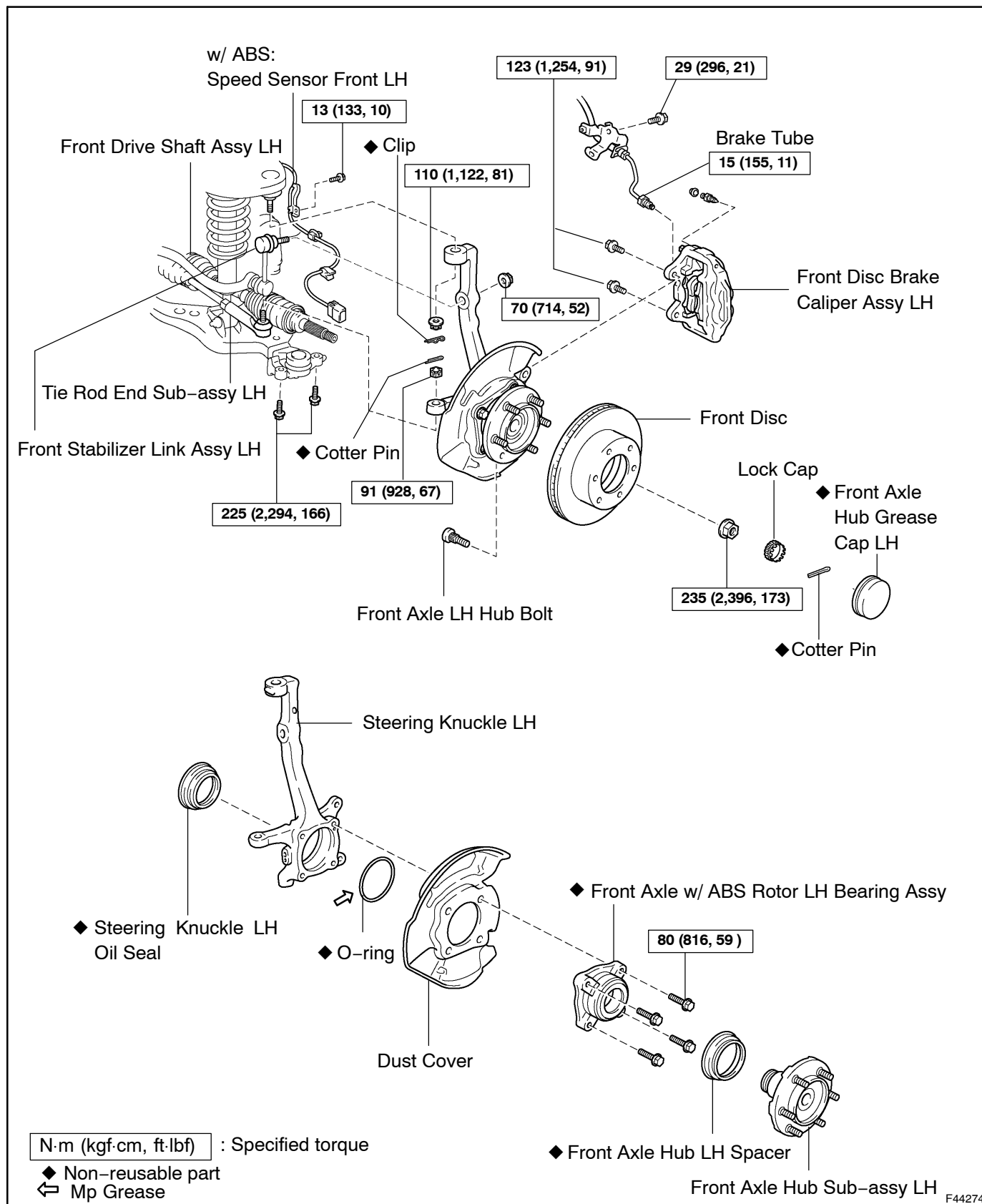


FRONT AXLE HUB SUB-ASSY LH

COMPONENTS

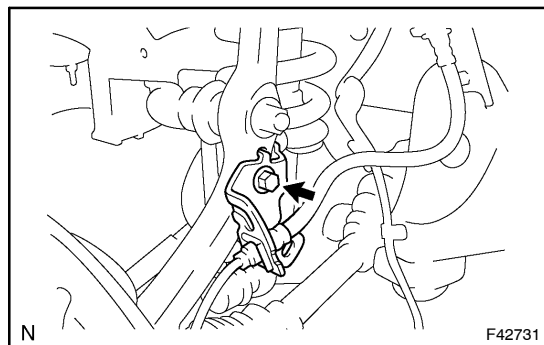
300HB-01



F44274

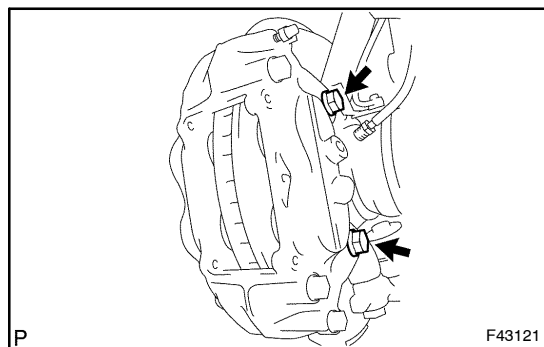
REPLACEMENT

1. REMOVE FRONT WHEEL



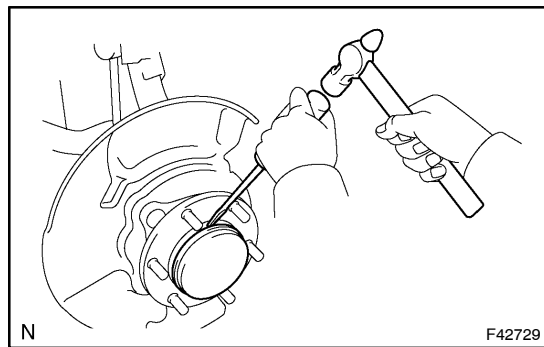
2. REMOVE FRONT DISC BRAKE CALIPER ASSY LH

- (a) Remove the bolt and separate the brake tube bracket from the steering knuckle.
