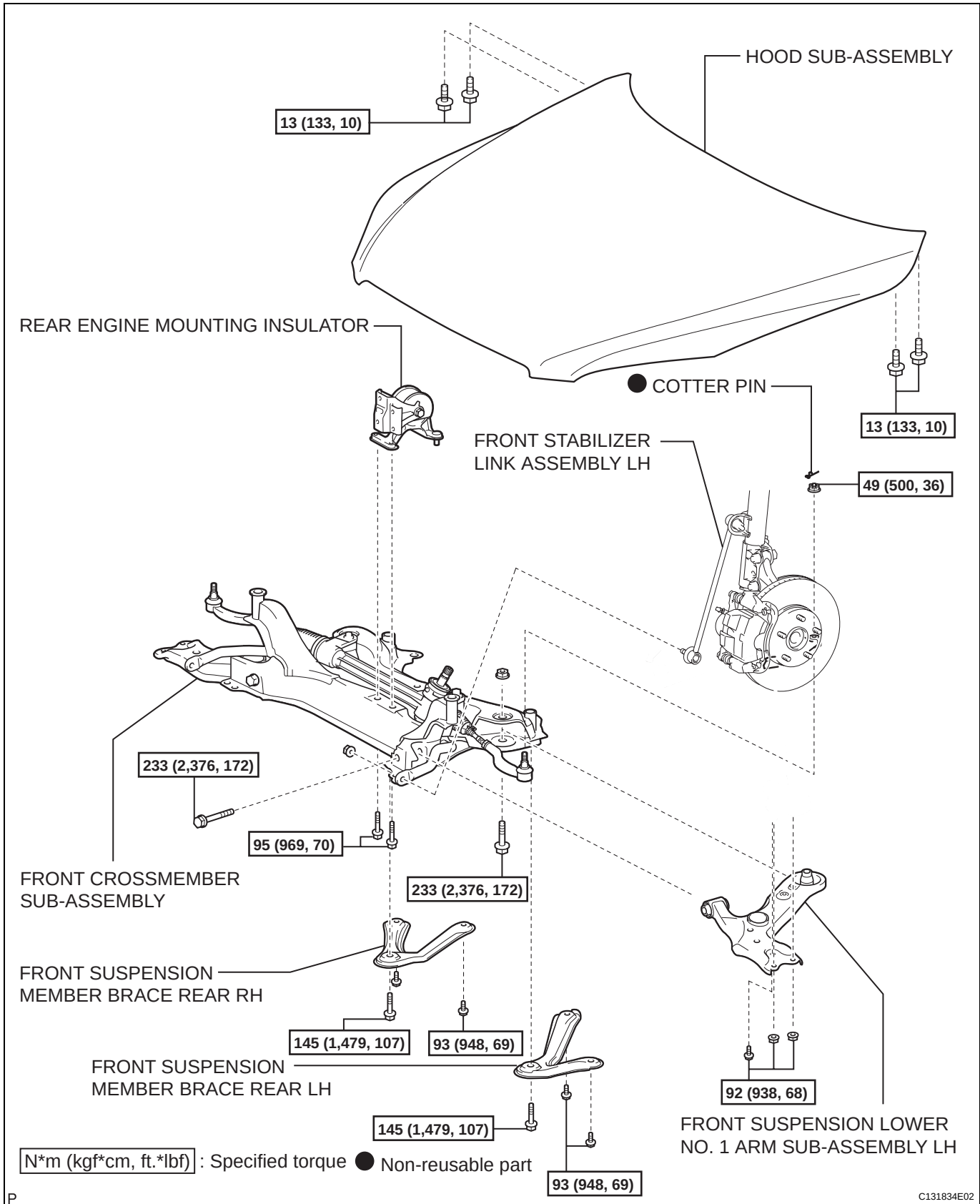
While fixing the nuts in place, loosen and remove the bolts.



- (b) Remove the 3 nuts and shock absorber with coil spring.

FRONT SUSPENSION LOWER NO. 1 ARM

COMPONENTS



REMOVAL

1. REMOVE FRONT WHEEL

2. REMOVE HOOD SUB-ASSEMBLY

- (a) Remove the hood (see page [ED-4](#)).

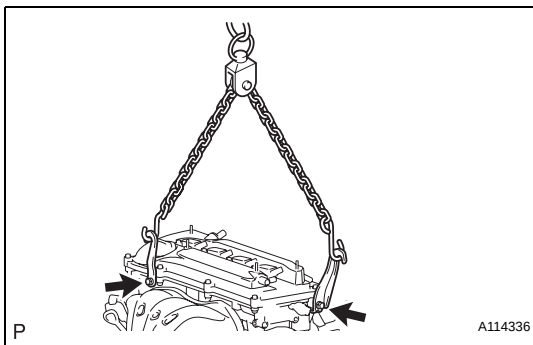
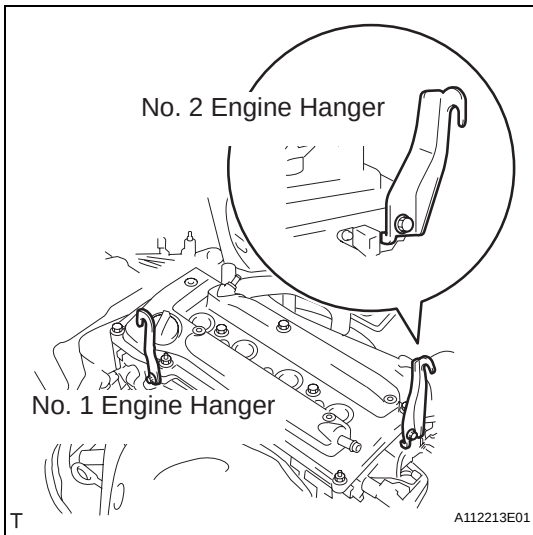
3. SUSPEND ENGINE ASSEMBLY

- (a) Install the No. 1 and No. 2 engine hangers with the bolts as shown in the illustration.

Torque: 38 N*m (387 kgf*cm, 28 ft.*lbf)

Parts No.

Item	Part No.
No. 1 Engine hanger	12281-28010
No. 2 Engine hanger	12282-28010
Bolt	91512-61020

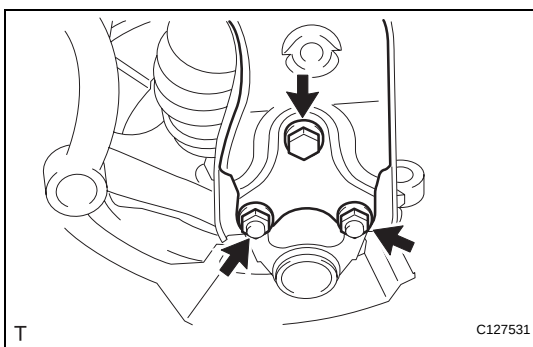


- (b) Attach the sling device and the engine with the chain block.

4. DISCONNECT FRONT STABILIZER LINK ASSEMBLY LH (See page [SP-30](#))

5. DISCONNECT FRONT STABILIZER LINK ASSEMBLY RH

- (a) Use the same procedure described for the LH side.



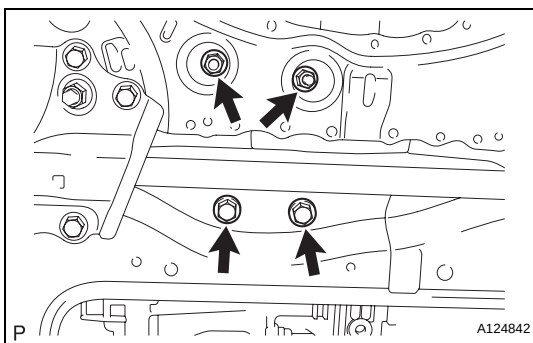
6. DISCONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH

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

7. DISCONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY RH

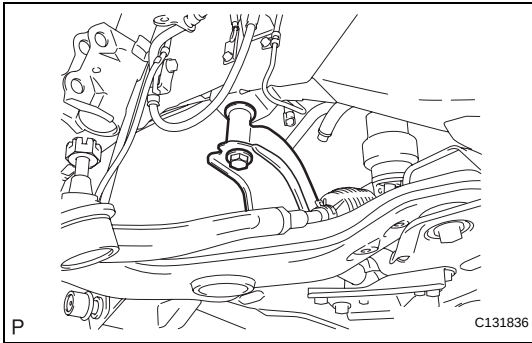
HINT:

Use the same procedures described for the LH side.

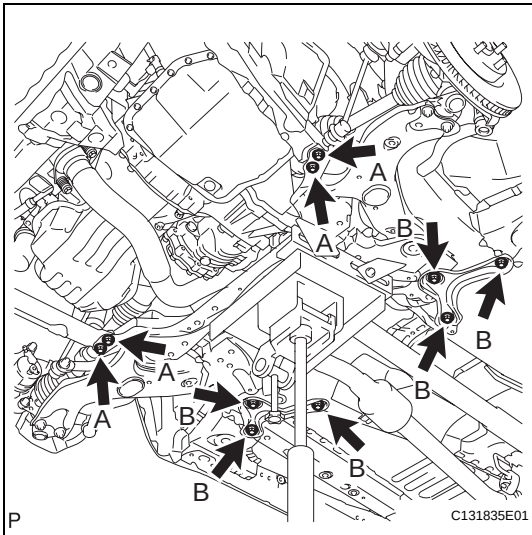


8. DISCONNECT FRONT CROSSMEMBER SUB-ASSEMBLY

- (a) Remove the 2 nuts, 2 bolts and engine mounting insulator rear.



