SUSPENSION SYSTEM

PRECAUTION

NOTICE:
When disconnecting the negative (-) battery terminal, initialize the following systems after the terminal is reconnected.

System Name	See procedure
Lighting System (Adaptive Front-Lighting System)	LI-17
Power Window Control System	WS-12
Power Back Door System	ED-33
Sliding Roof System	RF-4 and RF-22

PROBLEM SYMPTOMS TABLE

Use the table below to help find the cause of the problem. The numbers indicate the likelihood of the possible cause of the problem. Check each part in order. Replace parts as necessary.

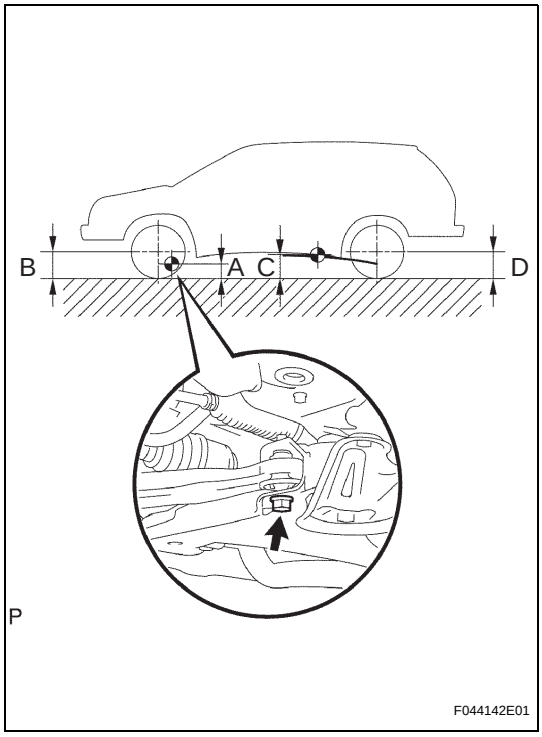
SUSPENSION SYSTEM

Symptom	Suspected area	See page
Bottoming	1. Vehicle (Overloaded)	-
	2. Pneumatic shock absorber (Worn)	-
	3. Spring (Weak)	SP-10
	4. Shock absorber (Worn)	SP-11
Sways/pitches	1. Tire (Worn or improperly inflated)	TW-1
	2. Stabilizer bar (for 2WD) (Bent or broken)	SP-27
	3. Stabilizer bar (for 4WD) (Bent or broken)	SP-31
	4. Pneumatic shock absorber (Worn)	-
	5. Shock absorber (Worn)	SP-38
Front wheel shimmy	1. Tire (Worn or improperly inflated)	TW-1
	2. Wheel (Out of balance)	TW-1
	3. Shock absorber (Worn)	SP-11
	4. Wheel alignment (Incorrect)	SP-2
	5. Ball joint (Worn)	-
	6. Hub bearing (Worn)	AH-3
	7. Steering linkage (Loose or worn)	-
	8. Steering gear (Out of adjustment or broken)	-
Rear wheel shimmy	1. Tire (Worn or improperly inflated)	TW-1
	2. Wheel (Out of balance)	TW-1
	3. Pneumatic shock absorber (Worn)	-
	4. Shock absorber (Worn)	SP-11
	5. Wheel alignment (Incorrect)	SP-2
	6. Hub bearing (Worn)	AH-3
Abnormal tire wear	1. Tire (Worn or improperly inflated)	TW-1
	2. Wheel alignment (Incorrect)	SP-2
	3. Pneumatic shock absorber (Worn)	-
	4. Shock absorber (Worn)	SP-11
	5. Suspension parts (Worn)	-

FRONT WHEEL ALIGNMENT

ADJUSTMENT

1. INSPECT TIRE (See page TW-1)



2. MEASURE VEHICLE HEIGHT

(a) Vehicle height.

Vehicle height:

Except air suspension

	Front B- A	Rear D - C
FF	119.6 mm (4.71 in.)	41.1 mm (1.62 in.)
4WD	109.6 mm (4.32 in.)	31.1 mm (1.22 in.)

Air suspension

	Front B- A	Rear D - C
FF	116.9 mm (4.60 in.)	41.1 mm (1.62 in.)
4WD	119.9 mm (4.41 in.)	36.1 mm (1.42 in.)

Measuring points:

A:
Ground clearance of lower suspension arm No.2 bush set bolt center

B:
Ground clearance of front wheel center

C:
Ground clearance of strut rod set bolt center

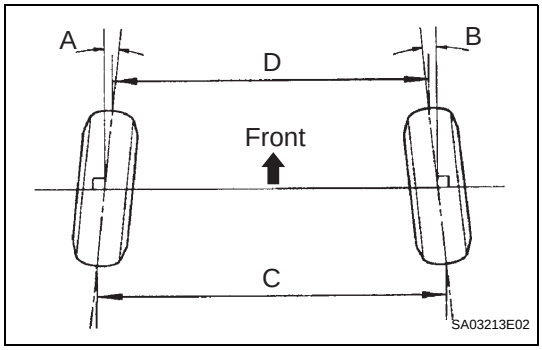
D:
Ground clearance of rear wheel center

NOTICE:

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

HINT:

Bounce the vehicle at the corners up and down to stabilize the suspension and inspect vehicle height.



3. INSPECT TOE-IN

(a) Inspect toe-in.

Toe-in

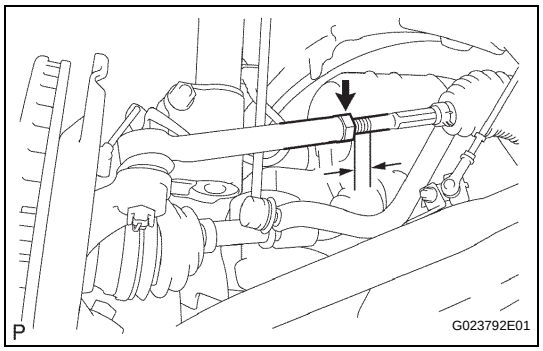
Toe-in (total)	-
A + B: C - D:	0° +- 12' (0° +- 0.16°) 0 +- 2 mm (0 +- 0.08 in.)

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

4. ADJUST TOE-IN

(a) Remove the rack boot set clips.

(b) Loosen the tie rod end lock nuts.

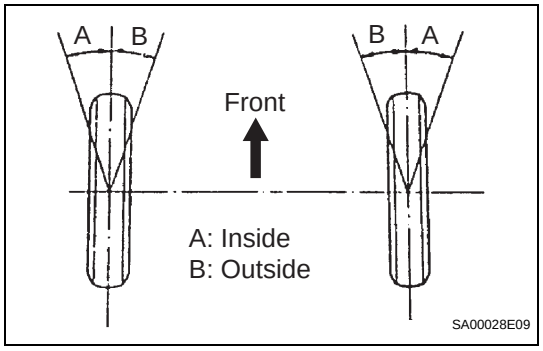


(c) Turn the right and left rack ends by equal amounts to adjust the toe-in.
HINT:
Try to adjust the toe-in to the center of the specified value.

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

(e) Place the boots on the seats and install the clips.
HINT:
Make sure that the boots are not twisted.

(f) Perform VSC system calibration (See page BC-5).



5. INSPECT WHEEL ANGLE

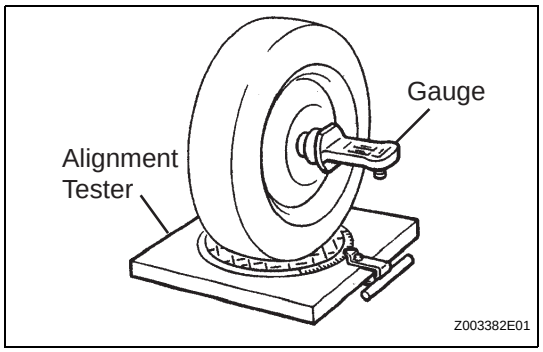
(a) Turn the steering wheel fully left and right and measure the turning angle.
Wheel turning angle:
Except air suspension

	Inside wheel	Outside wheel: Reference
FF	**35°28' +- 2° (35.47° +- 2°)**	**31°13' (31.22°)**
4WD	**35°41' +- 2° (35.68° +- 2°)**	**31°22' (31.37°)**

Air suspension

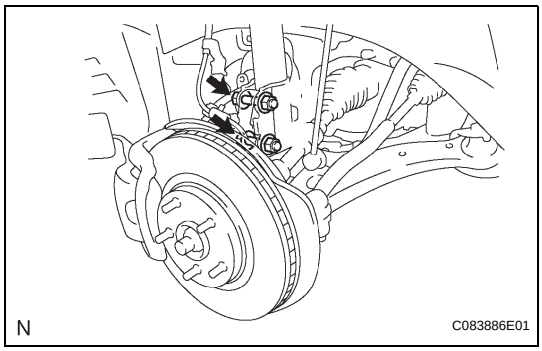
	Inside wheel	Outside wheel: Reference
FF	**35°42' +- 2° (35.70° +- 2°)**	**31°18' (31.30°)**
4WD	**35°48' +- 2° (35.80° +- 2°)**	**31°18' (31.30°)**

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



6. INSPECT CAMBER, CASTER AND STEERING AXIS INCLINATION

(a) Put the front wheel on the center of the alignment tester.



(b) Set the camber-caster-king pin gauge and attachment at the center of the axle hub or drive shaft.

Camber, caster and steering axis inclination:

Except air suspension

	FF	4WD
Camber Right-left error	**-0°40' +- 45' (-0.67° +- 0.75°) 45' (0.75°) or less**	**-0°35' +- 45' (-0.58° +- 0.75°) 45' (0.75°) or less**
Caster Right-left error	**2°51' +- 45' (2.85° +- 0.75°) 45' (0.75°) or less**	**2°50' +- 45' (2.83° +- 0.75°) 45' (0.75°) or less**
Steering axis inclination Right-left error	**10°45' +- 45' (10.75° +- 0.75°) 45' (0.75°) or less**	**10°45' +- 45' (10.75° +- 0.75°) 45' (0.75°) or less**

Air suspension

	FF	4WD
Camber Right-left error	**-0°40' +- 45' (-0.67° +- 0.75°) 45' (0.75°) or less**	**-0°37' +- 45' (-0.62° +- 0.75°) 45' (0.75°) or less**
Caster Right-left error	**2°51' +- 45' (2.85° +- 0.75°) 45' (0.75°) or less**	**2°50' +- 45' (2.83° +- 0.75°) 45' (0.75°) or less**
Steering axis inclination Right-left error	**10°42' +- 45' (10.70° +- 0.75°) 45' (0.75°) or less**	**10°35' +- 45' (10.58° +- 0.75°) 45' (0.75°) or less**

If the caster and steering axis inclination are not within the specified range after the camber has been correctly adjusted, recheck the suspension parts for damage and/or wear.

7. ADJUST CAMBER

NOTICE:

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

(a) Remove the front wheel.

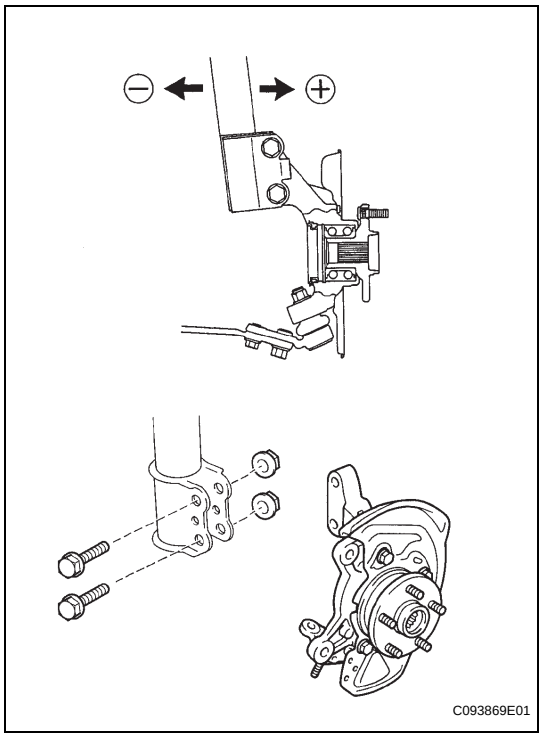
(b) Remove the 2 nuts on the lower side of the front shock absorber. (Procedure "B")

NOTICE:

When removing the nuts, keep the bolts from rotating.

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

(d) Temporarily install the 2 nuts.



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

(f) Tighten the nuts.
Torque: 230 N*m (2,350 kgf*cm, 170 ft.*lbf)
NOTICE:
When the installing the nuts, keep the bolts from rotating and them torque the nuts.

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

(h) Check the camber.
HINT:
- Try to adjust the camber to the center of the specified value.
- Adjusting value for the set bolts is 6' to 30' (0.1° to 0.5°).

If the camber is not within the specified value, estimate how much additional camber adjustment will be required, and select the camber adjusting bolt.
NOTICE:
Tighten the adjusting bolt with a new nut.

Bolt / Adjusting Value	Set Bolt		Adjusting Bolt					
	90105-17012		90105-17013		90105-17014		90105-17015	
			1 Dot		2 Dots		3 Dots	
								
	1	2	1	2	1	2	1	2
15'	●			●				
30'	●					●		
45'	●							●
1°00'			●					●
1°15'					●			●
1°30'							●	●

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(i) Do the step mentioned above again. At procedure "B", replace 1 or 2 selected bolts.
HINT:
When replacing the 2 bolts, replace 1 bolt at a time.
NOTICE:
Refer to NOTICE.

REAR WHEEL ALIGNMENT

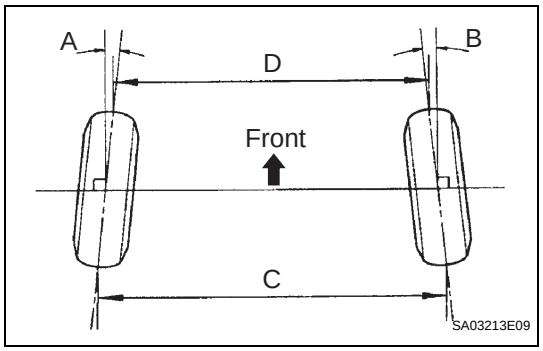
ADJUSTMENT

1. INSPECT TIRE (See page TW-1)

2. MEASURE VEHICLE HEIGHT

NOTICE:

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



3. INSPECT TOE-IN

(a) Inspect toe-in.

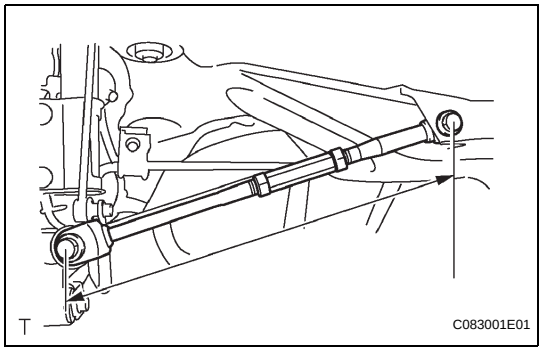
Air suspension

Toe-in (total)	**-**
A + B: **C - D:**	**0°18' +- 12' (0.3° +- 0.2°)** **3 +- 2 mm (0.12 +- 0.08 in.)**

Coil suspension

Toe-in (total)	**-**
A + B: **C - D:**	**0°14' +- 9' (0.24° +- 0.16°)** **3 +- 2 mm (0.12 +- 0.08 in.)**

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

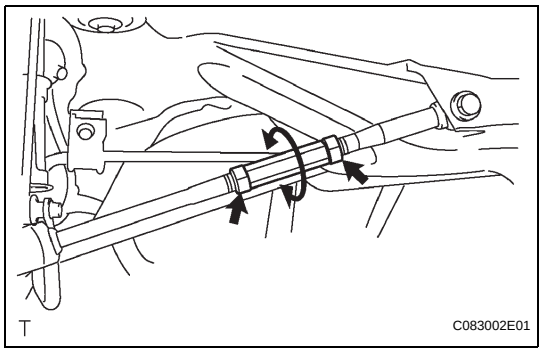


4. ADJUST TOE-IN (for 2WD)

(a) Measure the lengths of the right and left No. 2 lower suspension arms.

No. 2 lower suspension arm length difference:
1.5 mm (0.06 in.) or less

If the left-right difference is larger than 1.5 mm (0.06 in.), adjust it by following the procedures below.



(b) Loosen the lock nuts.

(c) Turn the right and left adjusting tube by an equal amount to adjust toe-in.

HINT:

- Try to adjust toe-in to the center value.
- One turn of each adjusting tube will adjust toe-in by about 11.1°(1° 11, 11.1 mm, 0.437 in.).

(d) Torque the lock nut.

Torque: 56 N*m (570 kgf*cm, 41 ft.*lbf)

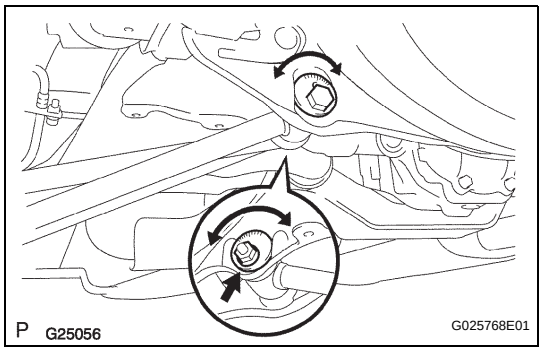
5. ADJUST TOE-IN (for 4WD)

(a) Measure the distance between each wheel disc and corner of the toe-adjusting cam, and then confirm that left and right distances are the same.

No. 2 lower suspension arm length difference:
1.0 mm (0.04 in.) or less

If the left-right difference is larger than 1.0 mm (0.04 in.), adjust it by following the procedures on the next page.

SP



(b) Turn the adjust cams by an equal amount to adjust toe-in.
HINT:
- Try to adjust toe-in to the center value.
- The toe-in will change by the following specifications corresponding to each graduation of the cam.
  Approx. 3.3 mm (0.13 in.)

(c) Tighten the nut.
Torque: 100 N*m (1,020 kgf*cm, 74 ft.*lbf)

6. INSPECT CAMBER

Air suspension

	2WD	4WD
Camber **Right-left error**	**-1°21' +- 45' (-1.35° +- 0.75°)** **45' (0.75°) or less**	**-0°55' +- 45' (-0.92° +- 0.75°)** **45' (0.75°) or less**

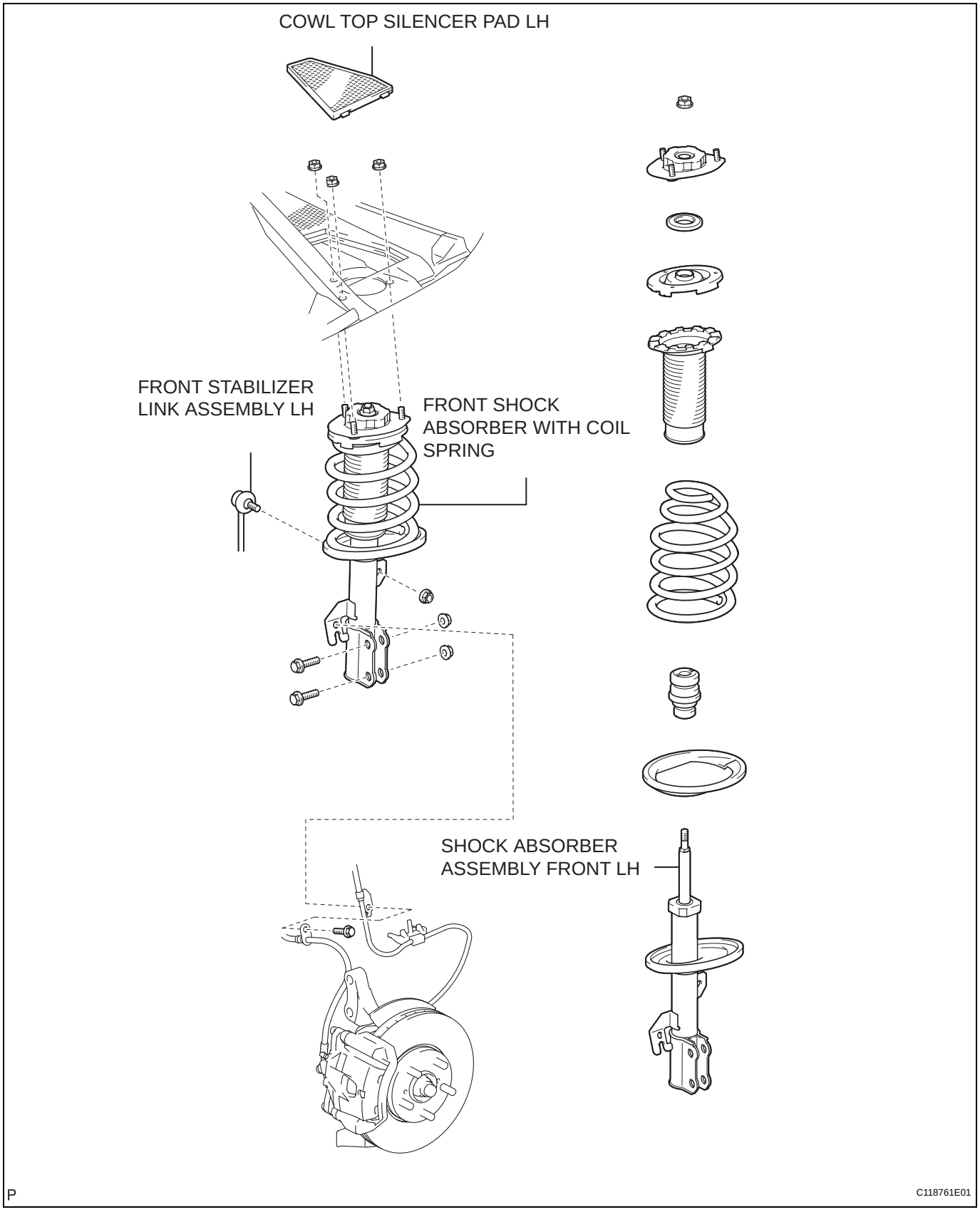
Coil suspension

	2WD	4WD
Camber **Right-left error**	**-1°20' +- 45' (-1.33° +- 0.75°)** **45' (0.75°) or less**	**-0°50' +- 45' (-0.83° +- 0.75°)** **45' (0.75°) or less**

HINT:
Camber is not adjustable. If the measurement is not within the specification, inspect the suspension parts for damage and/or wear, and replace them if necessary.

FRONT SHOCK ABSORBER

COMPONENTS

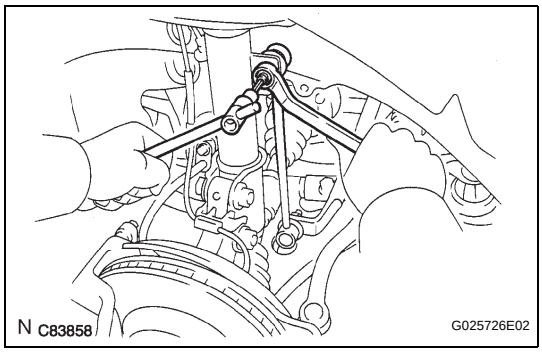


REMOVAL

1. REMOVE FRONT WHEEL

2. SEPARATE FRONT STABILIZER LINK ASSEMBLY LH

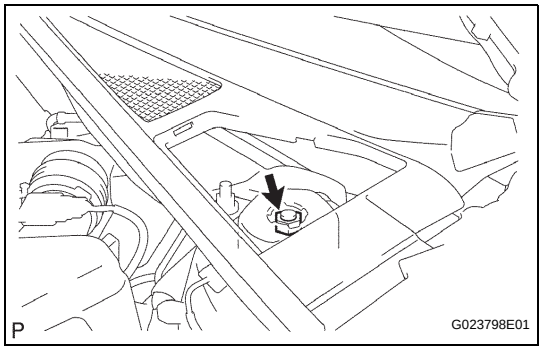
(a) Remove the nut and separate the front stabilizer link assembly LH from the shock absorber assembly front LH.
HINT:
If the ball joint turns together with the nut, use a hexagon (6 mm) wrench to hold the stud.



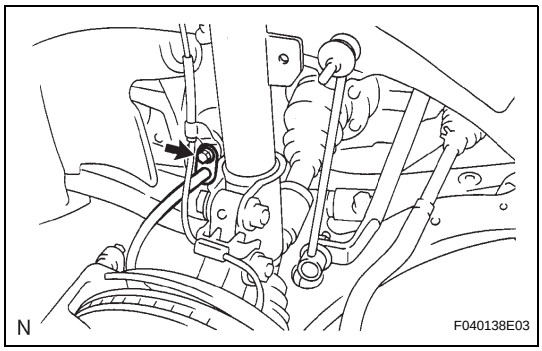
3. REMOVE COWL TOP SILENCER PAD LH

4. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING

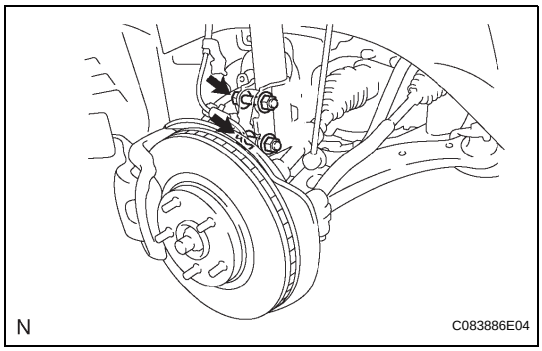
(a) Loosen the lock nut.
NOTICE:
- **Do not loosen and remove the lock nut except when removing the shock absorber assembly front LH with coil spring.**
- **Do not remove the lock nut.**

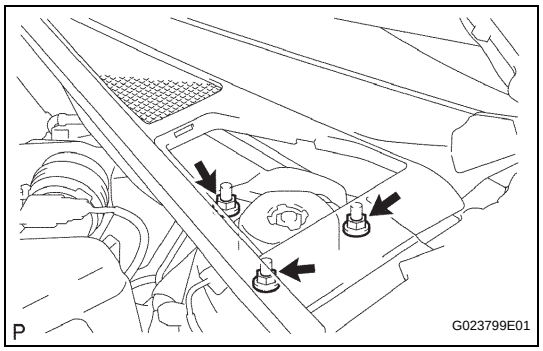


(b) Remove the bolt and disconnect the front flexible hose No. 1 and speed sensor front LH wire harness.



(c) Remove the 2 nuts and bolt on the lower side of front shock absorber with coil spring.
NOTICE:
When removing the bolts keep the bolt from rotating and loosen the nut.



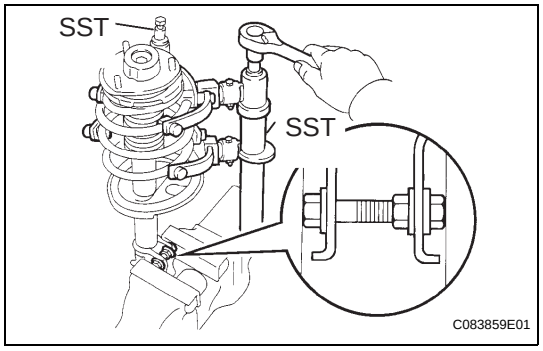


(d) Remove the 3 nuts on the upper side of the front shock absorber with coil spring.

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

NOTICE:

Make sure that the front speed sensor is disconnected from the front shock absorber.



5. FIX FRONT SHOCK ABSORBER WITH COIL SPRING

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

6. REMOVE SHOCK ABSORBER ASSEMBLY FRONT LH

(a) Using SST, compress the front coil spring LH.

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

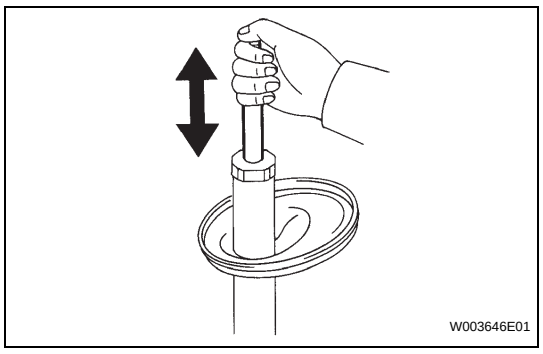
NOTICE:

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

HINT:

Use 2 of the same types of SST.

(b) Remove the front suspension support sub-assembly LH, front suspension support bearing LH, front coil spring seat upper LH, front coil spring insulator upper LH, front coil spring LH, front spring bumper LH and front coil spring insulator Lower LH from the shock absorber assembly front LH.



INSPECTION

1. INSPECT SHOCK ABSORBER ASSEMBLY FRONT LH

(a) Compress and extend the shock absorber rod 4 or more times.

Then check that there is no abnormal resistance or sound and operation resistance is normal.

HINT:

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

NOTICE:

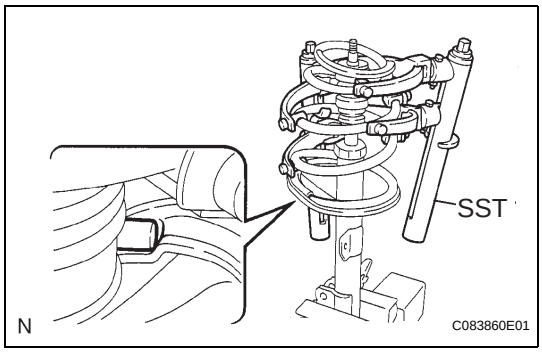
When disposing of the shock absorber assembly front LH, see DISPOSAL (See page SP-14).

INSTALLATION

1. INSTALL SHOCK ABSORBER ASSEMBLY FRONT LH

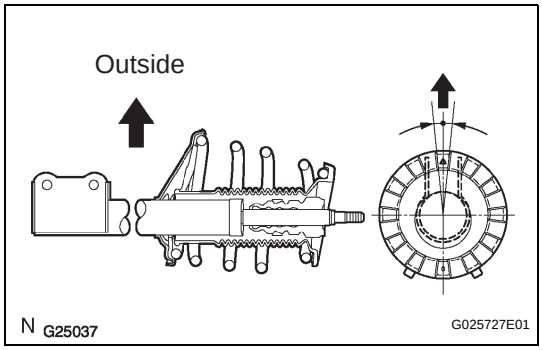
(a) Install the front coil spring insulator lower LH onto the shock absorber assembly front LH.

