

AXLE SYSTEM

PROBLEM SYMPTOMS TABLE

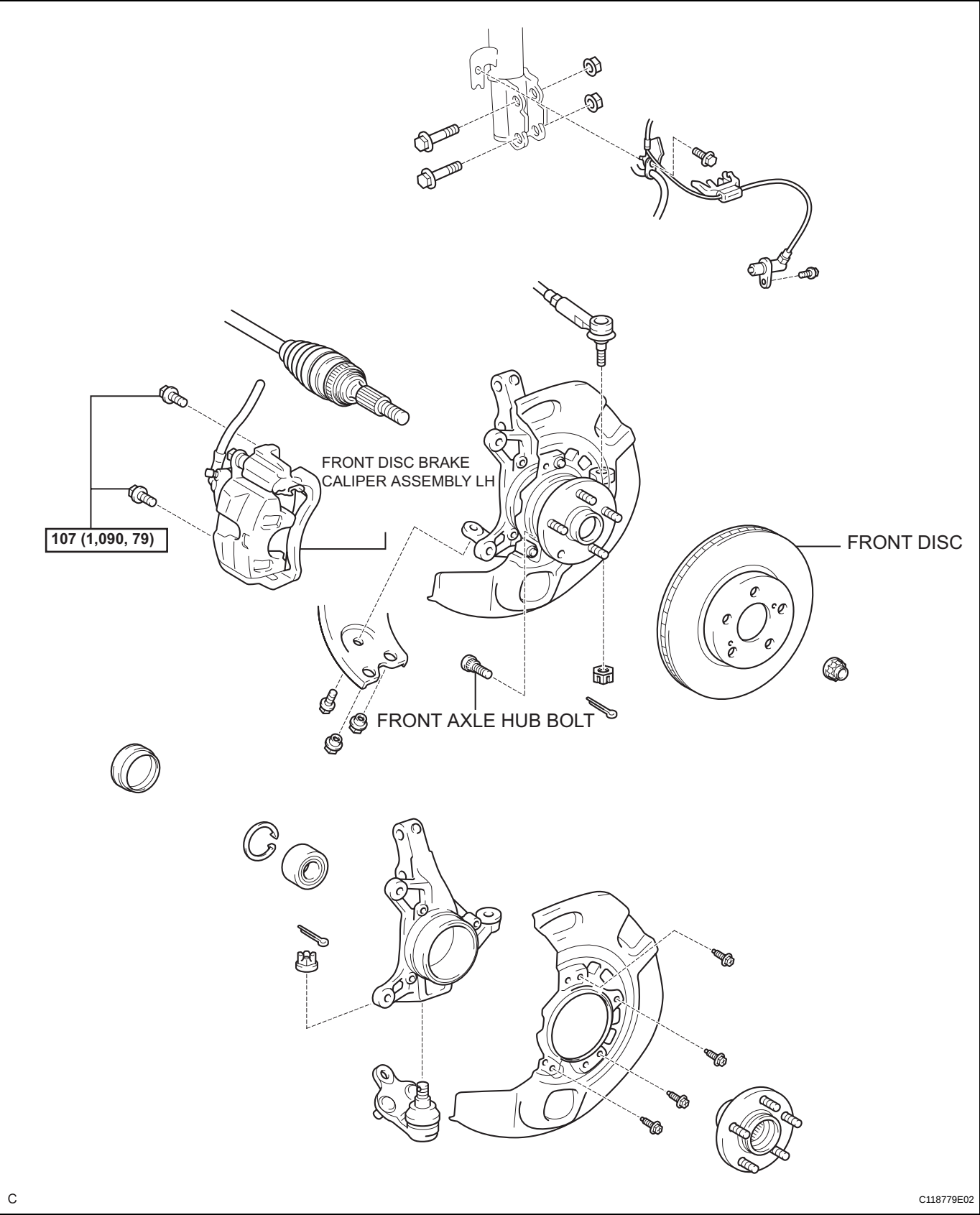
Use the table below to help determine the cause of the problem. The numbers indicate the priority of the possible cause of the problem. Check each part in order. If necessary, replace these parts.

AXLE SYSTEM

Symptom	Suspected area	See page
Wander	1. Wheel alignment (Front)	SP-2
	2. Wheel alignment (Rear)	SP-7
	3. Steering linkage (Loosen or worn)	-
	4. Front hub bearing	AH-5
	5. Rear hub bearing (2WD)	AH-15
	6. Rear hub bearing (4WD)	AH-18
	7. Stabilizer bar (Front [2WD])	SP-28
	8. Stabilizer bar (Front [4WD])	SP-28
	9. Stabilizer bar (Rear [2WD])	SP-67
	10. Stabilizer bar (Rear [4WD])	SP-70
Front wheel shimmy	1. Wheel balance	TW-1
	2. Shock absorber (Front)	SP-11
	3. Shock absorber (Rear)	SP-38
	4. Pneumatic rear LH w/shock absorber cylinder assembly	SP-44
	5. Ball joint (Worn)	SP-24
	6. Hub bearing (Worn)	AH-5

FRONT AXLE HUB BOLT

COMPONENTS



REPLACEMENT

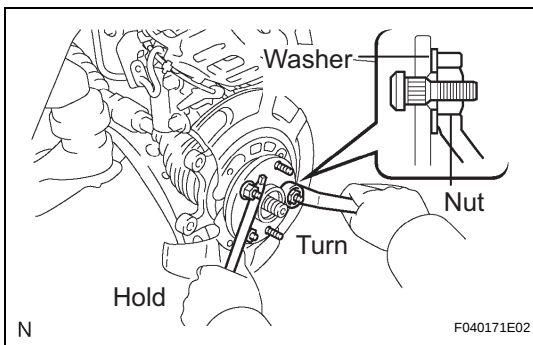
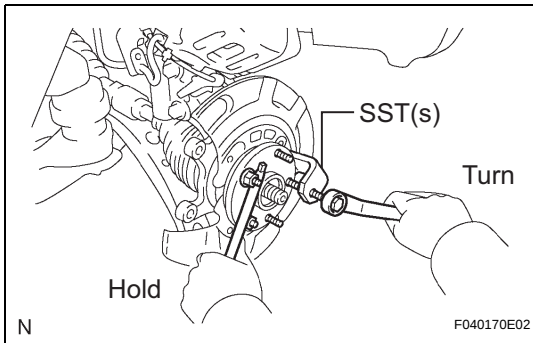
HINT:

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

1. REMOVE FRONT WHEEL
2. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY LH (See page [AH-5](#))
3. REMOVE FRONT DISC
4. REMOVE FRONT AXLE LH HUB BOLT

- (a) Temporarily install the 2 nuts and washers to the front axle LH hub bolt as shown in the illustration.
- (b) Using SST(s) and a screwdriver or an equivalent to hold the front axle, remove the front axle LH hub bolt.

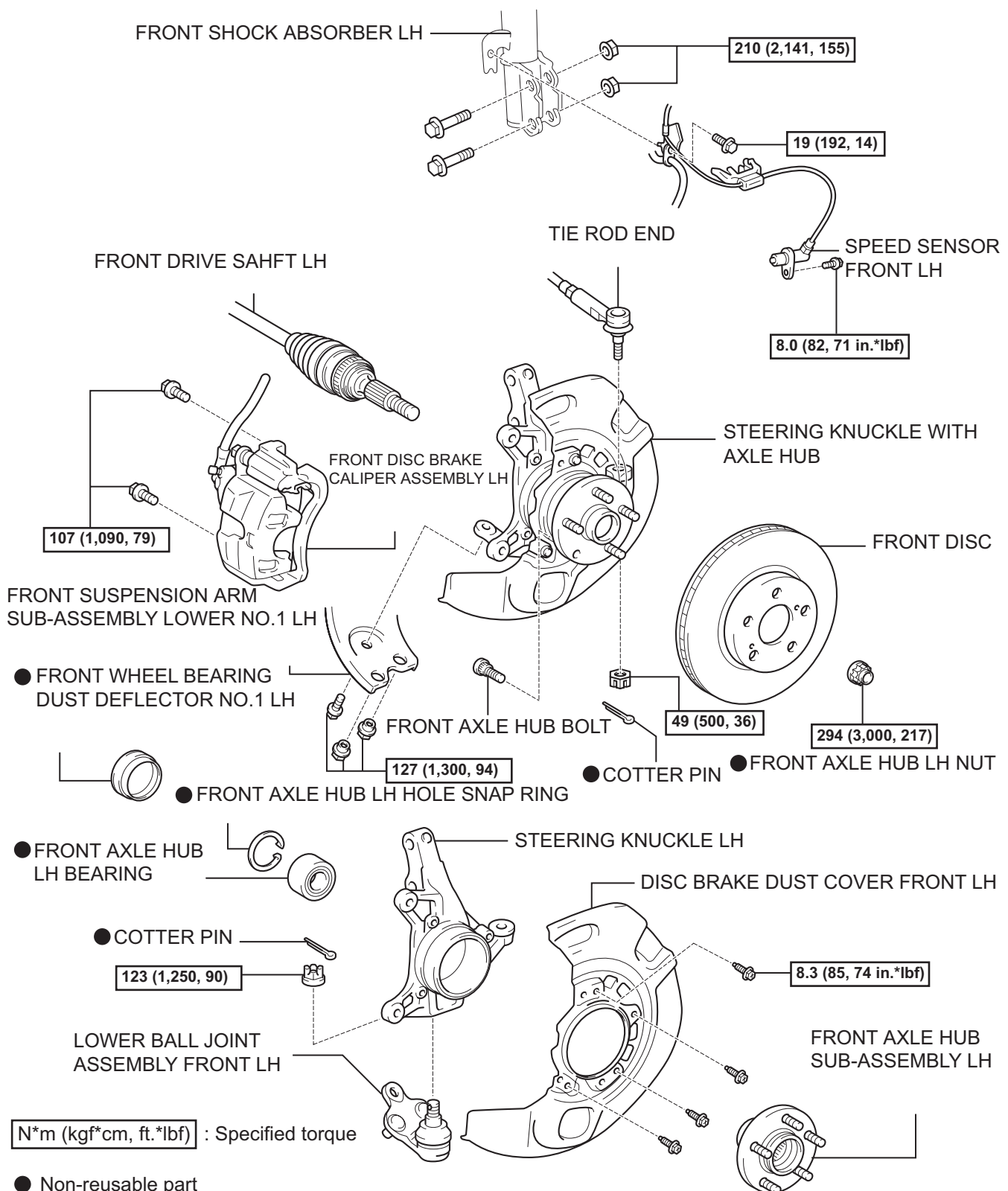
SST 09628-10011



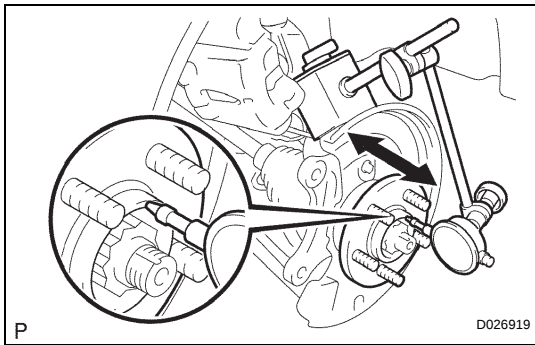
5. INSTALL FRONT AXLE LH HUB BOLT
 - (a) Install a washer and nut to a new front axle LH hub bolt as shown in the illustration.
 - (b) Using a screwdriver to hold the front axle, install the hub bolt by torquing the nut.
6. INSTALL FRONT DISC
7. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY LH (See page [AH-9](#))
8. INSTALL FRONT WHEEL
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)

FRONT AXLE HUB

COMPONENTS



AH



ON-VEHICLE INSPECTION

1. **INSPECT FRONT AXLE HUB BEARING BACKLASH**
 - (a) Using a dial gauge, check for backlash near the center of the axle hub.

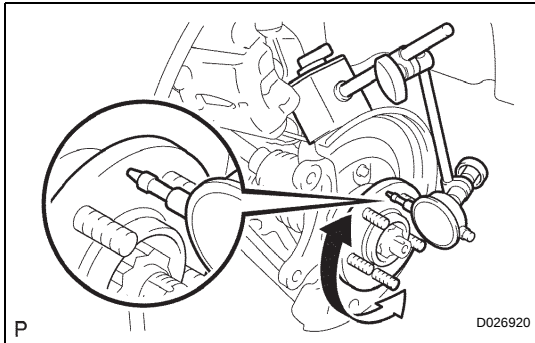
Maximum:

0.05 mm (0.0020 in.)

If backlash exceeds the maximum, replace the bearing.

NOTICE:

Ensure that the dial gauge is set at right angles to the measurement surface.



2. **INSPECT FRONT AXLE HUB BEARING DEVIATION**

- (a) Using a dial gauge, check for deviation in the surface of the axle hub outside the hub bolt.

Maximum:

0.05 mm (0.0020 in.)

If deviation exceeds the maximum, replace the axle hub.

NOTICE:

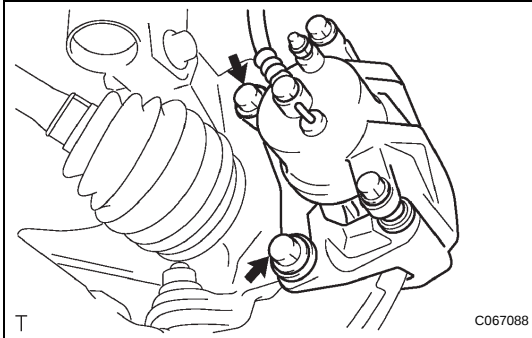
Ensure that the dial gauge is set at right angles to the measurement surface.

REMOVAL

HINT:

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

1. REMOVE FRONT WHEEL
2. REMOVE FRONT AXLE HUB LH NUT (See page [DS-5](#))
3. SEPARATE SPEED SENSOR FRONT LH (See page [DS-5](#))



4. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY LH

- (a) Remove the 2 bolts and separate the front disc brake caliper assembly LH from the steering knuckle LH.