- (b) Using SST, disconnect the brake tube from the front disc brake caliper assy LH.
SST 09023-00101



- (c) Remove the 2 bolts and front disc brake caliper assy LH.

3. REMOVE FRONT DISC

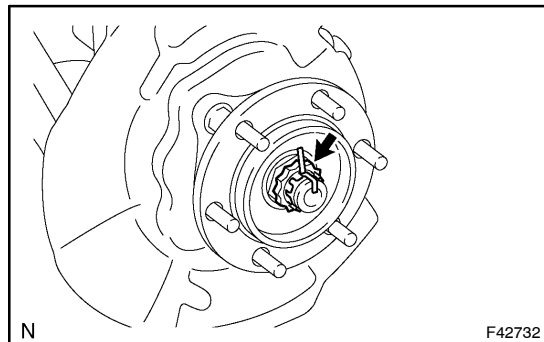


4. REMOVE FRONT AXLE HUB GREASE CAP LH

- (a) Using a screwdriver and a hammer, remove the front axle hub grease cap LH.

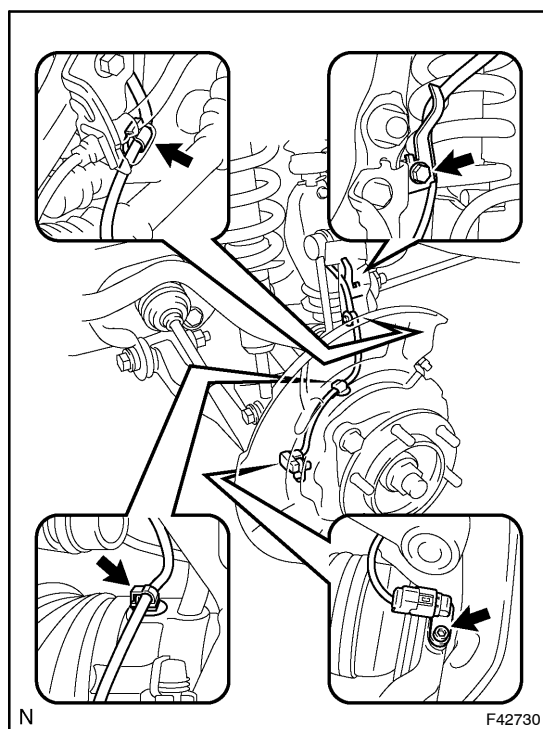
NOTICE:

Do not damage the axle hub.