(b) Install the front spring bumper LH to the piston rod.

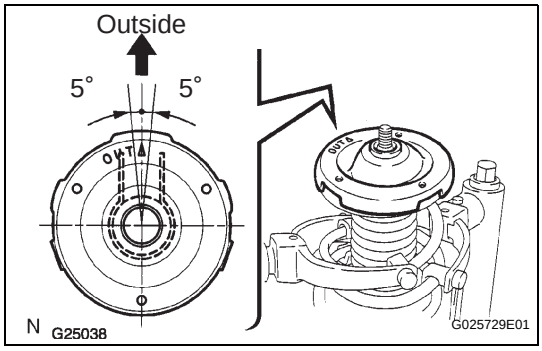


(c) Using SST, compress the front coil spring LH.
SST 09727-30021 (09727-00010, 09727-00021)
NOTICE:
Do not use an impact wrench. It will damage the SST.
HINT:
Use 2 of the same type of SST.

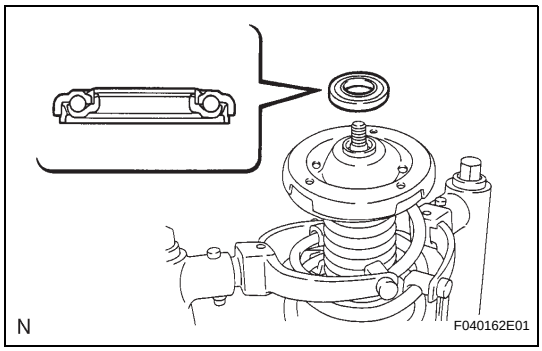
(d) Install the front coil spring LH to the shock absorber assembly front LH.
HINT:
Fit the lower end of the front coil spring LH in the gap of the spring lower seat.



(e) Install the front coil spring insulator upper LH as shown in the illustration.

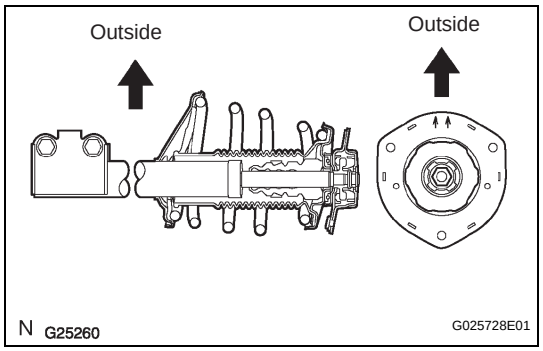


(f) Install the front coil spring seat upper LH to the shock absorber assembly front LH with the mark facing to the outside of the vehicle.

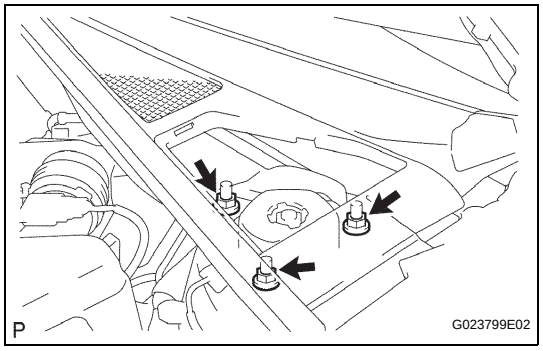


(g) Install a new front suspension support bearing LH.

SP

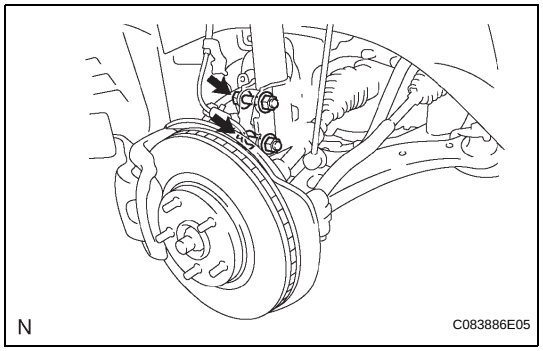


(h) Install the front suspension support sub-assembly LH with the mark facing to the outside of the vehicle.
(i) Temporarily tighten a new lock nut.
(j) Remove the SST slowly in order to release the coil spring.
SST 09727-30021 (09727-00010, 09727-00021)

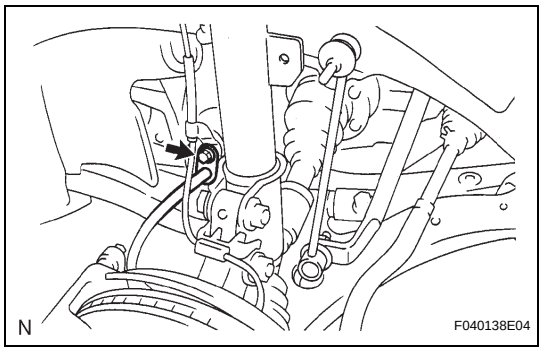


2. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING

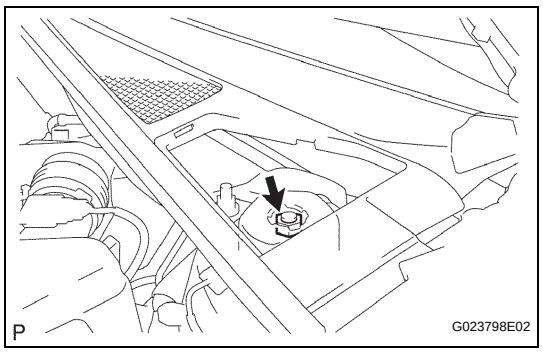
(a) Install the front shock absorber with coil spring as shown in the illustration.
(b) Install the 3 nuts to the upper side of front shock absorber with coil spring.
Torque: 80 N*m (816 kgf*cm, 59 ft.*lbf)
NOTICE:
Do not torque the nuts until installing the bolts and nuts (lower side)



(c) Install the 2 bolts and 2 nuts to the lower side of front shock absorber with coil spring.
Torque: 230 N*m (2,350 kgf*cm, 170 ft.*lbf)
NOTICE:
When the installing the nuts, keep the bolts from rotating and torque the nuts.

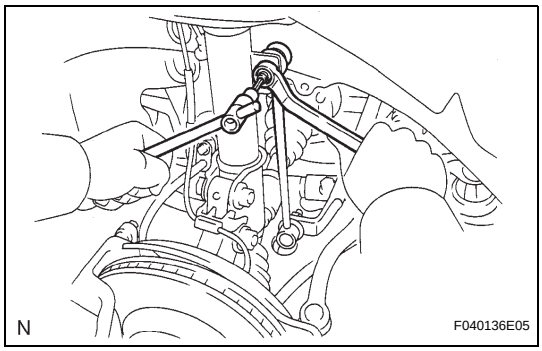


(d) Install the front flexible hose No. 1 and speed sensor wire harness front LH with the bolt.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)



(e) Fully tighten the lock nut.
Torque: 49 N*m (500 kgf*cm, 36 ft.*lbf)

3. INSTALL COWL TOP SILENCER PAD LH



4. INSTALL FRONT STABILIZER LINK ASSEMBLY LH

(a) Install the front stabilizer link assembly LH with the nut.

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

HINT:

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

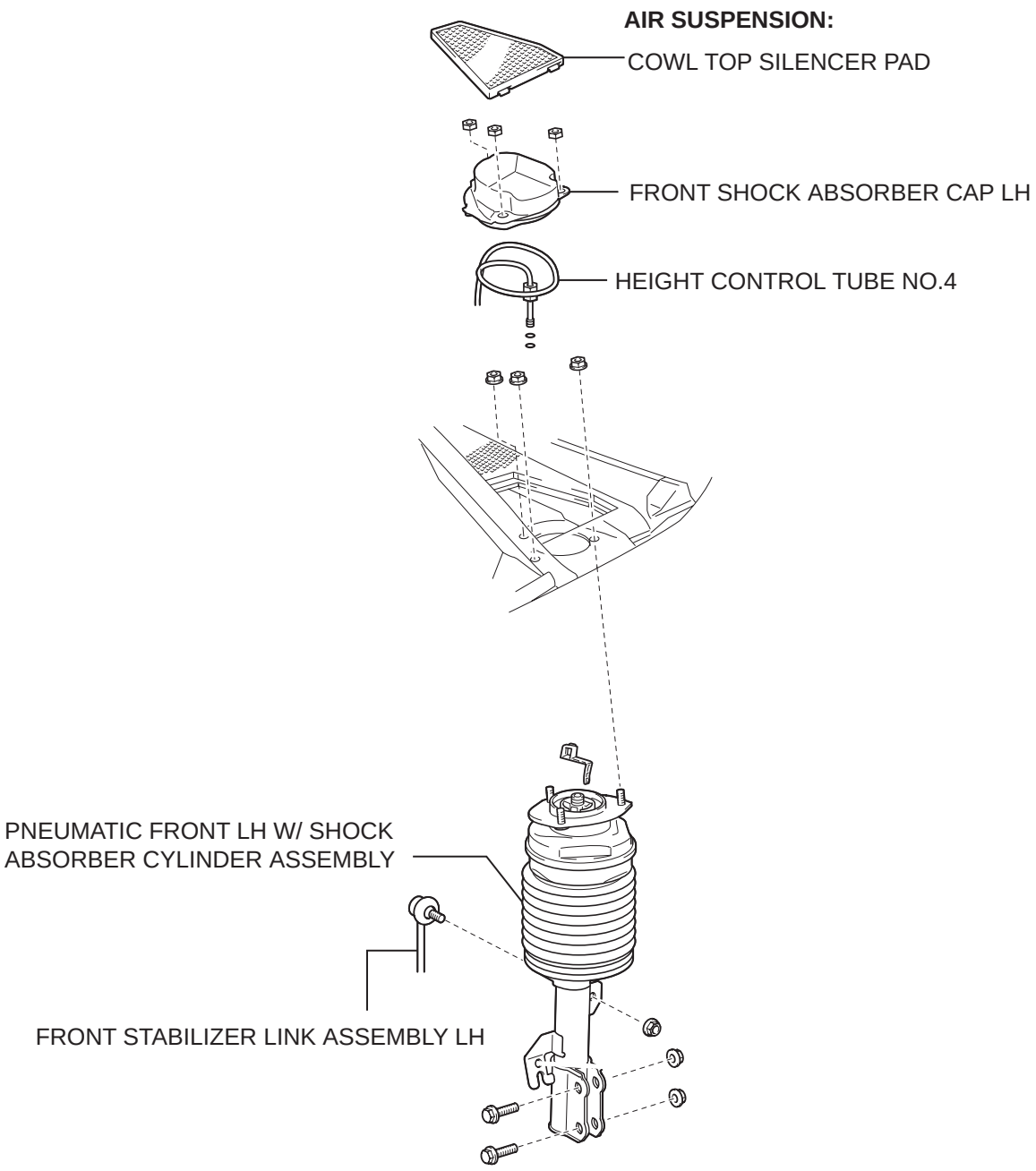
5. INSTALL FRONT WHEEL

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

6. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

PNEUMATIC CYLINDER WITH FRONT SHOCK ABSORBER

COMPONENTS



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SP

REMOVAL

1. REMOVE FRONT WHEELS

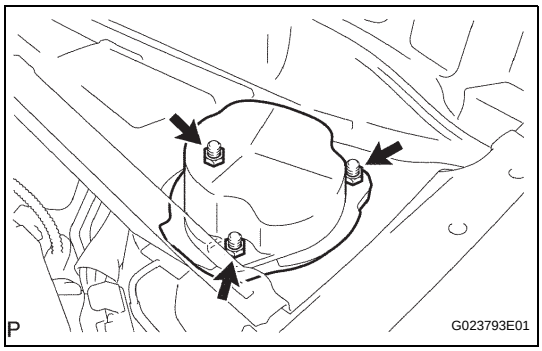
NOTICE:

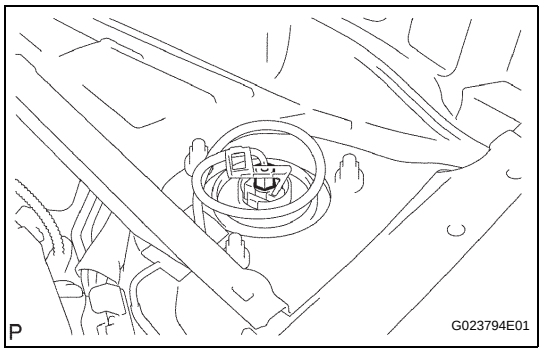
Before disconnecting the sir tube, press the height control OFF SW to stop the vehicle height control operation.

2. REMOVE COWL TOP SIDE SILENCER PAD LH

3. REMOVE FRONT SHOCK ABSORBER CAP LH

(a) Remove the 3 nuts and the front shock absorber cap LH.





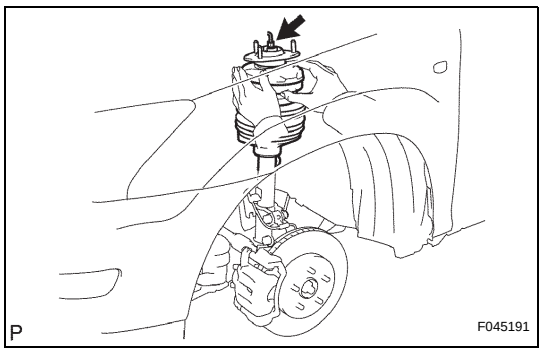
4. SEPARATE HEIGHT CONTROL TUBE NO.4

(a) Remove the height control tube clamp No. 11. Disconnect the height control tube No. 4 from the pneumatic front LH w/ shock absorber cylinder assembly by loosening the nut.

NOTICE:

Keep the chamber of the pneumatic front LH/w/ shock absorber cylinder assembly unmoved by holding it with your hand.

(b) Holding chamber by your hand.



5. SEPARATE FRONT STABILIZER LINK ASSEMBLY LH

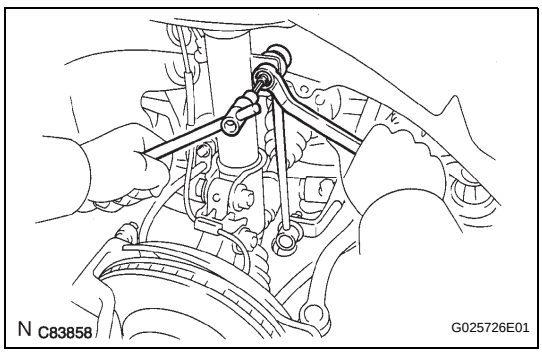
(a) Support the suspension lower arm No. 1 with a jack using a wood block to avoid damage.

(b) Remove the nut and the stabilizer link assembly from the pneumatic front LH w/ shock absorber cylinder assembly.

(c) Disconnect the height control sensor sub-assembly front LH from the front suspension arm sub-assembly lower No. 1 LH.

HINT:

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



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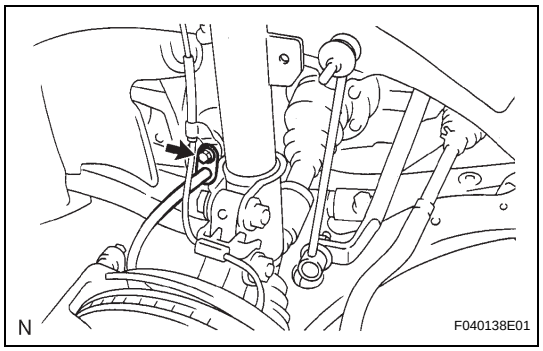
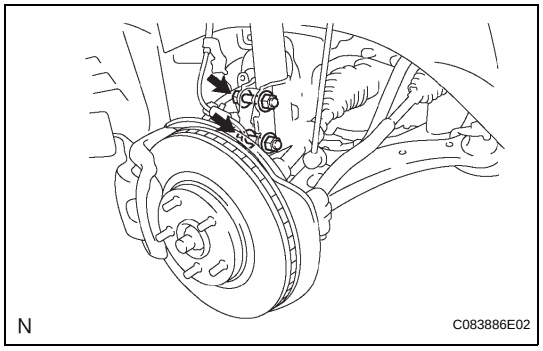
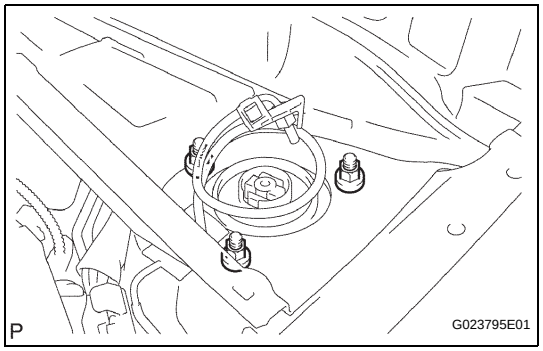


6. REMOVE PNEUMATIC FRONT LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

(a) Remove the bolt, and release the flexible hose and the speed sensor wire harness front the pneumatic front LH w/ shock absorber cylinder assembly.
NOTICE:
Confirm the disconnection of the front speed sensor and the pneumatic front w/ shock absorber cylinder assembly.

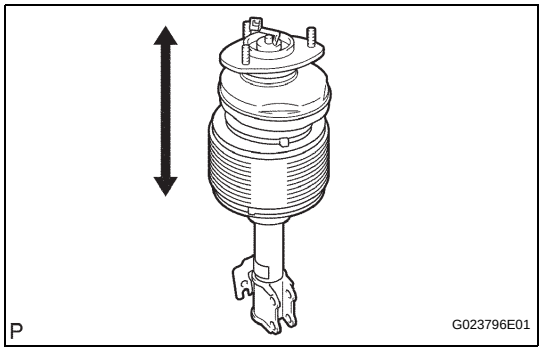


(b) Remove the 2 nuts and the pneumatic front w/ shock absorber cylinder assembly (lower side) from the steering knuckle.
NOTICE:
- **Leave the 2 bolts untouched.**
- **Do not turn the steering.**



(c) Remove the 3 nuts on the pneumatic cylinder with shock absorber (upper side).

(d) Let it down slowly to remove the 2 bolts and the pneumatic front LH w/ shock absorber cylinder assembly.



INSPECTION

1. INSPECT PNEUMATIC FRONT LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

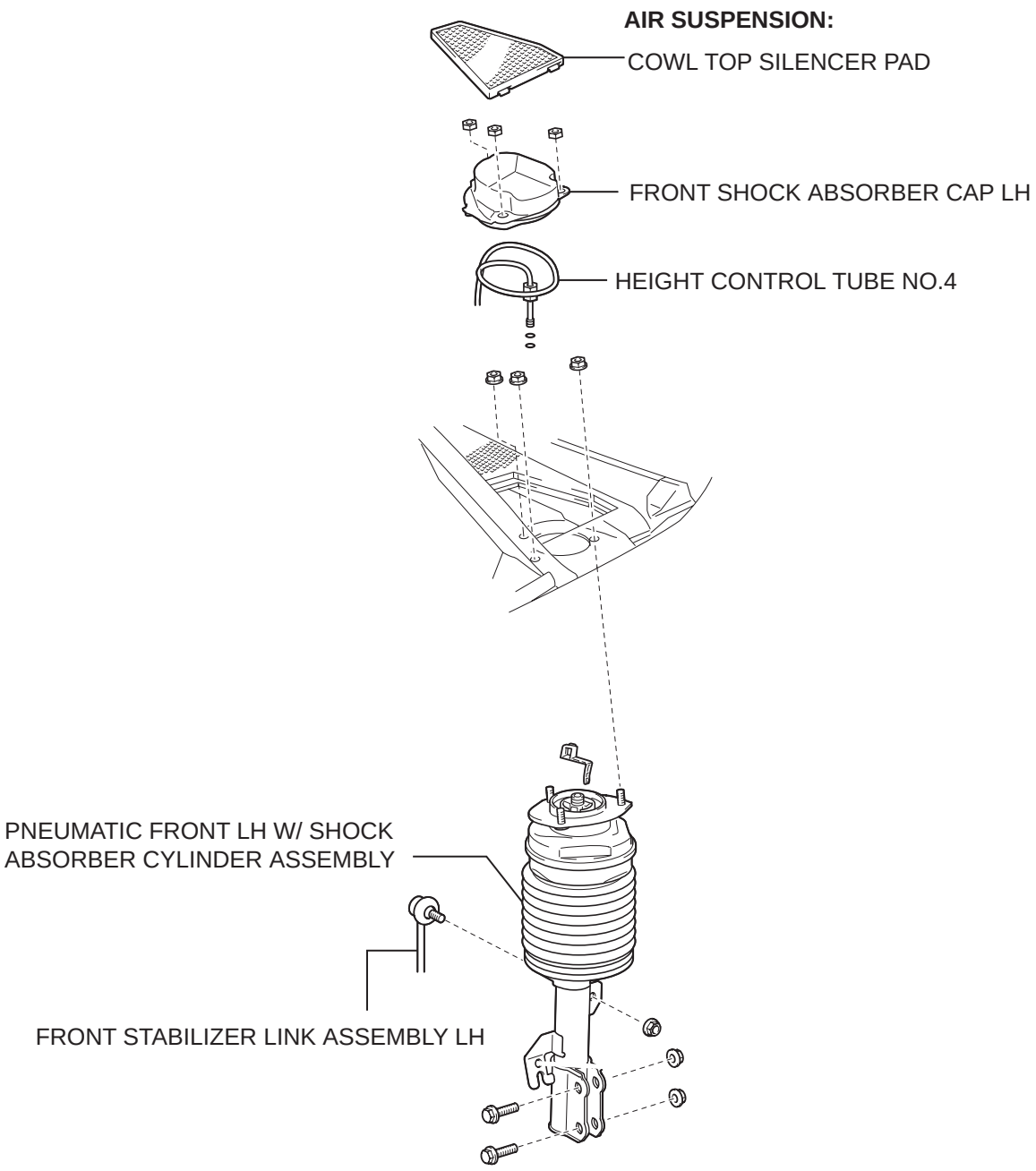
(a) Inspect pneumatic cylinder assembly operation

(1) Compress and expand the pneumatic cylinder assembly 4 times or more.

(2) Inspect the pneumatic cylinder assembly.
NOTICE:
- **Be sure not to cover the connection part for height control tube No. 4 when compressing and expanding the pneumatic cylinder assembly.**
- **When disposing of the pneumatic front w/ shock absorber cylinder assembly, see DISPOSAL (See page SP-19)**

PNEUMATIC CYLINDER WITH FRONT SHOCK ABSORBER

COMPONENTS



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REMOVAL

1. REMOVE FRONT WHEELS

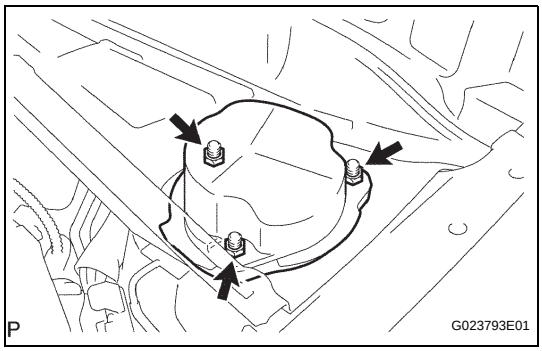
NOTICE:

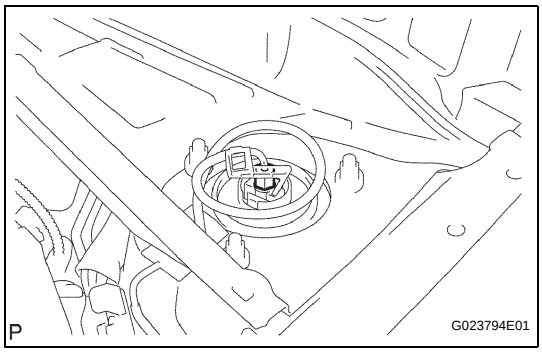
Before disconnecting the sir tube, press the height control OFF SW to stop the vehicle height control operation.

2. REMOVE COWL TOP SIDE SILENCER PAD LH

3. REMOVE FRONT SHOCK ABSORBER CAP LH

(a) Remove the 3 nuts and the front shock absorber cap LH.





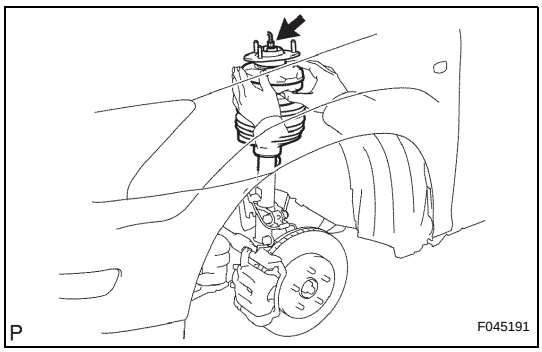
4. SEPARATE HEIGHT CONTROL TUBE NO.4

(a) Remove the height control tube clamp No. 11. Disconnect the height control tube No. 4 from the pneumatic front LH w/ shock absorber cylinder assembly by loosening the nut.

NOTICE:

Keep the chamber of the pneumatic front LH/w/ shock absorber cylinder assembly unmoved by holding it with your hand.

(b) Holding chamber by your hand.



5. SEPARATE FRONT STABILIZER LINK ASSEMBLY LH

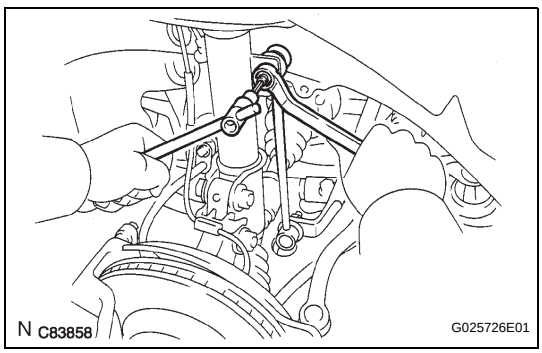
(a) Support the suspension lower arm No. 1 with a jack using a wood block to avoid damage.

(b) Remove the nut and the stabilizer link assembly from the pneumatic front LH w/ shock absorber cylinder assembly.

(c) Disconnect the height control sensor sub-assembly front LH from the front suspension arm sub-assembly lower No. 1 LH.

HINT:

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



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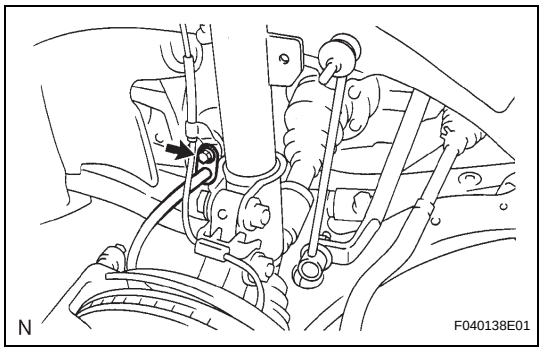
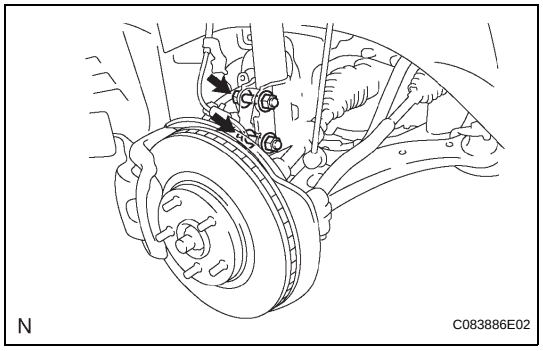
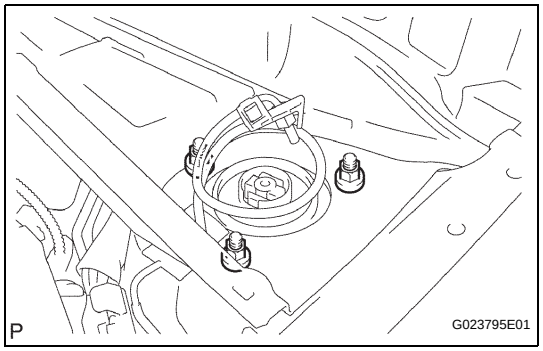


6. REMOVE PNEUMATIC FRONT LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

(a) Remove the bolt, and release the flexible hose and the speed sensor wire harness front the pneumatic front LH w/ shock absorber cylinder assembly.
NOTICE:
Confirm the disconnection of the front speed sensor and the pneumatic front w/ shock absorber cylinder assembly.

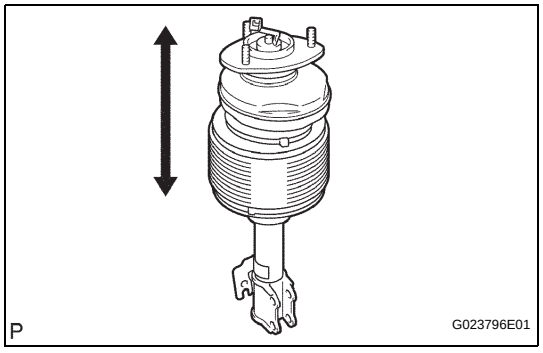


(b) Remove the 2 nuts and the pneumatic front w/ shock absorber cylinder assembly (lower side) from the steering knuckle.
NOTICE:
- **Leave the 2 bolts untouched.**
- **Do not turn the steering.**



(c) Remove the 3 nuts on the pneumatic cylinder with shock absorber (upper side).

(d) Let it down slowly to remove the 2 bolts and the pneumatic front LH w/ shock absorber cylinder assembly.



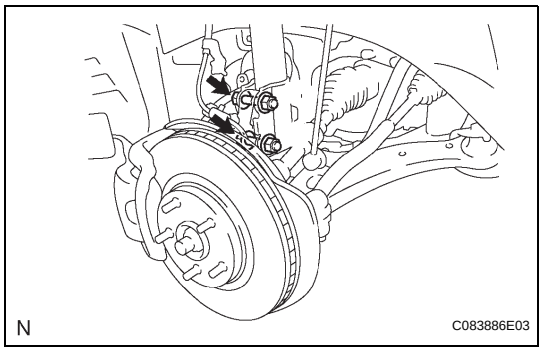
INSPECTION

1. INSPECT PNEUMATIC FRONT LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

(a) Inspect pneumatic cylinder assembly operation

(1) Compress and expand the pneumatic cylinder assembly 4 times or more.