NOTICE:

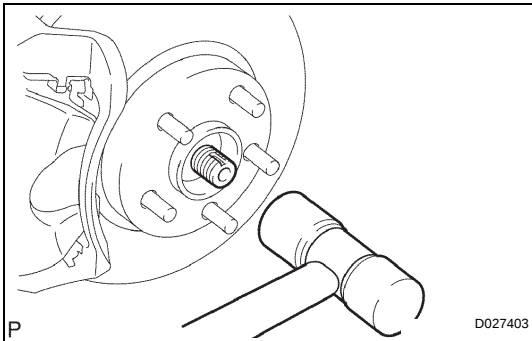
Use a string or other device to keep the brake caliper from hanging down.

5. REMOVE FRONT DISC
6. SEPARATE TIE ROD END SUB-ASSEMBLY LH (See page [DS-6](#))
7. SEPARATE FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 LH (See page [DS-6](#))
8. REMOVE FRONT AXLE ASSEMBLY LH

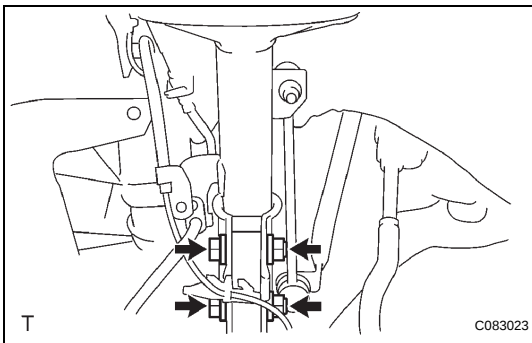
- (a) Using a plastic hammer, separate the front drive shaft assembly LH from the front axle hub sub-assembly LH.

NOTICE:

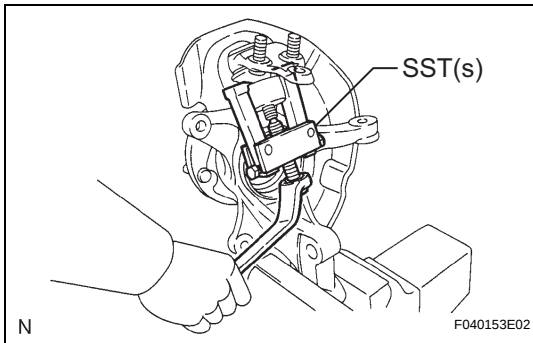
Be careful not to damage the boot and ABS speed sensor rotor.



- (b) Remove the 2 bolts, nuts and steering knuckle LH with the front axle nub sub-assembly LH.



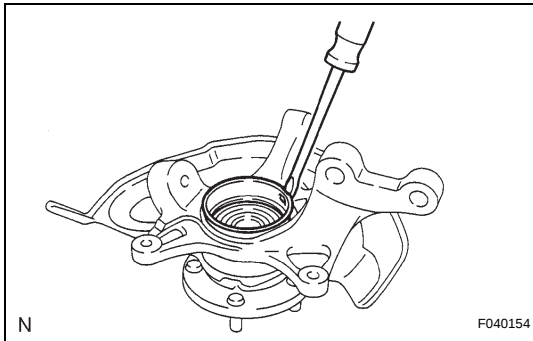
DISASSEMBLY



1. REMOVE LOWER BALL JOINT ASSEMBLY FRONT LH

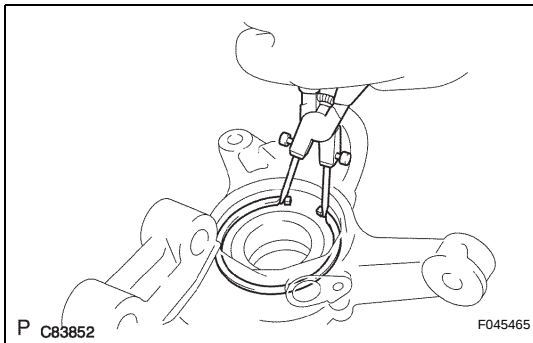
- (a) Remove the cotter pin and nut.
- (b) Using SST(s), remove the lower ball joint assembly front LH.

SST 09628-62011



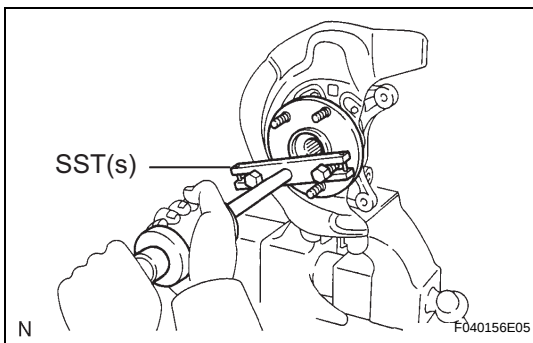
2. REMOVE FRONT WHEEL BEARING DUST DEFLECTOR NO.1 LH

- (a) Using a screwdriver, remove the bearing dust deflector NO. 1 LH.



3. REMOVE FRONT AXLE HUB LH HOLE SNAP RING

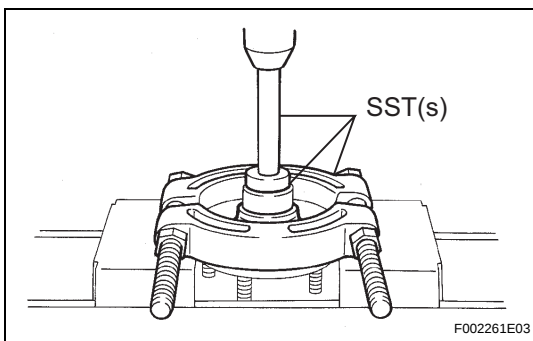
- (a) Using snap ring pliers, remove the front axle hub LH hole snap ring.



4. REMOVE FRONT AXLE ASSEMBLY LH

- (a) Using SST(s), remove the front axle hub sub-assembly LH.

SST 09520-00031



- (b) Using SST(s) and a press, remove the bearing inner race (outside) from the front axle hub sub-assembly LH.

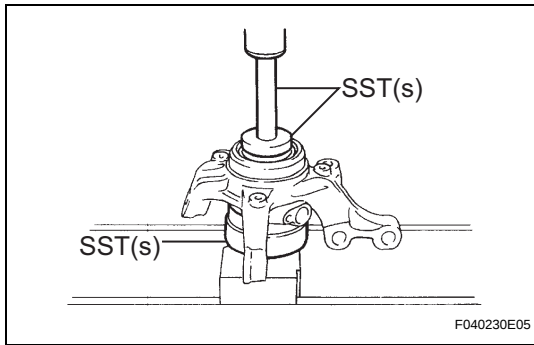
SST 09950-00020, 09950-60010 (09951-00430), 09950-70010 (09951-07100)

5. REMOVE DISC BRAKE DUST COVER FRONT LH

- (a) Using a torx wrench (T30), remove the 4 bolts and disc brake dust cover front LH.

HINT:

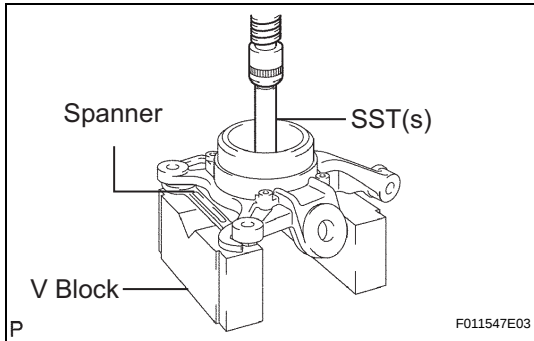
Torx is a registered trademark of Textron Inc.



6. REMOVE FRONT AXLE HUB LH BEARING

- Place the bearing inner race (outside) on the front axle hub LH bearing.
- Using SST(s) and a press, press the front axle hub LH bearing until it contacts the SST(s).

SST 09527-17011, 09950-60010 (09951-00600), 09950-70010 (09951-07100)



- Using a spanner to make the steering knuckle LH horizontal, fix it to the V block, as shown in the illustration.

NOTICE:

Be sure the steering knuckle is horizontally positioned.

- Using SST(s) and a press, remove the front axle hub LH bearing.

SST 09950-60010 (09951-00600), 09950-70010 (09951-07100)

REASSEMBLY

1. INSTALL FRONT AXLE HUB LH BEARING

- Using SST(s) and a press, install a new front axle hub LH bearing to the steering knuckle LH.

SST 09950-60020 (09951-00810), 09950-70010 (09951-07100)

2. INSTALL DISC BRAKE DUST COVER FRONT LH

- Place the disc brake dust cover front LH and using a torx wrench (T30), torque the 4 bolts.

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

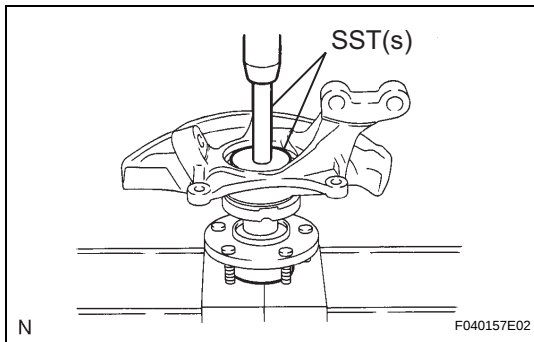
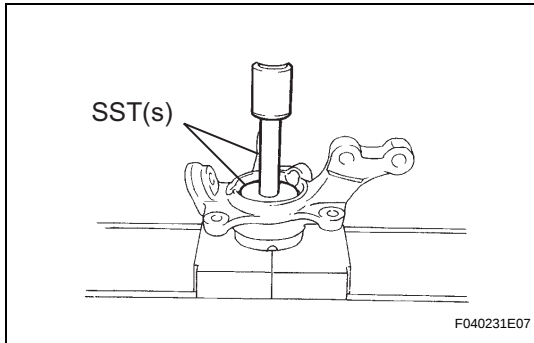
HINT:

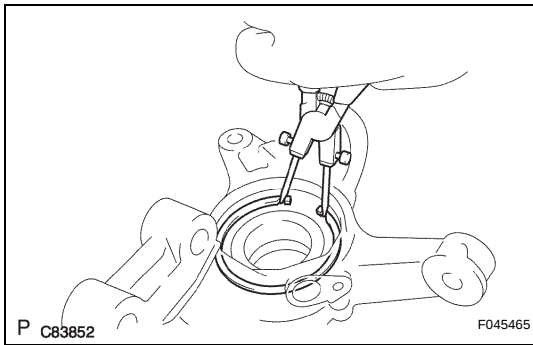
Torx is a registered trademark of Textron Inc.

3. INSTALL FRONT AXLE HUB SUB-ASSEMBLY LH

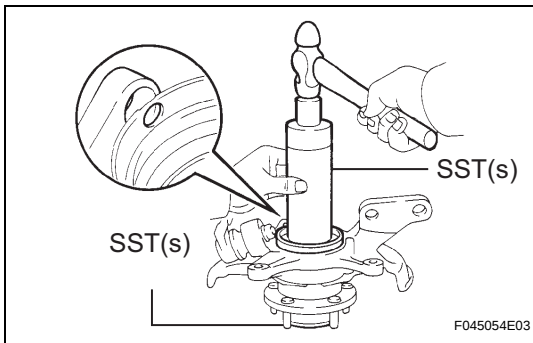
- Using SST(s), and a press, install the front axle hub sub-assembly LH.

SST 09608-32010, 09950-60020 (09951-00810), 09950-70010 (09951-07100)





4. **INSTALL FRONT AXLE HUB LH HOLE SNAP RING**
 - (a) Using snap ring pliers, install a new front axle hub LH hole snap ring.



5. **INSTALL FRONT WHEEL BEARING DUST DEFLECTOR NO.1 LH**
 - (a) Using SST(s) and a hammer, install the bearing dust deflector No. 1 LH.
SST 09316-60011 (09316-00011, 09316-00031), 09608-32010

HINT:

Align the hole for the speed sensor in the bearing dust deflector No. 1 LH with the steering knuckle.

6. **INSTALL LOWER BALL JOINT ASSEMBLY FRONT LH**

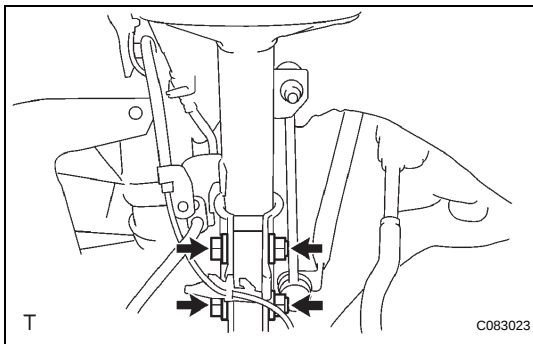
- (a) Install the lower ball joint assembly front LH and tighten the nut.

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

- (b) Install a new cotter pin.

NOTICE:

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

**INSTALLATION**

1. **INSTALL FRONT AXLE ASSEMBLY LH**

- (a) Install the 2 bolts, nuts and front axle assembly LH with the 2 bolts and nuts to the shock absorber assembly front LH.

Torque: 230 N*m (2,350 kgf*cm, 170 ft.*lbf)

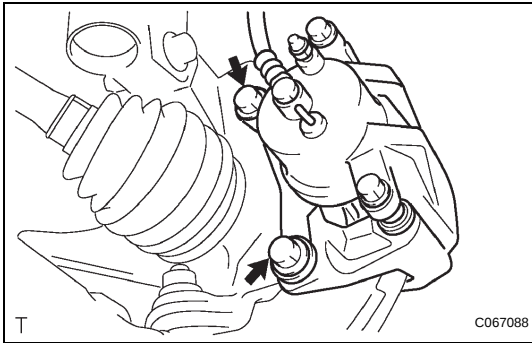
NOTICE:

- Only when reusing the bolts and nuts, apply the small amount of engine oil to the screw part of the nuts.
- Do not excessively push out the front axle assembly LH.
- Be careful not to damage the outboard joint boot.
- Be careful not to damage the speed sensor rotor.