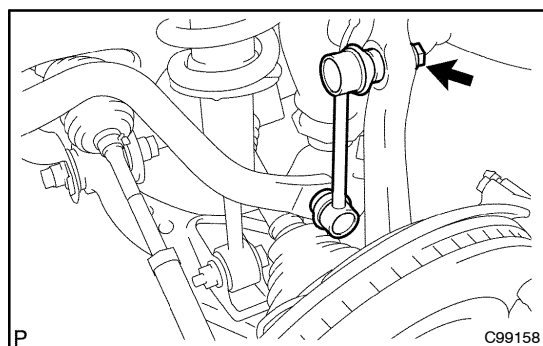
5. REMOVE FRONT AXLE HUB LH NUT

- (a) Remove the cotter pin and a lock cap.
- (b) Remove the front axle hub LH nut.



6. SEPARATE SPEED SENSOR FRONT LH (W/ ABS)

- Using a hexagon wrench, separate the speed sensor front LH.
- Disconnect the 2 clamp.
- Remove the bolt and separate the speed sensor wire harness from the steering knuckle.

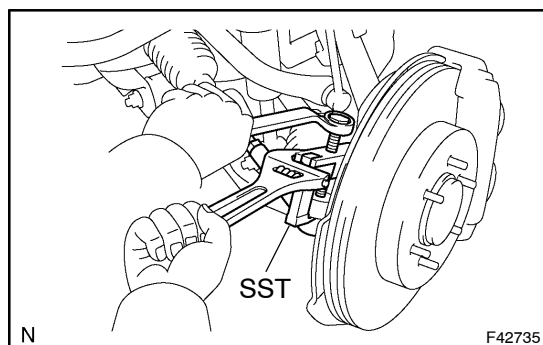


7. SEPARATE FRONT STABILIZER LINK ASSY LH

- Remove the nut and separate the stabilizer link assy LH from the steering knuckle.

HINT:

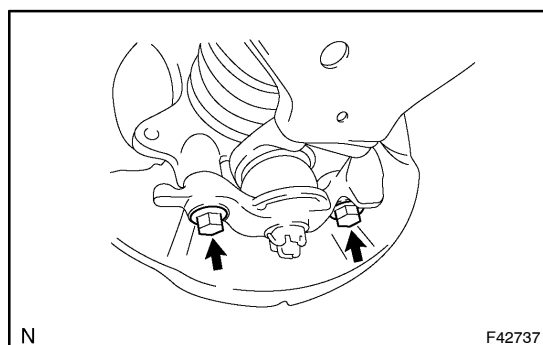
If the ball joint turns together with the nut, use a hexagon (6 mm) wrench to hold the stud.



8. SEPARATE TIE ROD END SUB-ASSY LH

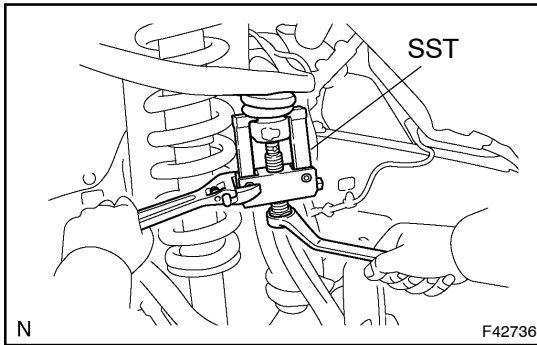
- Remove the cotter pin and nut.
- Using SST, separate the tie rod end sub-assy LH from the steering knuckle.

SST 09628-62011



9. SEPARATE FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH

- Remove the 2 bolts and separate the front suspension arm sub-assy lower No.1 LH from the steering knuckle.