(2) Inspect the pneumatic cylinder assembly.
NOTICE:
- **Be sure not to cover the connection part for height control tube No. 4 when compressing and expanding the pneumatic cylinder assembly.**
- **When disposing of the pneumatic front w/ shock absorber cylinder assembly, see DISPOSAL (See page SP-19)**

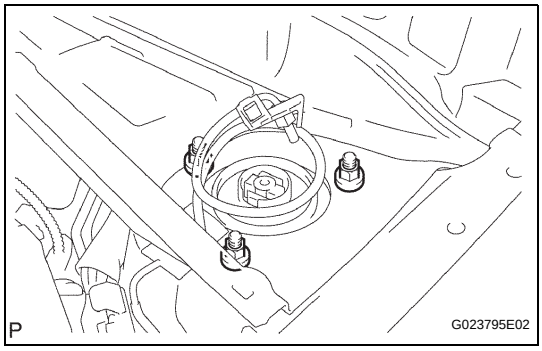


INSTALLATION

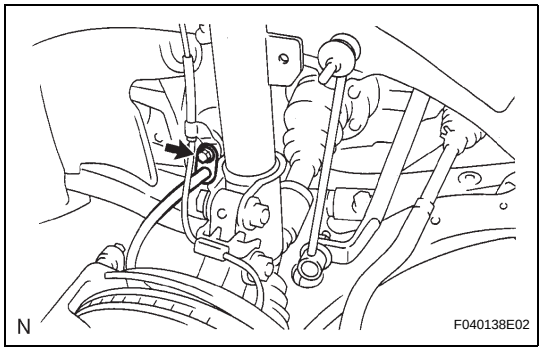
1. INSTALL PNEUMATIC FRONT LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

(a) Install the pneumatic front LH w/ shock absorber cylinder assembly (lower side) to the steering knuckle. Insert the bolts from the front side of the vehicle and tighten the 2 nuts.
Torque: 230 N*m (2,345 kgf*cm, 170 ft.*lbf)

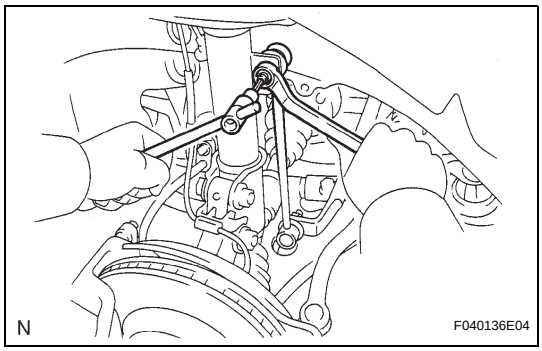
(b) Jack up the suspension lower arm assembly slowly using a wood block to avoid damage.



(c) Install the pneumatic front LH w/ shock absorber cylinder assembly (upper side) on the vehicle and fix tightly with the 3 nuts.
Torque: 80 N*m (816 kgf*cm, 59 ft.*lbf)



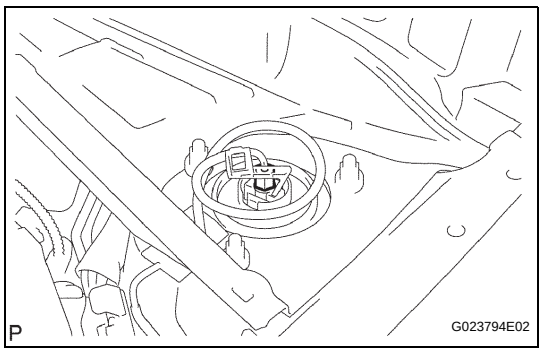
(d) Install the flexible hose and the front speed sensor wire harness on pneumatic front LH w/ shock absorber cylinder assembly with the bolt.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)
NOTICE:
Do not install the front speed sensor with the wire harness twisted.



2. CONNECT FRONT STABILIZER LINK ASSEMBLY LH

(a) Install the front stabilizer link assembly LH with the nut.
Torque: 74 N*m (755 kgf*cm, 55 ft.*lbf)

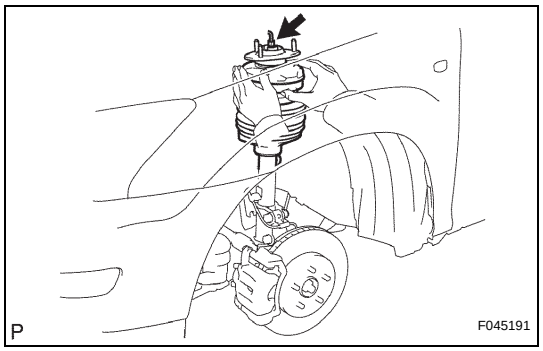
(b) Connect the height control sensor sub-assembly front LH to the front suspension arm sub-assembly lower No. 1 LH
HINT:
If the ball joint turns together with the nut, use a hexagon (6 mm) wrench to hold the stud.



3. CONNECT HEIGHT CONTROL TUBE NO.4

(a) Install the height control tube No. 4 to the pneumatic front LH w/ shock absorber cylinder assembly and tighten the locknut torque.
HINT:
- For connection and disconnection of the O-ring and height control tube No. 4 refer to the NOTICE for the suspension control system.
- When replacing the pneumatic front LH w/ shock absorber cylinder assembly it is unnecessary to replace the O-ring with a new one.

SP



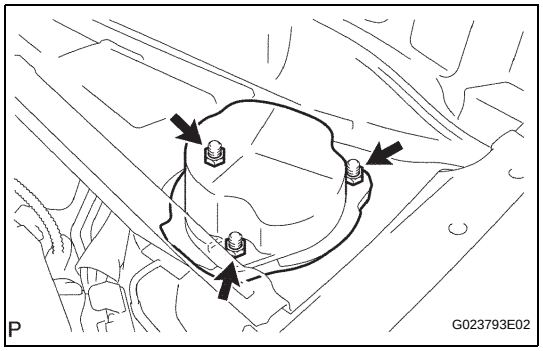
(b) Install the height control tube clamp No. 11.
NOTICE:
Keep the chamber of the pneumatic front LH w/ shock absorber cylinder assembly from moving by holding it with your hand.

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

(d) Jack down the vehicle slowly until all the tires are on the ground.
NOTICE:
When jacking down the vehicle, refer to the notice.

(e) Start the engine so that the pneumatic front LH w/ shock absorber cylinder assembly fills with air.
NOTICE:
When the pneumatic cylinder is not filled with air even after operating the compressor for more than 1 minute (height control indicator illumination blinks) re-start the engine and check if the compressor pots air into the cylinder.

4. INSPECT AIR LEAKAGE



5. INSTALL FRONT SHOCK ABSORBER CAP LH

(a) Install the front shock absorber cap LH with the 3 nuts.
Torque: 14 N*m (143 kgf*cm, 10 ft.*lbf)

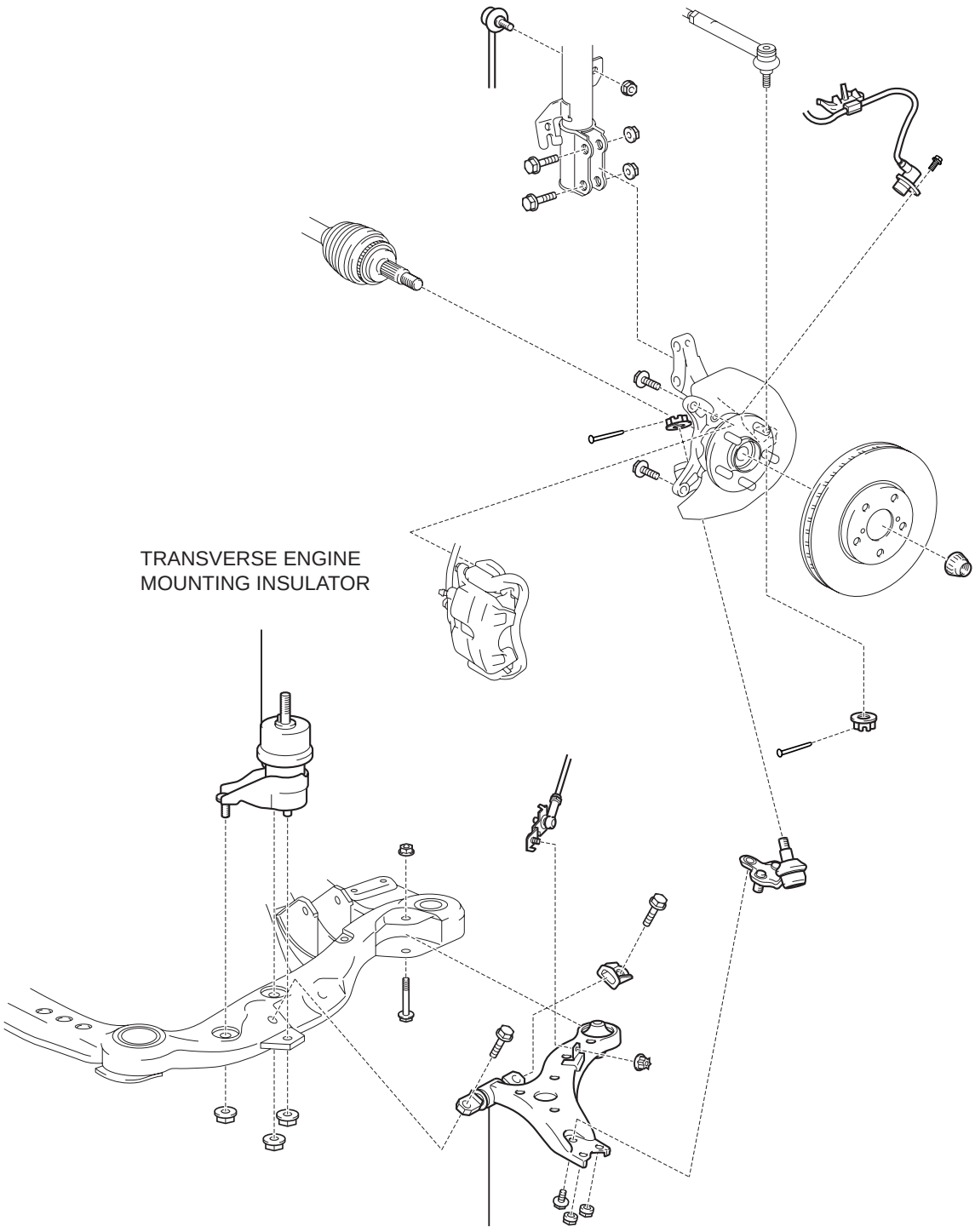
6. INSTALL COWL TOP SILENCER PAD LH

7. ADJUST VEHICLE HEIGHT

8. ADJUST FRONT WHEEL ALIGNMENT

FRONT SUSPENSION NO. 1 LOWER ARM

COMPONENTS

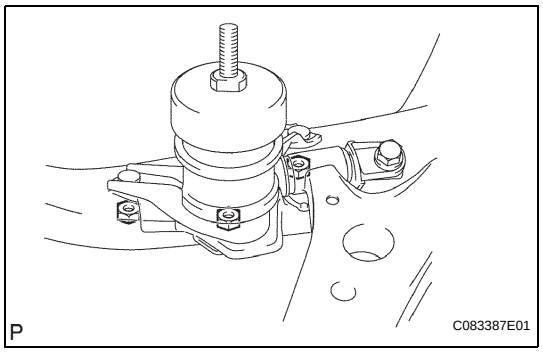


REMOVAL

1. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE

2. REMOVE TRANSVERSE ENGINE MOUNTING INSULATOR

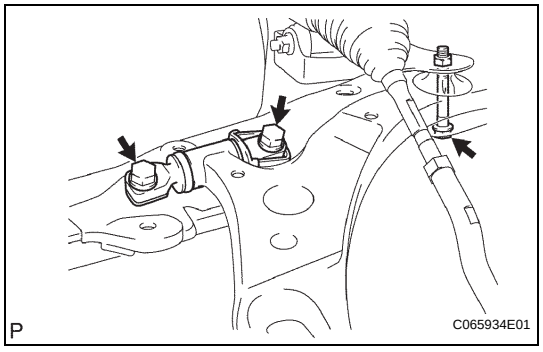
(a) Remove the 3 nuts and the transverse engine mounting insulator.



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

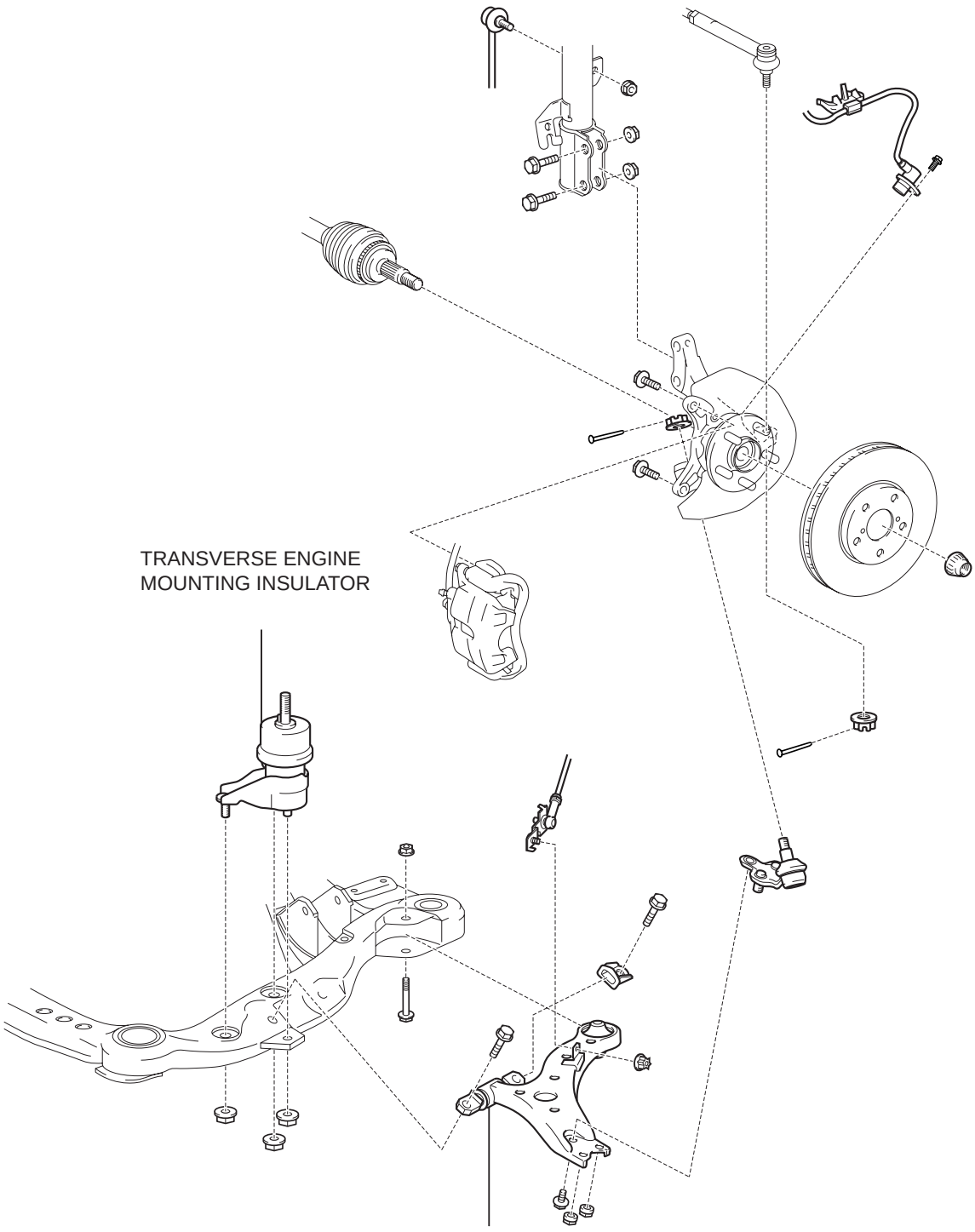
(a) Remove the 3 bolts and the nut on the suspension lower arm No. 1 and LH and remove it from the engine front support member.

(b) Remove the front lower arm bush stopper.



FRONT SUSPENSION NO. 1 LOWER ARM

COMPONENTS

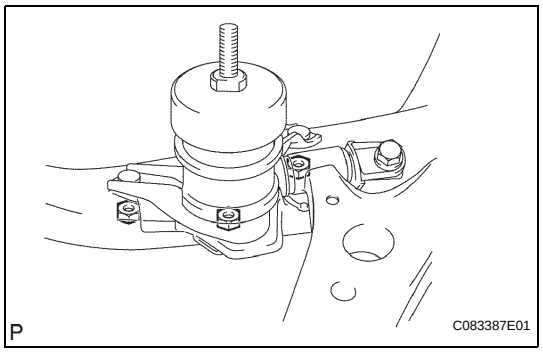


REMOVAL

1. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE

2. REMOVE TRANSVERSE ENGINE MOUNTING INSULATOR

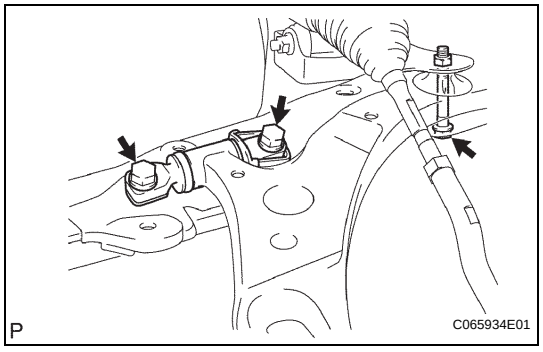
(a) Remove the 3 nuts and the transverse engine mounting insulator.



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

(a) Remove the 3 bolts and the nut on the suspension lower arm No. 1 and LH and remove it from the engine front support member.

(b) Remove the front lower arm bush stopper.



INSTALLATION

1. INSTALL FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 LH

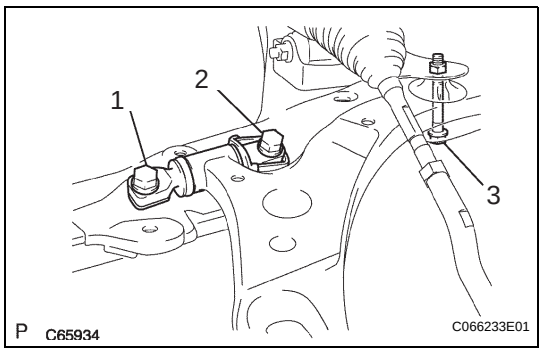
(a) Install the front lower arm bush stopper.

(b) Install the suspension lower arm No. 1 LH to the engine front support member with the 3 bolts and the nut but do not tighten.

(c) Tighten the 3 bolts in numerical order shown in the illustration.

Torque: 200 N*m (2,040 kgf*cm, 148 ft.*lbf) (bolt 1, 2)
206 N*m (2,100 kgf*cm, 152 ft.*lbf) (bolt 3)

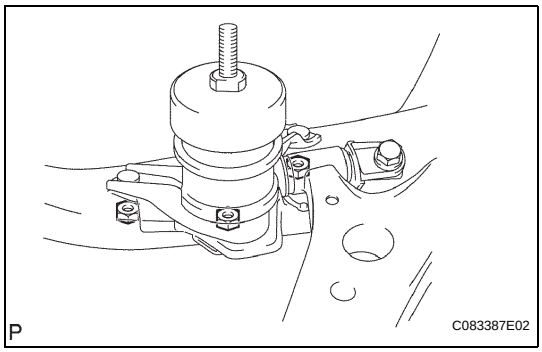
HINT:
Start installing the bolts from the front side of the vehicle.



2. INSTALL TRANSVERSE ENGINE MOUNTING INSULATOR

(a) Install the transverse engine mounting insulator with the 3 nuts.

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



3. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE

INSTALLATION

1. INSTALL FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 LH

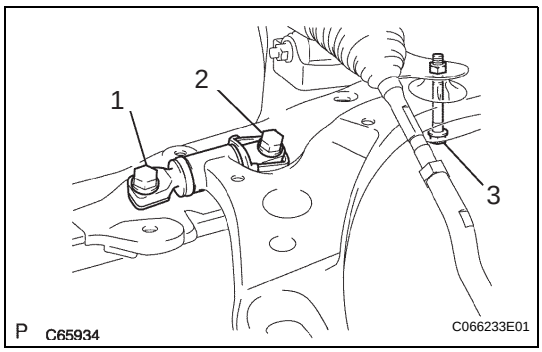
(a) Install the front lower arm bush stopper.

(b) Install the suspension lower arm No. 1 LH to the engine front support member with the 3 bolts and the nut but do not tighten.

(c) Tighten the 3 bolts in numerical order shown in the illustration.

Torque: 200 N*m (2,040 kgf*cm, 148 ft.*lbf) (bolt 1, 2)
206 N*m (2,100 kgf*cm, 152 ft.*lbf) (bolt 3)

HINT:
Start installing the bolts from the front side of the vehicle.



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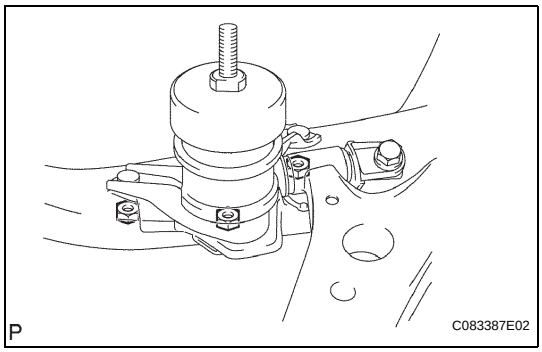
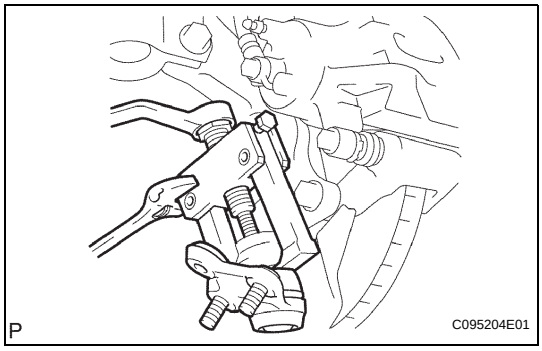
Torque: 87 N*m (887 kgf*cm, 64 ft.*lbf)

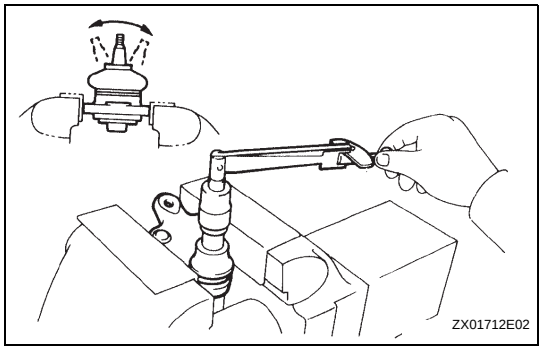


3. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE

REMOVAL

1. **REMOVE FRONT WHEEL**
2. **REMOVE FRONT AXLE HUB LH NUT**
   SST 09930-00010
3. **SEPARATE SPEED SENSOR FRONT LH (See page DS-5)**
4. **SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY LH (See page AH-5)**
5. **REMOVE FRONT DISC**
6. **SEPARATE TIE ROD END SUB-ASSEMBLY LH**
   SST 09628-62011
7. **SEPARATE FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 LH (See page DS-6)**
8. **REMOVE FRONT AXLE ASSEMBLY LH (See page DS-6)**
9. **REMOVE LOWER BALL JOINT ASSEMBLY FRONT LH**
   (a) Remove the cotter pin and castle nut.
   (b) Using SST, remove the lower ball joint assembly front LH.
   SST 09628-62011





INSPECTION

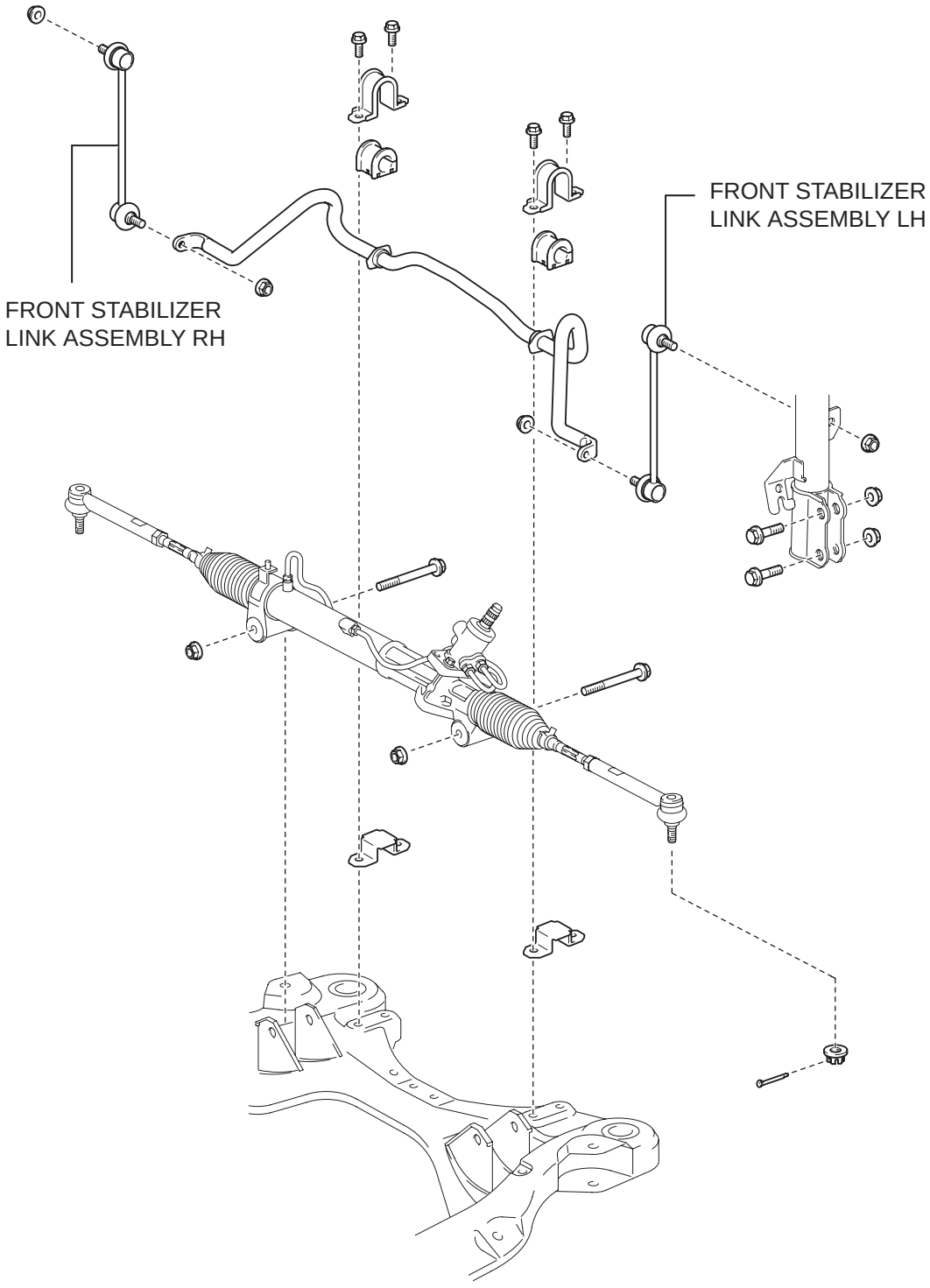
1. **INSPECT LOWER BALL JOINT ASSEMBLY FRONT LH**
   (a) As shown in the illustration, flip the ball joint stud back and forth 5 times before installing the nut.
   (b) Using a torque wrench, turn the nut continuously at a rate of 3 to 5 seconds per turn and take the torque reading on the 5th turn.
   Turning torque:
   0.98 to 3.43 N*m (10 to 35 kgf*cm, 8.7 to 30 in.*lbf)

INSTALLATION

1. **INSTALL LOWER BALL JOINT ASSEMBLY FRONT LH**
   (a) Install the lower ball joint assembly front LH to the steering knuckle with the nut.
   Torque: 123 N*m (1,250 kgf*cm, 91 ft.*lbf)
   NOTICE:
   Prevent oil from adhering to the screw and tapered parts.
   (b) Install a new cotter pin to the steering knuckle.
   NOTICE:
   If the holes for the cotter pin are not aligned, tighten the nut further up to 60°.
2. **INSTALL FRONT AXLE ASSEMBLY LH (See page DS-16)**
3. **INSTALL FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO. 1 LH (See page SP-21)**
4. **INSTALL TIE ROD END SUB-ASSEMBLY LH (See page DS-16)**
5. **INSTALL FRONT DISC**
6. **INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY LH (See page AH-9)**
7. **INSTALL SPEED SENSOR FRONT LH (See page DS-17)**
8. **INSTALL FRONT AXLE HUB LH NUT (See page DS-17)**
9. **INSTALL FRONT WHEEL**
   Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
10. **INSPECT AND ADJUST FRONT WHEEL ALIGNMENT** (See page SP-2)
11. **CHECK ABS SPEED SENSOR SIGNAL**

FRONT STABILIZER BAR (for 2WD)

COMPONENTS



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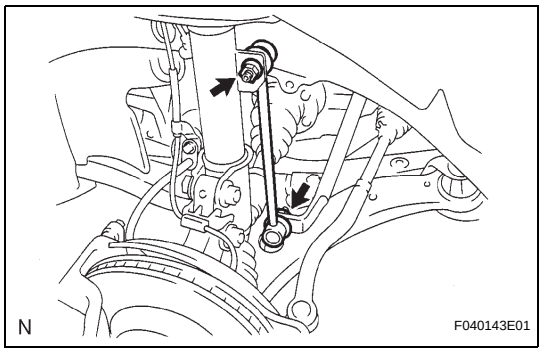
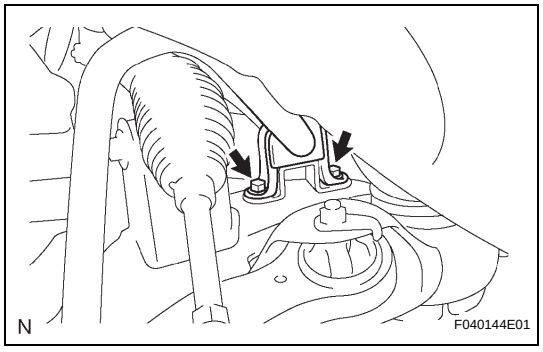
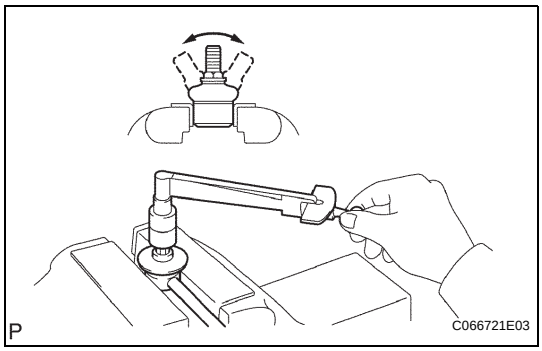
REMOVAL





1. **REMOVE FRONT WHEEL**
2. **REMOVE FRONT STABILIZER LINK ASSEMBLY LH**
   (a) Remove the 2 nuts and the front stabilizer link assembly LH.
   HINT:
   If the ball joint turns together with the nut, use a hexagon (6 mm) wrench to hold the stud.
3. **REMOVE FRONT STABILIZER LINK ASSEMBLY RH**
   HINT:
   Remove the RH side following the same procedures as with the LH side.
4. **REMOVE FRONT STABILIZER BRACKET NO.1 LH**
   (a) Remove the 2 bolts and the 2 front stabilizer No. 1 LH.
5. **REMOVE FRONT STABILIZER BRACKET NO.1 RH**
   HINT:
   Remove the RH side following the same procedures as with the LH side.
6. **REMOVE FRONT STABILIZER BRACKET NO.2 LH**
   (a) Remove the front stabilizer bracket No. 2 LH from the stabilizer bar bush.
7. **REMOVE FRONT STABILIZER BRACKET NO.2 RH**
   HINT:
   Remove the RH side following the same procedures as with the LH side.
8. **DISCONNECT TIE ROD END SUB-ASSEMBLY LH**
   SST 09628-62011
9. **DISCONNECT TIE ROD END SUB-ASSEMBLY RH**
   SST 09628-62011
   HINT:
   Disconnect the RH side by the same procedures with the LH side.
10. **SEPARATE STEERING INTERMEDIATE SHAFT SUB-ASSEMBLY**
11. **DISCONNECT STEERING GEAR OUTLET RETURN TUBE**
    SST 09023-12701
12. **DISCONNECT PRESSURE FEED TUBE ASSEMBLY**
    SST 09023-12701
13. **REMOVE POWER STEERING LINK ASSEMBLY**
14. **REMOVE FRONT STABILIZER BAR BUSH NO.1**
    (a) Remove the 2 bushes from the stabilizer.
15. **REMOVE STABILIZER BAR FRONT**
    (a) Remove the stabilizer bar front from the vehicle..