2. **INSTALL FRONT SUSPENSION ARM SUB-ASSEMBLY LOWER NO.1 LH (See page DS-16)**

3. **INSTALL TIE ROD END SUB-ASSEMBLY LH (See page DS-16)**

4. **INSTALL FRONT DISC**



5. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY LH

- (a) Install the front disc brake caliper assembly LH with the 2 bolts to the steering knuckle LH.

Torque: 104 N*m (1,060 kgf*cm, 77 ft.*lbf)

6. INSTALL FRONT AXLE HUB LH NUT

- (a) Using a socket wrench (30mm), install a new axle hub LH nut.

Torque: 294 N*m (3,000 kgf*cm, 217 ft.*lbf)

7. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY LH

- (a) Remove the 2 bolts and separate the front disc brake caliper assembly LH from the steering knuckle LH.

NOTICE:

Use a string or other device to keep the brake caliper from hanging down.

8. REMOVE FRONT DISC

9. INSPECT BEARING BACKLASH (See page [AH-5](#))

10. INSPECT AXLE HUB DEVIATION (See page [AH-5](#))

11. INSTALL FRONT DISC

12. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY LH

- (a) Install the front disc brake caliper assembly LH with the 2 bolts to the steering knuckle LH.

Torque: 104 N*m (1,060 kgf*cm, 77 ft.*lbf)

13. INSTALL SPEED SENSOR FRONT LH (See page [DS-17](#))

14. INSTALL FRONT AXLE HUB LH NUT

- (a) Using a socket wrench (30 mm), install a new axle hub LH nut.

Torque: 294 N*m (3,000 kgf*cm, 217 ft.*lbf)

- (b) Using a chisel and hammer, stake the axle hub LH nut.

15. INSPECT FRONT WHEEL ALIGNMENT

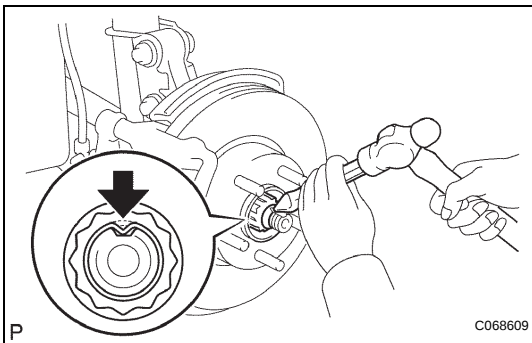
- (a) Inspect front wheel alignment (See page [SP-2](#)).

16. CHECK ABS SPEED SENSOR SIGNAL

- (a) Check ABS speed sensor signal (See page [BC-7](#)).

17. INSTALL FRONT WHEEL

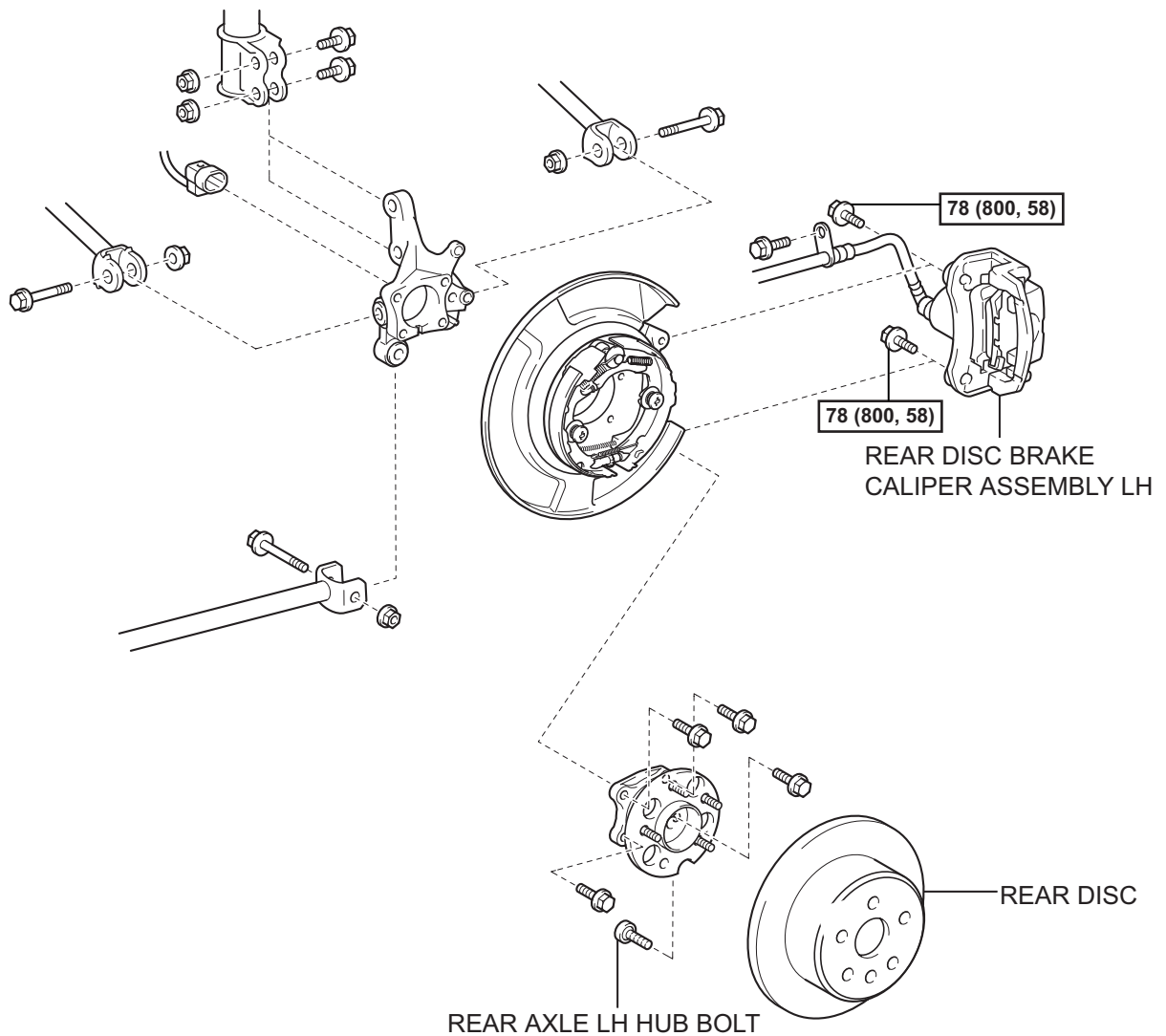
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)



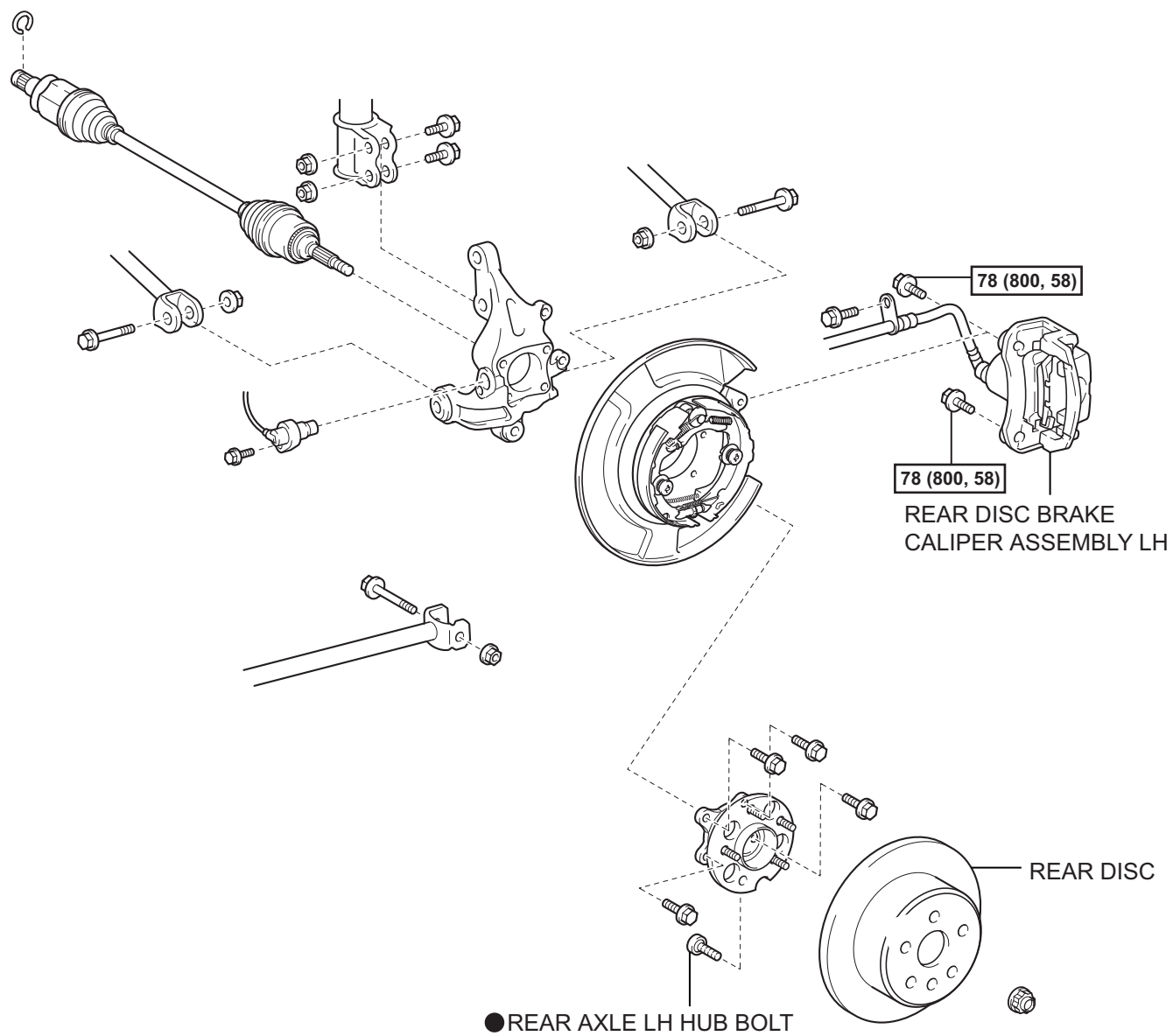
REAR AXLE HUB BOLT

COMPONENTS

(2WD)



(4WD)



AH

REPLACEMENT

HINT:

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

1. REMOVE REAR WHEEL

2. SEPARATE REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Separate rear disc brake caliper assembly LH for 2WD (see page [AH-15](#)).

3. SEPARATE REAR DISC BRAKE CALIPER ASSEMBLY LH

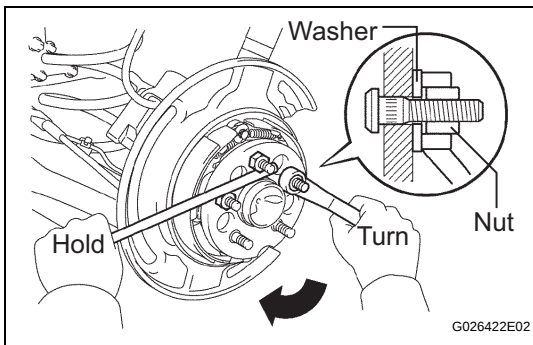
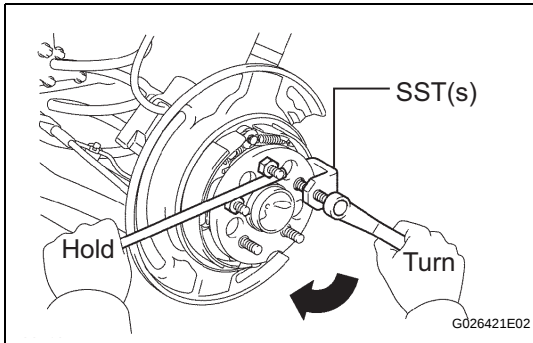
- (a) Separate rear disc brake caliper assembly LH for 4WD (see page [AH-19](#)).

4. REMOVE REAR DISC

5. REMOVE REAR AXLE LH HUB BOLT

- (a) Temporarily install the 2 nuts and washers to the rear axle LH hub bolt as shown in the illustration.
(b) Using SST(s) and a hammer handle or an equivalent to hold the hub & bearing assembly, remove the rear axle LH hub bolt.

SST 09628-10011



6. INSTALL REAR AXLE LH HUB BOLT

- (a) Install a washer and nut to a new bolt, as shown in the illustration.
(b) Using a hammer handle or an equivalent to hold the hub & bearing assembly, install the rear axle LH hub bolt by tightening the nut.

7. INSTALL REAR DISC

8. INSTALL REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Install rear disc brake caliper assembly LH for 2WD (see page [AH-16](#)).