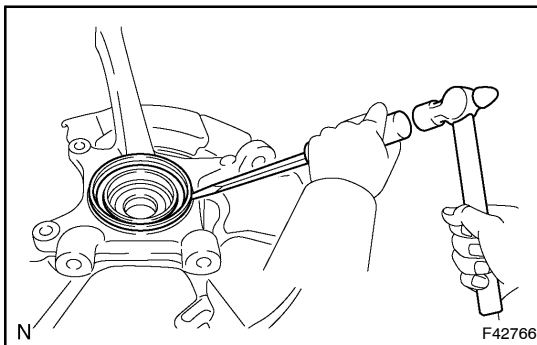


10. SEPARATE FRONT SUSPENSION UPPER ARM ASSY LH

- (a) Remove the cotter pin and nut.
 - (b) Using SST, separate the steering knuckle from the front suspension upper arm assy LH.
- SST 09628-62011

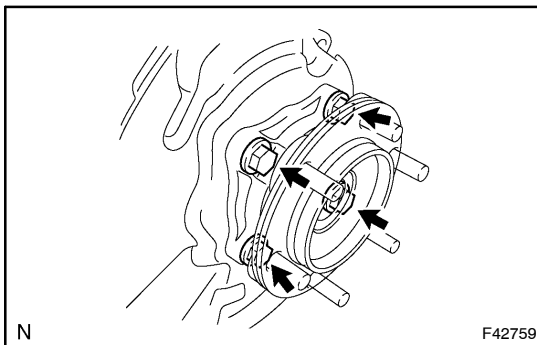
11. REMOVE FRONT AXLE HUB SUB-ASSY LH

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



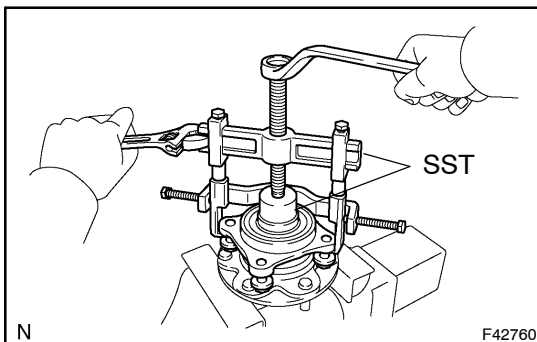
12. REMOVE STEERING KNUCKLE LH OIL SEAL

- (a) Using a screwdriver and hammer, remove the steering knuckle LH oil seal.

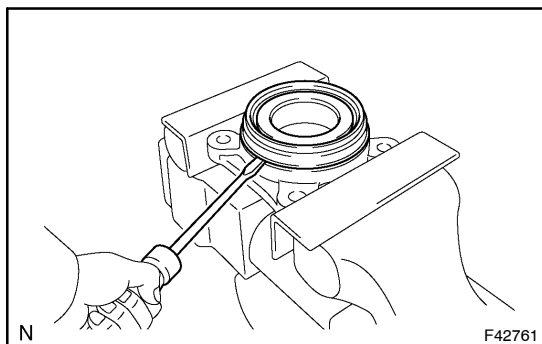


13. REMOVE FRONT AXLE HUB SUB-ASSY LH

- (a) Remove the 4 bolts and axle hub from the steering knuckle.
- (b) Remove the O-ring from the axle hub.

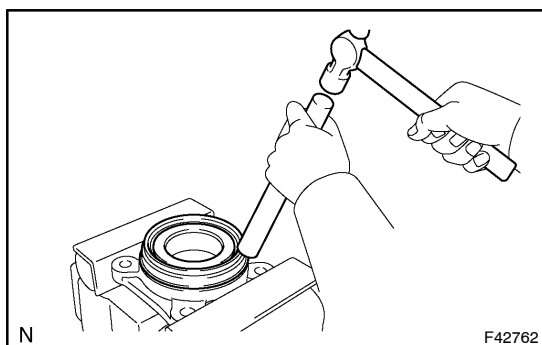


- (c) Fix the front axle hub soft in vise.
 - (d) Using SST, remove the bearing.
- SST 09710-30021 (09710-03051), 09950-40011 (09951-04020, 09952-04010, 09953-04020, 09954-04010, 09955-04061, 09957-04010, 09958-04011)