(b) Remove the bolt from the suspension member.



(c) Support the crossmember with the jack.

(d) Remove the bolts labeled A.

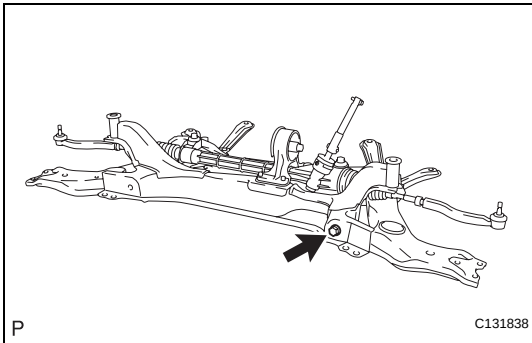
(1) Remove the 4 bolts from the member reinforcement.

(e) Remove the bolts labeled B.

(1) Remove the 6 bolts from the member brace.

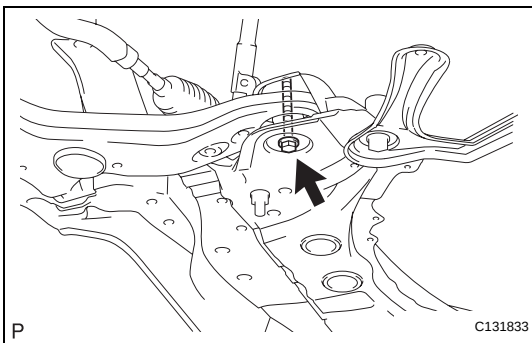
(f) Slowly lower the jack, and disconnect the crossmember from the vehicle.

SP



9. REMOVE FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH

(a) Remove the bolt and nut from the suspension member (front side).



(b) Remove the bolt and nut from the suspension member (rear side). Then remove the lower arm.

10. REMOVE FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY RH

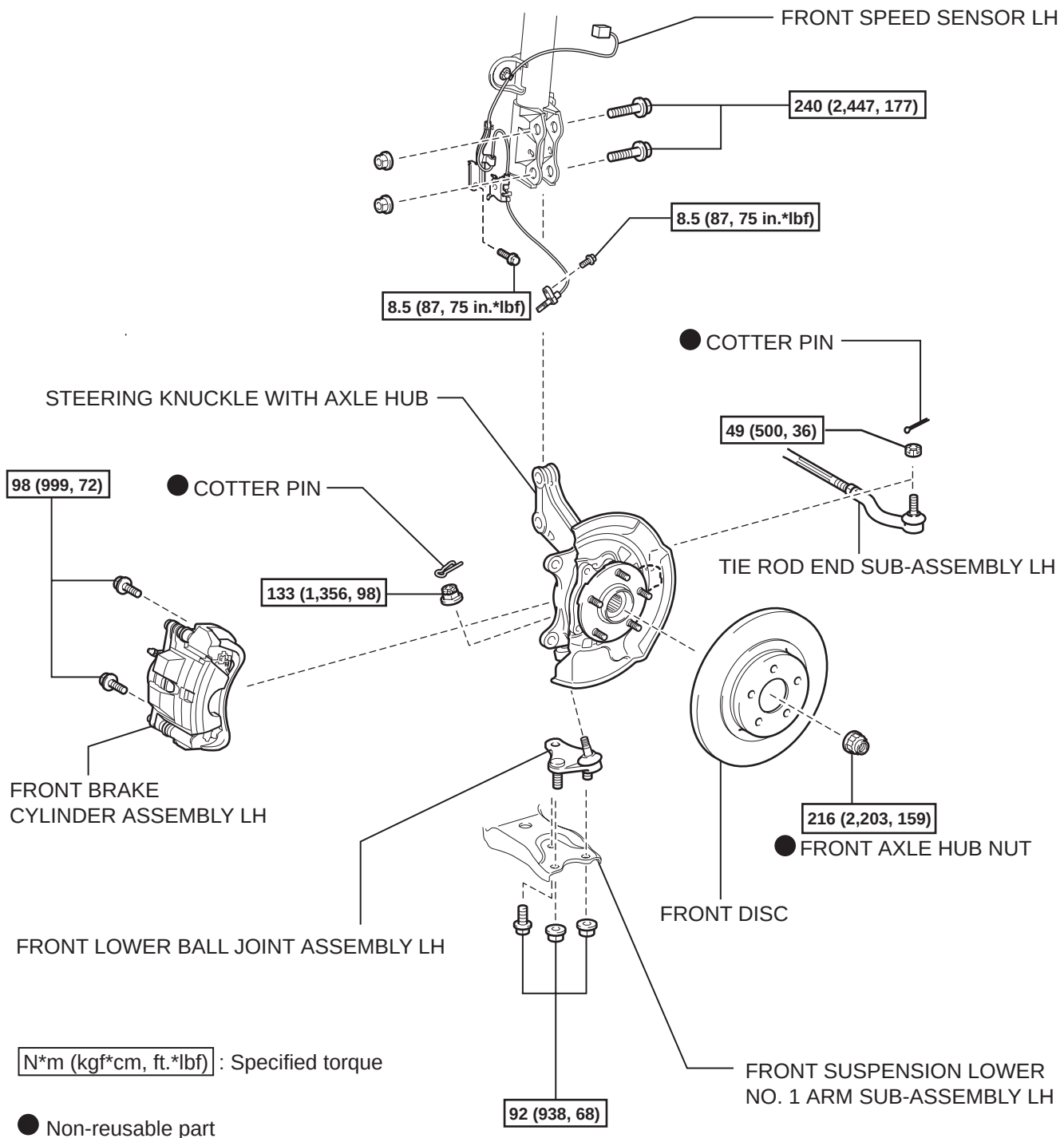
HINT:

Use the same procedures described for the LH side.

FRONT LOWER BALL JOINT

COMPONENTS

SP



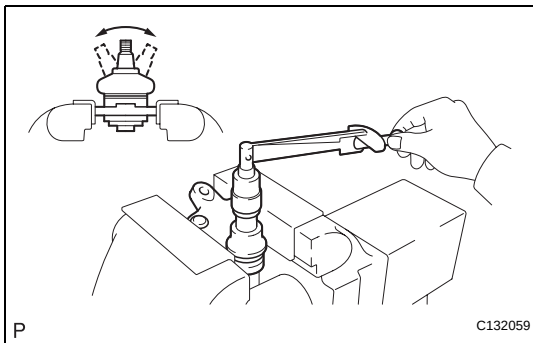
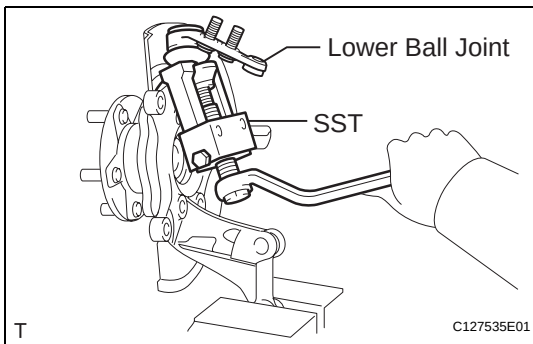
REMOVAL

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE FRONT WHEEL
2. REMOVE FRONT SPEED SENSOR LH (for 2WD) (See page [BC-191](#))
3. REMOVE FRONT BRAKE CYLINDER ASSEMBLY LH (See page [BR-40](#))
4. REMOVE FRONT DISC (See page [BR-42](#))
5. REMOVE FRONT AXLE HUB NUT (See page [AH-6](#))
6. DISCONNECT FRONT SUSPENSION LOWER NO. 1 ARM SUB-ASSEMBLY LH (See page [AH-7](#))
7. DISCONNECT TIE ROD END SUB-ASSEMBLY LH (See page [PS-42](#))
8. REMOVE STEERING KNUCKLE WITH AXLE HUB (See page [AH-7](#))
9. REMOVE FRONT LOWER BALL JOINT ASSEMBLY LH
 - (a) Remove the cotter pin and nut.
 - (b) Using SST, remove the lower ball joint.
SST 09628-62011