9. INSTALL REAR DISC BRAKE CALIPER ASSEMBLY LH

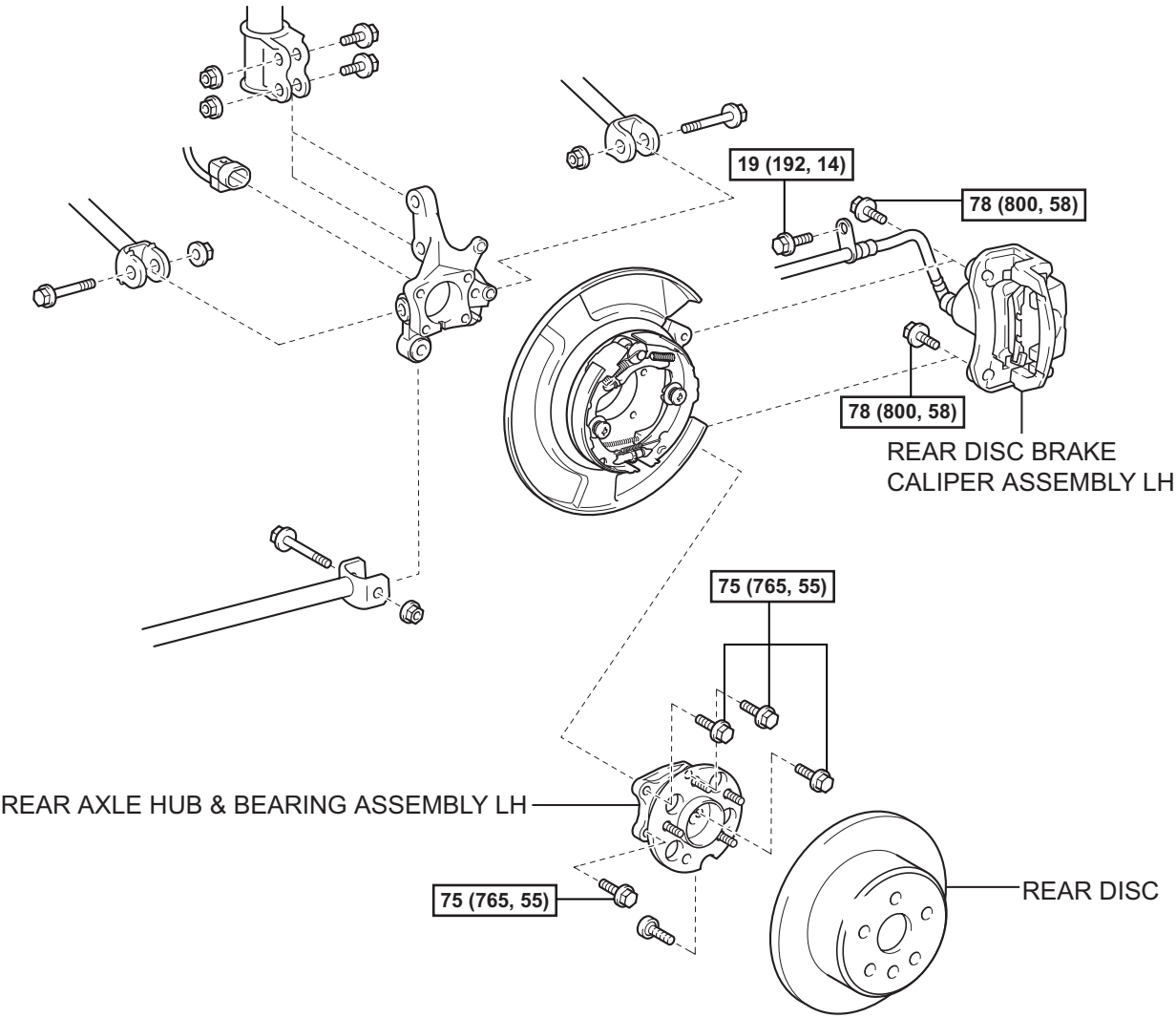
- (a) Install rear disc brake caliper assembly LH for 4WD (see page [AH-19](#)).

10. INSTALL REAR WHEEL

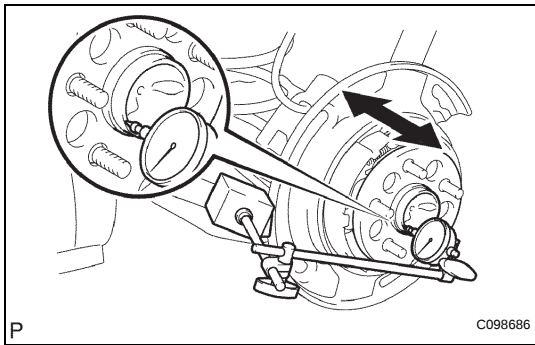
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)

REAR AXLE HUB AND BEARING (for 2WD)

COMPONENTS



AH



ON-VEHICLE INSPECTION

1. INSPECT REAR AXLE HUB BEARING BACKLASH

- (a) Using a dial gauge, check for backlash near the center of the axle hub.

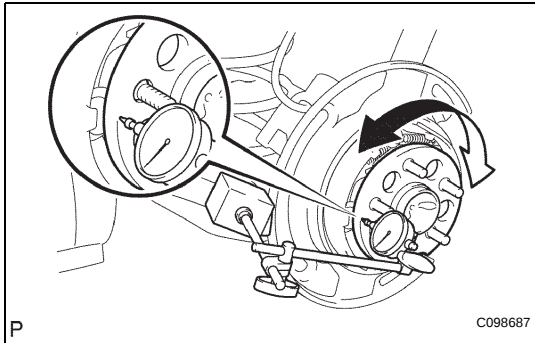
Maximum:

0.05 mm (0.0020 in.)

If backlash exceeds the maximum, replace the axle hub assembly.

NOTICE:

Ensure that the dial gauge is set at right angles to the measurement surface.



2. INSPECT REAR AXLE HUB BEARING DEVIATION

- (a) Using a dial gauge, check for deviation in the surface of the axle hub outside the hub bolt.

Maximum:

0.08 mm (0.0031 in.)

If backlash exceeds the maximum, replace the axle hub assembly.

NOTICE:

Ensure that the dial gauge is set at right angles to the measurement surface.

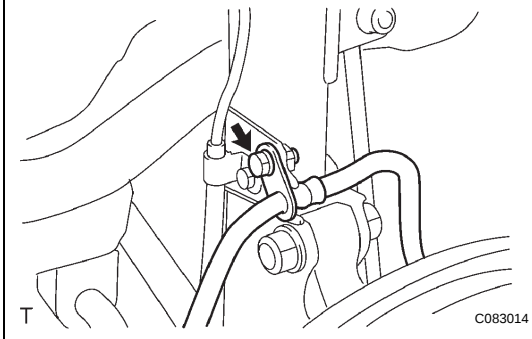
REMOVAL

HINT:

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

1. REMOVE REAR WHEEL
2. SEPARATE REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Remove the bolt, and separate the flexible hose from the shock absorber.



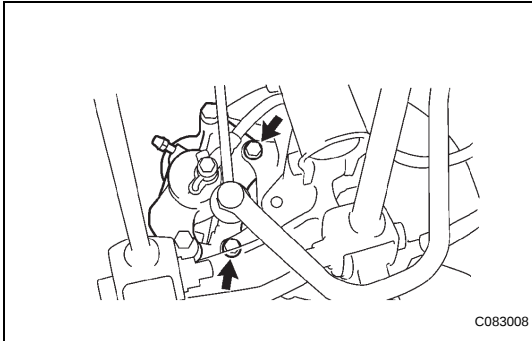
- (b) Remove the 2 bolts and separate the rear disc brake caliper assembly.

NOTICE:

Use a string or other device to keep the brake caliper from hanging down.

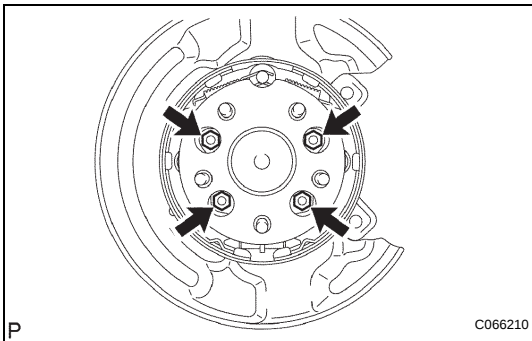
3. REMOVE REAR DISC
4. DISCONNECT SKID CONTROL SENSOR

- (a) Disconnect the connector.



5. REMOVE REAR AXLE HUB & BEARING ASSEMBLY LH

- (a) Remove the 4 bolts and hub & bearing assembly LH.



INSTALLATION

1. INSTALL REAR AXLE HUB & BEARING ASSEMBLY LH

- (a) Install the hub & bearing assembly LH with the 4 bolts.

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

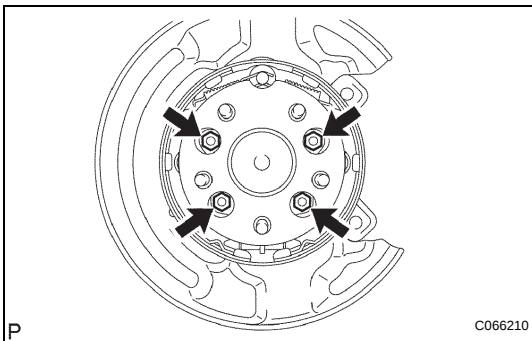
2. INSPECT BEARING BACKLASH (See page [AH-15](#))
3. INSPECT AXLE HUB DEVIATION (See page [AH-15](#))
4. CONNECT SKID CONTROL SENSOR

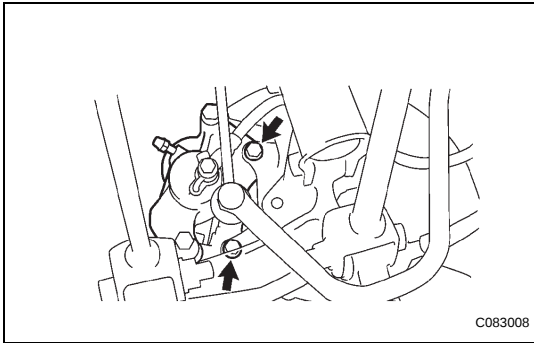
- (a) Connect the connector.

NOTICE:

Do not twist the sensor wire when connecting it.

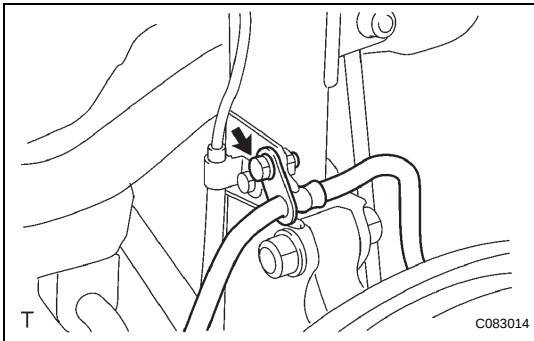
5. INSTALL REAR DISC





6. INSTALL REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Install the rear disc brake caliper with the 2 bolts.
Torque: 78 N*m (800 kgf*cm, 58 ft.*lbf)



- (b) Install the bolt with flexible hose to the shock absorber.

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

7. INSTALL REAR WHEEL

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

8. INSPECT REAR WHEEL ALIGNMENT

- (a) Inspect rear wheel alignment (See page [SP-7](#)).

9. ADJUST VEHICLE HEIGHT

- (a) Adjust vehicle height only for the vehicle with air suspension (See page [SC-15](#)).

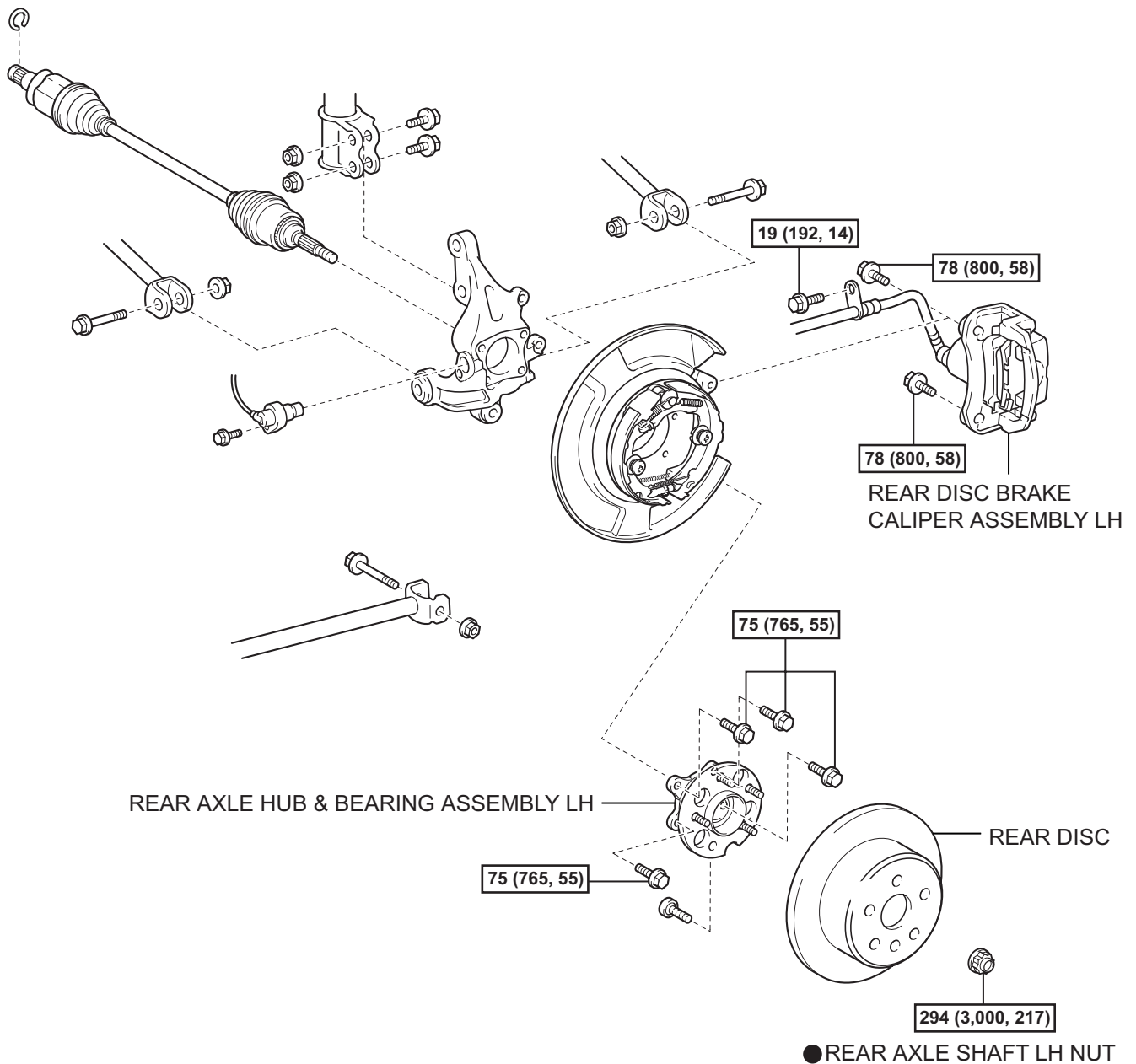
10. ADJUST HEADLIGHT AIM ONLY (See page [LI-196](#))

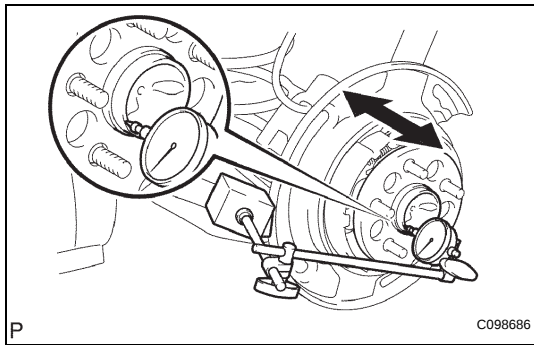
11. CHECK ABS SPEED SENSOR SIGNAL

- (a) Check ABS speed sensor signal (See page [BC-7](#)).