14. REMOVE FRONT AXLE HUB LH OIL SEAL

- (a) Using a screwdriver, remove the front axle hub LH oil seal.
SST 09308-00010

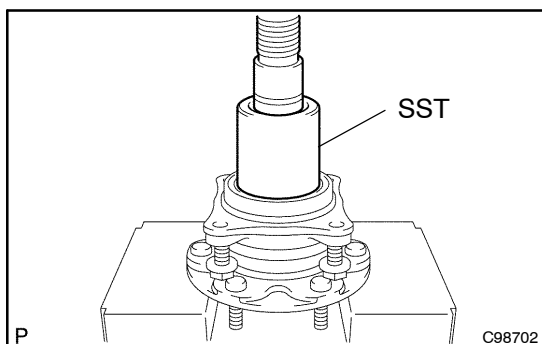


15. INSTALL FRONT AXLE HUB LH OIL SEAL

- (a) Using a brass bar and a hammer, install the new front axle hub LH oil seal.

NOTICE:

Do not damage the spacer.



16. INSTALL FRONT AXLE HUB SUB-ASSY LH

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

SST 09649-17010

HINT:

Preset the 4 bolts to the new bearing before a press.

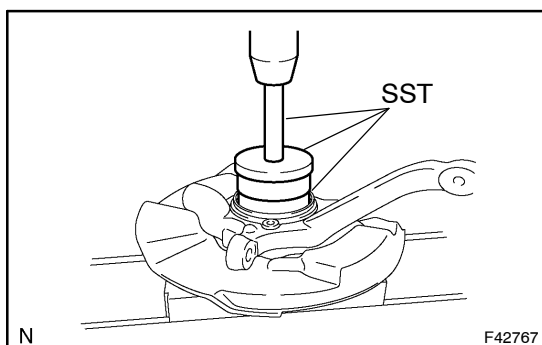
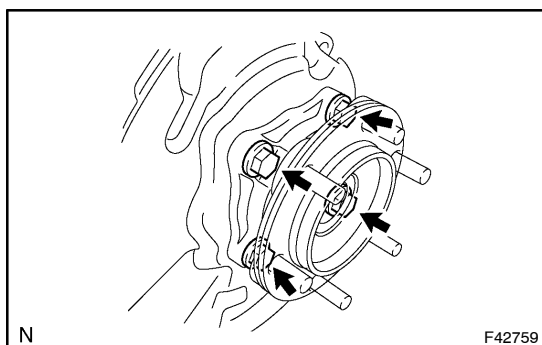
- (b) Apply the MP grease to a new O-ring.
(c) Install the O-ring to the axle hub.

NOTICE:

Do not damage the speed sensor rotor.

- (d) Install the dust cover, axle hub to the steering knuckle with the 4 bolts.

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



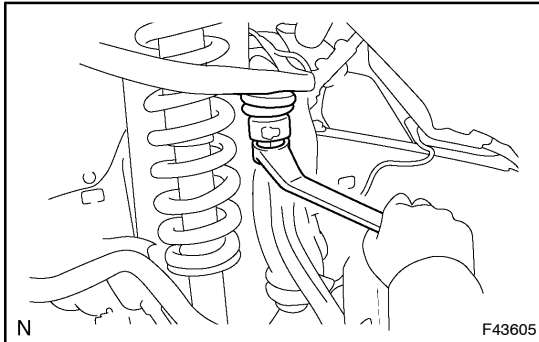
17. INSTALL STEERING KNUCKLE LH OIL SEAL

- (a) Using SST and a press, install a new steering knuckle LH oil seal.