SP



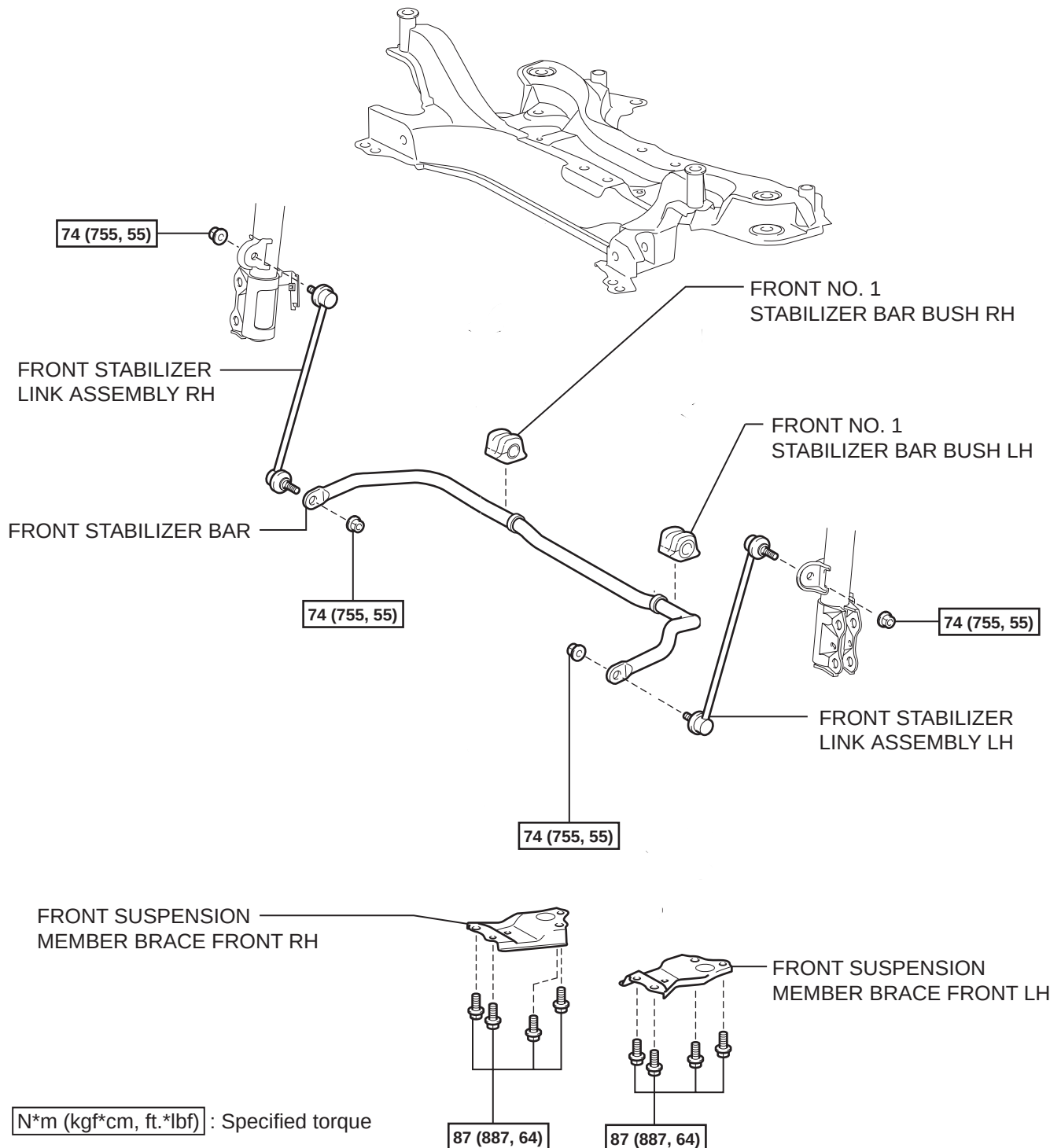
INSPECTION

1. INSPECT FRONT LOWER BALL JOINT ASSEMBLY LH
 - (a) As shown in the illustration, move 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 to 5 seconds per turn and take the torque reading on the fifth turn.
Standard turning torque:
0.98 to 3.43 N*m (10 to 35 kgf*cm, 9 to 30 in.*lbf) or less
 - (c) Check for any cracks and grease leaks on the ball joint dust cover.

FRONT STABILIZER BAR

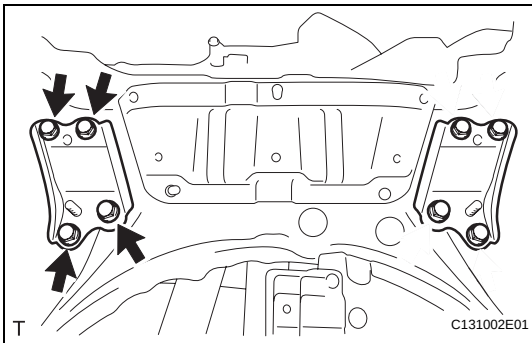
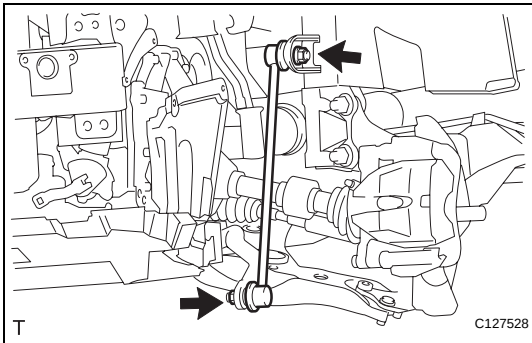
COMPONENTS

SP



REMOVAL

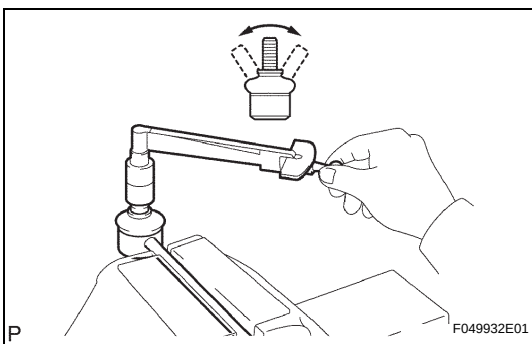
1. **REMOVE FRONT WHEEL**
2. **REMOVE FRONT STABILIZER LINK ASSEMBLY LH**
(a) Remove the 2 nuts and stabilizer link.
3. **REMOVE FRONT STABILIZER LINK ASSEMBLY RH**
HINT:
Use the same procedures described for the LH side.



4. **REMOVE FRONT SUSPENSION MEMBER BRACE FRONT LH**
(a) Remove the 4 bolts and member brace from the crossmember.
5. **REMOVE FRONT SUSPENSION MEMBER BRACE FRONT RH**
HINT:
Use the same procedures described for the LH side.
6. **REMOVE FRONT STABILIZER BAR**
(a) Remove the stabilizer bar from the crossmember.
7. **REMOVE FRONT NO. 1 STABILIZER BAR BUSH LH**
(a) Remove the bush from the stabilizer bar.
8. **REMOVE FRONT NO. 1 STABILIZER BAR BUSH RH**
HINT:
Use the same procedures described for the LH side.

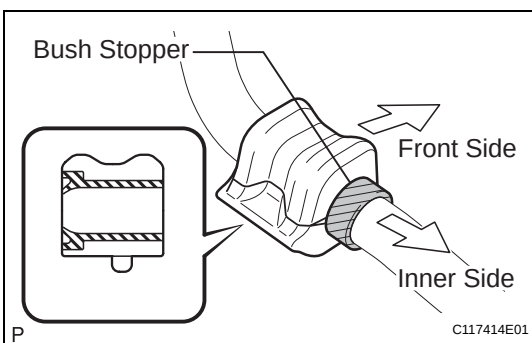
INSPECTION

1. **INSPECT FRONT STABILIZER LINK ASSEMBLY LH**
 - (a) As shown in the illustration, move 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 to 5 seconds per turn and take the torque reading on the fifth turn.
Turning torque:
0.05 to 1.96 N*m, (0.5 to 20 kgf*cm, 0.4 to 17 in.*lbf) or less
 - (c) Check for any cracks and grease leaks on the ball joint dust cover.



INSTALLATION

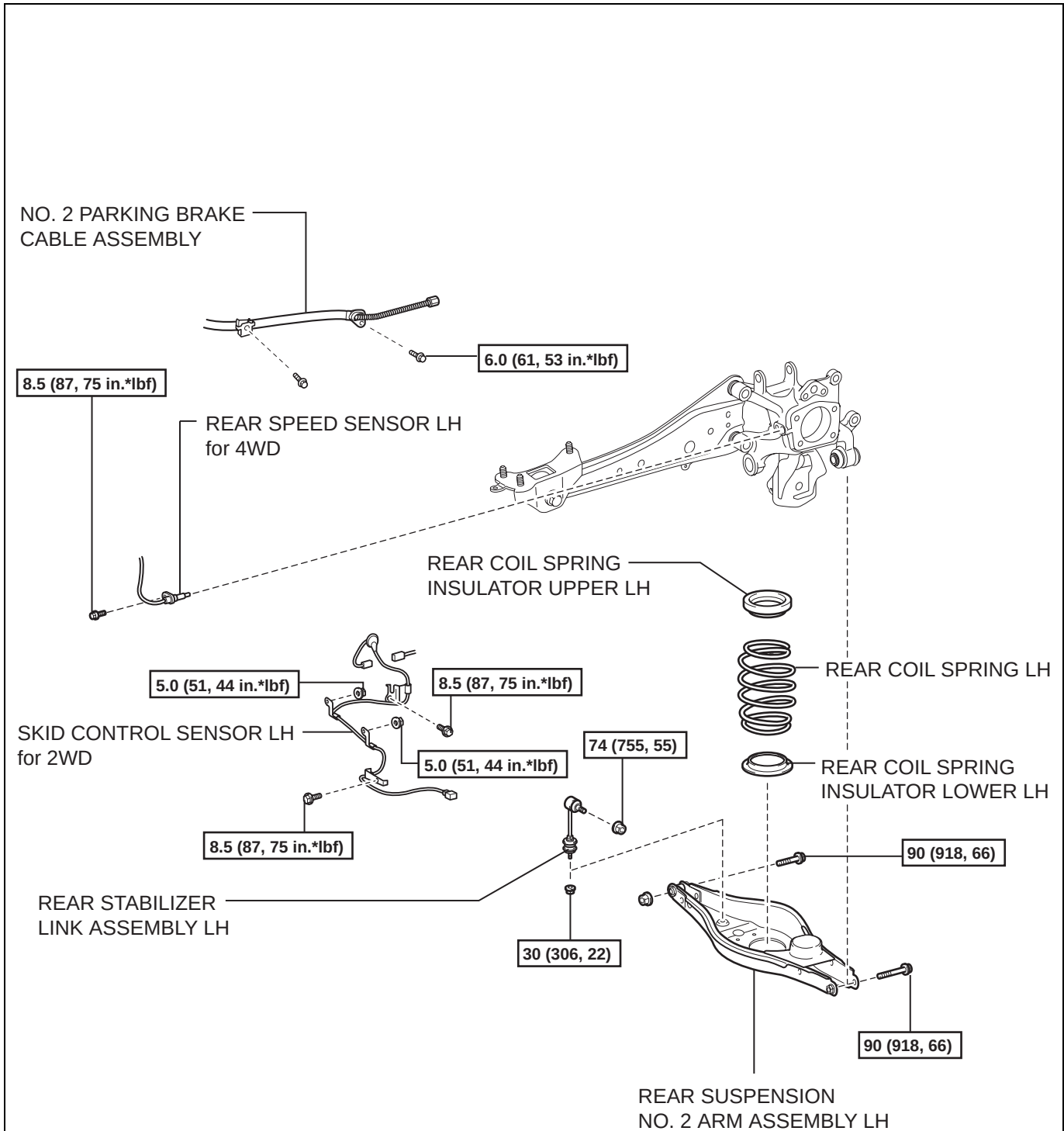
1. **INSTALL FRONT NO. 1 STABILIZER BAR BUSH LH**
 - (a) Install the bush.
HINT:
 - Install each bush to the inner side of each bush stopper on the stabilizer bar.
 - Install each bush with its slit facing the vehicle rear side.