INSPECTION

1. INSPECT FRONT STABILIZER LINK ASSEMBLY LH

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

(b) Using a torque wrench, turn the nut continuously at a rate of 2 to 4 seconds per turn and take the torque reading on the 5th turn.

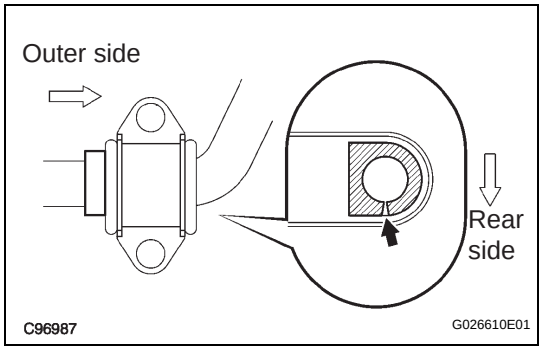
Turning torque:

0.05 to 1.96 N*m (0.5 to 20 kgf*cm, 0.4 to 17.4 in.*lbf)

INSTALLATION

1. INSTALL STABILIZER BAR FRONT

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



2. INSTALL FRONT STABILIZER BAR BUSH NO.1

(a) Install front stabilizer bar bush No. 1.
HINT:
Install the bush to the outer side of the bush stopper on the stabilizer bar.

3. INSTALL POWER STEERING LINK ASSEMBLY

4. INSTALL PRESSURE FEED TUBE ASSEMBLY
SST 09023-12701

5. INSTALL STEERING GEAR OUTLET RETURN TUBE
SST 09023-12701

6. CONNECT STEERING INTERMEDIATE SHAFT SUB-ASSEMBLY

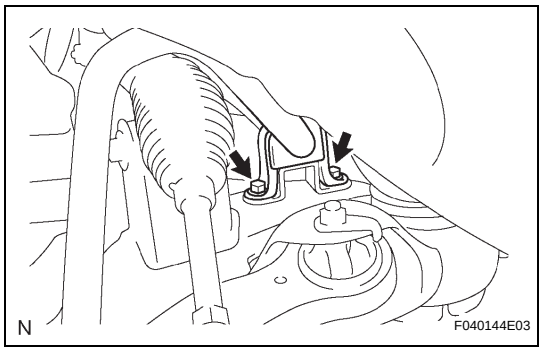
7. INSTALL TIE ROD END SUB-ASSEMBLY LH

8. INSTALL TIE ROD END SUB-ASSEMBLY RH
HINT:
Install the RH side side following the same procedures as with the LH side.

9. INSTALL FRONT STABILIZER BRACKET NO.2 LH

(a) Install the front stabilizer bracket No. 2 from the stabilizer bar bush No. 1.

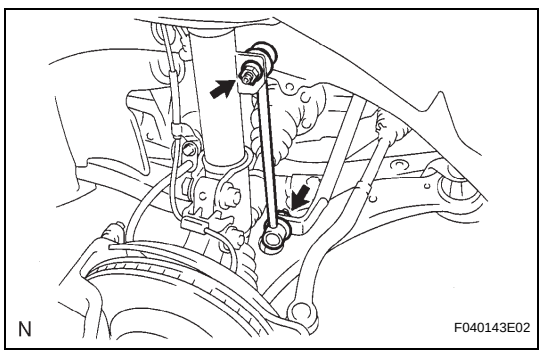
10. INSTALL FRONT STABILIZER BRACKET NO.2 RH
HINT:
Install the RH side side following the same procedures as with the LH side.



11. INSTALL FRONT STABILIZER BRACKET NO.1 LH

(a) Install the 2 front stabilizer brackets No. 1 LH with the 2 bolts.
Torque: 16 N*m (163 kgf*cm, 12 ft.*lbf)

12. INSTALL FRONT STABILIZER BRACKET NO.1 RH
HINT:
Install the RH side side following the same procedures as with the LH side.



13. INSTALL FRONT STABILIZER LINK ASSEMBLY LH

(a) Install the front stabilizer link assembly LH with the 2 nuts.
Torque: 74 N*m (755 kgf*cm, 55 ft.*lbf)
HINT:
If the ball joint turns together with the nut, use a hexagon (6 mm) wrench to hold the stud.

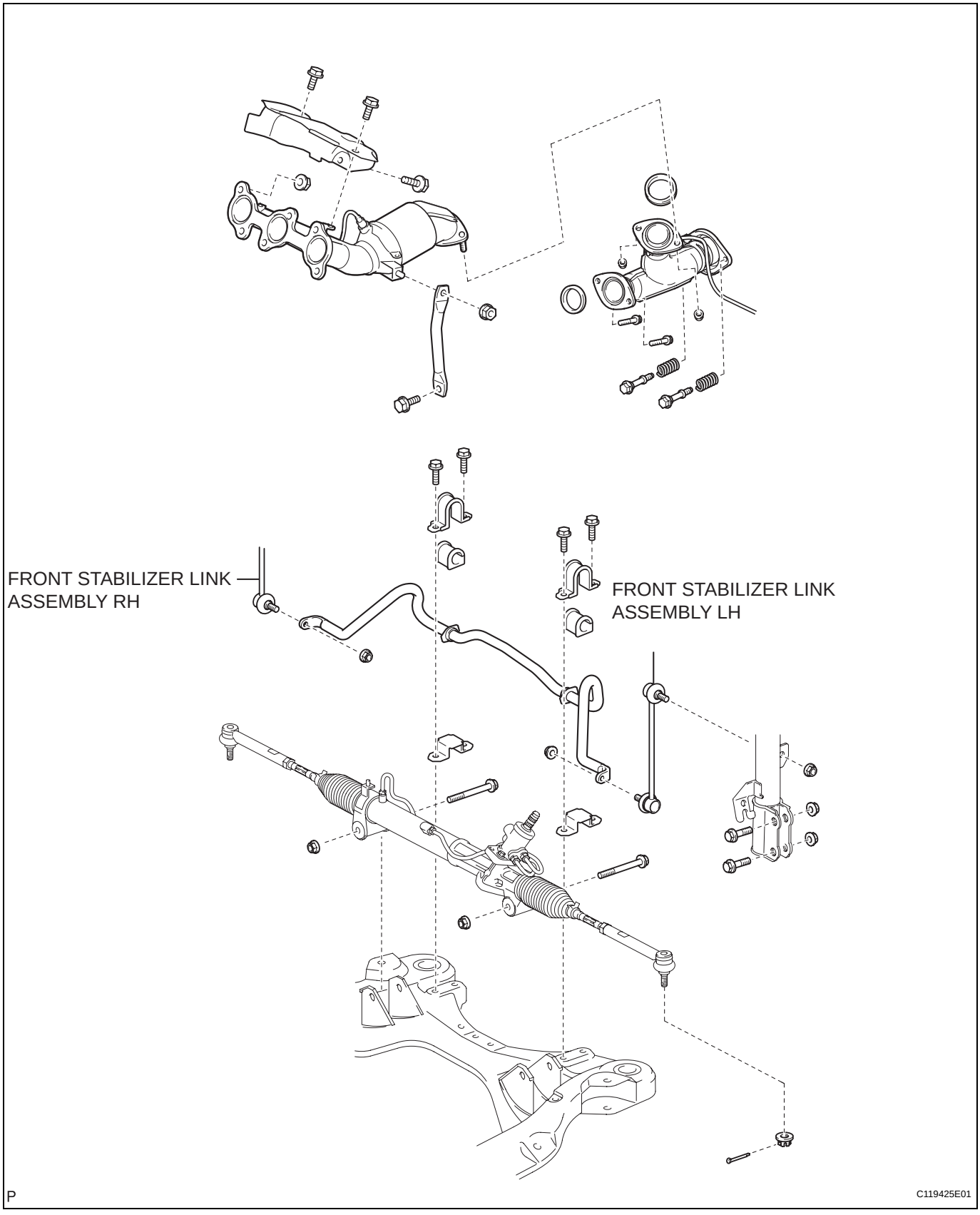
14. INSTALL FRONT STABILIZER LINK ASSEMBLY RH
HINT:
Install the RH side side following the same procedures as with the LH side.

SP

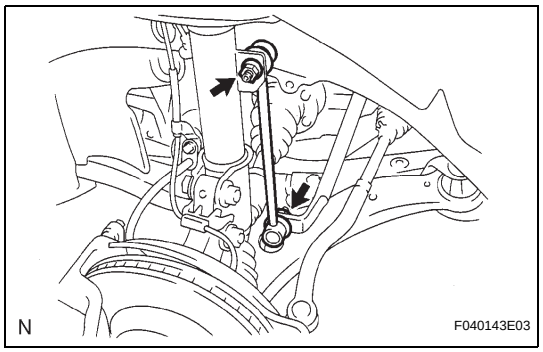
15. **INSTALL FRONT WHEEL**
    Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
16. **BLEED POWER STEERING FLUID**
17. **CHECK POWER STEERING FLUID LEAKAGE**
18. **INSPECT AND ADJUST STEERING WHEEL CENTER POINT**
19. **INSPECT AND ADJUST FRONT WHEEL ALIGNMENT**

FRONT STABILIZER BAR (for 4WD)

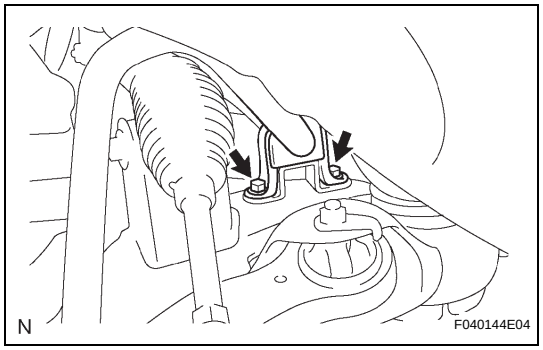
COMPONENTS



REMOVAL



1. **REMOVE FRONT WHEEL**
2. **REMOVE FRONT STABILIZER LINK ASSEMBLY LH**
   (a) Remove the 2 nuts and the front stabilizer link assembly LH.
   HINT:
   If the ball joint turns together with the nut, use a hexagon (6 mm) wrench to hold stud.
3. **REMOVE FRONT STABILIZER LINK ASSEMBLY RH**
   HINT:
   Remove the RH side following the same procedures as with the LH side.
4. **REMOVE ENGINE UNDER COVER NO.2**
5. **REMOVE EXHAUST PIPE SUB-ASSEMBLY FRONT NO.3**



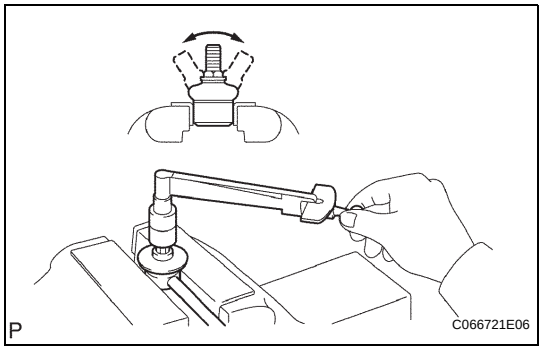
6. **REMOVE FRONT STABILIZER BRACKET NO.1 LH**
   (a) Remove the 2 bolts and 2 front stabilizer brackets No. 1 LH.
7. **REMOVE FRONT STABILIZER BRACKET NO.1 RH**
   HINT:
   Remove the RH side following the same procedures as with the LH side.
8. **REMOVE FRONT STABILIZER BRACKET NO.2 LH**
   (a) Remove the front stabilizer bracket No. 2 LH from the stabilizer bar bush.
9. **REMOVE FRONT STABILIZER BRACKET NO.2 RH**
   HINT:
   Remove the RH side by the same procedures with the LH side.
10. **SEPARATE TIE ROD END SUB-ASSEMBLY LH**
    SST 09628-62011
11. **SEPARATE TIE ROD END SUB-ASSEMBLY RH**
    SST 09628-62011
    HINT:
    Separate the RH side following the same procedures as with the LH side.
12. **SEPARATE STEERING INTERMEDIATE SHAFT SUB-ASSEMBLY**
13. **DISCONNECT RETURN TUBE ASSEMBLY**
    SST 09023-12701
14. **DISCONNECT PRESSURE FEED TUBE ASSEMBLY**
    SST 09023-12701
15. **REMOVE POWER STEERING LINK ASSEMBLY**
16. **REMOVE FRONT STABILIZER BAR BUSH NO.1**
    (a) Remove the 2 bushes from the stabilizer.
17. **REMOVE MANIFOLD STAY**

18. REMOVE EXHAUST MANIFOLD HEAT INSULATOR NO.1

19. REMOVE EXHAUST MANIFOLD CONVERTER SUB-ASSEMBLY

20. REMOVE STABILIZER BAR FRONT

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



INSPECTION

1. INSPECT FRONT STABILIZER LINK ASSEMBLY LH

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

(b) Using a torque wrench, turn the nut continuously at a rate of 2 to 4 seconds per turn and the torque reading on the 5th turn.

Torque: Turning torque

0.05 to 1.96 N*m (0.5 to 20 kgf*cm, 0.4 to 17.4 in.*lbf)

INSTALLATION

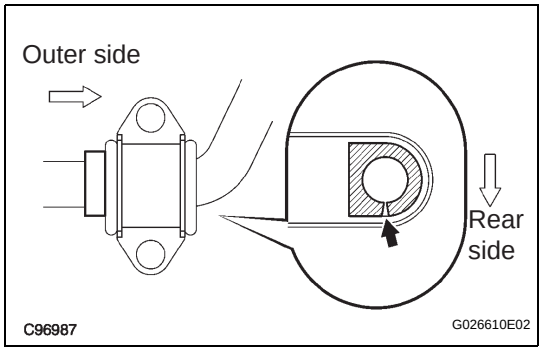
1. INSTALL STABILIZER BAR FRONT
(a) Install the stabilizer bar front from the vehicle.

2. INSTALL EXHAUST MANIFOLD CONVERTER SUB-ASSEMBLY

3. INSTALL EXHAUST MANIFOLD HEAT INSULATOR NO.1

4. INSTALL MANIFOLD STAY

5. INSTALL FRONT STABILIZER BAR BUSH NO.1
(a) Install front stabilizer bar bush No. 1.
HINT:
Install the bushing to the outer side of the bushing stopper on the stabilizer bar.



6. INSTALL POWER STEERING LINK ASSEMBLY

7. INSTALL PRESSURE FEED TUBE ASSEMBLY
SST 09023-12701

8. INSTALL RETURN TUBE ASSEMBLY
SST 09023-12701

9. CONNECT STEERING INTERMEDIATE SHAFT SUB-ASSEMBLY

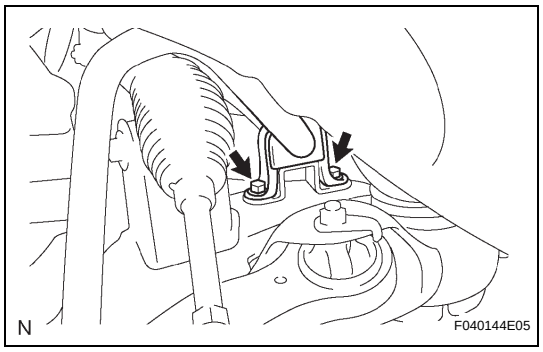
10. INSTALL TIE ROD END SUB-ASSEMBLY LH

11. INSTALL TIE ROD END SUB-ASSEMBLY RH
HINT:
Install the RH side following the same procedures as with the LH side.

12. INSTALL FRONT STABILIZER BRACKET NO.2 LH
(a) Install the front stabilizer bracket No. 2 from the stabilizer bar bush No. 1.

13. INSTALL FRONT STABILIZER BRACKET NO.2 RH
HINT:
Install the RH side following the same procedures as with the LH side.

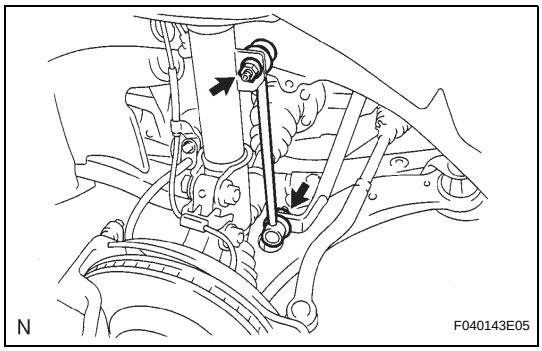
14. INSTALL FRONT STABILIZER BRACKET NO.1 LH
(a) Install the 2 front stabilizer brackets No. 1 LH with LH with the 2 bolts.
Torque: 16 N*m (163 kgf*cm, 12 ft.*lbf)



15. INSTALL FRONT STABILIZER BRACKET NO.1 RH
HINT:
Install the RH side following the same procedures as with the LH side.

16. INSTALL EXHAUST PIPE SUB-ASSEMBLY FRONT NO.3

17. INSTALL ENGINE UNDER COVER NO.2



18. INSTALL FRONT STABILIZER LINK ASSEMBLY LH

(a) Install the front stabilizer link assembly LH with the 2 nuts.

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

HINT:

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

19. INSTALL FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Install the RH side following the same procedures as with the LH side.

20. INSTALL FRONT WHEEL

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

21. BLEED POWER STEERING FLUID

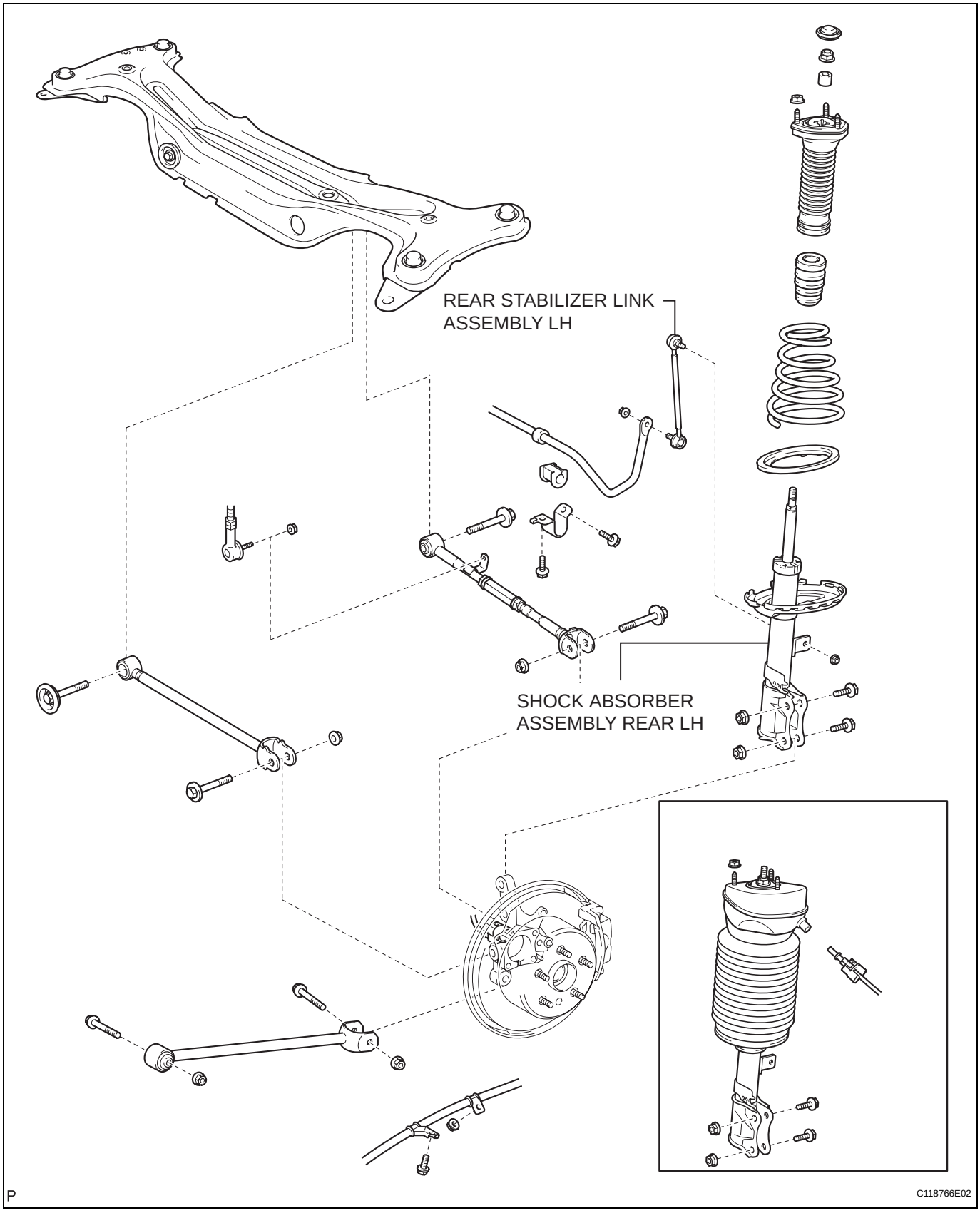
22. CHECK POWER STEERING FLUID LEAKAGE

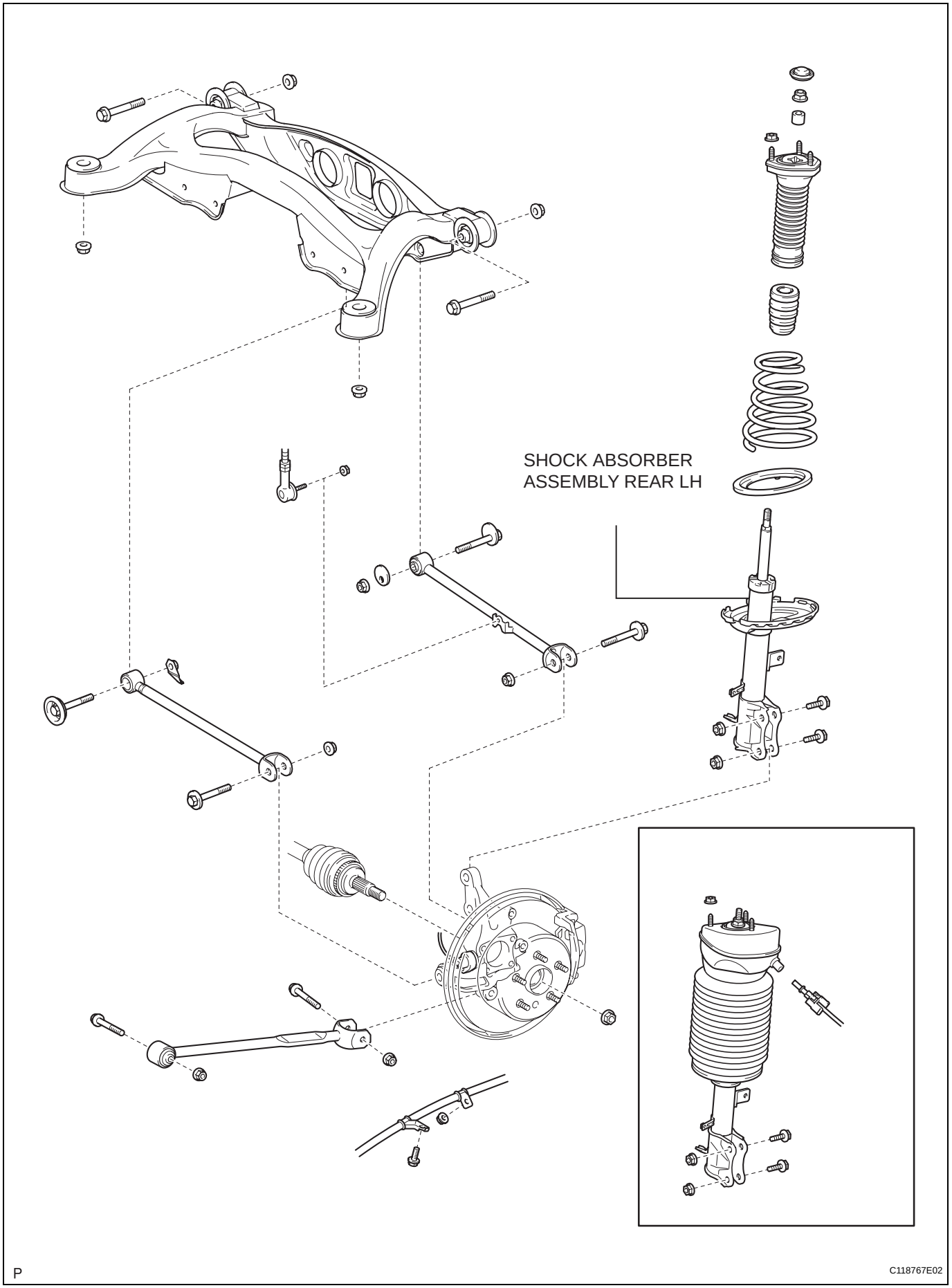
23. INSPECT AND ADJUST STEERING WHEEL CENTER POINT

24. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

REAR SHOCK ABSORBER

COMPONENTS

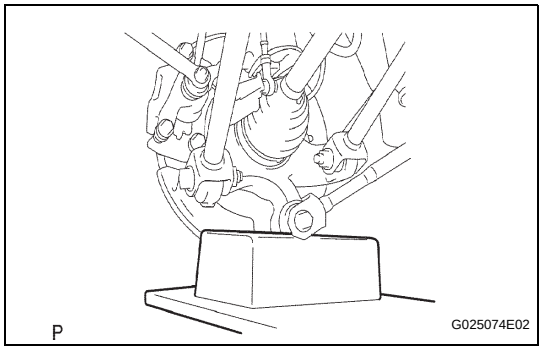


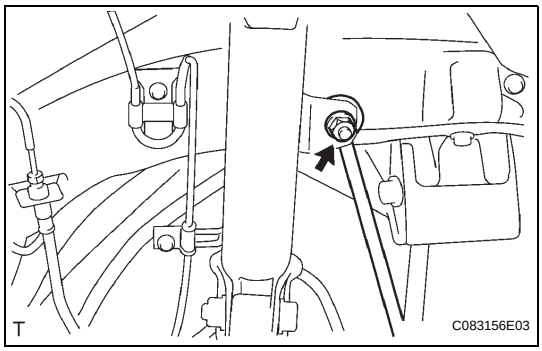

SHOCK ABSORBER
ASSEMBLY REAR LH
P
C118767E02

REMOVAL

NOTICE:
Support the rear axle carrier with a jack.

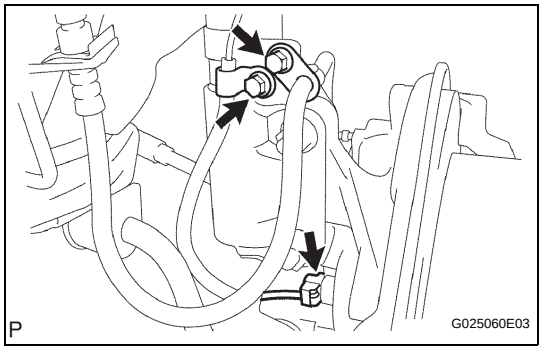
1. **REMOVE TONNEAU COVER ASSEMBLY**
2. **REMOVE DECK SIDE TRIM COVER LH**
3. **REMOVE REAR WHEEL**
4. **SEPARATE REAR STABILIZER LINK ASSEMBLY LH**
   (a) Support the rear axle carrier with a jack.