REAR AXLE HUB AND BEARING (for 4WD)

COMPONENTS





ON-VEHICLE INSPECTION

1. INSPECT REAR AXLE HUB BEARING BACKLASH

- (a) Using a dial gauge, check for backlash near the center of the axle hub.

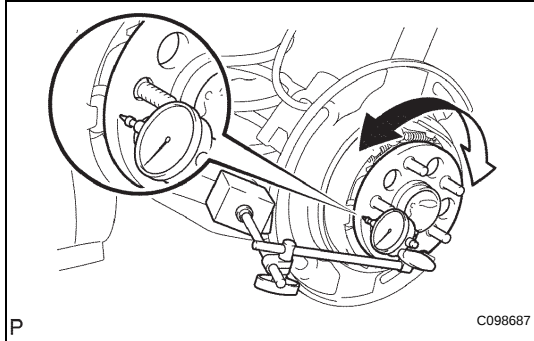
Maximum:

0.05 mm (0.0020 in.)

If backlash exceeds the maximum, replace the axle hub assembly.

NOTICE:

Ensure that the dial gauge is set at right angles to the measurement surface.



2. INSPECT REAR AXLE HUB BEARING DEVIATION

- (a) Using a dial gauge, check for deviation in the surface of the axle hub outside the hub bolt.

Maximum:

0.08 mm (0.0031 in.)

If backlash exceeds the maximum, replace the axle hub assembly.

NOTICE:

Ensure that the dial gauge is set at right angles to the measurement surface.

REMOVAL

HINT:

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

1. REMOVE REAR WHEEL

2. SEPARATE SPEED SENSOR REAR LH

- (a) remove the bolt and separate the speed sensor from the axle carrier.

NOTICE:

- Be careful not to damage the speed sensor.
- Prevent foreign matter from adhering to the speed sensor.

3. REMOVE REAR AXLE SHAFT LH NUT

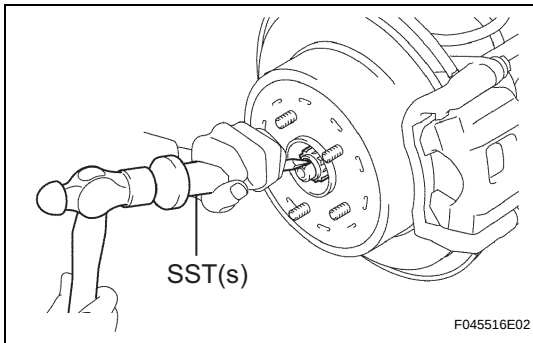
- (a) Using SST(s) and a hammer, unstake the staked part of the axle hub LH nut.

SST 09930-00010

NOTICE:

Loosen the staked part of the nut completely, otherwise the screw of the drive shaft may be damaged.

- (b) While applying the brakes, remove the lock axle hub LH nut.

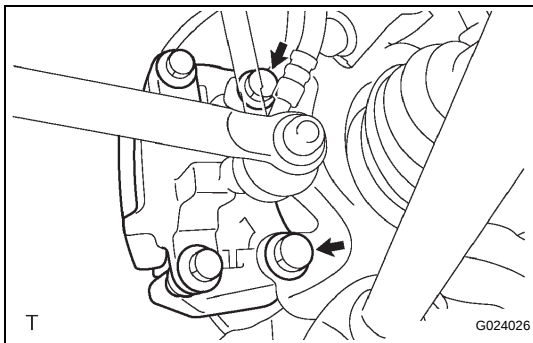


4. SEPARATE REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Remove the bolt, and separate the flexible hose from the shock absorber.
- (b) Remove the 2 bolts and separate rear disc brake caliper assembly.

NOTICE:

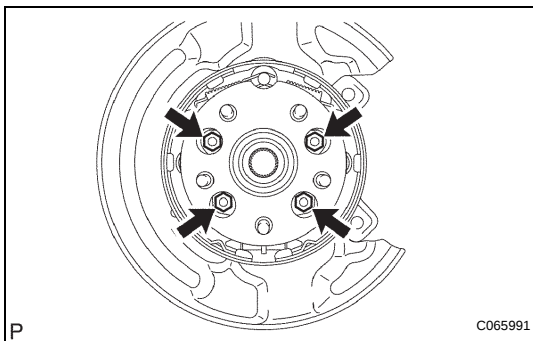
Use a string or other device to keep the brake caliper from hanging down.

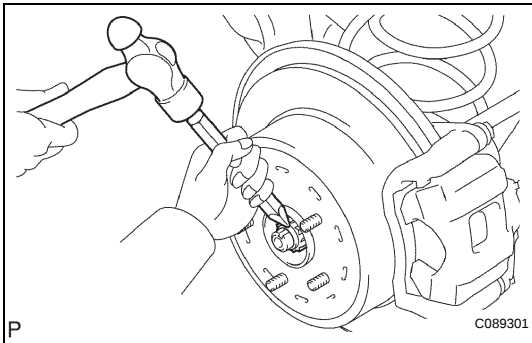
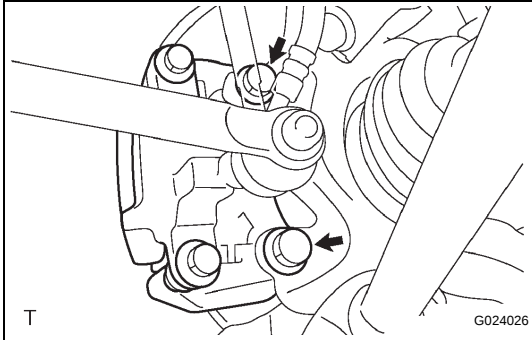
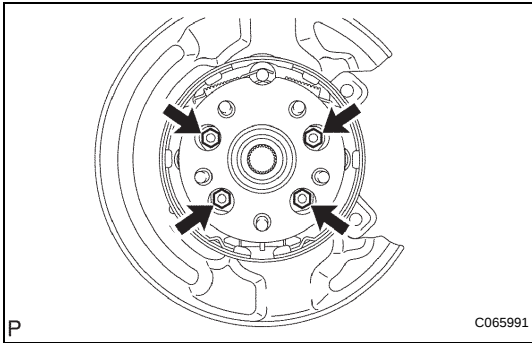


5. REMOVE REAR DISC

6. REMOVE REAR AXLE HUB & BEARING ASSEMBLY LH

- (a) Remove the 4 bolts and the rear axle hub & bearing assembly LH.



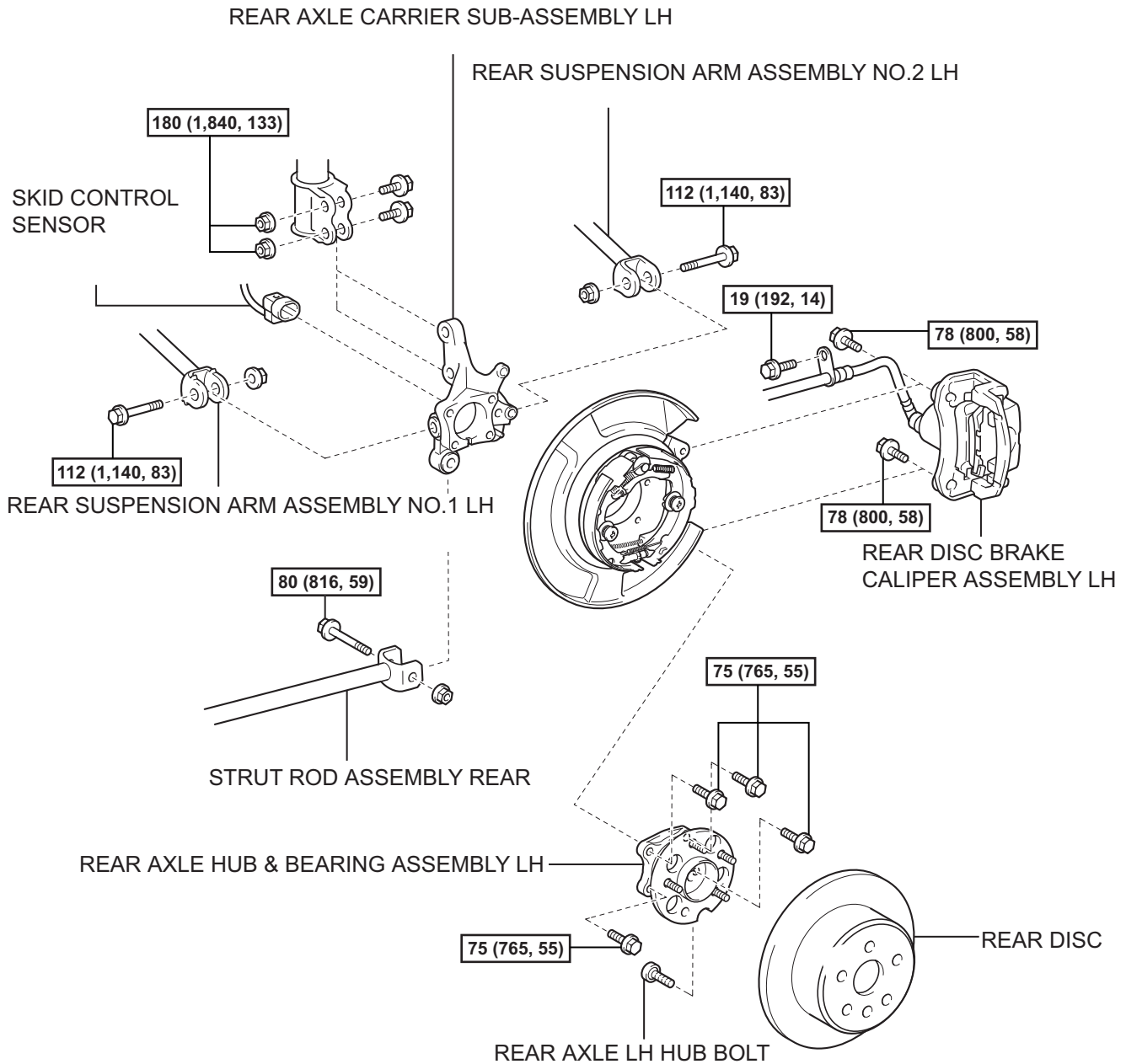


INSTALLATION

1. **INSTALL REAR AXLE HUB & BEARING ASSEMBLY LH**
 - (a) Install the rear axle hub & bearing assembly LH with the 4 bolts.
Torque: 75 N*m (765 kgf*cm, 55 ft.*lbf)
2. **INSPECT BEARING BACKLASH** (See page [AH-18](#))
3. **INSPECT AXLE HUB DEVIATION** (See page [AH-18](#))
4. **INSTALL REAR DISC**
5. **INSTALL REAR DISC BRAKE CALIPER ASSEMBLY LH**
 - (a) Install the rear disc brake caliper assembly LH with the 2 bolts.
Torque: 78 N*m (800 kgf*cm, 58 ft.*lbf)
 - (b) Install the flexible hose with the bolt to the shock absorber.
Torque: 19 N*m (192 kgf*cm, 14 ft.*lbf)
6. **INSTALL REAR AXLE SHAFT LH NUT**
 - (a) Install a new axle shaft LH nut.
Torque: 294 N*m (3,000 kgf*cm, 217 ft.*lbf)
 - (b) Using a chisel and hammer, stake the axle shaft LH nut.
7. **INSTALL SPEED SENSOR REAR LH**
 - (a) Install the speed sensor with the bolt.
Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)
NOTICE:
 - Be careful not to damage the speed sensor.
 - Prevent foreign matter from adhering to the speed sensor.
 - Do not twist the sensor wire when installing the sensor.
8. **INSTALL REAR WHEEL**
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)
9. **INSPECT REAR WHEEL ALIGNMENT**
 - (a) Inspect rear wheel alignment (See page [SP-7](#)).
10. **ADJUST VEHICLE HEIGHT**
 - (a) Adjust vehicle height only for the vehicle with air suspension (See page [SC-15](#)).
11. **ADJUST HEADLIGHT AIM ONLY** (See page [LI-196](#))
12. **CHECK ABS SPEED SENSOR SIGNAL**
 - (a) Check ABS speed sensor signal (See page [BC-7](#)).