2. **REMOVE FRONT NO. 1 STABILIZER BAR BUSH RH**
HINT:
Use the same procedures described for the LH side.
3. **INSTALL FRONT STABILIZER BAR**
(a) Install the stabilizer bar to the crossmember.
4. **INSTALL FRONT SUSPENSION MEMBER BRACE FRONT LH**
(a) Install the member brace with the 4 bolt to the suspension member.
Torque: 87 N*m (887 kgf*cm, 64 ft.*lbf)
5. **INSTALL FRONT SUSPENSION MEMBER BRACE FRONT RH**
HINT:
Use the same procedures described for the LH side.
6. **INSTALL FRONT STABILIZER LINK ASSEMBLY LH**
(a) Install the link with the 2 nut.
Torque: 74 N*m (755 kgf*cm, 55 ft.*lbf)
7. **INSTALL FRONT STABILIZER LINK ASSEMBLY RH**
HINT:
Use the same procedures described for the LH side.
8. **INSTALL FRONT WHEEL**
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
9. **STABILIZE SUSPENSION (See page [SP-12](#))**

REAR COIL SPRING

COMPONENTS



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

REMOVAL

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

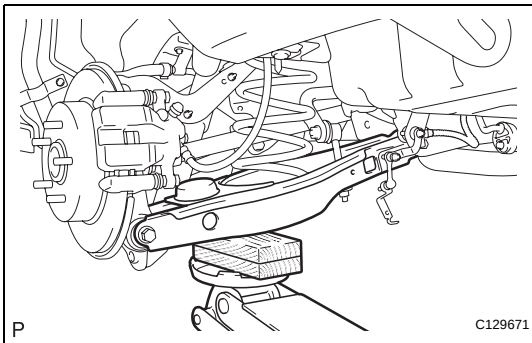
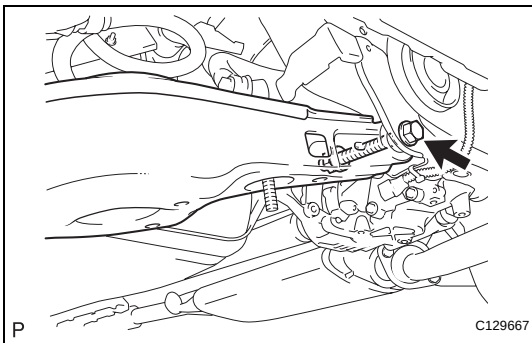
1. REMOVE REAR WHEEL
2. REMOVE SKID CONTROL SENSOR WIRE (for 2WD)
(See page [BC-198](#))
3. REMOVE REAR SPEED SENSOR LH (for 4WD) (See page [BC-205](#))
4. DISCONNECT NO. 2 PARKING BRAKE CABLE ASSEMBLY (See page [PB-8](#))
5. DISCONNECT REAR STABILIZER LINK ASSEMBLY LH (See page [SP-50](#))
6. DISCONNECT REAR SUSPENSION NO. 2 ARM SUB-ASSEMBLY LH

- (a) Loosen the bolt from the suspension member side.

NOTICE:

Do not remove the bolt and nut. Only loosen them.

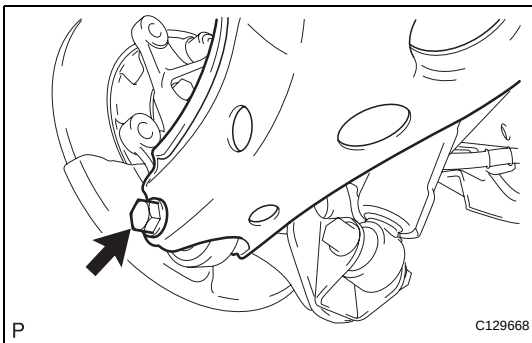
SP



- (b) Support the No. 2 suspension arm LH with a jack.

NOTICE:

Place a wooden or rubber block between the jack and arm.



- (c) Remove the bolt and nut from the axle carrier side.
- (d) Slowly lower the jack, and disconnect the No. 2 suspension arm from the axle carrier.

7. REMOVE REAR COIL SPRING INSULATOR UPPER LH

- (a) Remove the insulator upper from the coil spring.

8. REMOVE REAR COIL SPRING LH

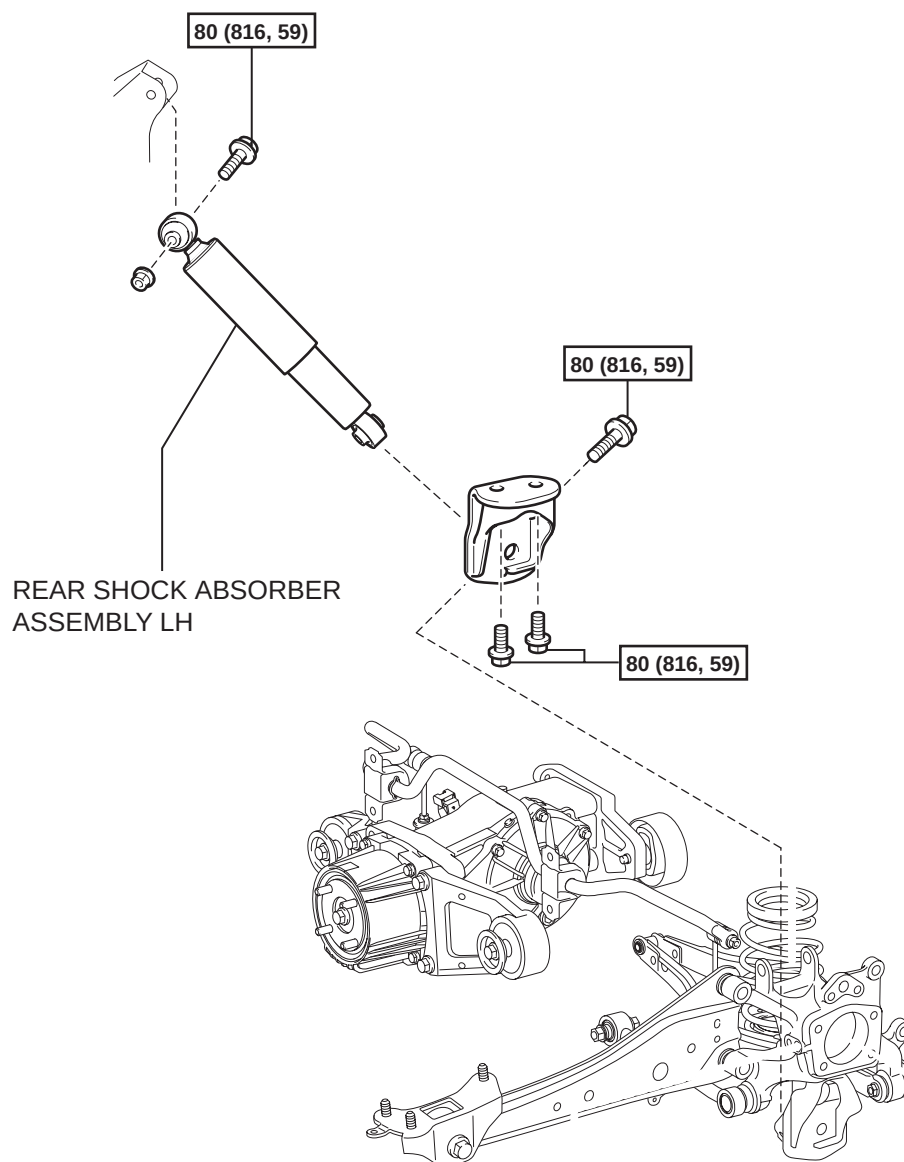
- (a) Remove the coil spring from the suspension No. 2 arm

9. REMOVE REAR COIL SPRING INSULATOR LOWER LH

- (a) Remove the insulator lower from the suspension No. 2 arm.