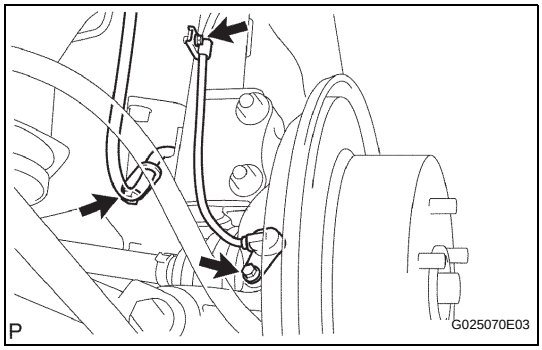


   (b) Remove the nut and disconnect the stabilizer link from the shock absorber.
   HINT:
   If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

5. **REMOVE REAR SHOCK ABSORBER WITH COIL SPRING**
   (a) 2WD models:
   Disconnect the skid control sensor connector.
   Remove the 2 bolts, and disconnect the flexible hose and skid control sensor wire from the shock absorber and rear axle carrier.



   (b) 4WD models:
   Remove the 3 bolts, and disconnect the flexible hose and speed sensor from the shock absorber and rear axle carrier.



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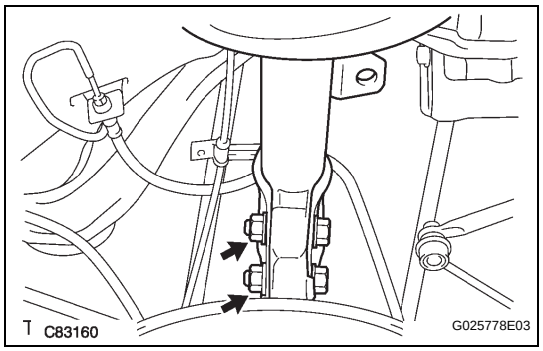
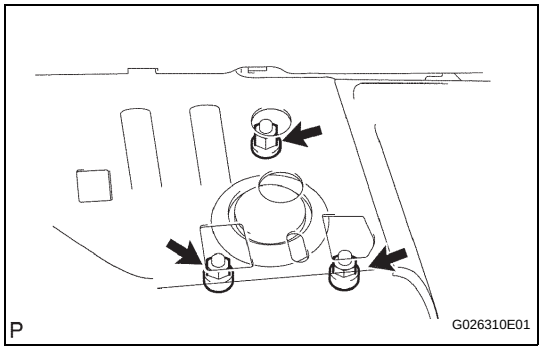


(c) Loosen the 2 nuts on the lower side of the shock absorber.
HINT:
Do not remove the 2 bolts and 2 nuts.
(d) Support the rear axle carrier with a jack.

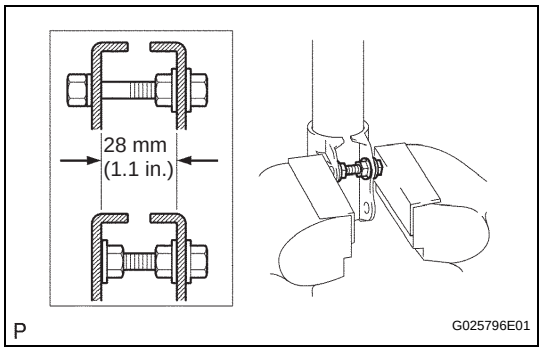


(e) Remove the 3 nuts.
(f) Lower the rear axle carrier, and remove the 2 nuts and 2 bolts on the lower side of the rear shock absorber.
(g) Remove the shock absorber with coil spring.

DISASSEMBLY

1. FIX REAR SHOCK ABSORBER WITH COIL SPRING

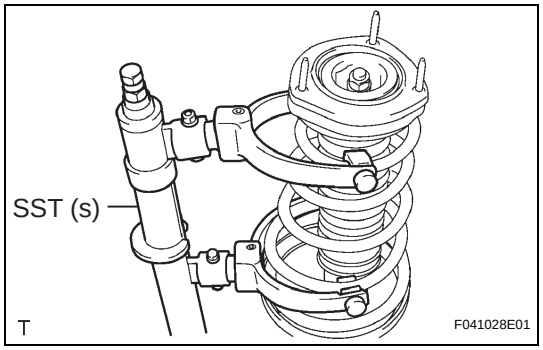
(a) Install the 2 nus and bolt to the bracket at the lower part of the shock absorber , and secure it in a vise as shown in the illustration to the left.



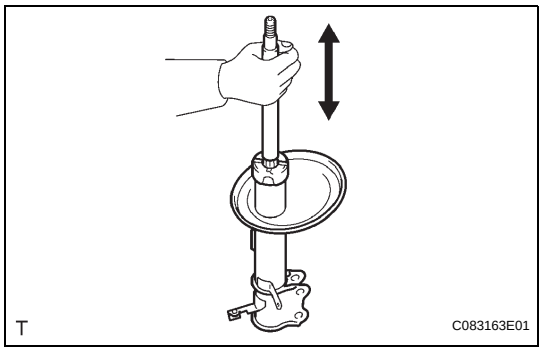
2. REMOVE SHOCK ABSORBER ASSEMBLY REAR LH

(a) Loosen the nut while holding the LH support suspension with a bar taped up so as not to damage the stud bolts.
NOTICE:
Do not damage the LH support suspension stud bolts.

(b) Using SST (s), compress the coil spring.
SST 09727-30021
NOTICE:
Do not use an impact wrench. It will damage the SST(s).



(c) Remove the nut, collar and LH support suspension.
(d) Remove the coil spring, spring bumper and insulator lower.



INSPECTION

1. INSPECT SHOCK ABSORBER ASSEMBLY REAR LH

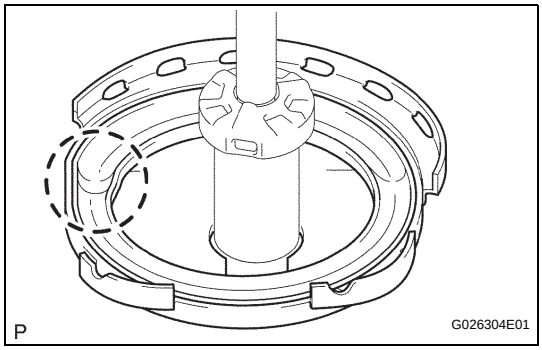
(a) Compress and extend the shock absorber rod, and check that there is no abnormal resistance or unusual sound.
If there is any abnormality, replace the shock absorber with a new one.
NOTICE:
When disposing of the shock absorber, see DISPOSAL (See page SP-40).

REASSEMBLY

1. INSTALL SHOCK ABSORBER ASSEMBLY REAR LH

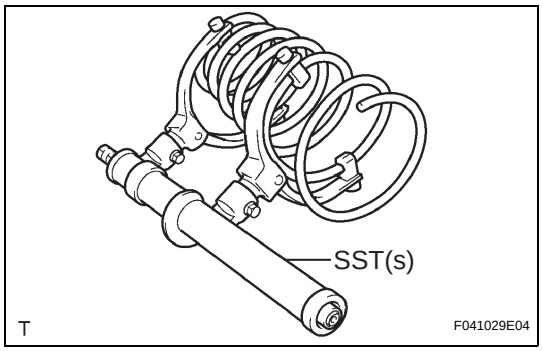
(a) Install the spring bumper.

(b) Install the insulator lower, as shown in the illustration.

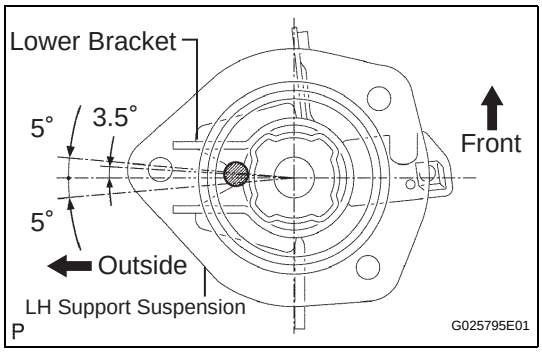


(c) Using SST (s), compress the coil spring.
SST 09727-30021
NOTICE:
Do not use an impact wrench. It will damage the SST(s).

(d) Install the coil spring to the shock absorber.
HINT:
Fit the lower end of the coil spring into the gap of the lower seat.



(e) Align the LH support suspension with the shock absorber lower bracket, as shown in the illustration.
HINT:
Ensure that the stud bolt is positioned 3.5° to the front of the vehicle as shown in the illustration, and the deviation should be within + - 5 °.

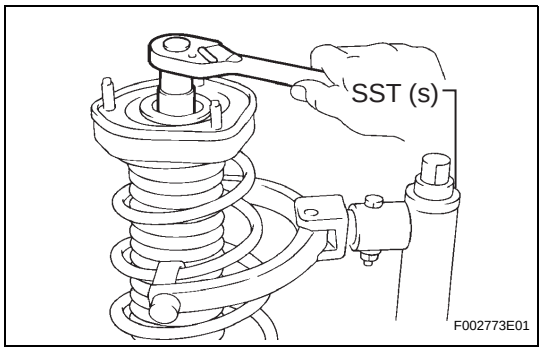


(f) Install the collar to the piston rod.

(g) Temporarily install the new nut.

(h) Remove the SST (s).
SST 09727-30021
HINT:
After removing SST (s), recheck the direction of the LH support suspension.

(i) Fully tighten the nut while holding the LH support suspension with a bar taped up so as not to damage the stud bolts.
Torque: 49 N*m (500 kgf*cm, 36 ft.*lbf)



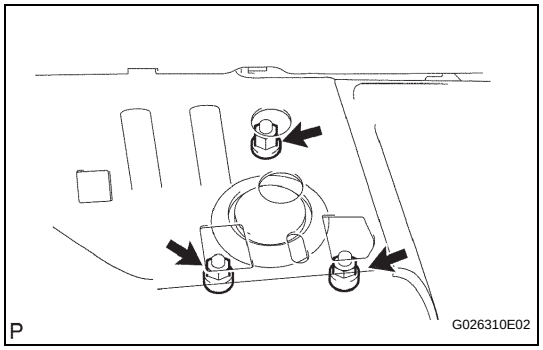
SP

NOTICE:
Do not damage the LH support suspension stud bolts.

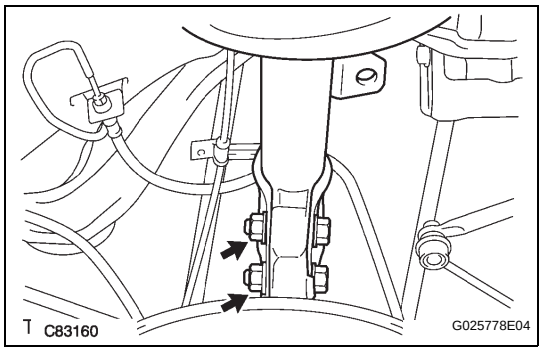
INSTALLATION

1. INSTALL REAR SHOCK ABSORBER WITH COIL SPRING

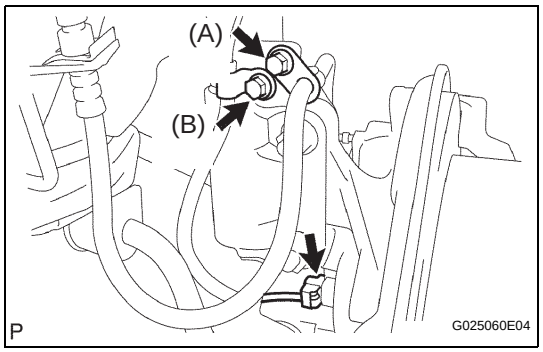
(a) Install the rear shock absorber with coil spring and 3 nuts.
Torque: 58 N*m (590 kgf*cm, 43 ft.*lbf)



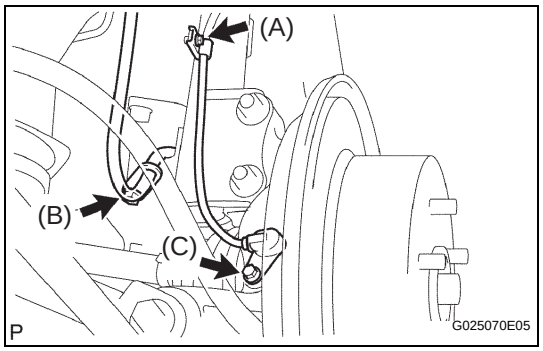
(b) Install the shock absorber with coil spring, 2 bolts and nuts.
Torque: 180 N*m (1,840 kgf*cm, 133 ft.*lbf)
NOTICE:
When installing the nuts, keep the bolts from rotating.

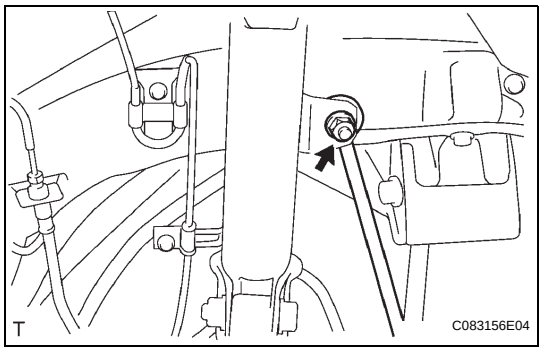


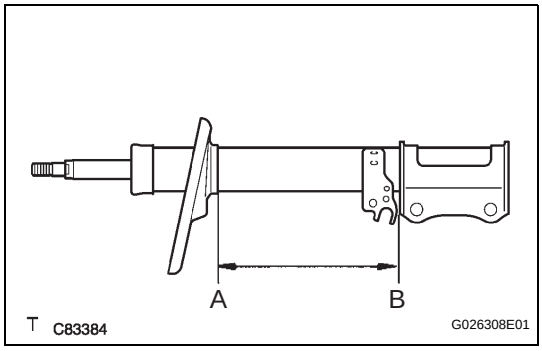
(c) 2WD models:
Install the flexible hose and skid control sensor wire with the 2 bolts. Connect the skid control sensor connector.
Torque: Bolt A
19 N*m (192 kgf*cm, 14 ft.*lbf)
Bolt B
5.0 N*m (51 kgf*cm, 44 in.*lbf)



(d) 4WD models:
Install the flexible hose and speed sensor wire the 3 bolts.
Torque: Bolt A
5.0 N*m (51 kgf*cm, 44 in.*lbf)
Bolt B
19 N*m (192 kgf*cm, 14 ft.*lbf)
Bolt C
8.0 N*m (82 kgf*cm, 71 in.*lbf)







2. **INSTALL REAR STABILIZER LINK ASSEMBLY LH**
   (a) Install the stabilizer link to the shock absorber with the nut.
   Torque: 39 N*m (400 kgf*cm, 29 ft.*lbf)
   HINT:
   If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

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

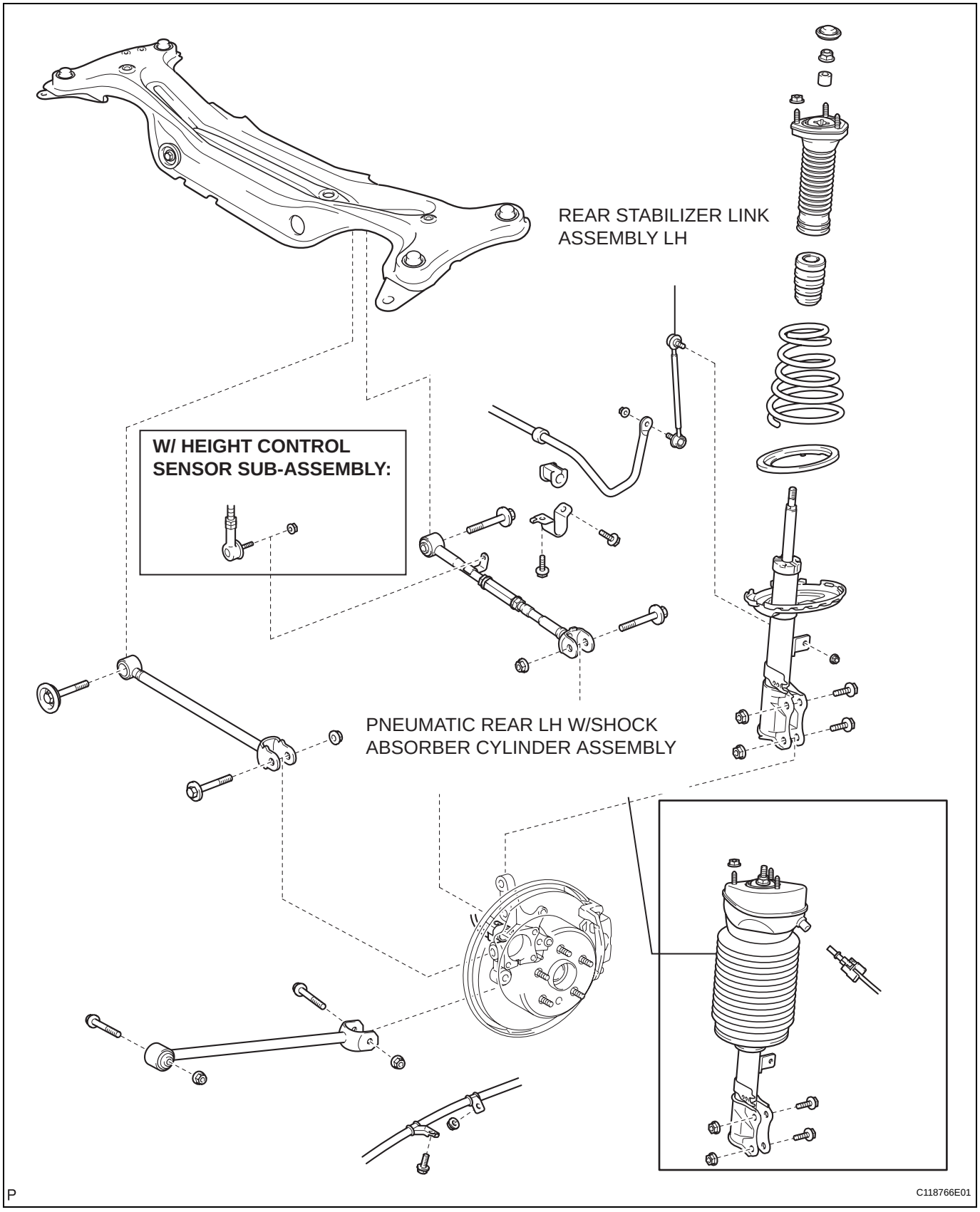
4. **INSPECT REAR WHEEL ALIGNMENT**
   (See page SP-7)

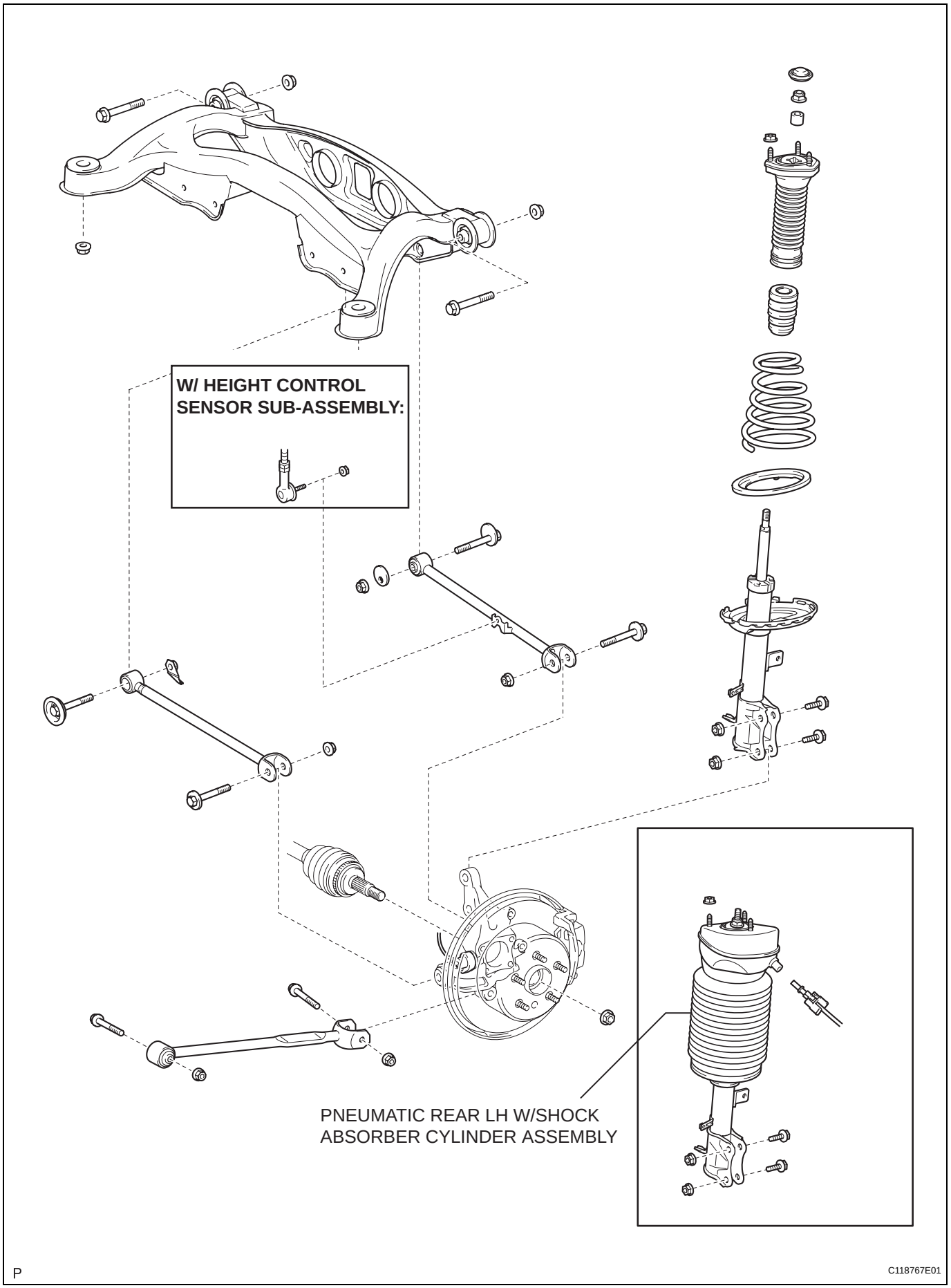
DISPOSAL

1. **DISPOSE OF SHOCK ABSORBER ASSEMBLY REAR LH**
   (a) Fully extend the shock absorber rod.
   (b) Using a drill, make a hole in the cylinder somewhere between A and B as shown in the illustration to discharge the gas inside.
   CAUTION:
   - **Be careful when drilling because shards of metal may fly about, so always use the proper safety equipment.**
   - **The gas is colorless, odorless and non-poisonous.**

PNEUMATIC CYLINDER WITH REAR SHOCK ABSORBER

COMPONENTS




W/ HEIGHT CONTROL SENSOR SUB-ASSEMBLY:
PNEUMATIC REAR LH W/SHOCK ABSORBER CYLINDER ASSEMBLY
P
C118767E01

REMOVAL

NOTICE:

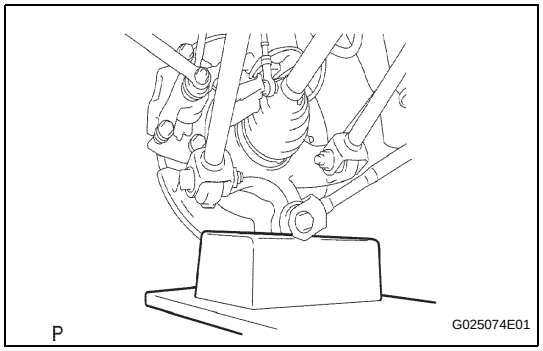
- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle.**
- **Support the rear axle carrier with a jack.**

1. REMOVE DECK SIDE TRIM COVER LH

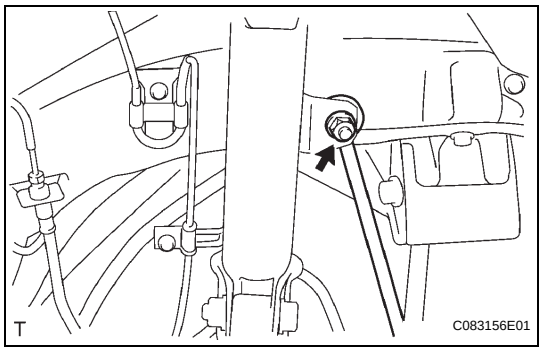
2. REMOVE REAR WHEEL

3. SEPARATE REAR STABILIZER LINK ASSEMBLY LH

(a) Support the rear axle carrier with a jack.



(b) Remove the nut, and disconnect the stabilizer link from the shock absorber.
HINT:
If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

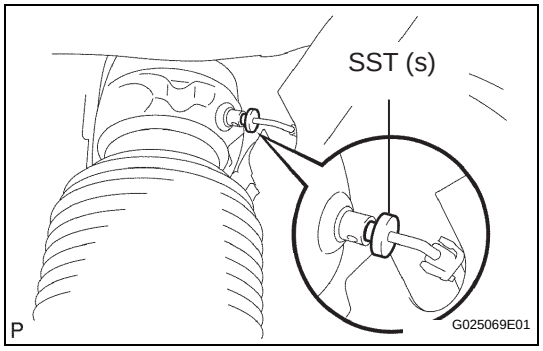


4. SEPARATE HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR LH

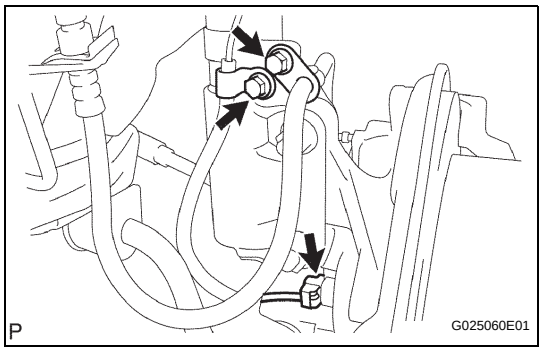
(a) 2WD models (See page SP-61)
(b) 4WD models (See page SP-64)

5. REMOVE PNEUMATIC REAR LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

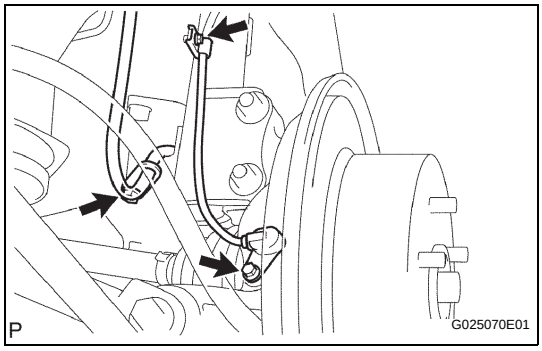
(a) Disconnect the connector No. 2.
(b) Using SST (s), remove the height control tube No. 7 from the pneumatic shock absorber.
SST 09730-00010



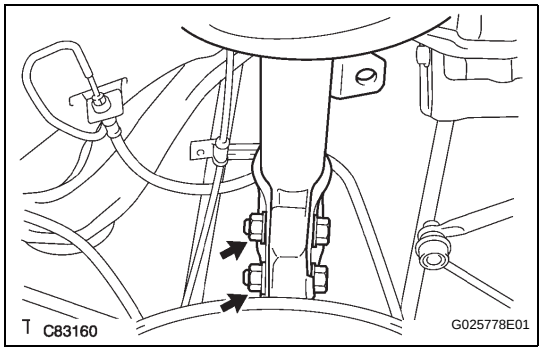
SP



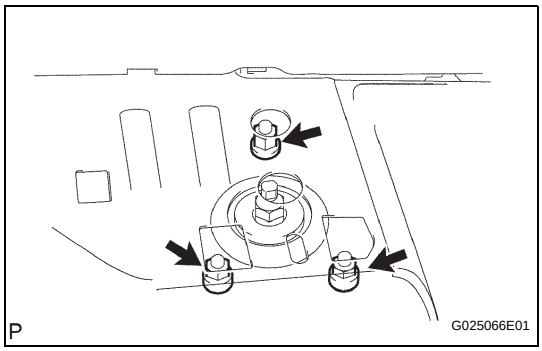
(c) 2WD models:
Disconnect the skid control sensor connector.
Remove the 2 bolts, and disconnect the flexible hose and skid control sensor wire from the pneumatic shock absorber.



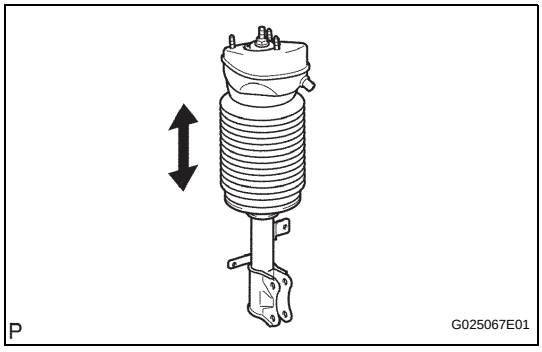
(d) 4WD models:
Remove the 3 bolts, and disconnect the flexible hose and speed sensor from the pneumatic shock absorber and rear axle carrier.



(e) Loosen the 2 nuts on the lower side of the pneumatic shock absorber.
HINT:
Do not remove the 2 bolts and 2 nuts.



(f) Remove the 3 nuts.
(g) Lower the rear axle carrier, and remove the 2 nuts and bolts on the lower side of the pneumatic shock absorber.
(h) Remove the pneumatic shock absorber.



INSPECTION

1. REMOVE PNEUMATIC REAR LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

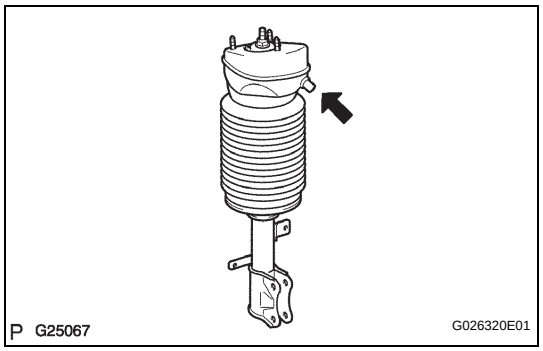
(a) Compress and extend the pneumatic shock absorber, and check that there is no abnormal resistance or unusual sound.
If there is any abnormality, replace the pneumatic shock absorber with a new one.