REAR AXLE CARRIER (for 2WD)

COMPONENTS



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

● Non-reusable part

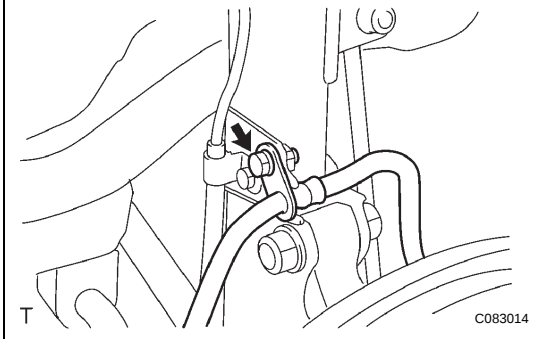
REMOVAL

HINT:

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

1. REMOVE REAR WHEEL
2. SEPARATE REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Remove the bolt, and separate the flexible hose from the shock absorber.



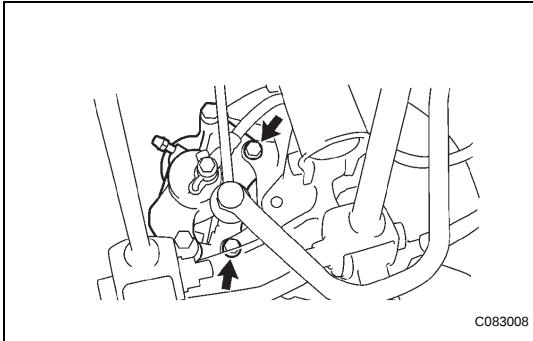
- (b) Remove the 2 bolts and separate the rear disc brake caliper assembly.

NOTICE:

Use a string or other device to keep the brake caliper from hanging down.

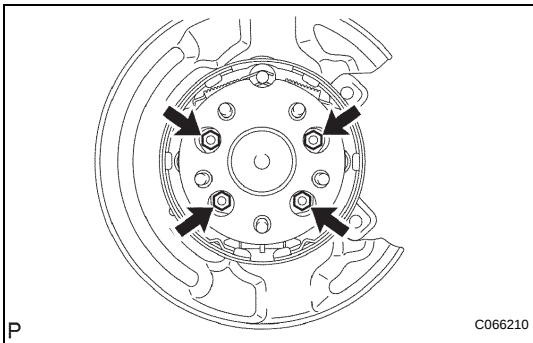
3. REMOVE REAR DISC
4. DISCONNECT SKID CONTROL SENSOR

- (a) Disconnect the connector.



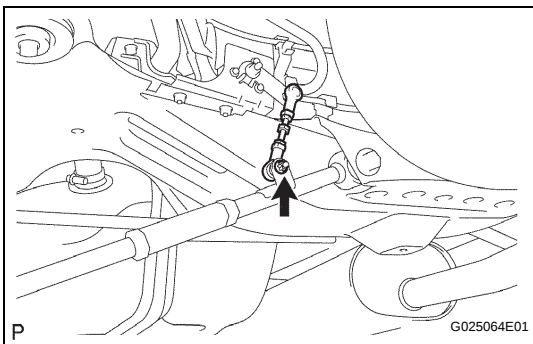
5. REMOVE REAR AXLE HUB & BEARING ASSEMBLY LH

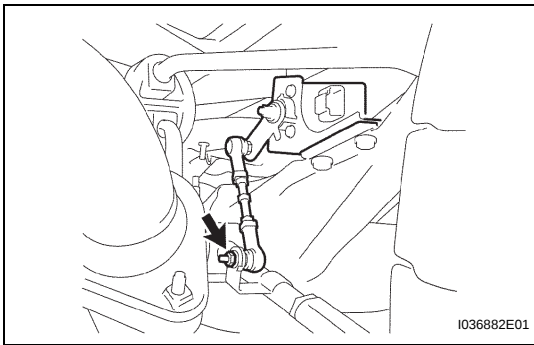
- (a) Remove the 4 bolts and hub & bearing assembly LH.



6. SEPARATE HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR

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





7. SEPARATE HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR

- (a) Remove the nut and separate the height control link (w/ discharge head light).

HINT:

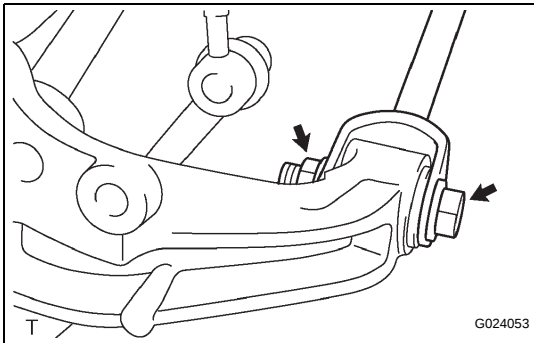
Perform the procedure only when removing the RH side.

8. SEPARATE STRUT ROD ASSEMBLY REAR

- (a) Remove the bolt and nut, and the strut rod assembly rear (rear axle carrier side) from rear axle carrier.

HINT:

When removing the bolt, keep the nut from rotating.

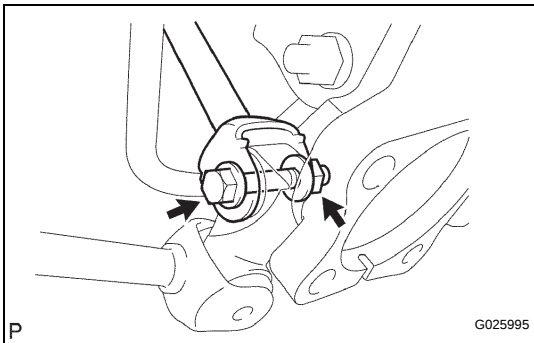


9. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.2 LH

- (a) Remove the bolt and nut, and separate the rear suspension arm assembly No. 2 (rear axle carrier side) from the rear axle carrier.

HINT:

When removing the bolt, keep the nut from rotate.

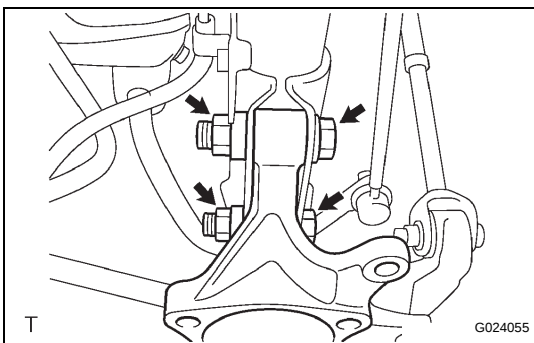


10. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.1 LH

- (a) Remove the bolt and nut, separate the rear suspension arm assembly No. 1 (rear axle carrier side) from the rear axle carrier.

HINT:

When removing the bolt, keep the nut from rotate.



11. REMOVE REAR AXLE CARRIER SUB-ASSEMBLY LH

- (a) Remove the 2 bolts and nuts, and remove the rear axle carrier from the shock absorber.

INSTALLATION

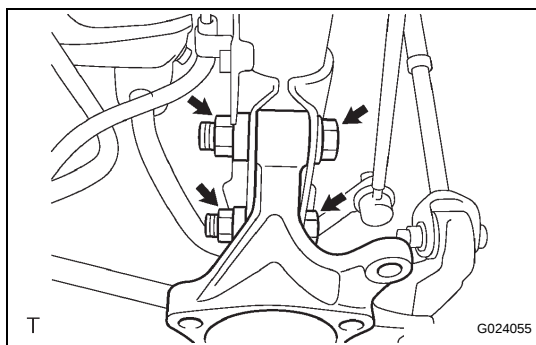
1. INSTALL REAR AXLE CARRIER SUB-ASSEMBLY LH

- (a) Install the rear axle carrier sub-assembly with the 2 bolts and nuts to the shock absorber.

Torque: 180 N*m (1,840 kgf*cm, 133 ft.*lbf)

HINT:

Insert the bolt from the rear side of the vehicle and lightly tighten the nut.

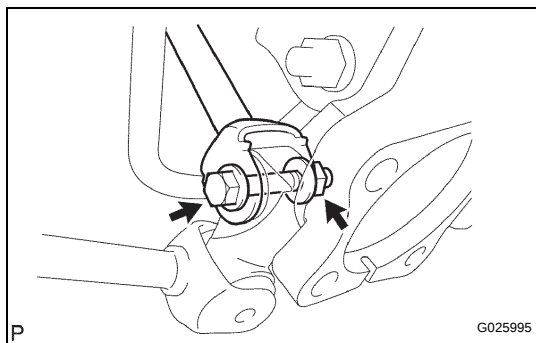


2. TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.1 LH

- (a) Temporarily tighten the rear suspension arm assembly No. 1 LH with the bolt and nut.

HINT:

Insert the bolt from the rear side of the vehicle and lightly tighten the bolt.

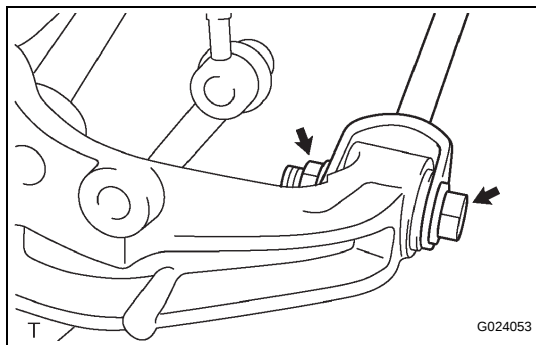


3. TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH

- (a) Temporarily tighten the rear suspension arm assembly No. 2 LH with the bolt and nut.

HINT:

Insert the bolt from the rear side of the vehicle and lightly tighten the bolt.

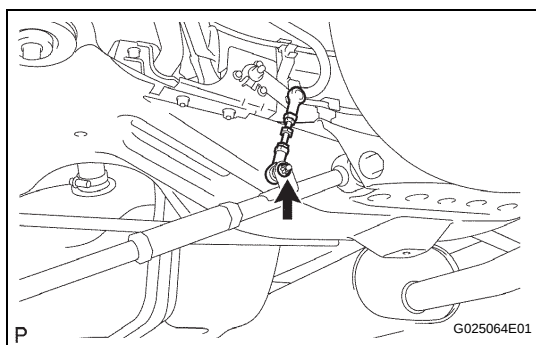


4. TEMPORARILY TIGHTEN STRUT ROD ASSEMBLY REAR

- (a) Temporarily tighten the strut rod assembly rear with the bolt and nut.

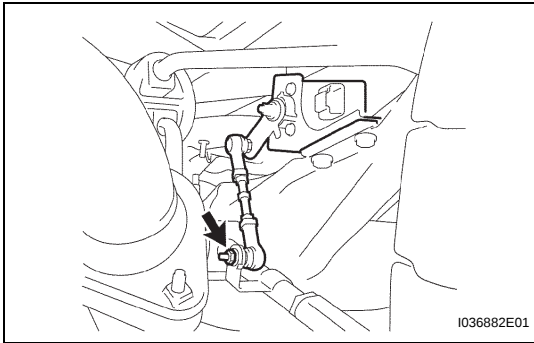
HINT:

Insert the bolt from the inside of the vehicle and lightly tighten the bolt.



5. INSTALL HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR

- (a) Install the height control sensor sub-assembly and nut to the suspension arm assembly No. 2 (w/ air suspension).



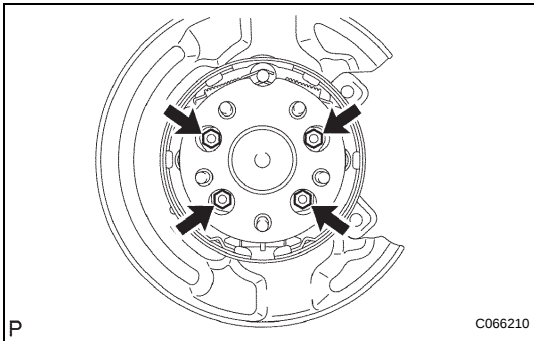
6. INSTALL HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR

- (a) Install the height control sensor link with the nut (w/ discharge head light).

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

HINT:

Perform the procedure only when installing the RH side.



7. INSTALL REAR AXLE HUB & BEARING ASSEMBLY LH

- (a) Install the hub & bearing assembly LH with the 4 bolts.

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

8. INSPECT BEARING BACKLASH (See page AH-15)

9. INSPECT AXLE HUB DEVIATION (See page AH-15)

10. CONNECT SKID CONTROL SENSOR

- (a) Connect the connector.

NOTICE:

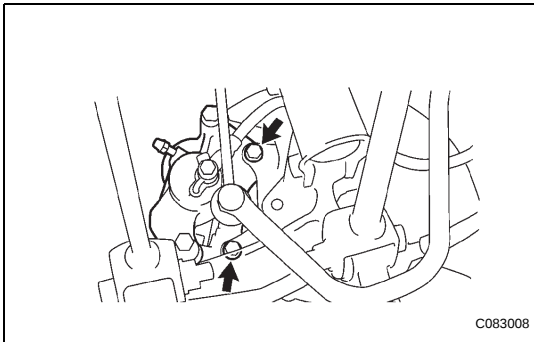
Do not twist the sensor wire when connecting it.

11. INSTALL REAR DISC

12. INSTALL REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Install the rear disc brake caliper with the 2 bolts.

Torque: 78 N*m (800 kgf*cm, 58 ft.*lbf)

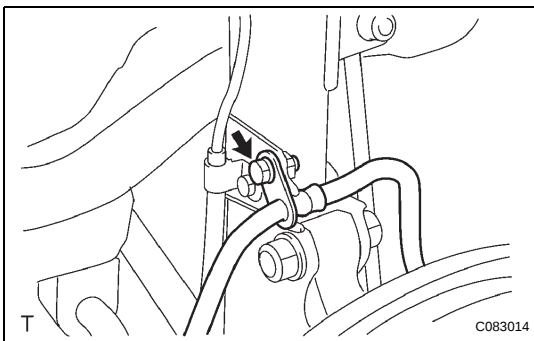


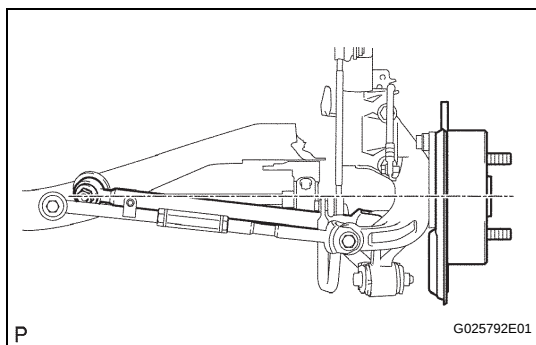
- (b) Install the bolt with flexible hose to the shock absorber.