REAR SHOCK ABSORBER

COMPONENTS



$\boxed{\text{N*m (kgf*cm, ft.*lbf)}}$: Specified torque

SP

REMOVAL

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE REAR WHEEL

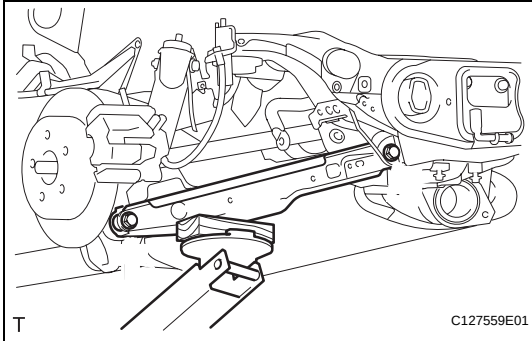
2. REMOVE REAR SHOCK ABSORBER ASSEMBLY LH

- (a) Support the No. 2 suspension arm LH with a jack.

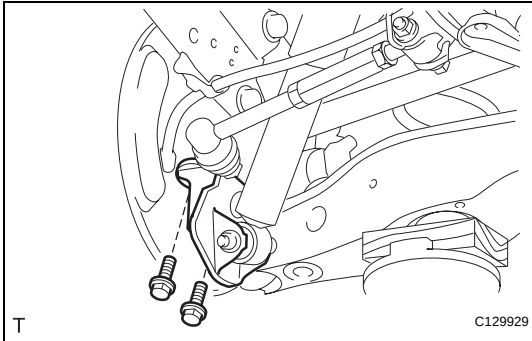
NOTICE:

Place a wooden or rubber block between the jack and arm.

- (b) Remove the bolt and 2 nuts from the suspension member and axle carrier.



- (c) Remove the 2 bolts and disconnect the shock absorber with the bracket.



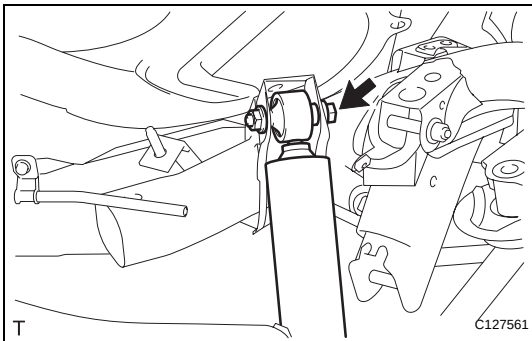
- (d) Remove the nut and bolt from the shock absorber upper side.

- (e) Remove the shock absorber from the vehicle.

- (f) Remove the nut and bolt from the bracket.

HINT:

While fixing the nut in place, loosen and remove the bolt.



INSPECTION

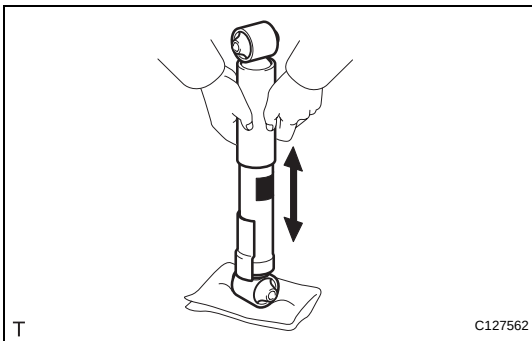
1. INSPECT REAR SHOCK ABSORBER ASSEMBLY LH

- (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 (see page [SP-37](#)).



INSTALLATION

HINT:

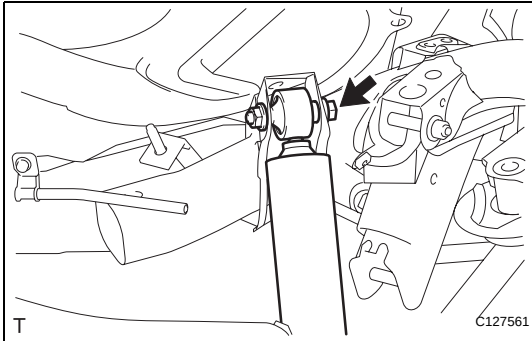
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. TEMPORARILY INSTALL REAR SHOCK ABSORBER ASSEMBLY LH

- (a) Temporarily install the bracket to the shock absorber with the bolt and nut.

NOTICE:

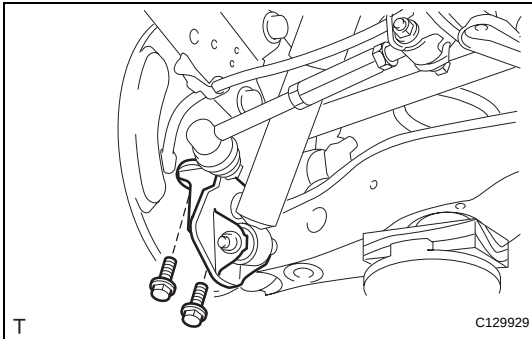
Fix the nut in place and temporarily install the bolt.



- (b) Temporarily install the shock absorber upper side to the suspension member with the bolt and nut.

NOTICE:

Fix the nut in place and temporarily install the bolt.



- (c) Install the shock absorber with the 2 bolts to the axle carrier.

Torque: 80 N*m (816 kgf*cm, 59 ft.*lbf)

- (d) Temporarily install the suspension arm with the bolt and 2 nuts to the suspension member and axle carrier.

2. TEMPORARILY INSTALL REAR UPPER CONTROL ARM ASSEMBLY LH (See page [SP-40](#))

3. INSTALL REAR WHEEL

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

4. STABILIZE SUSPENSION

- (a) Lower the vehicle.
(b) Press down on the vehicle several times to stabilize the suspension.

5. TIGHTEN REAR SHOCK ABSORBER ASSEMBLY LH

- (a) Fix the nut in place and tighten the bolt.

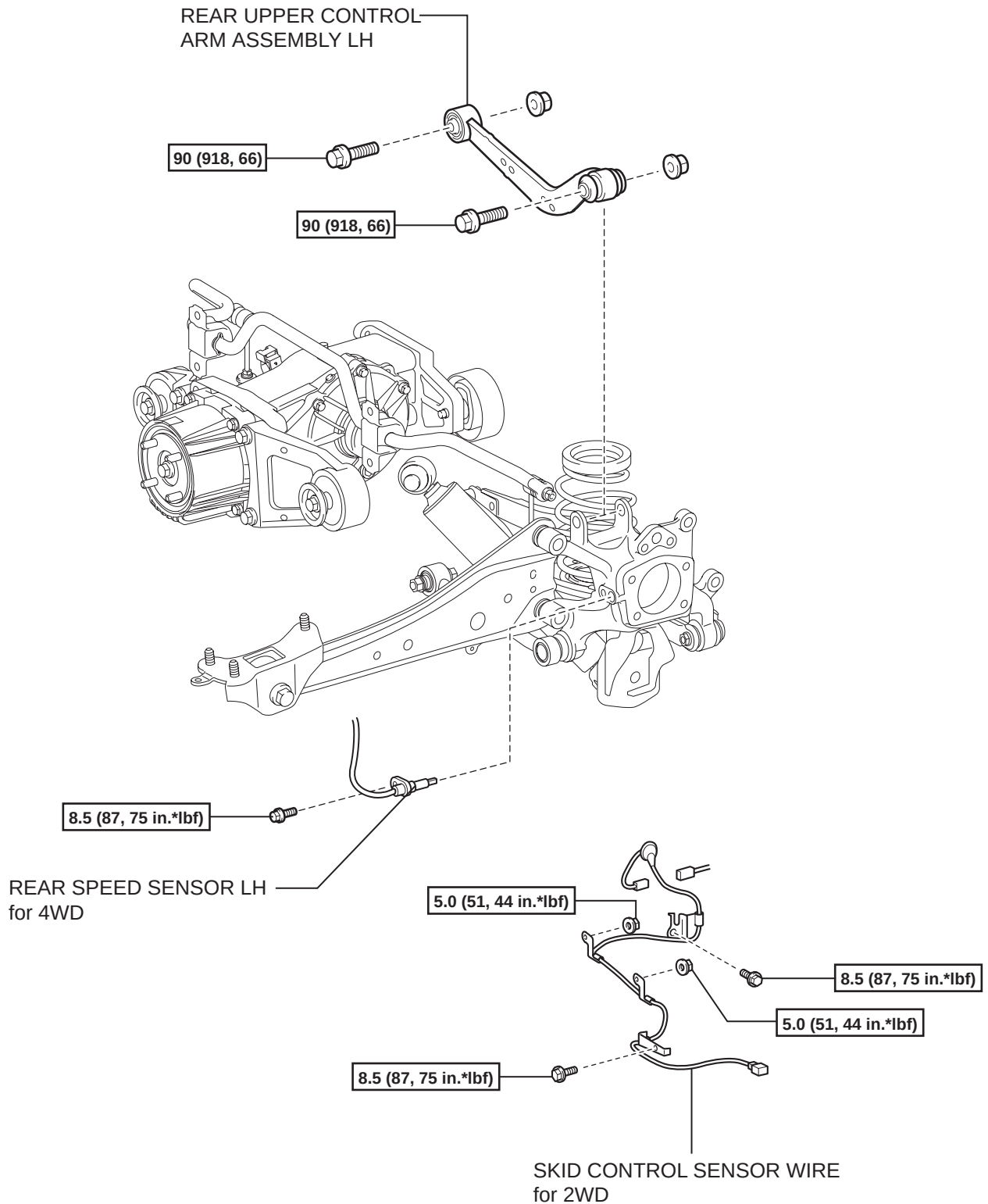
Torque: 80 N*m (816 kgf*cm, 59 ft.*lbf)

6. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

- (a) Inspect and adjust the rear wheel alignment (see page [SP-7](#)).