SP

NOTICE:

- **Be sure not to cover the connection part of the height control tube No. 7 when compressing and expanding the pneumatic shock absorber.**
- **Do not touch the dust cover as much as possible in order not to deform it.**
- **When disposing of the pneumatic shock absorber, see DISPOSAL (See page SP-46).**

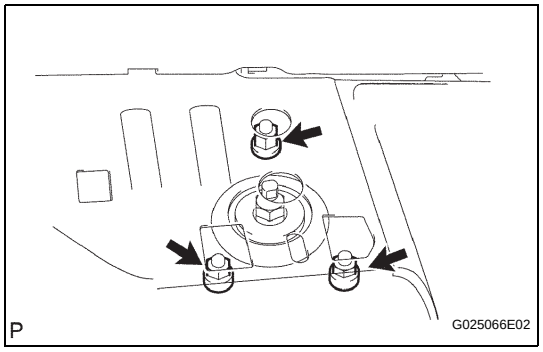
INSTALLATION



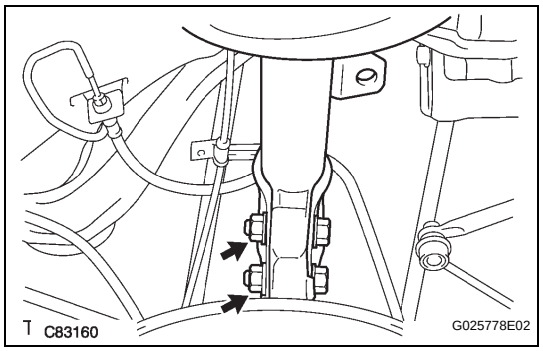
1. INSTALL PNEUMATIC REAR LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

(a) Coat a new O-ring with MP grease, and install it to the pneumatic shock absorber.
HINT:

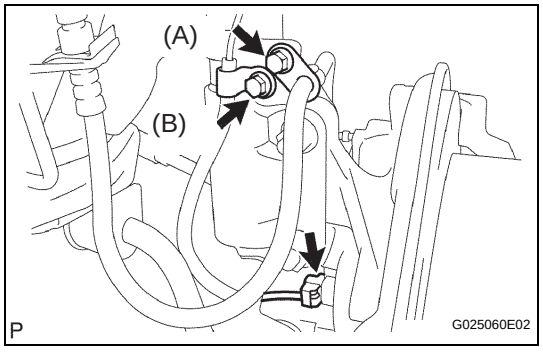
- For disconnection and connection of the O-ring and tube, See page SC-1.
- When replacing pneumatic cylinder assembly, it is un-necessary to replace the O-ring with a new one.



(b) Install the pneumatic shock absorber and 3 nuts.
Torque: 58 N*m (590 kgf*cm, 43 ft.*lbf)

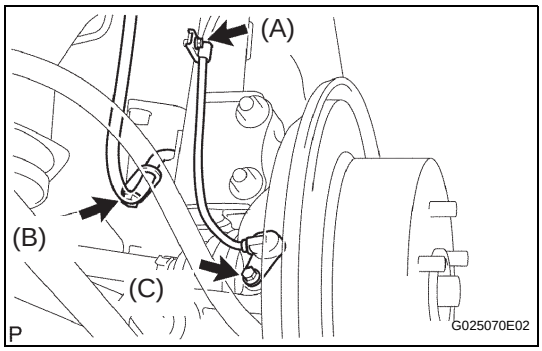


(c) Install the pneumatic shock absorber, 2 bolts and nuts.
Torque: 180 N*m (1,840 kgf*cm, 133 ft.*lbf)
NOTICE:
When installing the nut, keep the bolt from rotating.



(d) 2WD models:
Install the flexible hose and skid control sensor wire with the 2 bolts. Connect the skid control sensor connector.
Torque: Bolt A
19 N*m (192 kgf*cm, 14 ft.*lbf)
Bolt B
5.0 N*m (51 kgf*cm, 44 in.*lbf)

SP



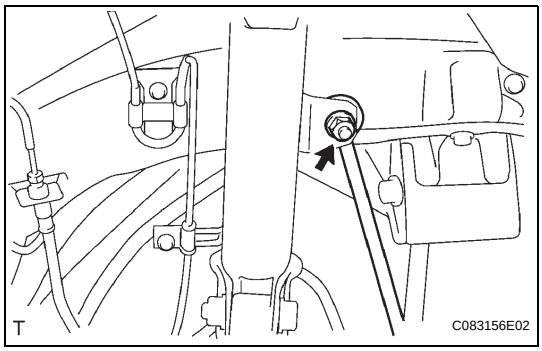
(e) 4WD models:
Install the flexible hose and speed sensor with the 3 bolts.
Torque: Bolt A
5.0 N*m (51 kgf*cm, 44 in.*lbf)
Bolt B
19 N*m (192 kgf*cm, 14 ft.*lbf)
Bolt C
8.0 N*m (82 kgf*cm, 71 in.*lbf)

(f) Connect the height control tube No. 7 and connector No . 2 to the pneumatic shock absorber.

2. INSTALL HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR LH

(a) 2WD models (See page SP-61)

(b) 4WD models (See page SP-64)



3. INSTALL REAR STABILIZER LINK ASSEMBLY LH

(a) Install the stabilizer link to the pneumatic shock absorber with the nut.
Torque: 39 N*m (400 kgf*cm, 29 ft.*lbf)
HINT:
If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

4. INSTALL REAR WHEEL

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

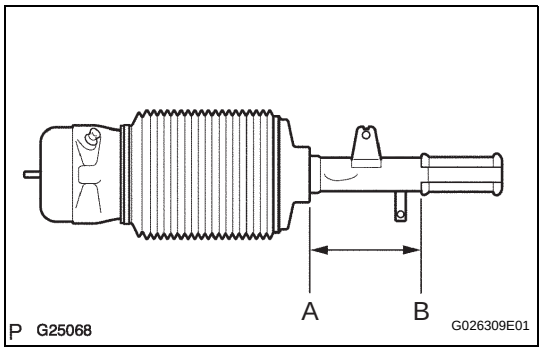
(b) Jack down the vehicle slowly until all the are on the ground.

(c) Start the engine so that the pneumatic shock absorber fills with air.
NOTICE:
When the pneumatic shock absorber is not filled with air even after operating the compressor for move than 1 minute (height control indicator illumination blinks), re-start the engine and check if the compressor puts air into the pneumatic shock absorber.

5. ADJUST VEHICLE HEIGHT

6. ADJUST HEADLIGHT AIM ONLY

DISPOSAL



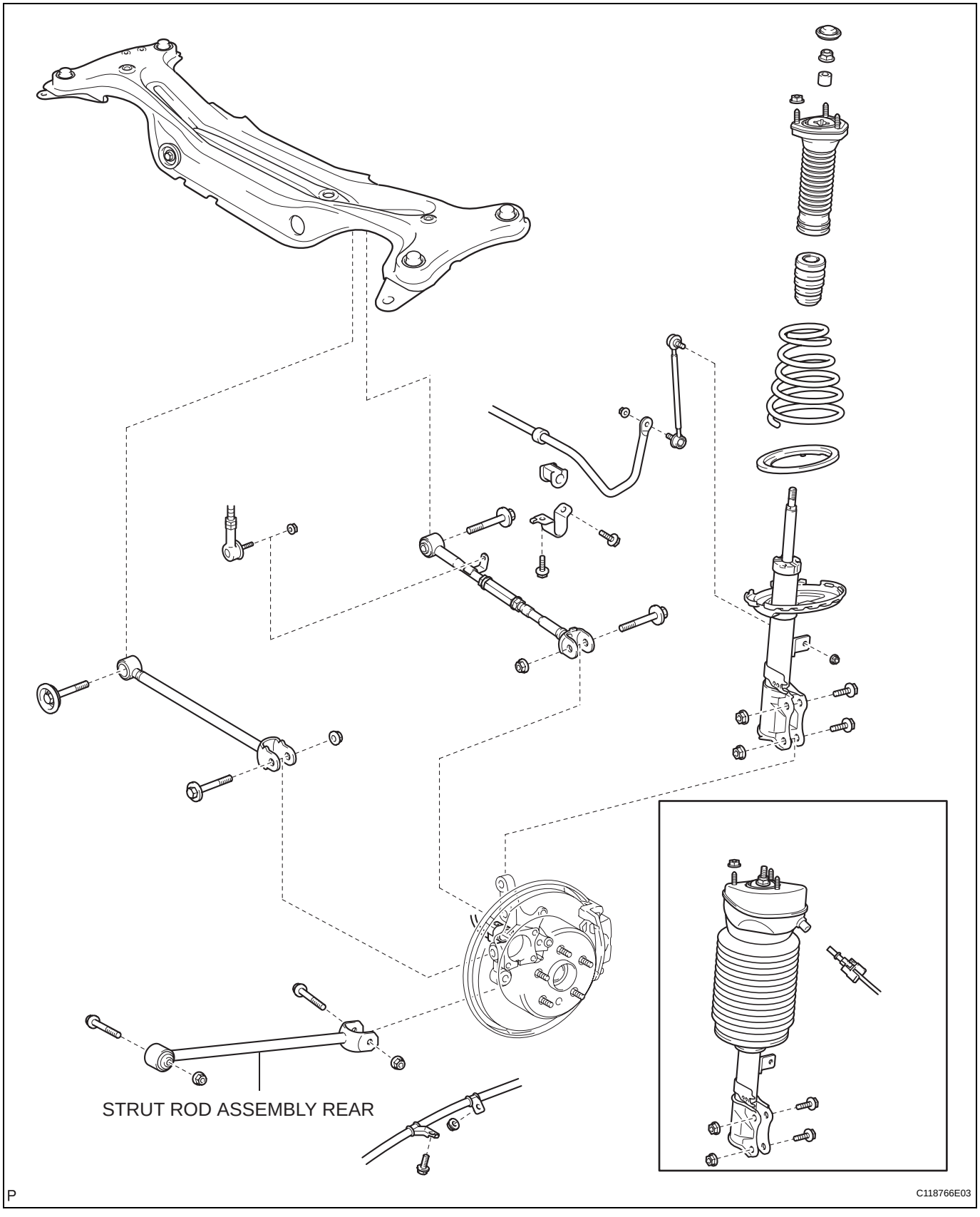
1. DISPOSE OF PNEUMATIC REAR LH W/SHOCK ABSORBER CYLINDER ASSEMBLY

(a) Fully extend the shock absorber rod.

(b) Using a drill, make a hole in the cylinder somewhere between A and B as shown in the illustration to discharge the gas inside.
CAUTION:
- **Be careful when drilling because shards of metal may fly about, so always use the proper safety equipment.**
- **The bas is colorless, odorless and non-poisonous.**

REAR STRUT ROD

COMPONENTS



REMOVAL

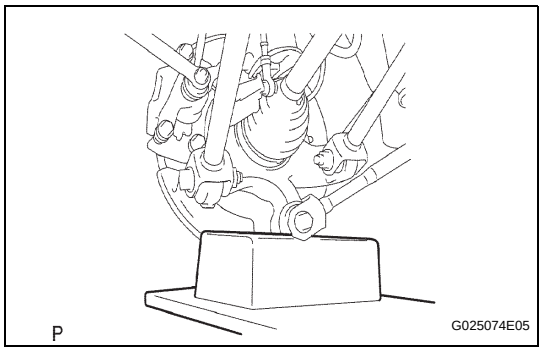
NOTICE:

- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle with air suspension.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle with air suspension.**
- **Support the rear axle carrier with a jack.**

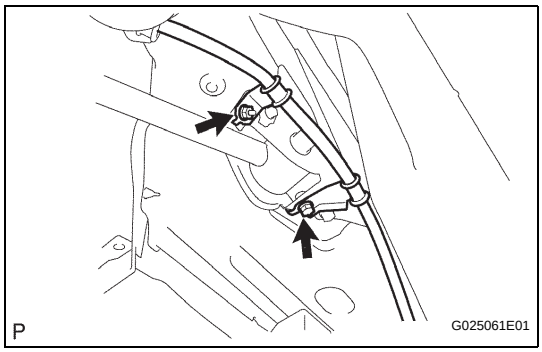
1. REMOVE REAR WHEEL

2. REMOVE STRUT ROD ASSEMBLY REAR

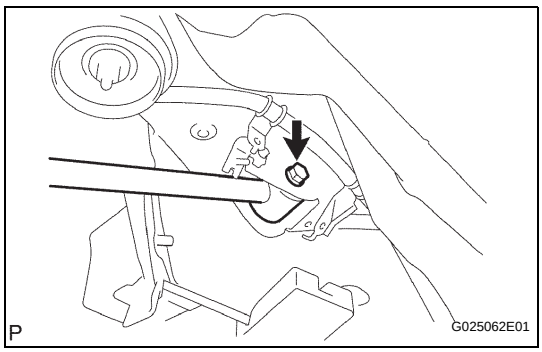
(a) Support the rear axle carrier with a jack.



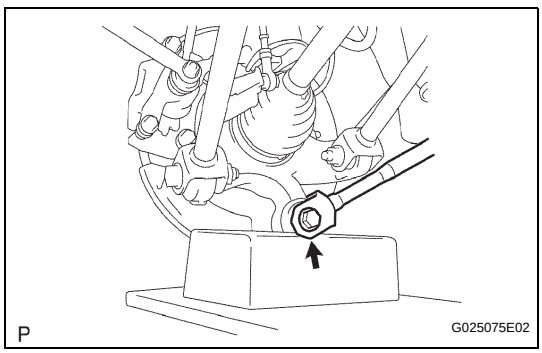
(b) Remove the bolt and nut, and separate the parking brake cable.
NOTICE:
When removing the bolt, keep the nut from rotating.



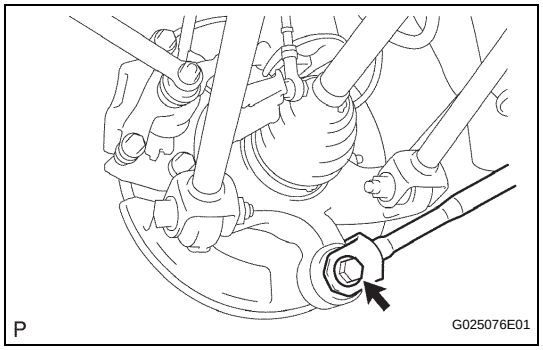
(c) Remove the bolt and nut, and disconnect the strut rod (front side).
NOTICE:
When removing the bolt, keep the nut from rotating.



(d) Remove the bolt, nut and strut rod from the rear axle carrier.
NOTICE:
When removing the bolt, keep the nut from rotating.



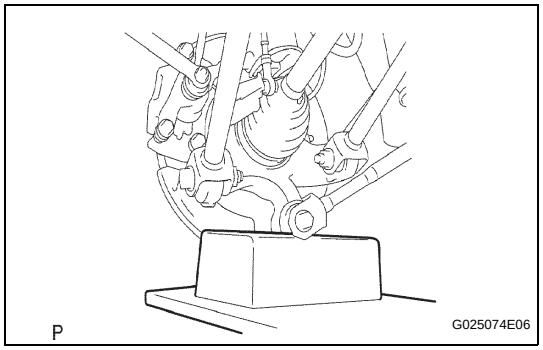
SP



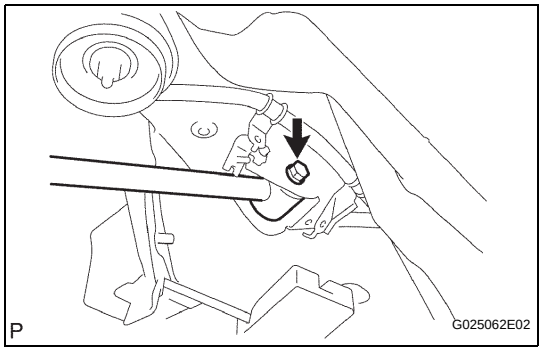
INSTALLATION

1. TEMPORARILY TIGHTEN STRUT ROD ASSEMBLY REAR

(a) Install the strut rod (rear side), bolt and nut, and temporarily tighten the bolt.
NOTICE:
When installing the bolt, tighten the bolt temporarily with the nut fixed.



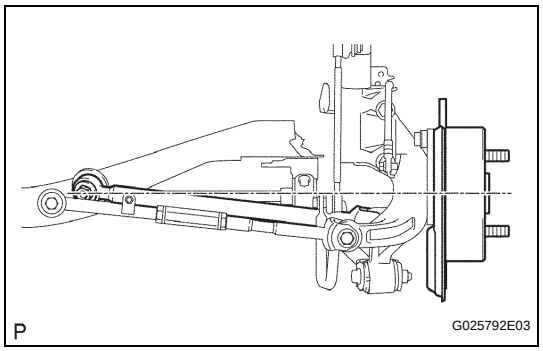
(b) Support the rear axle carrier.



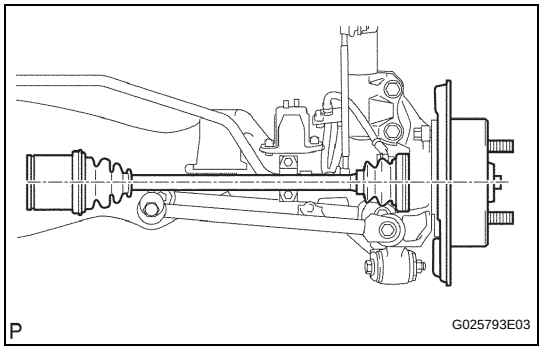
(c) Connect the strut rod (inner side) with the bolt and nut.
NOTICE:
When installing the bolt, tighten the bolt temporarily with the nut fixed.

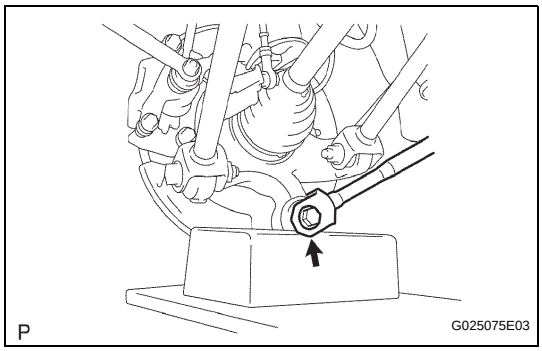
2. STABILIZE SUSPENSION

(a) 2WD:
Jack up the rear axle carrier, placing a wood block to avoid damage. Apply load to the suspension so that the installed bolt of the suspension arm assembly No. 1 (inner side of vehicle) is horizontally aligned with the center of the rear axle hub.



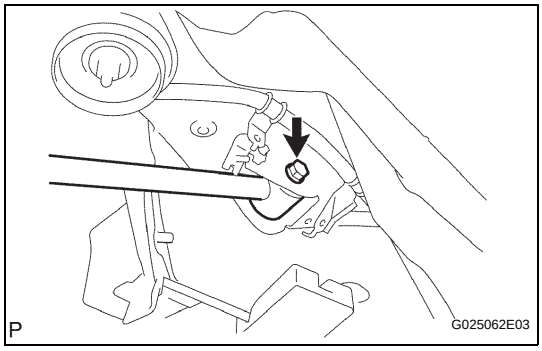
(b) 4WD:
Jack up the rear axle carrier, placing a wood block to avoid damage. Apply load to the suspension so that the rear drive shaft assembly is horizontally positioned.



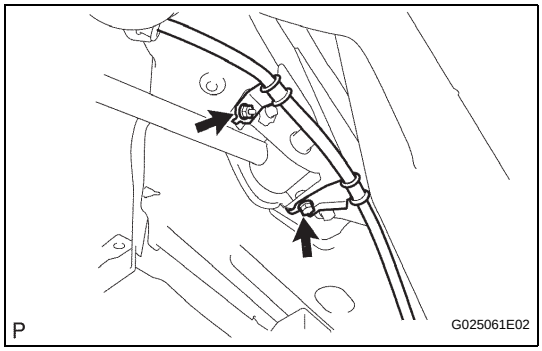


3. FULLY TIGHTEN STRUT ROD ASSEMBLY REAR

(a) Fully tighten the bolt.
Torque: 80 N*m (816 kgf*cm, 59 ft.*lbf)



(b) Fully tighten the bolt.
Torque: 80 N*m (816 kgf*cm, 59 ft.*lbf)



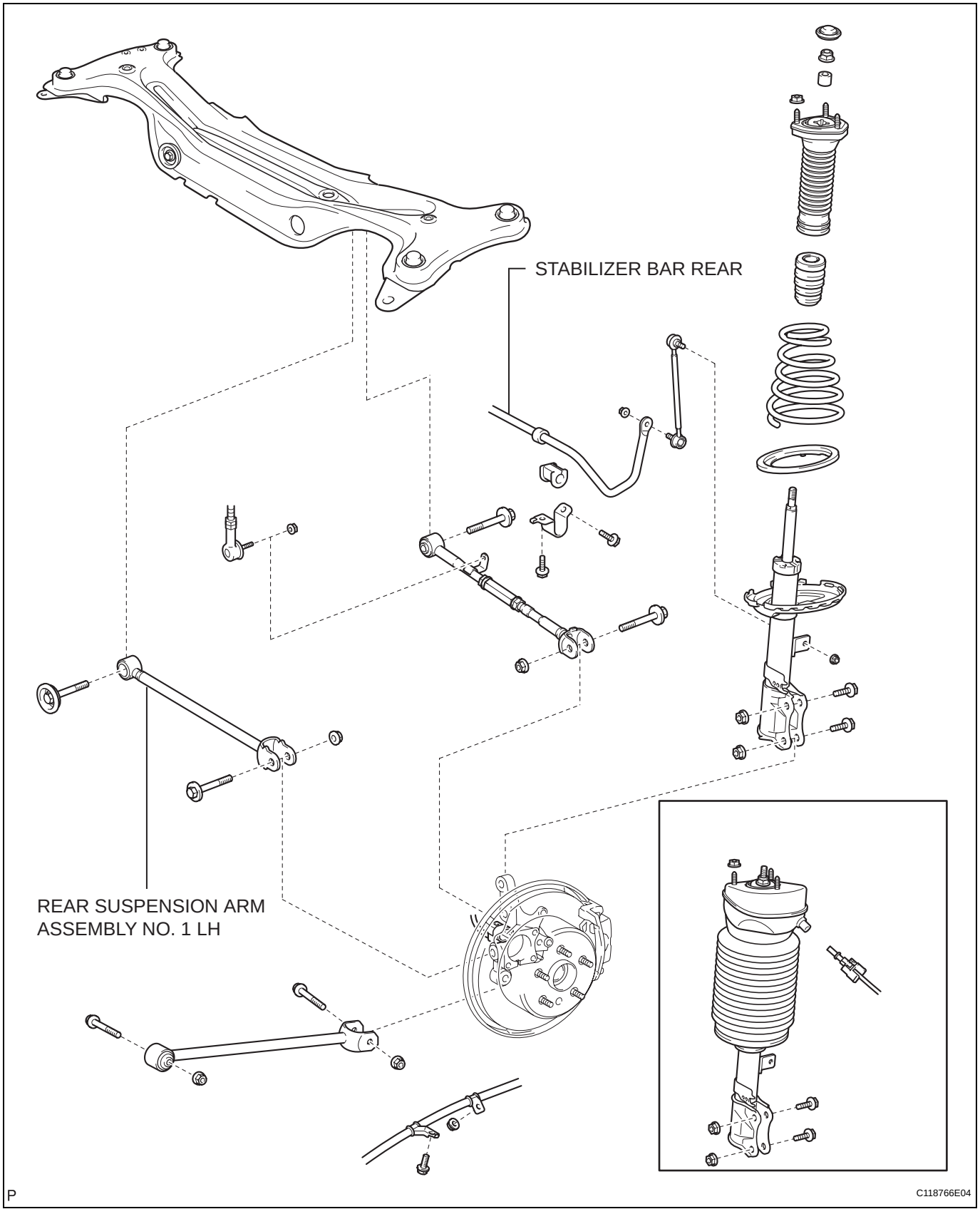
(c) Install the parking brake cable with the bolt and nut.
Torque: Bolt
39 N*m (400 kgf*cm, 29 ft.*lbf)
Nut
6.0 N*m (61 kgf*cm, 53 in.*lbf)

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

5. INSPECT REAR WHEEL ALIGNMENT

REAR SUSPENSION NO. 1 ARM (for 2WD)

COMPONENTS



SP

REMOVAL

NOTICE:

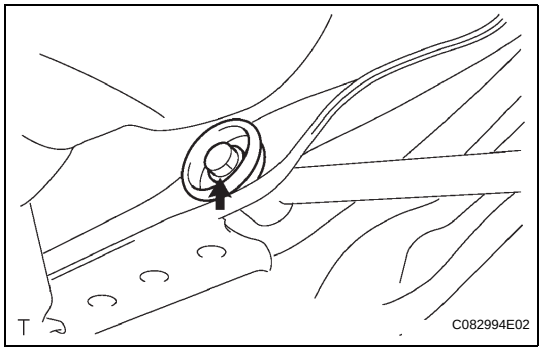
- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle with air suspension.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle with air suspension.**
- **Support the rear axle carrier with a jack.**

1. REMOVE REAR WHEEL

2. REMOVE STABILIZER BAR REAR (See page SP-67)

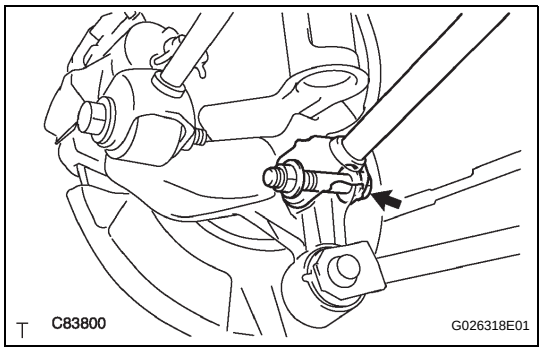
3. REMOVE REAR SUSPENSION ARM ASSEMBLY NO. 1 LH

(a) Remove the bolt and disconnect the rear suspension arm assembly No. 1 (inner side).



(b) Remove the bolt, nut and the rear suspension arm assembly No. 1 (outer side) from the rear axle carrier.

NOTICE:
When removing the bolt, keep the nut from rotating.

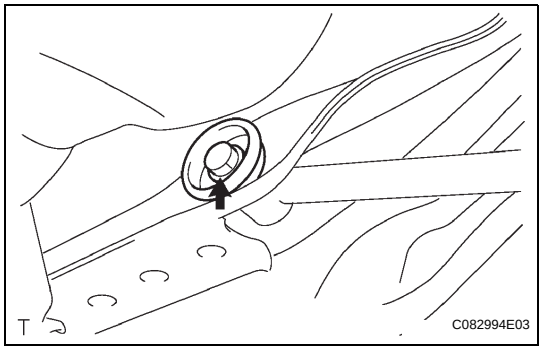


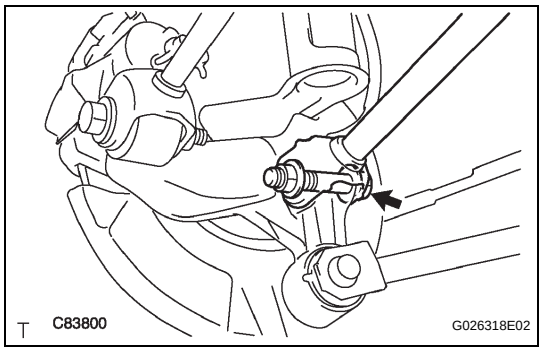
INSTALLATION

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

(a) Install the rear suspension arm assembly No. 1 (inner side) with the bolt, and temporarily tighten the bolt.

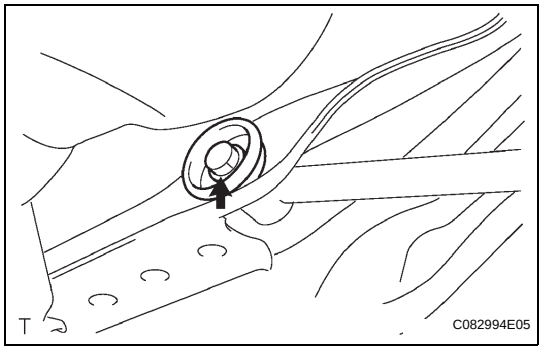
HINT:
Ensure that the paint mark faces to the rear.





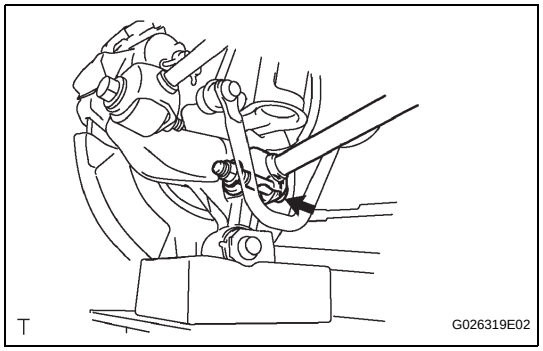
(b) Connect the rear suspension arm assembly No. 1 (outer side) to the rear axle carrier with the bolt and nut, and temporarily tighten the bolt and nut.
NOTICE:
When installing the bolt, tighten the bolt temporarily with the nut fixed.