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

13. INSTALL REAR WHEEL

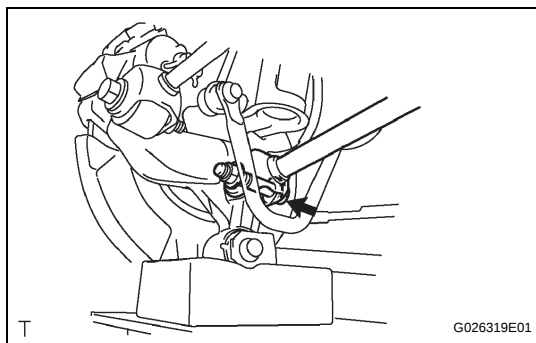
Torque: 103 N*m (1,050 kgf*cm, 76 ft.*lbf)





14. STABILIZE SUSPENSION

- (a) 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.

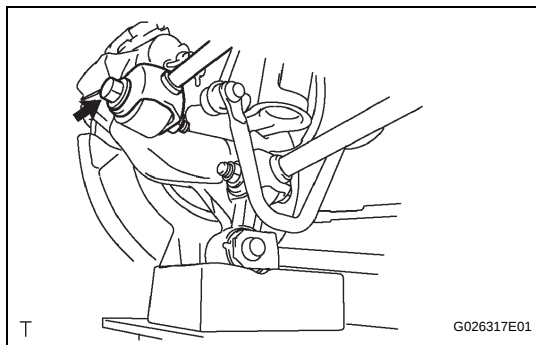


15. FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.1 LH

- (a) Fully tighten the bolt.
Torque: 112 N*m (1,224 kgf*cm, 83 ft.*lbf)

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

- (a) Fully tighten the bolt.
Torque: 112 N*m (1,224 kgf*cm, 83 ft.*lbf)



17. FULLY TIGHTEN STRUT ROD ASSEMBLY REAR

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

18. INSPECT REAR WHEEL ALIGNMENT

- (a) Inspect rear wheel alignment (See page [SP-7](#)).

19. ADJUST VEHICLE HEIGHT

- (a) Adjust vehicle height only for the vehicle with air suspension (See page [SC-15](#)).

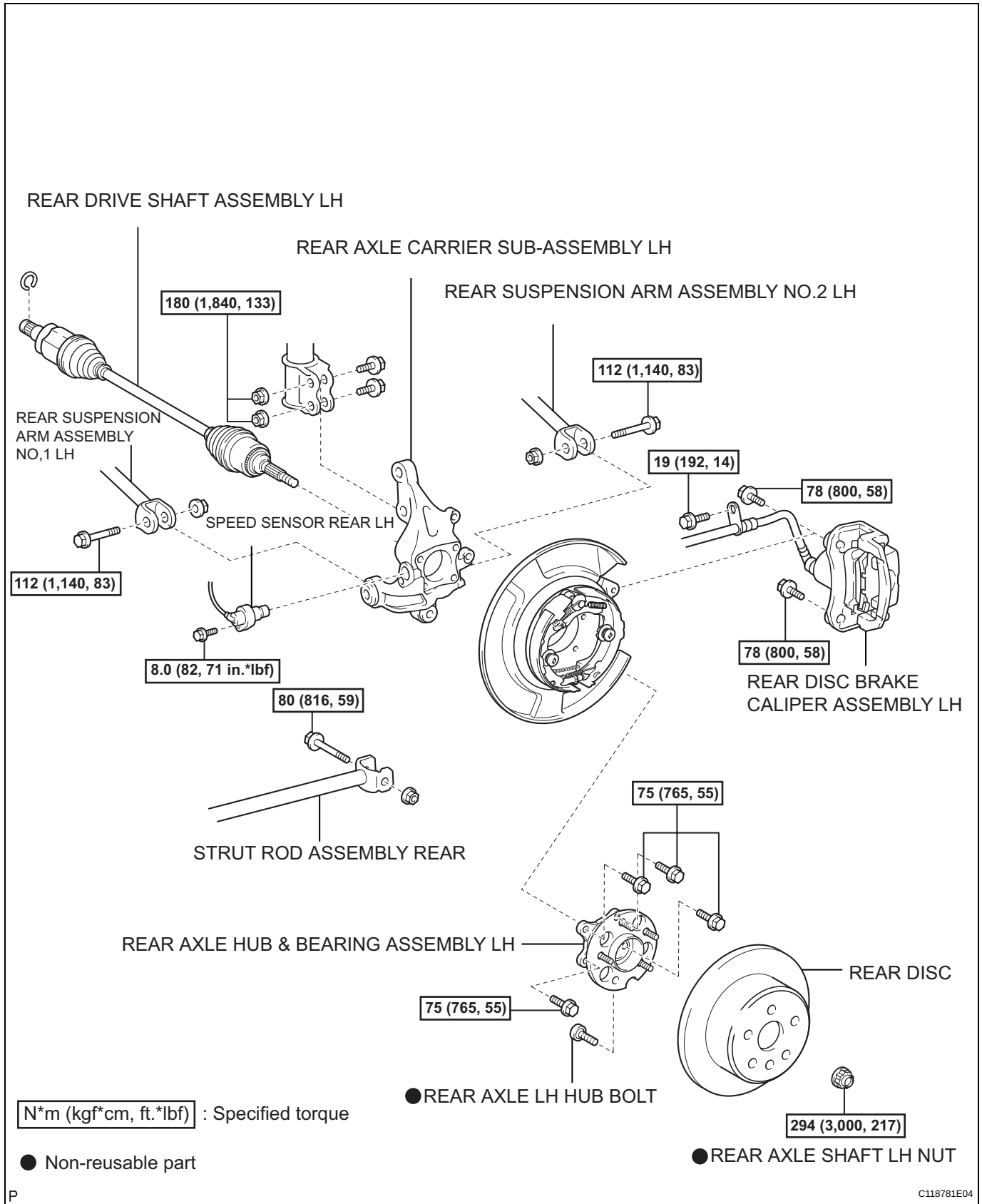
20. ADJUST HEADLIGHT AIM ONLY (See page [LI-196](#))

21. CHECK ABS SPEED SENSOR SIGNAL

- (a) Check ABS speed sensor signal (See page [BC-7](#)).

REAR AXLE CARRIER (for 4WD)

COMPONENTS



REMOVAL

HINT:

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

1. REMOVE REAR WHEEL

2. SEPARATE SPEED SENSOR REAR LH

- (a) Remove the bolt and separate the speed sensor from the axle carrier.

NOTICE:

- Be careful not to damage the speed sensor.
- Prevent foreign matter from adhering to the speed sensor.

3. REMOVE REAR AXLE SHAFT LH NUT

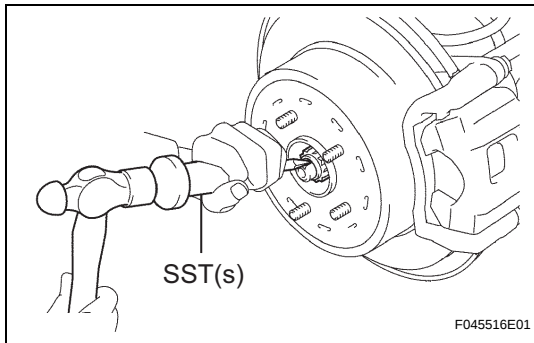
- (a) Using SST(s) and a hammer, unstake the staked part of the axle hub LH nut.

SST 09930-00010

NOTICE:

Loosen the staked part of the nut completely, otherwise the screw of the drive shaft may be damaged.

- (b) While applying the brakes, remove the lock axle hub LH nut.

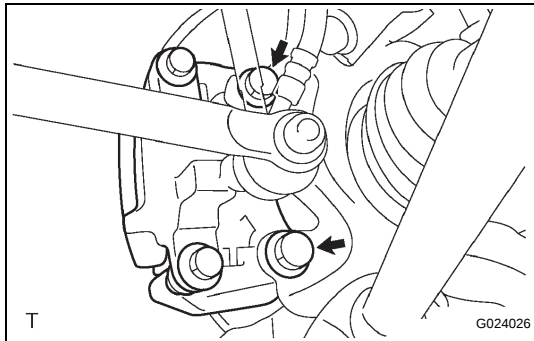


4. SEPARATE REAR DISC BRAKE CALIPER ASSEMBLY LH

- (a) Remove the bolt, and separate the flexible hose from the shock absorber.
- (b) Remove the 2 bolts and separate rear disc brake caliper assembly.

NOTICE:

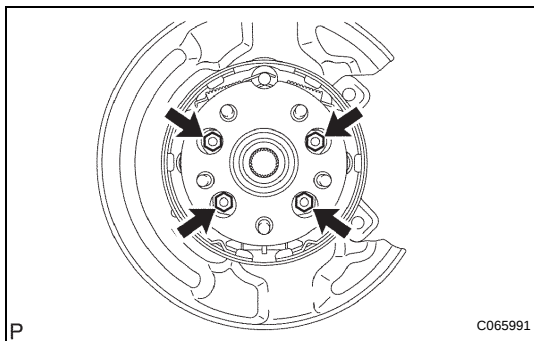
Use a string or other device to keep the brake caliper from hanging down.

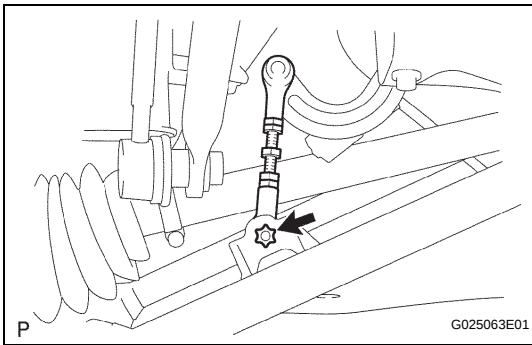


5. REMOVE REAR DISC

6. REMOVE REAR AXLE HUB & BEARING ASSEMBLY LH

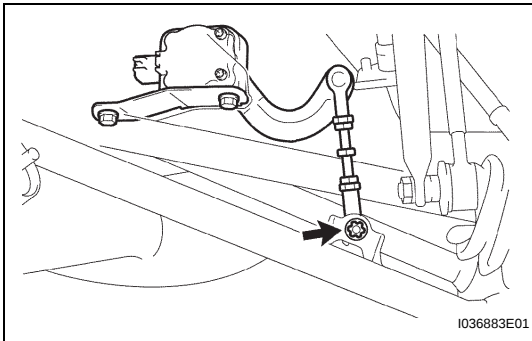
- (a) Remove the 4 bolts and the rear axle hub & bearing assembly LH.





7. SEPARATE HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR

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

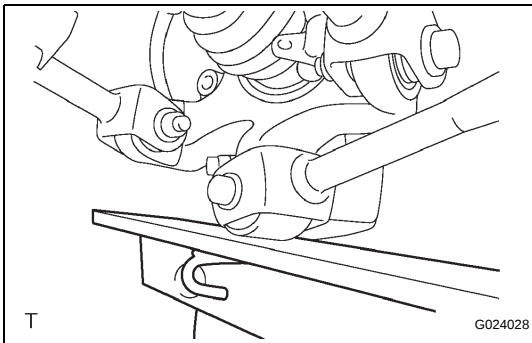


8. SEPARATE HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR

- Remove the nut and separate the height control sensor link (w/ discharge head light)

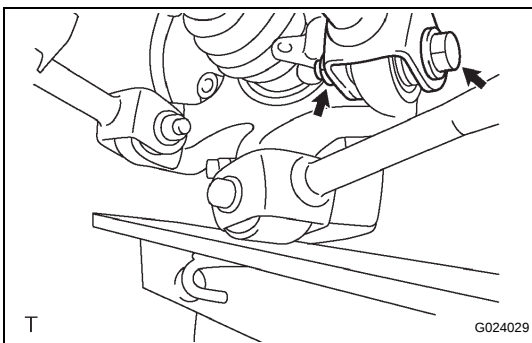
HINT:

Perform the procedure only when removing the RH side.



9. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.1 LH

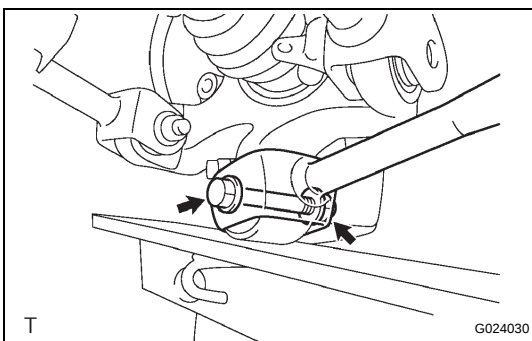
- Using a jack, raise the rear axle carrier sub-assembly LH, as shown in the illustration.



- Remove the bolt and nut, and separate the rear suspension arm assembly No. 1 LH (rear axle carrier side) from the rear axle carrier.

HINT:

When removing the bolt, keep the nut from rotating.