REAR UPPER CONTROL ARM

COMPONENTS



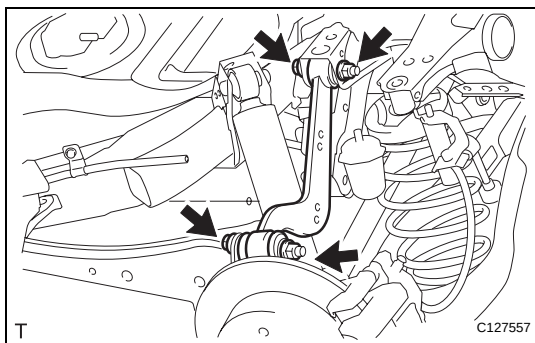
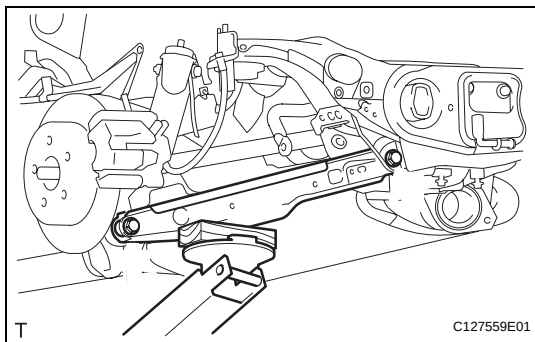
N*m (kgf*cm, ft.*lbf) : Specified torque

REMOVAL

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE REAR WHEEL
2. DISCONNECT SKID CONTROL SENSOR WIRE (for 2WD) (See page [BC-198](#))
3. DISCONNECT REAR SPEED SENSOR LH (for 4WD) (See page [BC-205](#))
4. REMOVE REAR UPPER CONTROL ARM ASSEMBLY LH
 - (a) Support the No. 2 suspension arm.



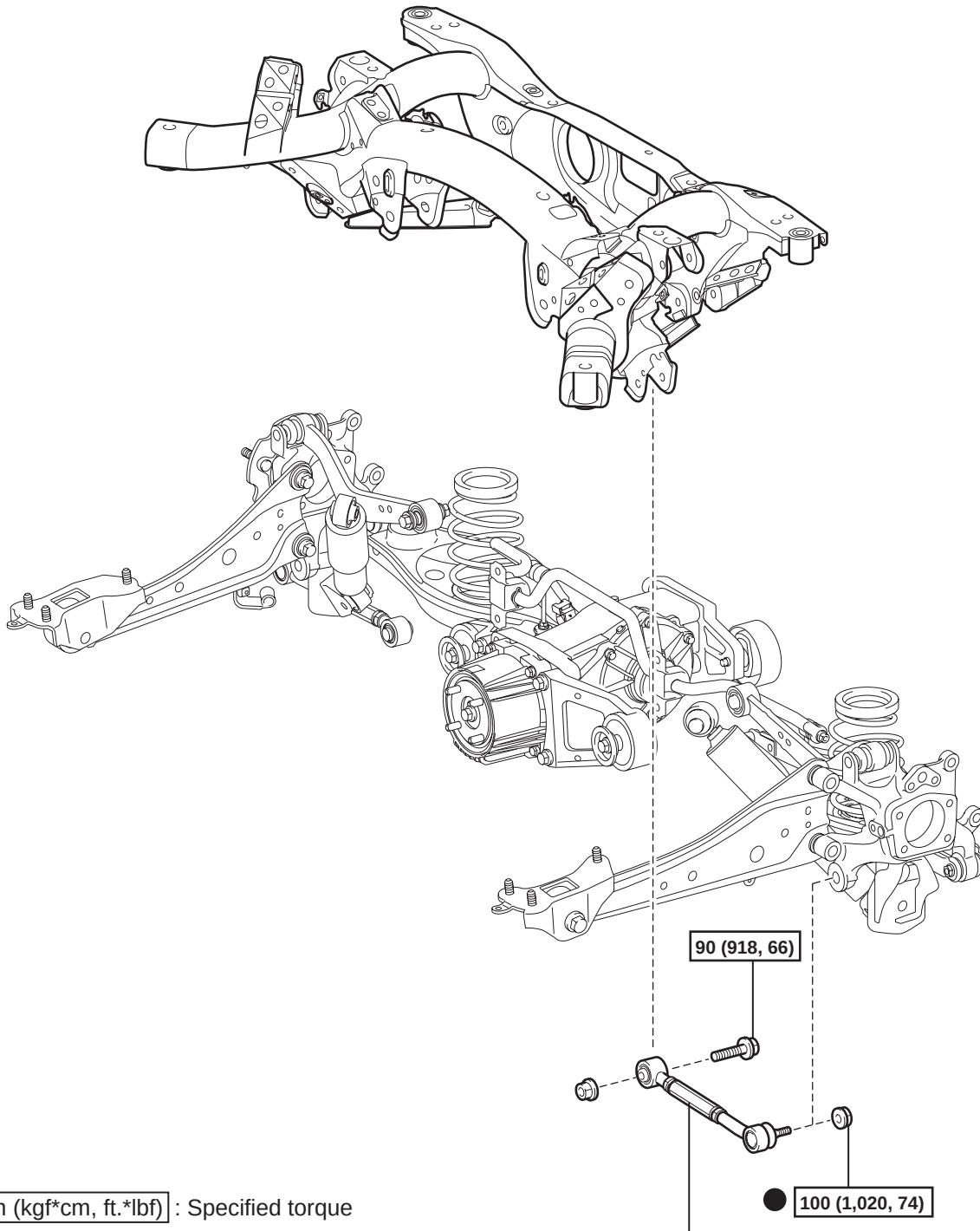
- (b) Remove the 2 bolts and 2 nuts, and disconnect the upper control arm.

NOTICE:

When removing the bolts, hold the nuts in place.

REAR NO. 1 SUSPENSION ARM

COMPONENTS



REAR NO. 1 SUSPENSION ARM ASSEMBLY LH

REMOVAL

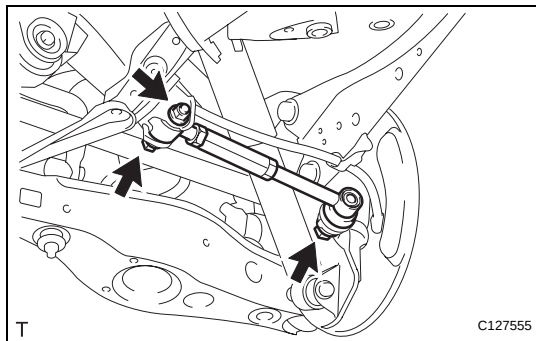
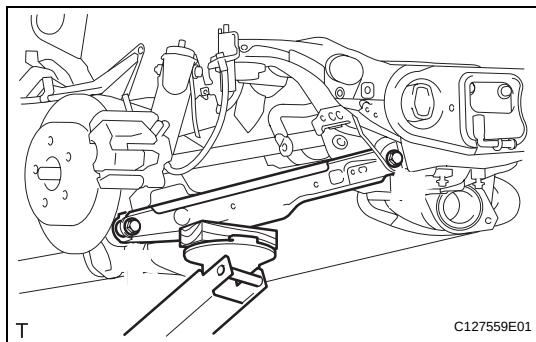
HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE REAR WHEEL

2. REMOVE REAR NO. 1 SUSPENSION ARM ASSEMBLY LH

- (a) Support the No. 2 suspension arm LH.



- (b) Remove the bolt and 2 nuts from the suspension member and axle carrier.

HINT:

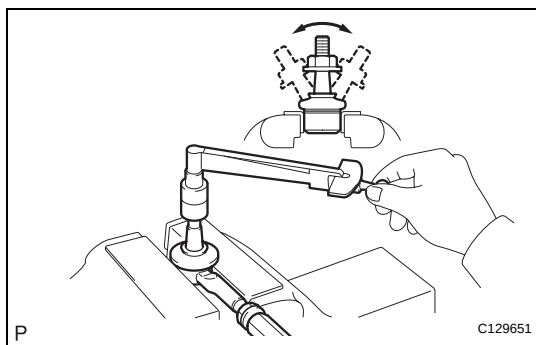
While fixing the nut in place, loosen and remove the bolt from the suspension member side.

- (c) Using SST, disconnect the suspension arm from the axle carrier.

SST 09610-20012

NOTICE:

Do not damage the dust cover.



INSPECTION

1. INSPECT REAR NO. 1 SUSPENSION ARM ASSEMBLY LH

- (a) As shown in the illustration, move 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 2 to 4 seconds per turn and take the torque reading on the fifth turn.