2. STABILIZE SUSPENSION (See page SP-49)



3. FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO. 1 LH

(a) Fully tighten the bolt.
Torque: 120 N*m (1,224 kgf*cm, 89 ft.*lbf)



(b) Fully tighten the bolt.
Torque: 112 N*m (1,140 kgf*cm, 83 ft.*lbf)

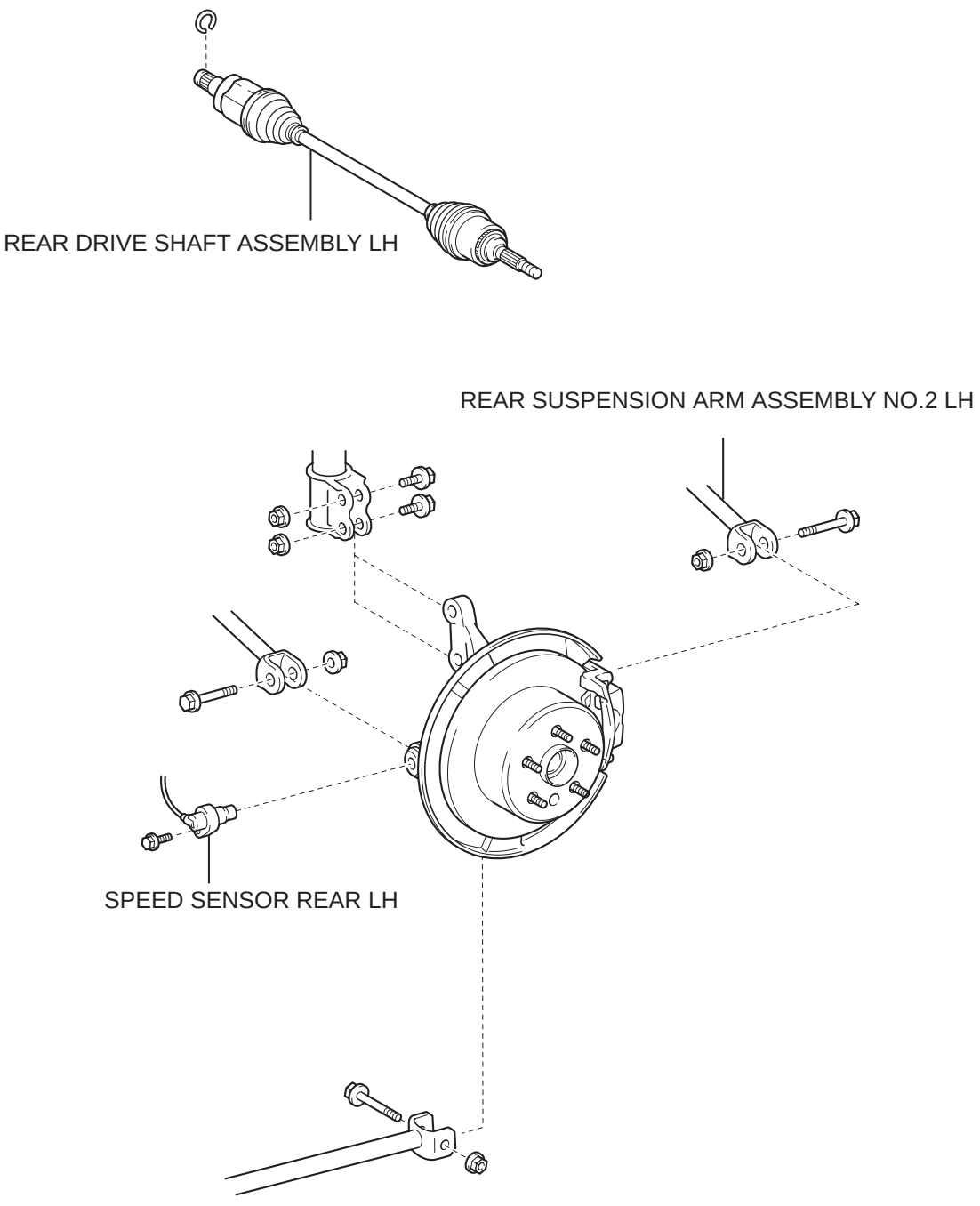
4. INSTALL STABILIZER BAR REAR

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

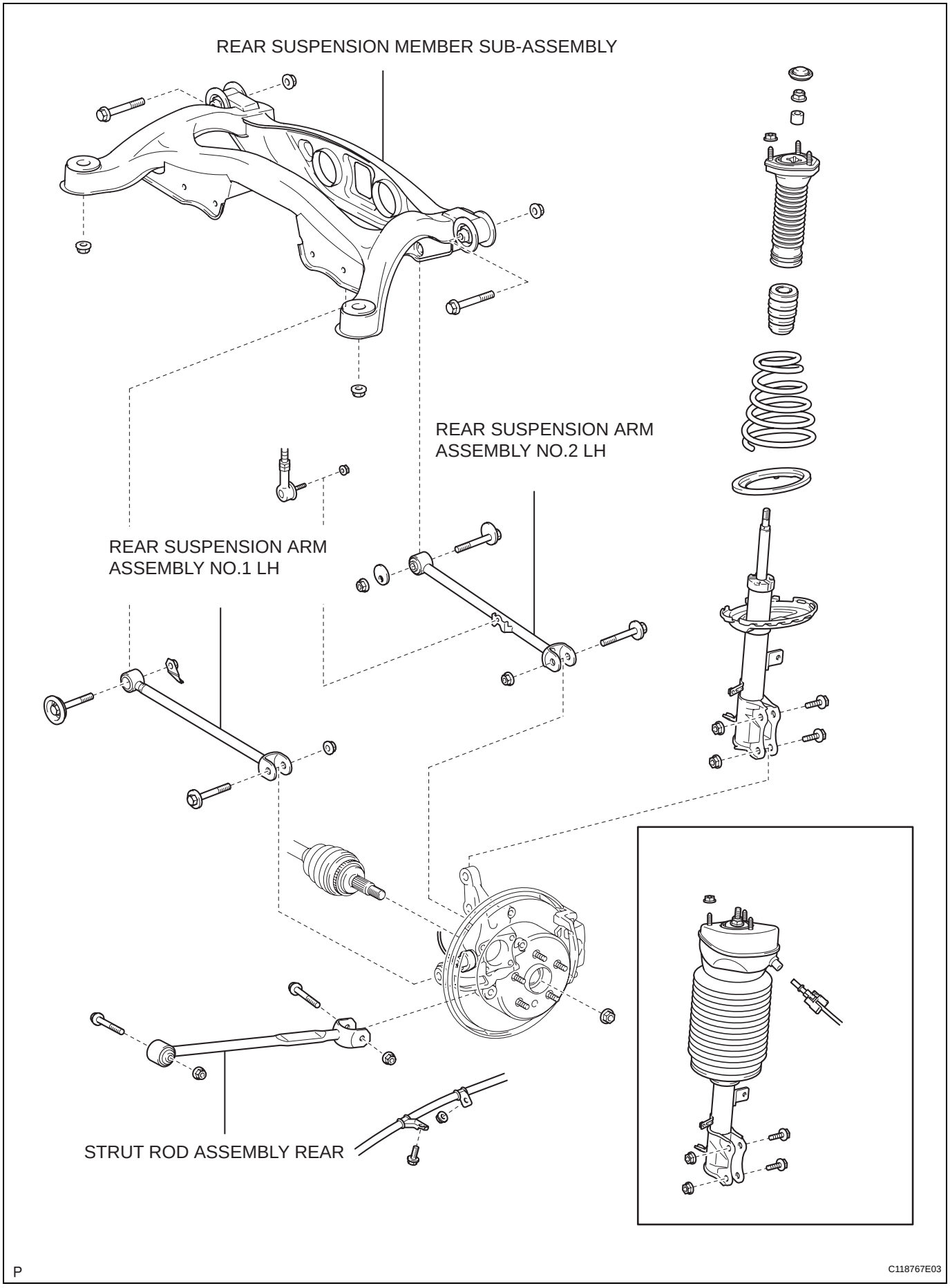
6. INSPECT REAR WHEEL ALIGNMENT
(See page SP-7)

REAR SUSPENSION NO. 1 ARM (for 4WD)

COMPONENTS



SP


REAR SUSPENSION MEMBER SUB-ASSEMBLY
REAR SUSPENSION ARM ASSEMBLY NO.2 LH
REAR SUSPENSION ARM ASSEMBLY NO.1 LH
STRUT ROD ASSEMBLY REAR
P
C118767E03

SP

REMOVAL

NOTICE:

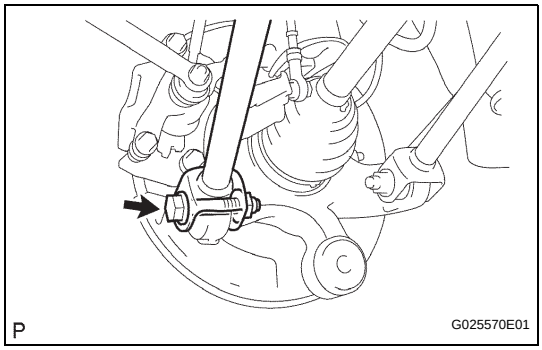
- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle with air suspension.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle with air suspension.**
- **Support the rear axle carrier with a jack.**

1. REMOVE REAR WHEEL

2. REMOVE EXHAUST PIPE ASSEMBLY

3. REMOVE PROPELLER W/CENTER BEARING SHAFT ASSEMBLY
SST 09325-20010

4. REMOVE STRUT ROD ASSEMBLY REAR

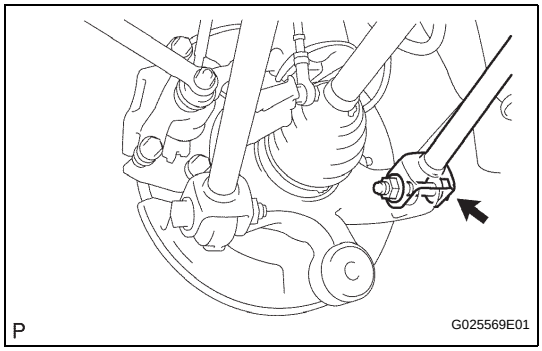


5. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.2 LH

(a) Remove the height control sensor sub-assembly, and separate the height control sensor wire (w/ height control sensor sub-assembly).

(b) Remove the bolt, nut and the rear suspension arm assembly No. 2 (outer side) from the rear axle carrier.
NOTICE:
When removing the bolt, keep the nut from rotating.

6. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.2 RH
HINT:
Separate the RH side using the same procedures as for the LH side.



7. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.1 LH

(a) Remove the bolt, nut and the rear suspension arm assembly No. 1 (outer side) from the rear axle carrier.
NOTICE:
When removing the bolt, keep the nut from rotating.

8. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.1 RH
HINT:
Separate the RH side using the same procedures as for the LH side.

9. REMOVE SPEED SENSOR REAR LH

10. REMOVE SPEED SENSOR REAR RH
HINT:
Remove the RH side using the same procedures as for the LH side.

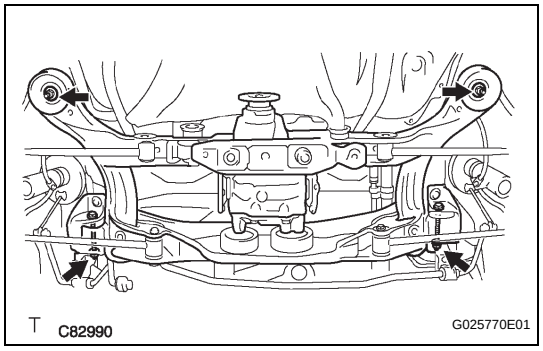
SP

11. REMOVE REAR DRIVE SHAFT ASSEMBLY LH

12. REMOVE REAR DRIVE SHAFT ASSEMBLY RH

HINT:

Remove the RH side using the same procedures as for the LH side.

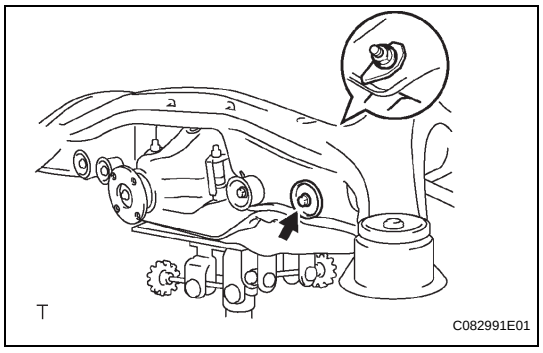


13. REMOVE REAR SUSPENSION MEMBER SUB-ASSEMBLY

(a) Support the rear suspension member with a jack.

(b) Remove the 4 nuts, 2 bolts and 2 retainers from the rear suspension member.

(c) Lower the rear suspension member.



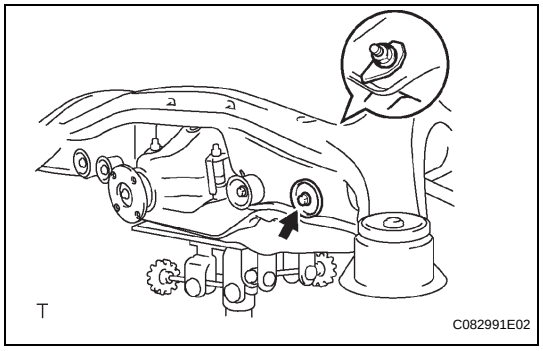
14. REMOVE REAR SUSPENSION ARM ASSEMBLY NO.1 LH

(a) Remove the bolt, nuts and rear suspension arm assembly No. 1.

NOTICE:

When removing the bolt, keep the nut from rotating.

INSTALLATION

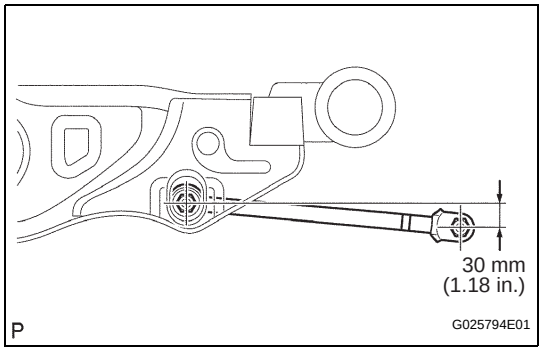


1. INSTALL REAR SUSPENSION ARM ASSEMBLY NO.1 LH

(a) Install the rear suspension arm assembly No. 1 with the bolt and nut, and temporarily tighten the bolt.

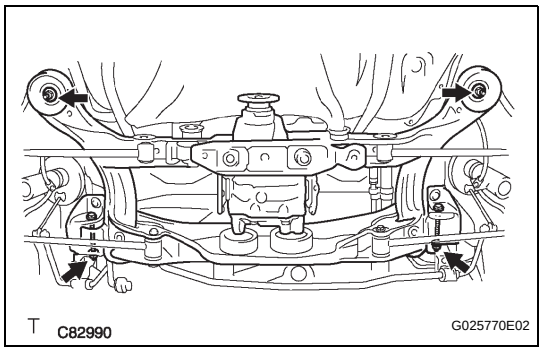
HINT:

Ensure that the paint mark faces to the rear.



(b) Set the rear suspension arm assembly No. 1 in the illustration, and fully tighten the bolt.

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



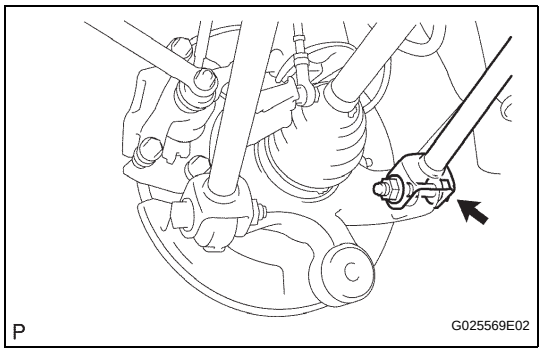
2. **INSTALL REAR SUSPENSION MEMBER SUB-ASSEMBLY**
   (a) Raise the rear suspension member with a jack.
   (b) Install the rear suspension member with the 4 nuts, 2 bolts and 2 retainers.
   Torque: Front side
   115 N*m (1,173 kgf*cm, 85 ft.*lbf)
   Rear side
   181 N*m (1,846 kgf*cm, 134 in.*lbf)

3. **INSTALL REAR DRIVE SHAFT ASSEMBLY LH**

4. **INSTALL REAR DRIVE SHAFT ASSEMBLY RH**
   HINT:
   Install the RH side using the same procedures as for the LH side.

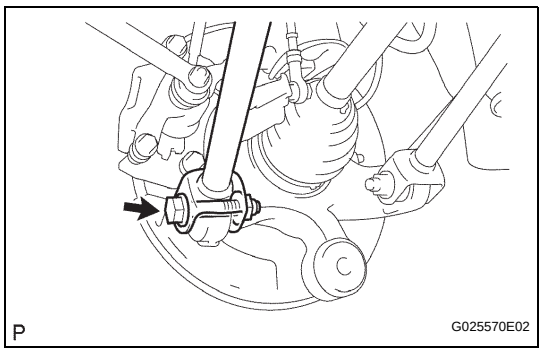
5. **INSTALL SPEED SENSOR REAR LH**

6. **INSTALL SPEED SENSOR REAR RH**
   HINT:
   Install the RH side using the same procedures as for the LH side.



7. **TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.1 LH**
   (a) Install the rear suspension arm assembly No. 1 (out side) to the rear axle carrier, and temporarily tighten the bolt.
   NOTICE:
   When installing the bolt, tighten the bolt temporarily with the nut fixed.

8. **TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.1 RH**
   HINT:
   Temporarily tighten the RH side using the same procedures as for the LH side.



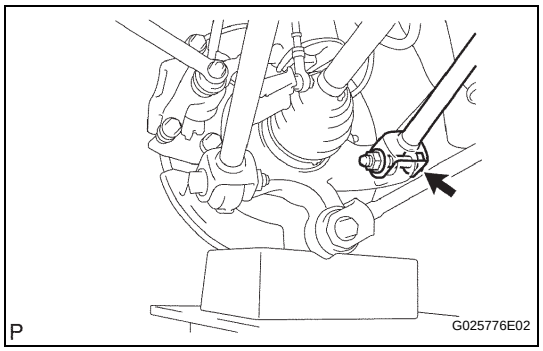
9. **TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH**
   (a) Install the rear suspension arm No. 2 (out side) to the rear axle carrier, and temporarily tighten the bolt.
   NOTICE:
   When installing the bolt, tighten the bolt temporarily with the nut fixed.

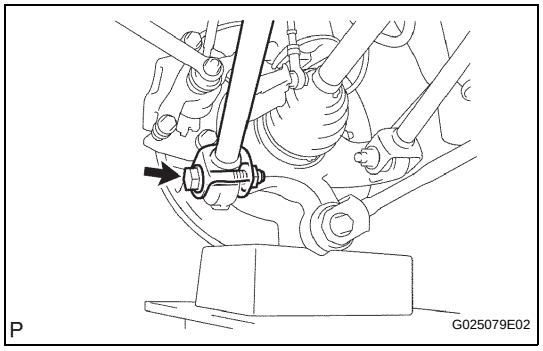
10. **TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 RH**
    HINT:
    Temporarily tighten the RH side using the same procedures as for the LH side.

11. **TEMPORARILY TIGHTEN STRUT ROD ASSEMBLY REAR (See page SP-49)**

12. **STABILIZE SUSPENSION (See page SP-49)**

SP





13. **FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.1 LH**
    (a) Fully tighten the bolt.
    Torque: 112 N*m (1,140 kgf*cm, 83 ft.*lbf)

14. **FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.1 RH**
    HINT:
    Fully tighten the RH side using the same procedures as for the LH side.

15. **FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH**
    (a) Fully tighten the bolt.
    Torque: 112 N*m (1,140 kgf*cm, 83 ft.*lbf)
    (b) Install the height control sensor sub-assembly, and connect the height control sensor wire (w/ height control sensor sub-assembly).
    Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)

16. **FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 RH**
    HINT:
    Fully tighten the RH side using the same procedures as for the LH side.

17. **FULLY TIGHTEN STRUT ROD ASSEMBLY REAR**

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

19. **TEMPORARILY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSEMBLY**

20. **FULLY TIGHTEN PROPELLER W/CENTER BEARING SHAFT ASSEMBLY**

21. **INSTALL EXHAUST PIPE ASSEMBLY**

22. **CHECK FOR EXHAUST GAS LEAKAGE**

23. **INSPECT REAR WHEEL ALIGNMENT**

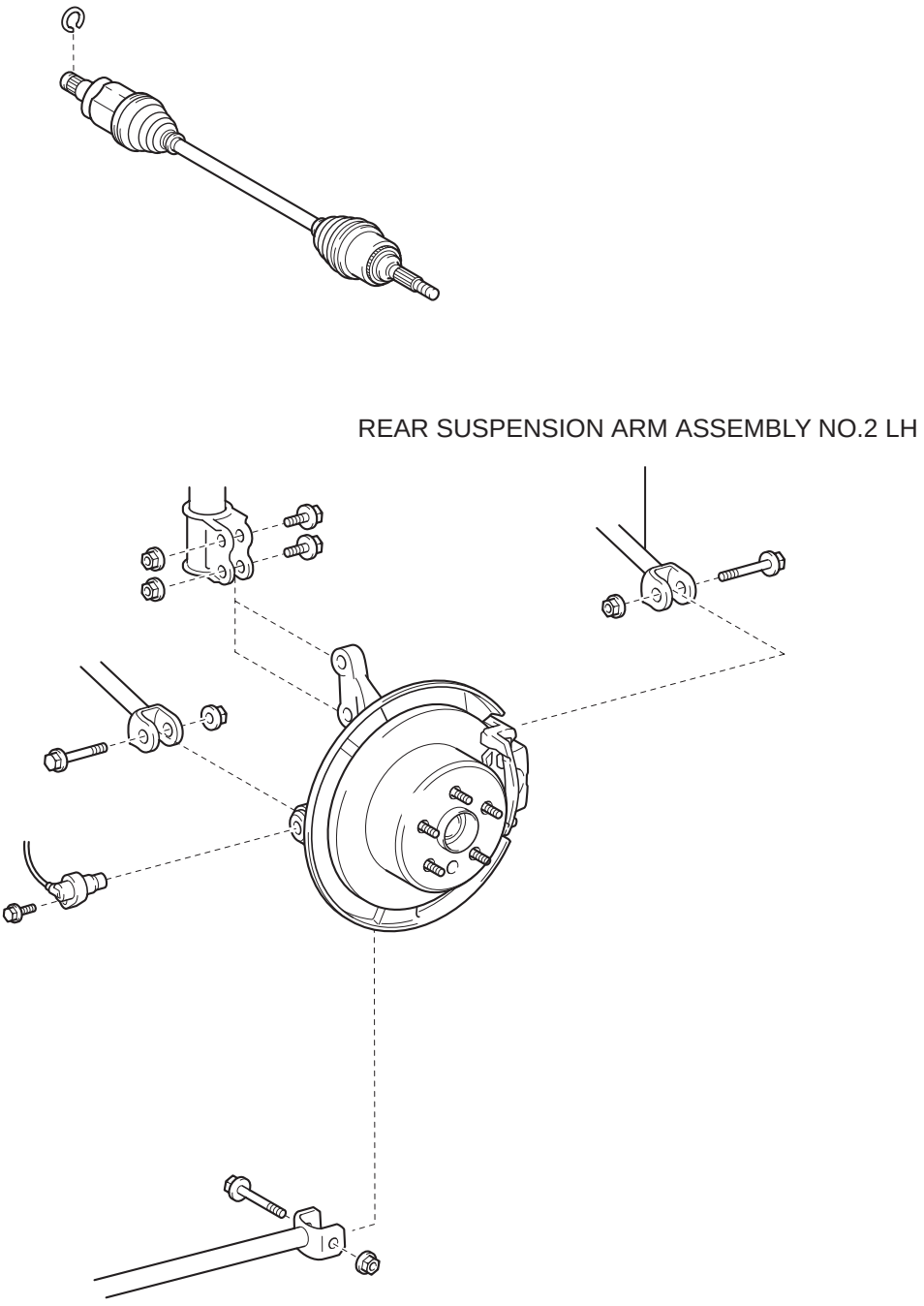
24. **ADJUST VEHICLE HEIGHT**

25. **ADJUST HEADLIGHT AIM ONLY (See page LI-196)**

26. **CHECK ABS SPEED SENSOR SIGNAL**

REAR SUSPENSION NO. 2 ARM (for 2WD)

COMPONENTS



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C118776E03

SP

REMOVAL

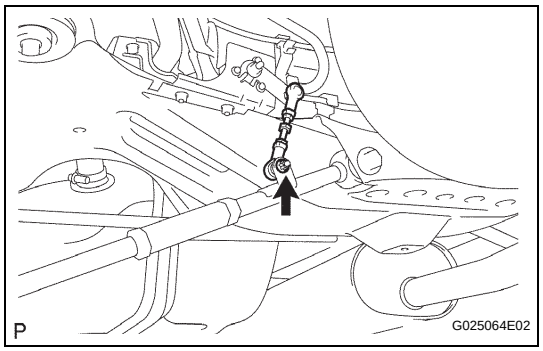
NOTICE:

- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle with air suspension.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle with air suspension.**
- **Support the rear axle carrier with a jack.**

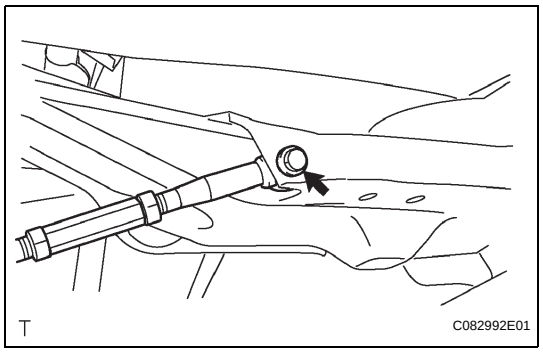
1. REMOVE REAR WHEEL

2. REMOVE REAR SUSPENSION ARM ASSEMBLY NO.2 LH

(a) Remove the nut, and separate the height control sensor sub-assembly from the suspension arm assembly No. 2 (w/ height control sensor sub-assembly).

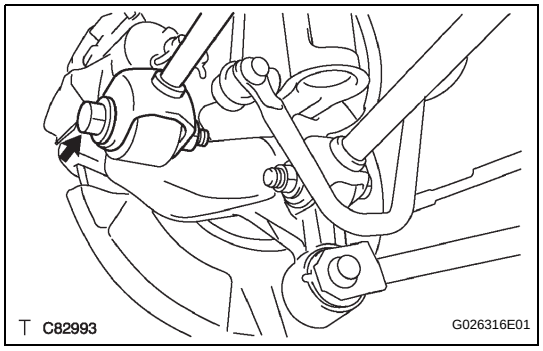


(b) Remove the bolt, nut and disconnect the rear suspension arm assembly No. 2 (inner side).



(c) Remove the bolt, nut and the rear suspension arm assembly No. 2 (outer side) from the rear axle carrier.

NOTICE:
When removing the bolt, keep the nut from rotating.

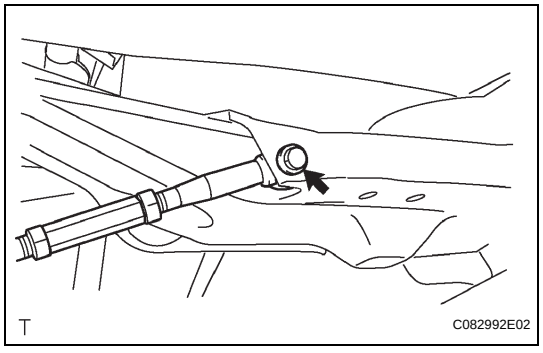


INSTALLATION

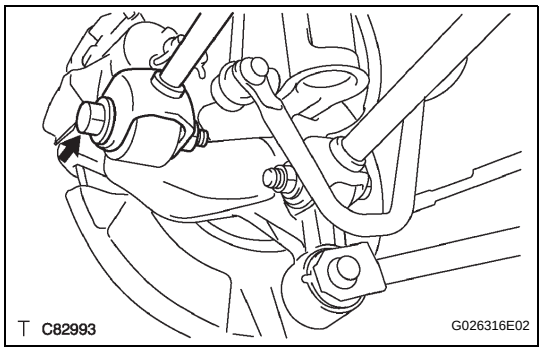
1. TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH

(a) Install the rear suspension arm assembly No. 2 (inner side) with the bolt, and temporarily tighten the bolt.

HINT:
Ensure that the paint mark faces to the rear.

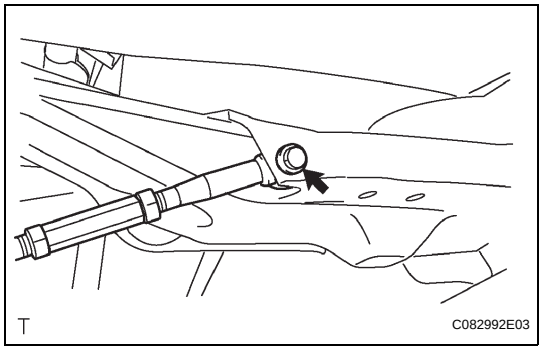


SP



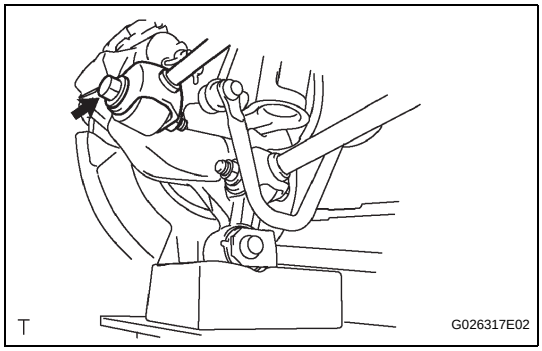
(b) Connect the rear suspension arm assembly No. 2 (outer side) to the rear axle carrier with the bolt and nut, and temporarily tighten the bolt.
NOTICE:
When installing the bolt, tighten the bolt temporarily with the nut fixed.