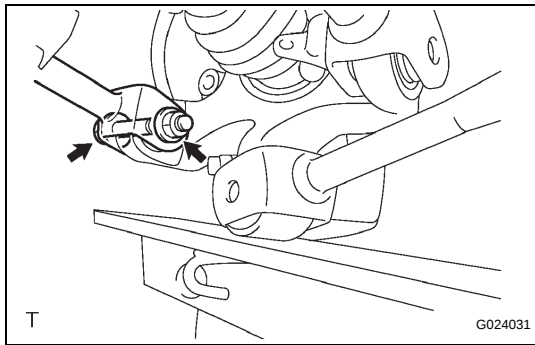


10. SEPARATE STRUT ROD ASSEMBLY REAR

- Remove the bolt and nut, and separate the strut rod assembly rear (rear axle carrier side) from rear axle carrier.

HINT:

When removing the bolt, keep the nut from rotating.

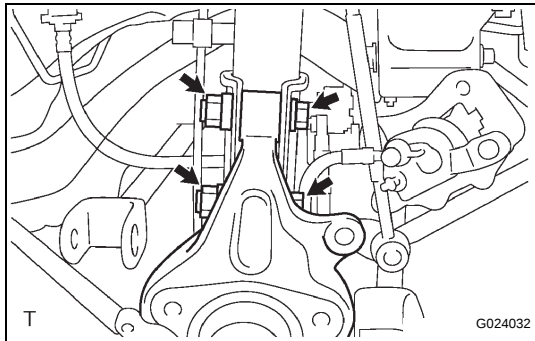


11. SEPARATE REAR SUSPENSION ARM ASSEMBLY NO.2 LH

- (a) Remove the bolt and nut, and separate the rear suspension arm assembly No. 2 LH (rear axle carrier side) from the rear axle carrier.

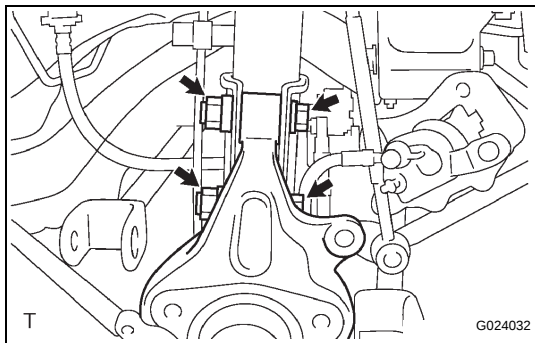
HINT:

When removing the bolt, keep the nut from rotating.



12. REMOVE REAR AXLE CARRIER SUB-ASSEMBLY LH

- (a) Remove the 2 bolts and 2 nuts, and the rear axle carrier sub-assembly LH from the shock absorber.



INSTALLATION

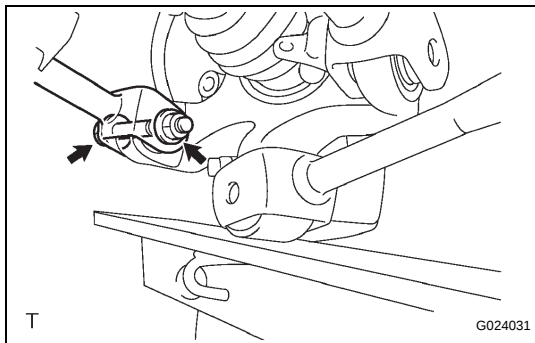
1. INSTALL REAR AXLE CARRIER SUB-ASSEMBLY LH

- (a) Install the rear axle carrier sub-assembly LH with the 2 bolts and nuts.

Torque: 180 N*m (1,840 kgf*cm, 133 ft.*lbf)

HINT:

Insert the bolt from the rear side of the vehicle and temporarily install the nut to the shock absorber.

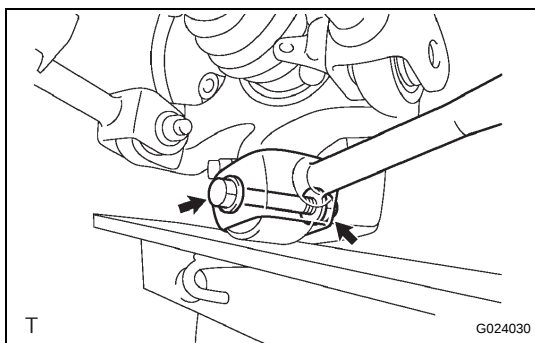


2. TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH

- (a) Temporarily tighten the rear suspension arm assembly No. 2 LH with the bolt and nut.

HINT:

Insert the bolt from the rear side of the vehicle and lightly tighten the bolt.

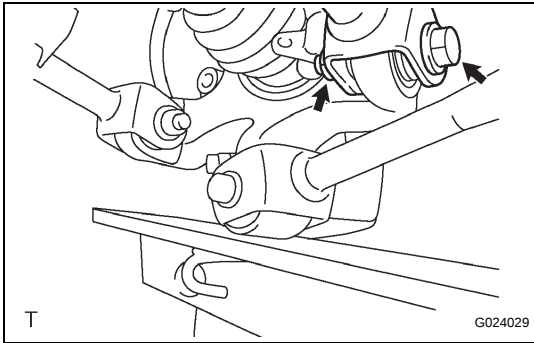


3. TEMPORARILY TIGHTEN STRUT ROD ASSEMBLY REAR

- (a) Temporarily tighten the strut rod assembly rear with the bolt and nut.

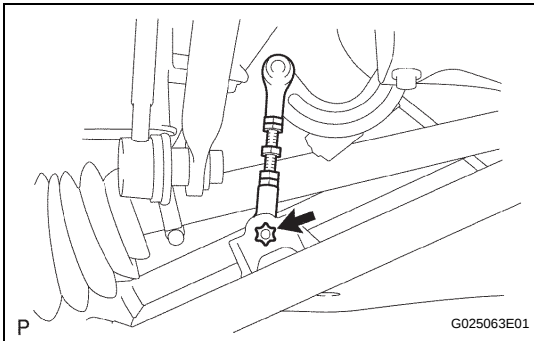
HINT:

Insert the bolt from the inside of the vehicle and lightly tighten the bolt.



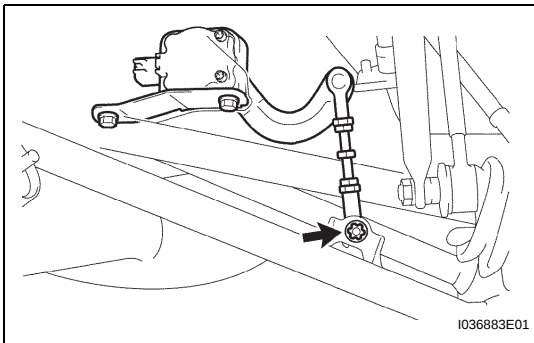
4. **TEMPORARILY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.1 LH**
 - (a) Temporarily tighten the rear suspension arm assembly No. 1 LH with the bolt and nut.

HINT:
Insert the bolt from the front side of the vehicle and lightly tighten the bolt.



5. **INSTALL HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR**
 - (a) Install the height control sensor sub-assembly and nut to the suspension arm assembly No. 2 (w/ air suspension).

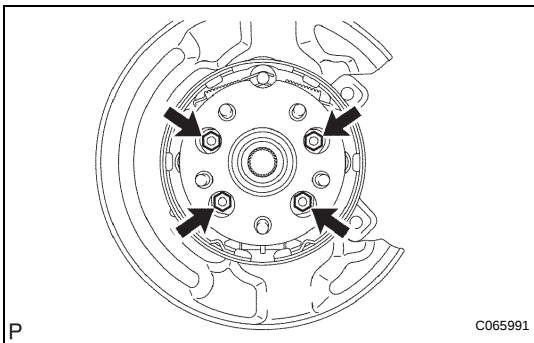
Torque: 5.4 N*m (55 kgf*cm, 48 in.*lbf)



6. **INSTALL HEIGHT CONTROL SENSOR SUB-ASSEMBLY REAR**
 - (a) Install the height control sensor link with the nut (w/ discharge head light).

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

HINT:
Perform the procedure only when installing the RH side.



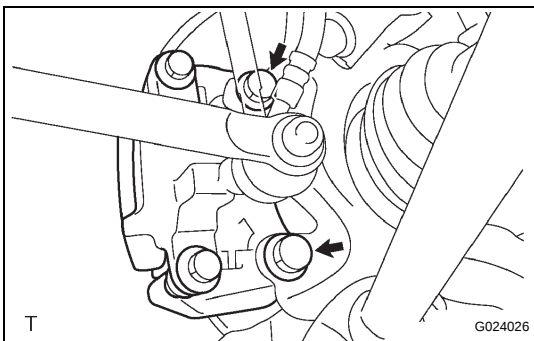
7. **INSTALL REAR AXLE HUB & BEARING ASSEMBLY LH**
 - (a) Install the rear axle hub & bearing assembly LH with the 4 bolts.

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

8. **INSPECT BEARING BACKLASH (See page AH-18)**

9. **INSPECT AXLE HUB DEVIATION (See page AH-18)**

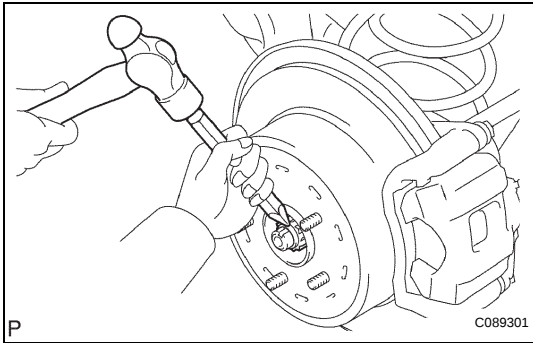
10. **INSTALL REAR DISC**



11. **INSTALL REAR DISC BRAKE CALIPER ASSEMBLY LH**
 - (a) Install the rear disc brake caliper assembly LH with the 2 bolts.

Torque: 78 N*m (800 kgf*cm, 58 ft.*lbf)

 - (b) Install the flexible hose with the bolt to the shock absorber.
- Torque: 19 N*m (192 kgf*cm, 14 ft.*lbf)**

**12. INSTALL REAR AXLE SHAFT LH NUT**

- (a) Install a new axle shaft LH nut.

Torque: 294 N*m (3,000 kgf*cm, 217 ft.*lbf)

- (b) Using a chisel and hammer, stake the axle shaft LH nut.

13. INSTALL SPEED SENSOR REAR LH

- (a) Install the speed sensor with the bolt.

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

NOTICE:

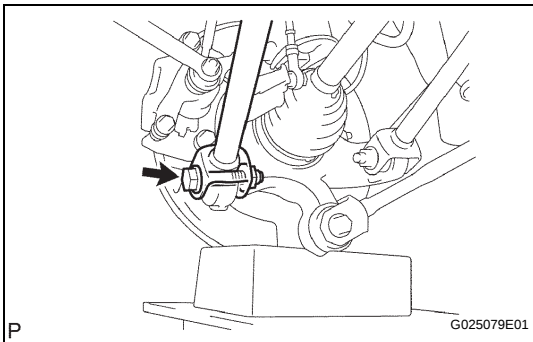
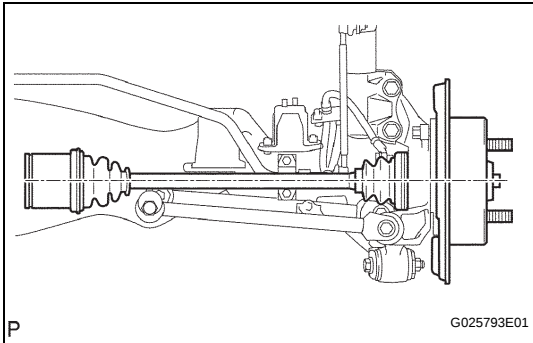
- Be careful not to damage the speed sensor.
- Prevent foreign matter from adhering to the speed sensor.
- Do not twist the sensor wire when installing the sensor.

14. INSTALL REAR WHEEL

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

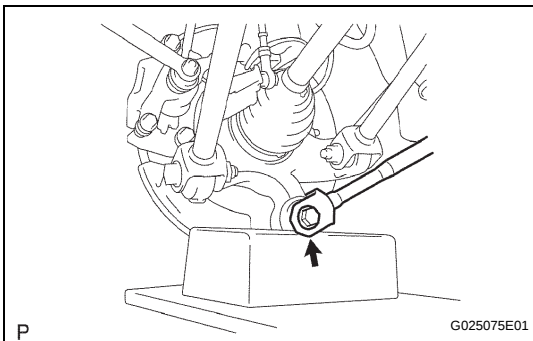
15. STABILIZE SUSPENSION

- (a) 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.

**16. FULLY TIGHTEN REAR SUSPENSION ARM ASSEMBLY NO.2 LH**

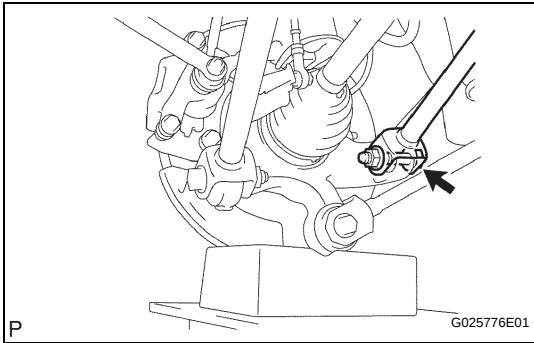
- (a) Fully tighten the bolt.

Torque: 112 N*m (1,140 kgf*cm, 83 ft.*lbf)

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

- (a) Fully tighten the bolt.

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



18. 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)

19. INSPECT REAR WHEEL ALIGNMENT

- (a) Inspect rear wheel alignment (See page [SP-7](#)).

20. ADJUST VEHICLE HEIGHT

- (a) Adjust vehicle height only for the vehicle with air suspension (See page [SC-15](#)).

21. ADJUST HEADLIGHT AIM ONLY (See page [LI-196](#))

22. CHECK ABS SPEED SENSOR SIGNAL

- (a) Check ABS speed sensor signal (See page [BC-7](#)).