Standard turning torque:

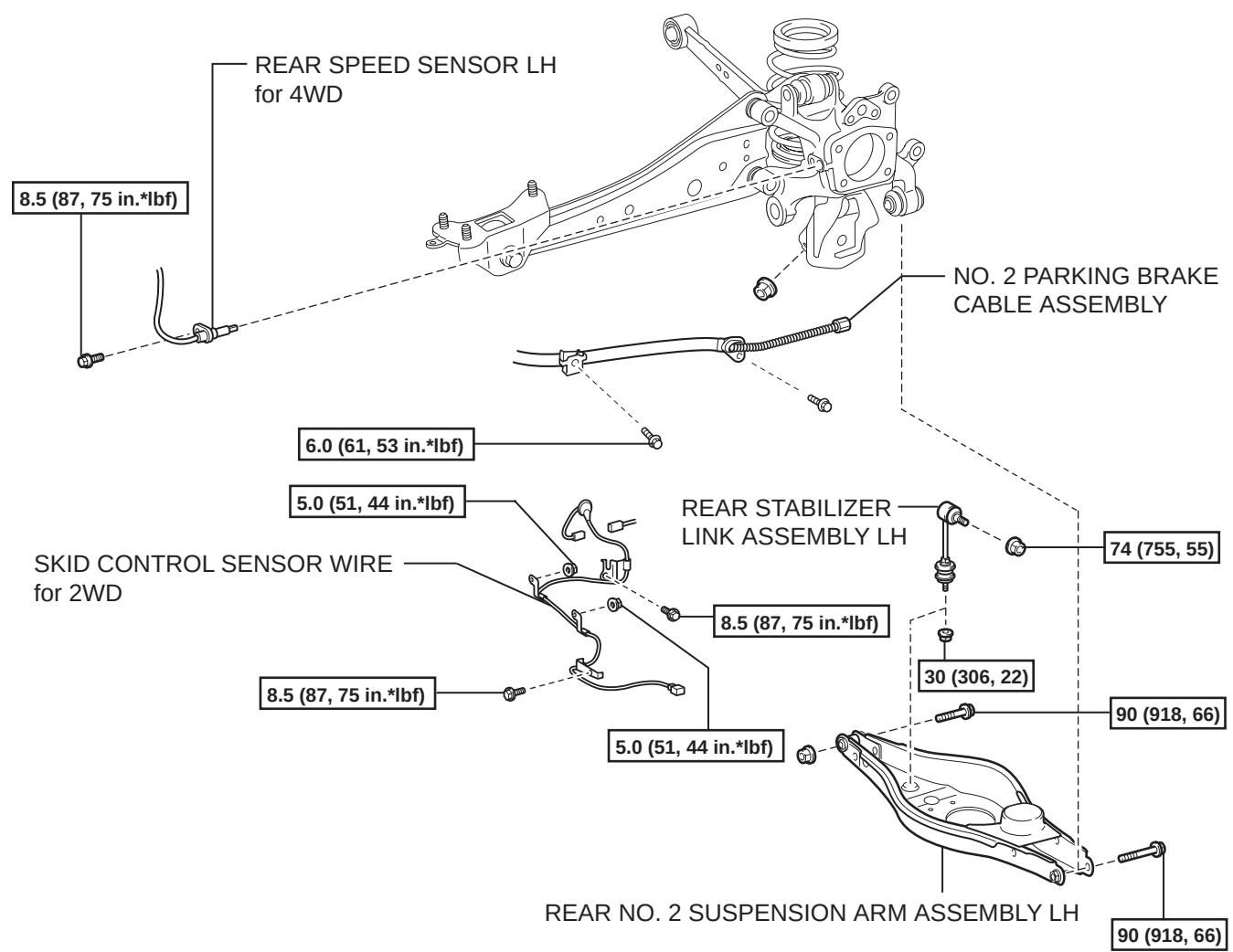
3.4 N*m (35 kgf*cm, 30 in.*lbf)

- (c) Check for any cracks and grease leaks on the ball joint dust cover.

REAR NO. 2 SUSPENSION ARM

COMPONENTS

SP



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

REMOVAL

HINT:

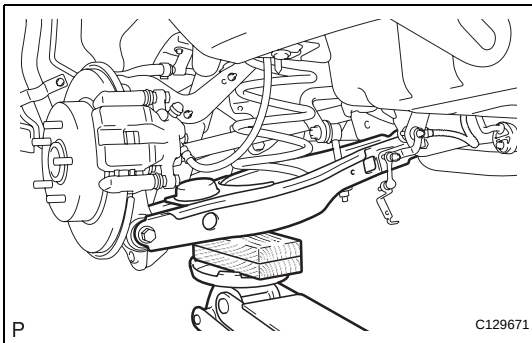
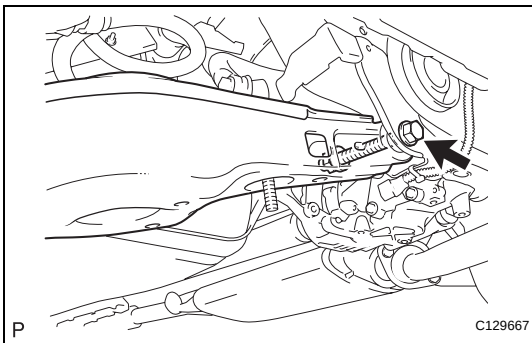
- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE REAR WHEEL
2. DISCONNECT NO. 2 PARKING BRAKE CABLE ASSEMBLY (See page [PB-8](#))
3. DISCONNECT SKID CONTROL SENSOR WIRE (for 2WD) (See page [BC-198](#))
4. DISCONNECT REAR SPEED SENSOR LH (for 4WD) (See page [BC-205](#))
5. DISCONNECT REAR STABILIZER LINK ASSEMBLY LH (See page [SP-50](#))
6. DISCONNECT REAR NO. 2 SUSPENSION ARM ASSEMBLY LH

- (a) Loosen the bolt from the suspension member side.

NOTICE:

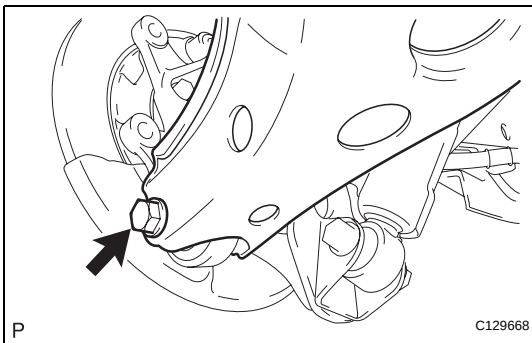
Do not remove the bolt and nut. Only loosen them.

SP

- (b) Support the No. 2 suspension arm LH with a jack.

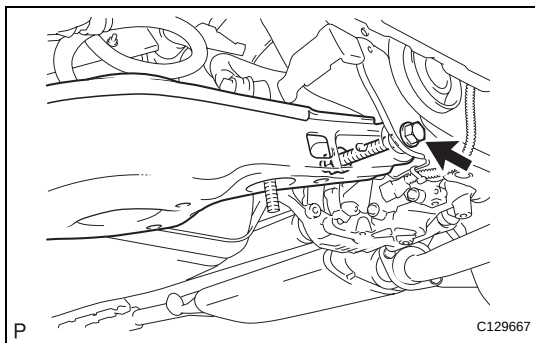
NOTICE:

Place a wooden or rubber block between the jack and the arm.



- (c) Remove the bolt and nut from the axle carrier side.
- (d) Slowly lower the jack, and disconnect the No. 2 suspension arm from the axle carrier.

7. REMOVE REAR COIL SPRING INSULATOR UPPER LH (See page [SP-33](#))
8. REMOVE REAR COIL SPRING LH (See page [SP-33](#))
9. REMOVE REAR COIL SPRING INSULATOR LOWER LH (See page [SP-33](#))

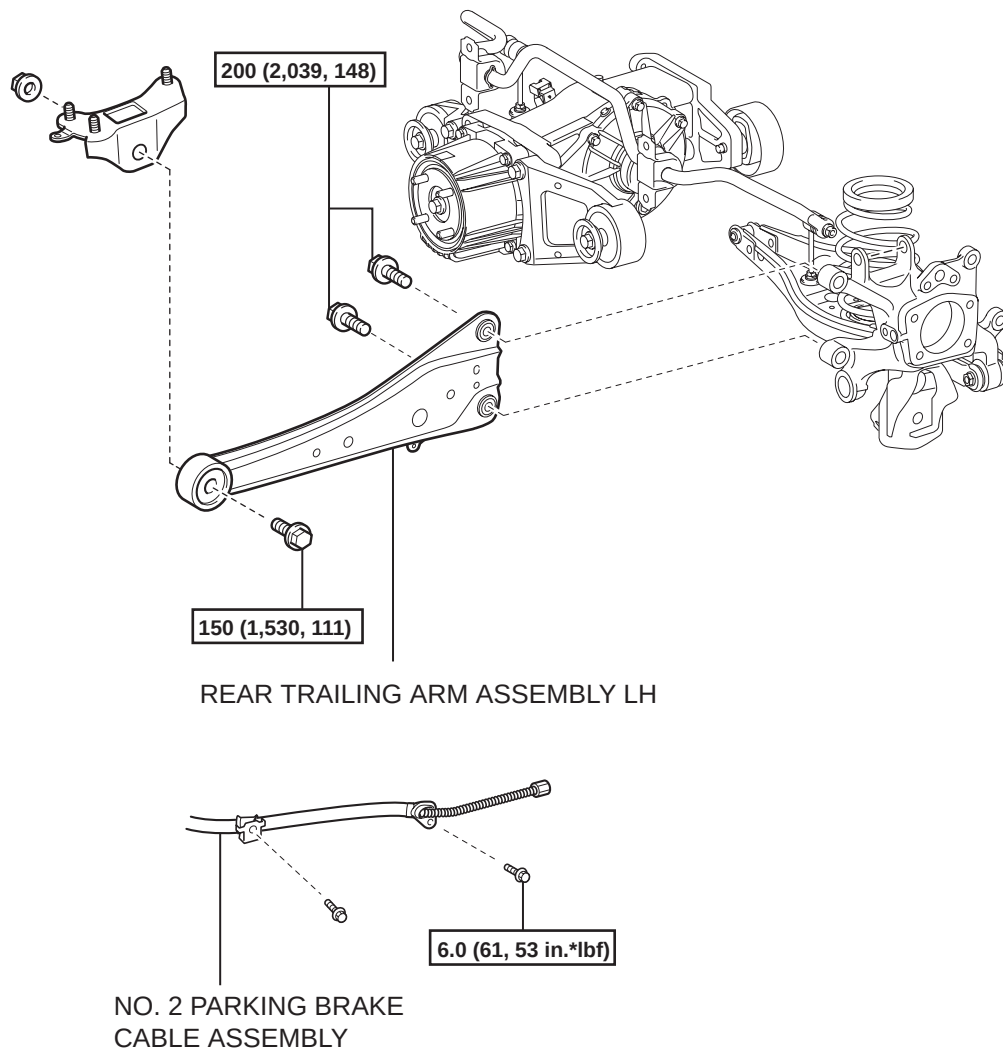


10. REMOVE REAR NO. 2 SUSPENSION ARM ASSEMBLY LH

- (a) Remove the bolt, nut and suspension arm from the suspension member.