2. STABILIZE SUSPENSION (See page SP-49)

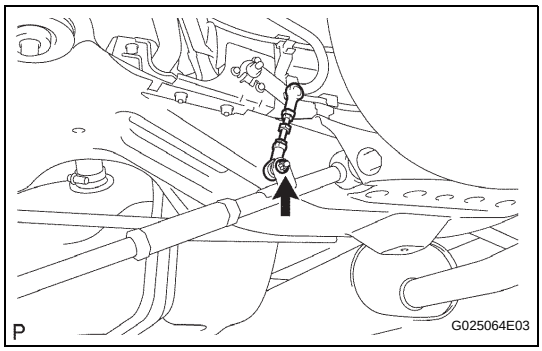


3. FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH

(a) Fully tighten the bolt.
Torque: 120 N*m (1,224 kgf*cm, 89 ft.*lbf)



(b) Fully tighten the bolt.
Torque: 112 N*m (1,142 kgf*cm, 83 ft.*lbf)



(c) Install the height control sensor sub-assembly and nut to the suspension arm assembly No. 2 (w/ height control sensor sub-assembly.)
Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)

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

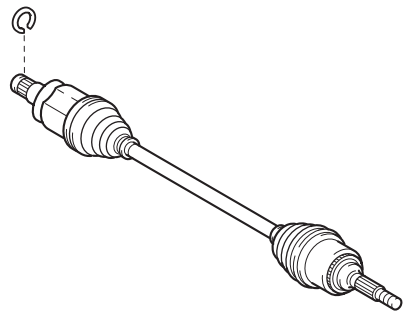
5. INSPECT REAR WHEEL ALIGNMENT
(See page SP-7)

6. ADJUST VEHICLE HEIGHT

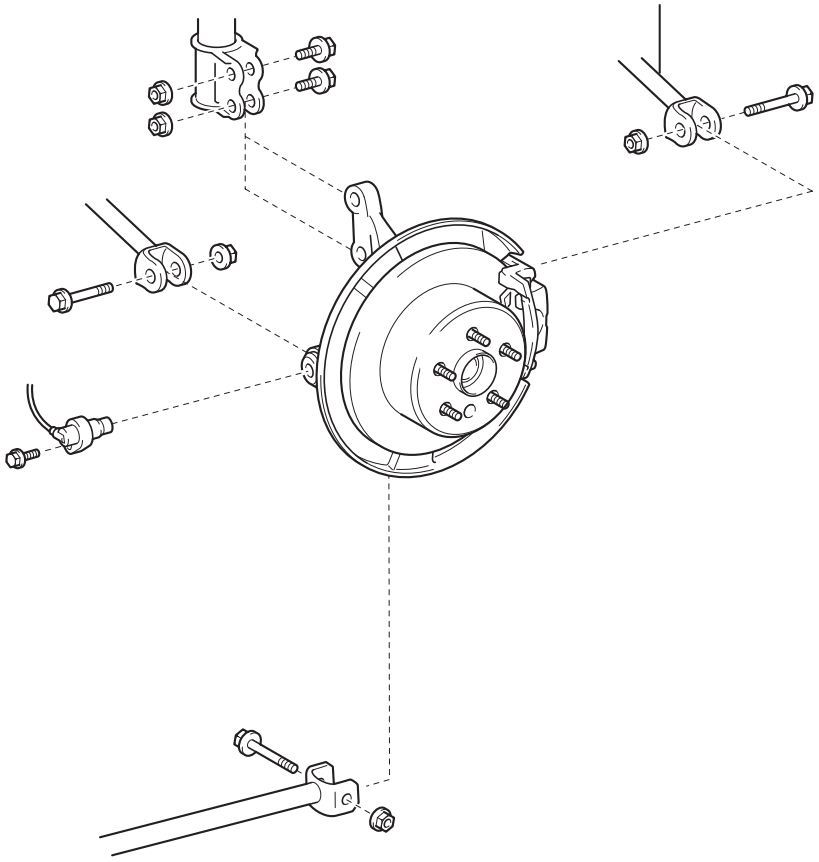
7. ADJUST HEADLIGHT AIM ONLY

REAR SUSPENSION NO. 2 ARM (for 4WD)

COMPONENTS



REAR SUSPENSION ARM ASSEMBLY NO.2 LH



P

C118776E04

SP

REMOVAL

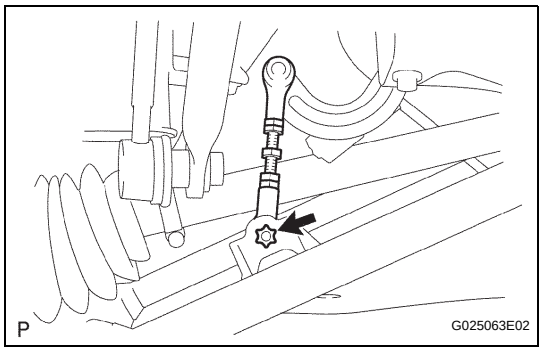
NOTICE:

- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle with air suspension.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle with air suspension.**
- **Support the rear axle carrier with a jack.**

1. REMOVE REAR WHEEL

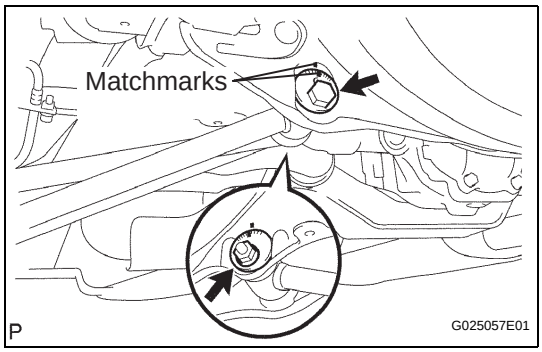
2. REMOVE REAR SUSPENSION ARM ASSEMBLY NO.2 LH

(a) Remove the nut, and separate the height control sensor sub-assembly from the suspension arm assembly No. 2 (w/ height control sensor sub-assembly).

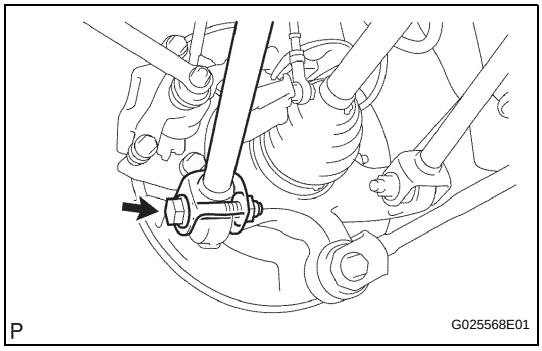


(b) Place matchmarks on the adjust cams and rear suspension member sub-assembly.

(c) Remove the nut, camber adjust cam and toe adjust cam, and disconnect the rear suspension arm assembly No. 2 (inner side).
NOTICE:
When removing the nut, keep the bolt from rotating.



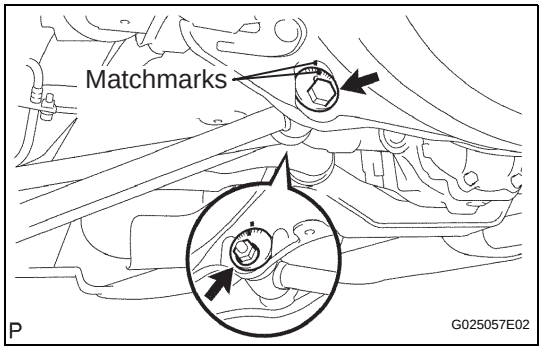
(d) Remove the bolt, nut and the rear suspension arm assembly No. 2 (outer side) from the rear axle carrier.
NOTICE:
When removing the bolt, keep the nut from rotating.



INSTALLATION

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

(a) Install the rear suspension arm No. 2 (inner side) to the rear suspension member sub-assembly with the camber adjust cam and toe adjust cam, and temporarily tighten the nut.
HINT:
Ensure that the paint mark faces to the rear.



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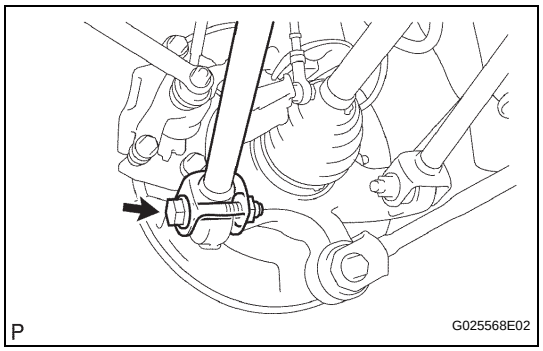
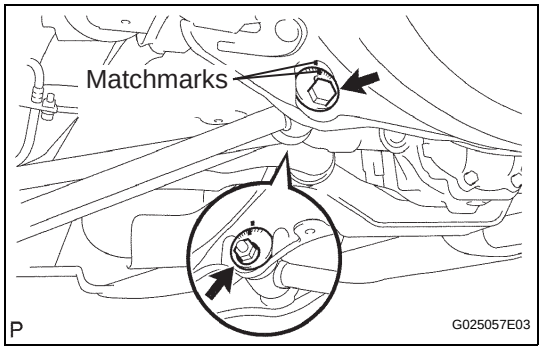


(b) Connect the rear suspension arm assembly No. 2 (outer side) to the rear axle carrier with the bolt and nut.
NOTICE:
When installing the bolt, tighten the bolt temporarily with the nut fixed.

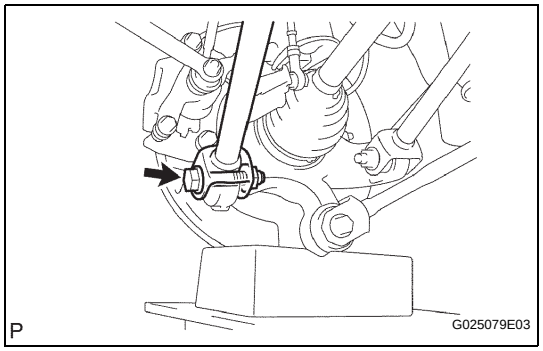
2. STABILIZE SUSPENSION (See page SP-49)



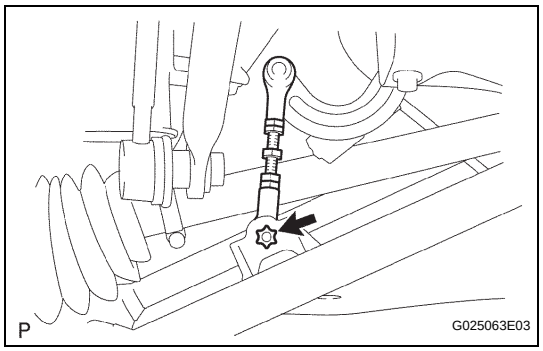
3. FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH

(a) Align the matchmarks on the adjust cams and rear suspension member sub-assembly.

(b) Fully tighten the nut.
Torque: 100 N*m (1,020 kgf*cm, 74 ft.*lbf)



(c) Fully tighten the nut.
Torque: 112 N*m (1,140 kgf*cm, 83 ft.*lbf)



(d) Install the height control sensor sub-assembly and nut to the suspension arm assembly No. 2 (w/ height control sensor sub-assembly.)
Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)

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

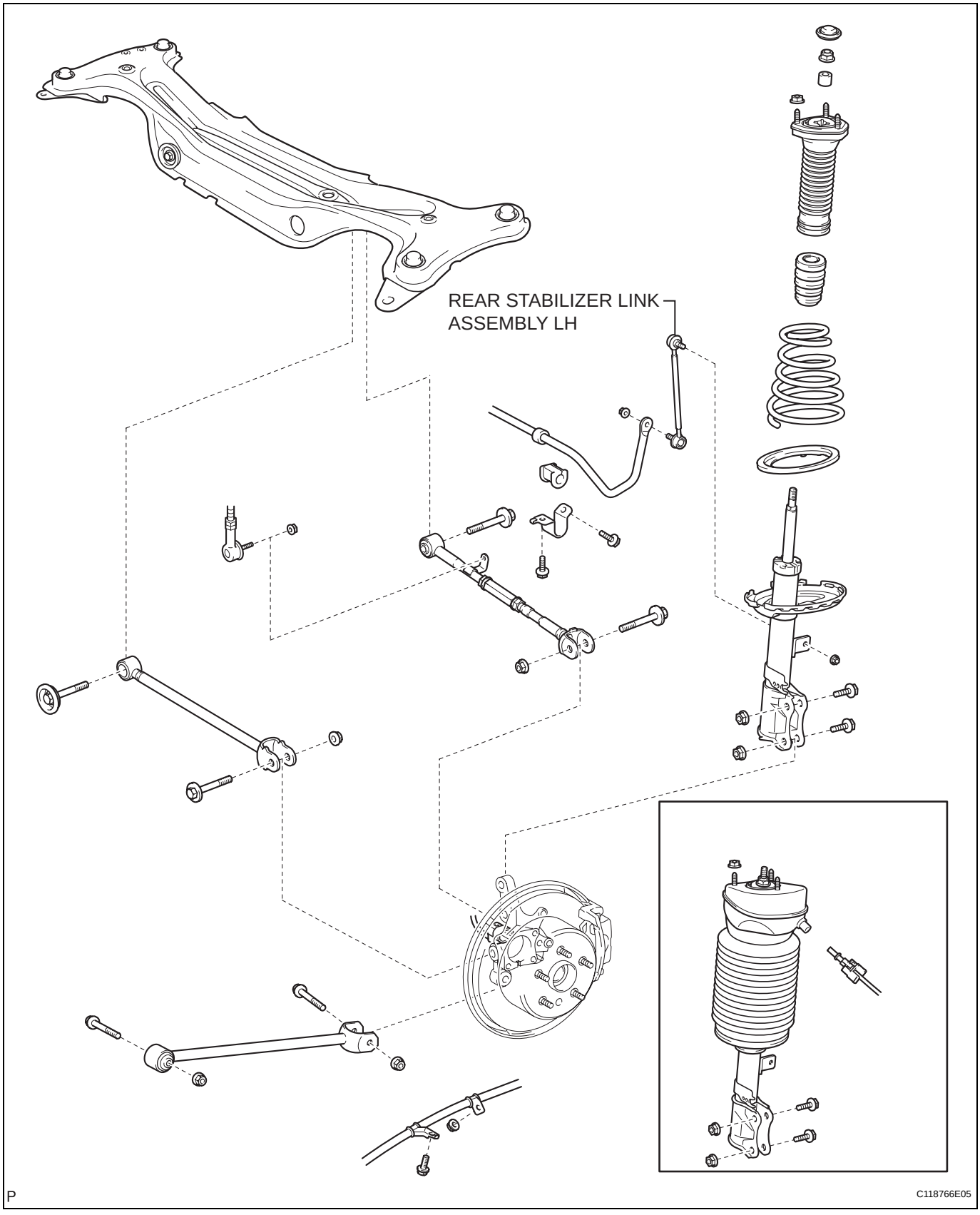
5. INSPECT REAR WHEEL ALIGNMENT
(See page SP-7)

6. ADJUST VEHICLE HEIGHT

7. ADJUST HEADLIGHT AIM ONLY

REAR STABILIZER BAR (for 2WD)

COMPONENTS



REMOVAL

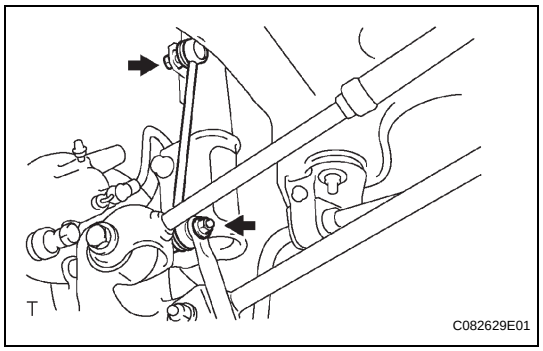
NOTICE:

- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle with air suspension.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle with air suspension.**
- **Support the rear axle carrier with a jack.**

1. REMOVE REAR WHEEL

2. REMOVE REAR STABILIZER LINK ASSEMBLY LH

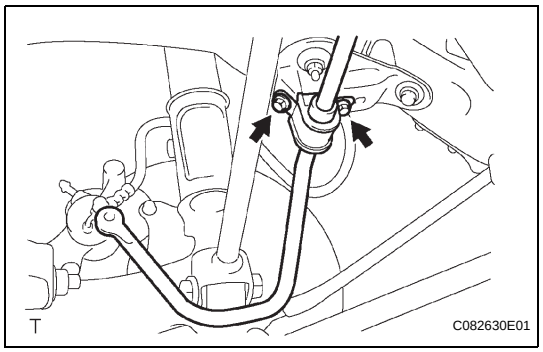
(a) Remove the 2 nuts and rear stabilizer link.
HINT:
If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.



3. REMOVE REAR STABILIZER LINK ASSEMBLY RH
HINT:
Remove the RH side using the same procedures as for the LH side.

4. REMOVE REAR STABILIZER BAR BRACKET NO.1

(a) Remove the 4 bolts and stabilizer bar bracket.



5. REMOVE STABILIZER BAR REAR

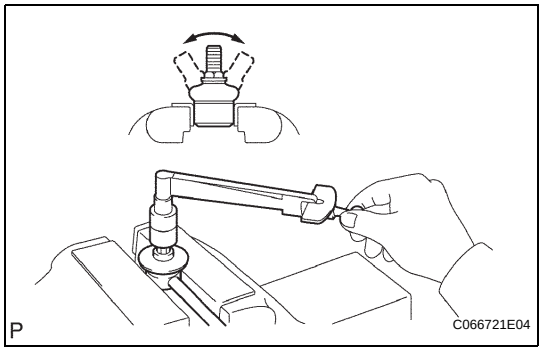
(a) Remove the stabilizer bar and 2 stabilizer bushes.

INSPECTION

1. INSPECT REAR STABILIZER LINK ASSEMBLY LH

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

(b) Using a torque wrench, continuously turn the nut 3 to 5 seconds per turn, and take the torque reading on the 5th turn.
Turning torque:
1.0 N*m (10 kgf*cm, 9 in.*lbf) or less
NOTICE:
- **Check that neither unusual drag nor rattle occurs during the rotation.**
- **Check that neither crack nor grease leakage exists on the dust cover.**



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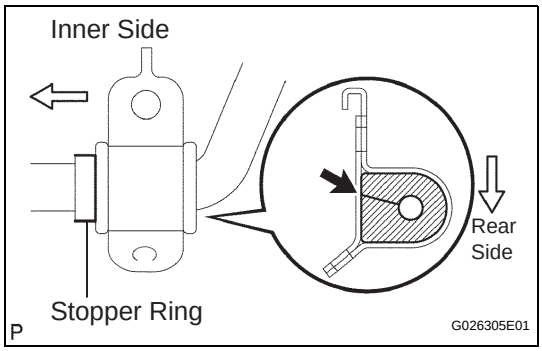
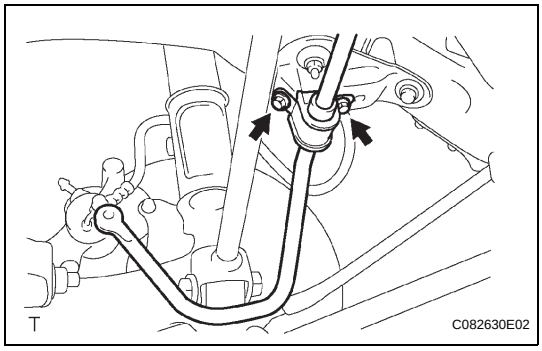


INSTALLATION

1. INSTALL STABILIZER BAR REAR

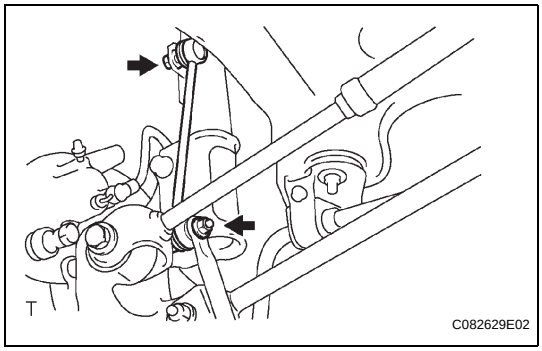
(a) Install the stabilizer bush to the outer side of the stopper ring on the stabilizer bar.

(b) Install the stabilizer bar.



2. INSTALL REAR STABILIZER BAR BRACKET NO.1

(a) Install the stabilizer bar bracket with the 4 bolts.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)



3. INSTALL REAR STABILIZER LINK ASSEMBLY LH

(a) Install the stabilizer link with the 2 nuts.
Torque: 39 N*m (400 kgf*cm, 29 ft.*lbf)
HINT:
If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

4. INSTALL REAR STABILIZER LINK ASSEMBLY RH

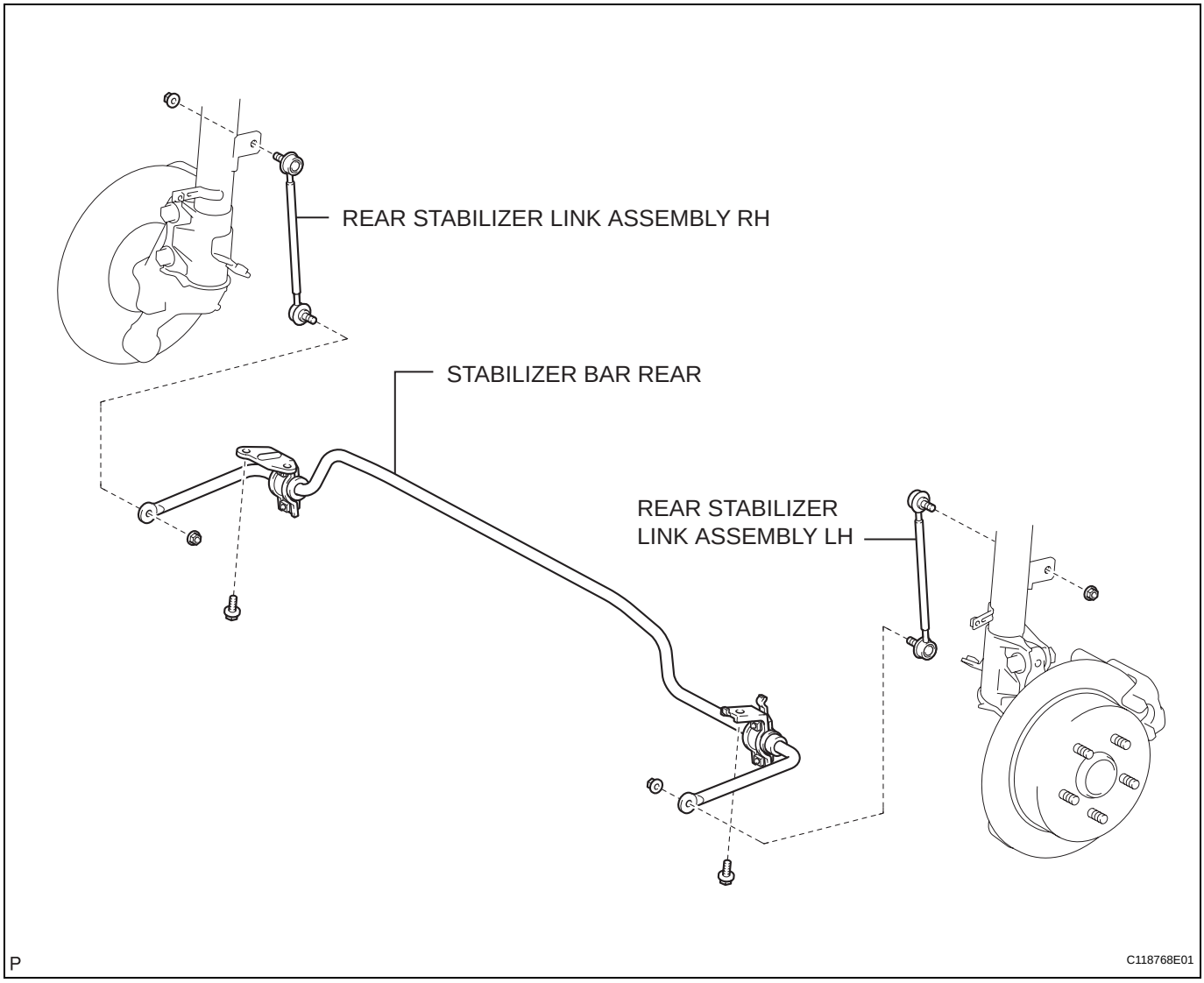
HINT:
Install the RH side using the same procedures as for the LH side.

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

6. INSPECT REAR WHEEL ALIGNMENT

REAR STABILIZER BAR (for 4WD)

COMPONENTS



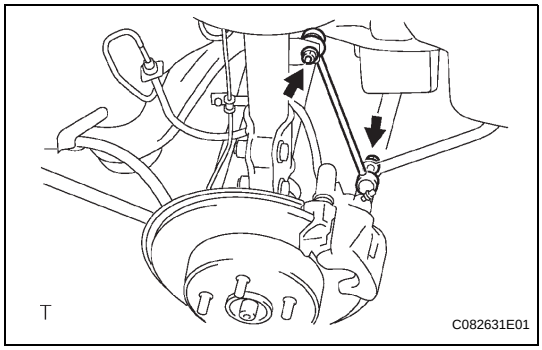
REMOVAL

NOTICE:

- **Press the height control switch to stop the vehicle height control operation before jacking up or lifting up the vehicle with air suspension.**
- **Press the height control switch to operate the vehicle height control after jacking down or lifting down the vehicle with air suspension.**

1. REMOVE REAR WHEEL

2. REMOVE REAR STABILIZER LINK ASSEMBLY LH



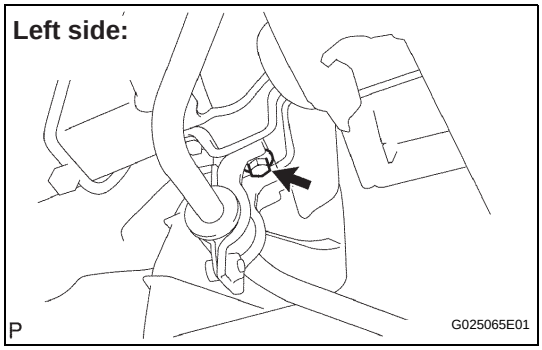
(a) Remove the 2 nuts and stabilizer link.
HINT:
If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

3. REMOVE REAR STABILIZER LINK ASSEMBLY RH

HINT:
Remove the RH side using the same procedures as for the LH side.

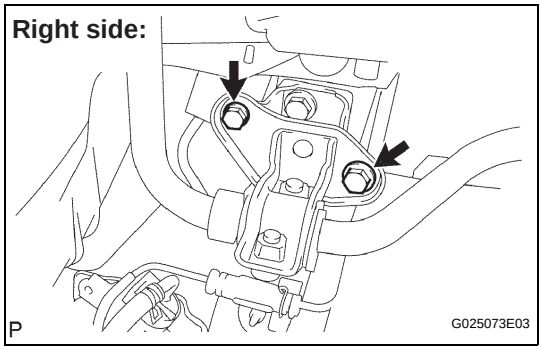
4. REMOVE STABILIZER BAR REAR

Left side:



(a) Left side:
Remove the bolt.

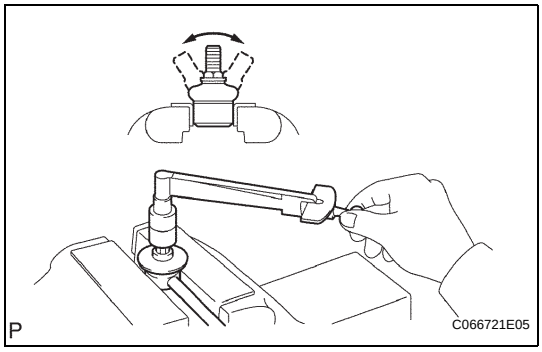
Right side:



(b) Right side:
Remove the 3 bolts and stabilizer bar.

INSPECTION

1. INSPECT REAR STABILIZER LINK ASSEMBLY LH



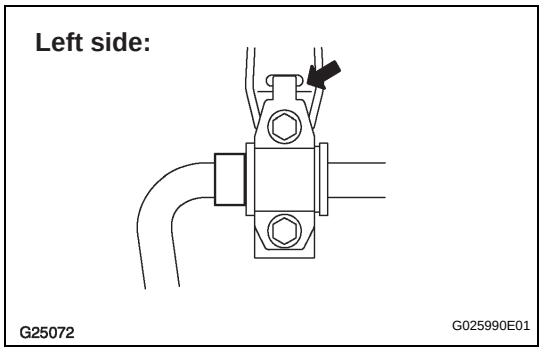
(a) Before installing the nut, flip the ball joint stud back and forth 5 times as shown in the illustration.

(b) Using a torque wrench, continuously turn the nut 3 to 5 seconds per turn, and take the torque reading on the 5th turn.
Turning torque:
1.0 N*m (10 kgf*cm, 9 in.*lbf) or less

SP

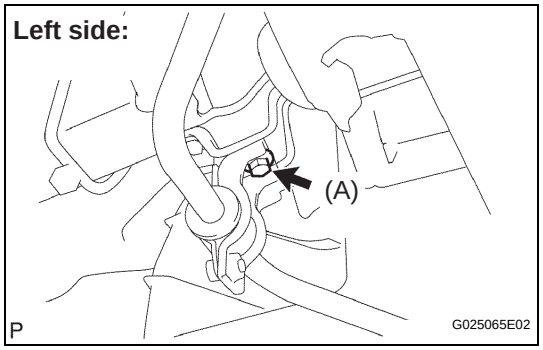
NOTICE:
- **Check that neither unusual drag nor rattle occurs during the rotation.**
- **Check that neither crack nor grease leakage exists on the dust cover.**

INSTALLATION

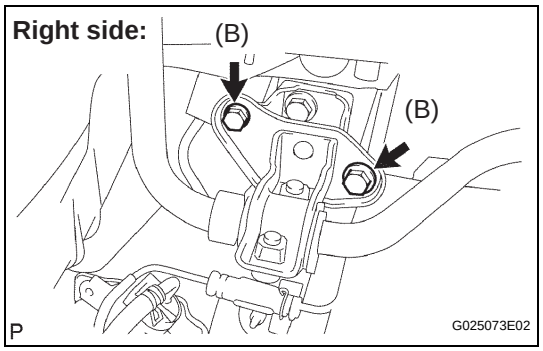


1. INSTALL STABILIZER BAR REAR

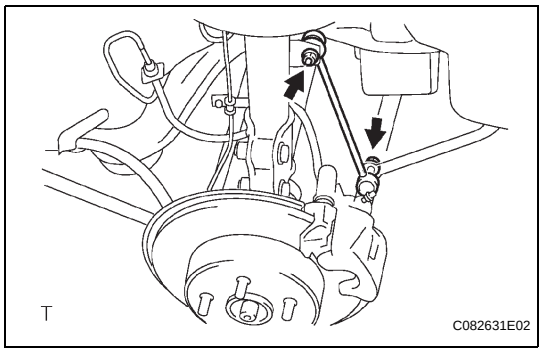
(a) Install the stabilizer bracket.



(b) Left side:
Torque: Bolt A
54 N*m (550 kgf*cm, 40 ft.*lbf)



(c) Right side:
Torque: Bolt B
19 N*m (194 kgf*cm, 14 ft.*lbf)



2. INSTALL REAR STABILIZER LINK ASSEMBLY LH

(a) Install the stabilizer link with the 2 nuts.
Torque: 39 N*m (400 kgf*cm, 29 ft.*lbf)
HINT:
If the ball joint turns together with the nut, use a hexagon wrench (5 mm) to hold the stud.

3. INSTALL REAR STABILIZER LINK ASSEMBLY RH

HINT:
Install the RH side using the same procedures as for the LH side.

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

5. INSPECT REAR WHEEL ALIGNMENT

SP