REAR TRAILING ARM

COMPONENTS



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

REMOVAL

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.

1. REMOVE REAR WHEEL

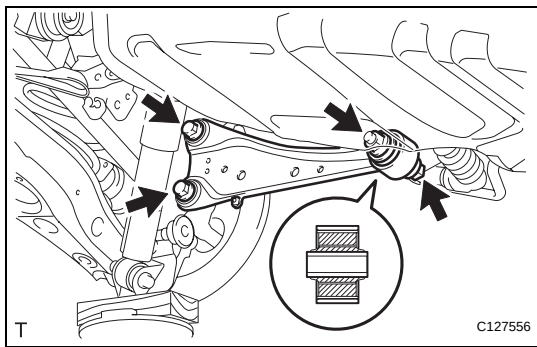
2. DISCONNECT NO. 2 PARKING BRAKE CABLE ASSEMBLY (See page [PB-8](#))

3. REMOVE REAR TRAILING ARM ASSEMBLY LH

- (a) Remove the 3 bolts, nut and trailing arm from the axle carrier and suspension arm bracket.

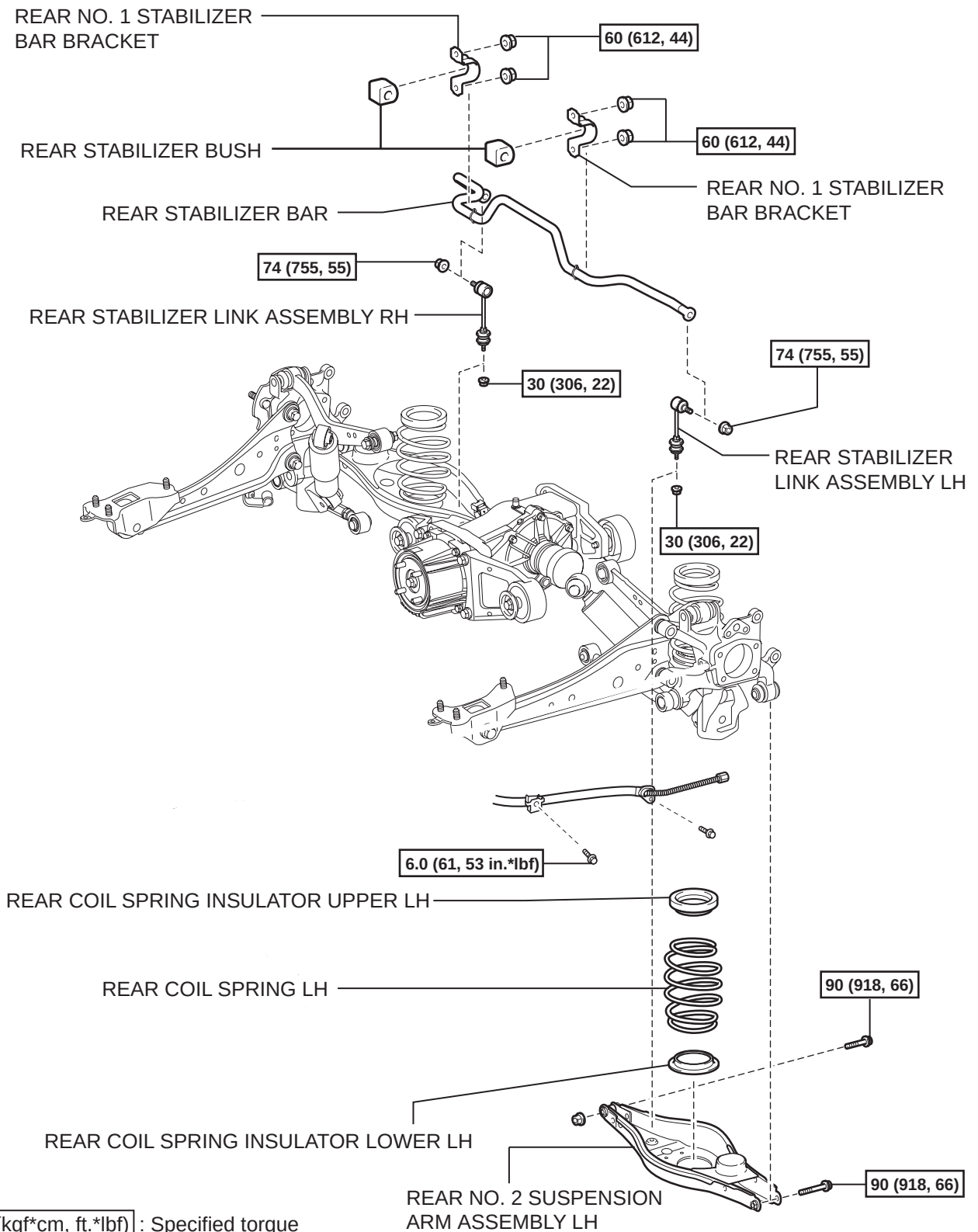
HINT:

While fixing the nut in place, loosen and remove the bolt.



REAR STABILIZER BAR

COMPONENTS

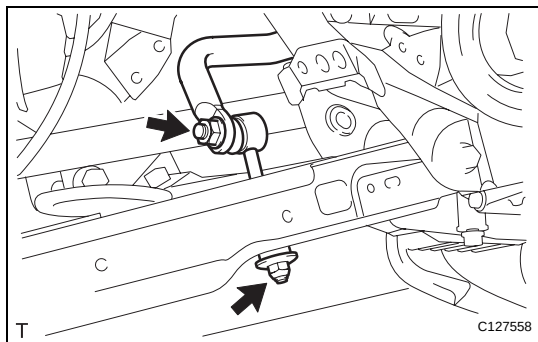


SP

REMOVAL

HINT:

- Use the same procedures for the RH side and LH side.
- The procedures listed below are for the LH side.



SP

1. REMOVE REAR WHEEL

2. REMOVE REAR STABILIZER LINK ASSEMBLY LH

- (a) Remove the nut and disconnect the link from the suspension No. 2 arm.
- (b) Remove the nut and link from the stabilizer bar.

3. REMOVE REAR STABILIZER LINK ASSEMBLY RH

HINT:

Use the same procedures described for the LH side

4. REMOVE REAR NO. 2 SUSPENSION ARM ASSEMBLY LH (See page [SP-45](#))

5. REMOVE REAR NO. 2 SUSPENSION ARM ASSEMBLY RH

HINT:

Use the same procedures described for the LH side

6. REMOVE REAR COIL SPRING INSULATOR UPPER LH (See page [SP-33](#))

7. REMOVE REAR COIL SPRING LH (See page [SP-33](#))

8. REMOVE REAR COIL SPRING INSULATOR LOWER LH (See page [SP-33](#))

9. REMOVE REAR COIL SPRING INSULATOR UPPER RH

HINT:

Use the same procedures described for the LH side

10. REMOVE REAR COIL SPRING RH

HINT:

Use the same procedures described for the LH side

11. REMOVE REAR COIL SPRING INSULATOR LOWER RH

HINT:

Use the same procedures described for the LH side

12. REMOVE REAR NO. 1 STABILIZER BAR BRACKET

- (a) Remove the 2 nuts and bracket.

HINT:

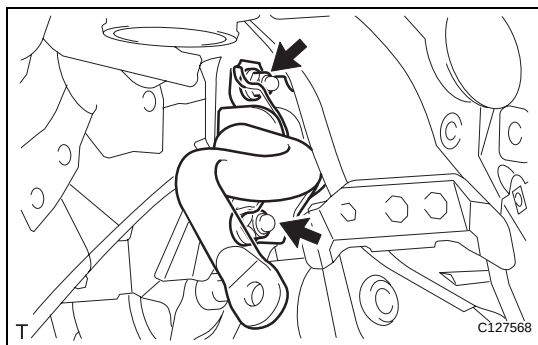
Use the same procedures for the other side.

13. REMOVE REAR STABILIZER BAR

- (a) Remove the stabilizer bar from the vehicle.

NOTICE:

When removing the stabilizer bar from the vehicle, make sure not to damage the sensor wire, brake hose, etc.



14. REMOVE REAR STABILIZER BUSH

- (a) Remove the 2 stabilizer bushes from the stabilizer bar.