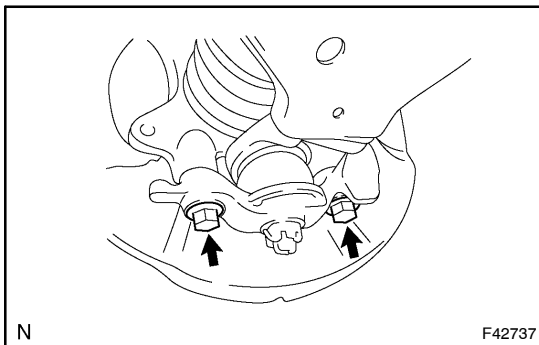
SST 09527-17011, 09950-70010 (09951-07100),
09951-01000

18. INSTALL FRONT AXLE HUB SUB-ASSY LH**NOTICE:**

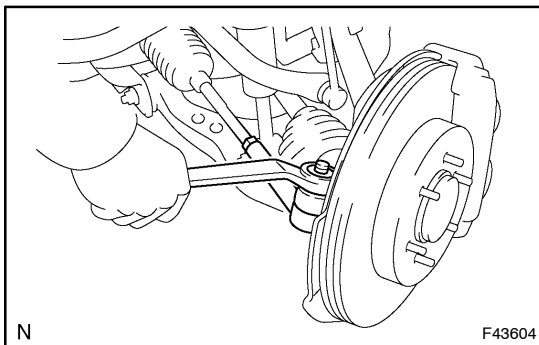
- Do not damage the speed sensor rotor.
- Inspect no damage and no foreign matter at the speed sensor rotor.

**19. INSTALL FRONT SUSPENSION UPPER ARM ASSY LH**

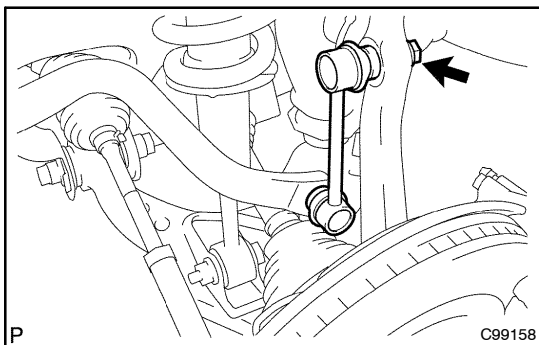
- Install the front suspension upper arm assy LH with a nut.
Torque: 110 N·m (1,122 kgf·cm, 81 ft·lbf)
- Install a new cotter pin.

**20. INSTALL FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH**

- Install the front suspension arm sub-assy lower No.1 LH with the 2 bolts.
Torque: 225 N·m (2,294 kgf·cm, 166 ft·lbf)

**21. INSTALL TIE ROD END SUB-ASSY LH**

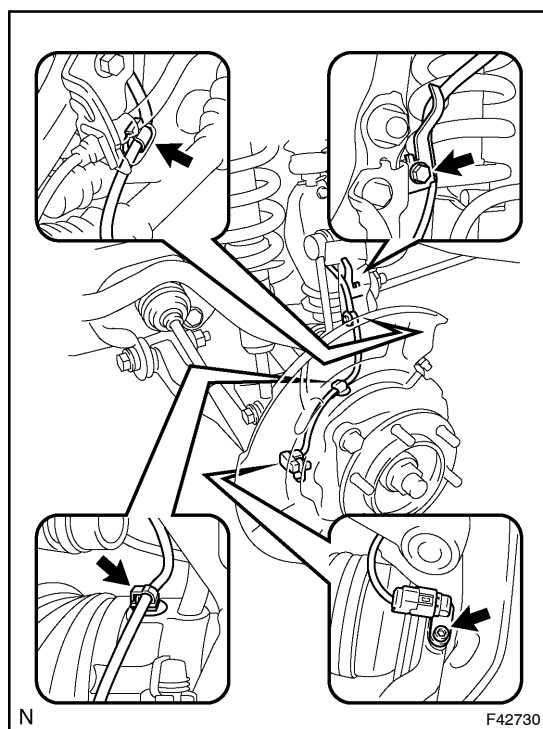
- Install the tie rod end sub-assy LH with a nut.
Torque: 91 N·m (928 kgf·cm, 67 ft·lbf)
- Install a new cotter pin.

**22. INSTALL FRONT STABILIZER LINK ASSY LH**

- Install the stabilizer link with a nut to the steering knuckle.
Torque: 70 N·m (714 kgf·cm, 52 ft·lbf)

HINT:

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

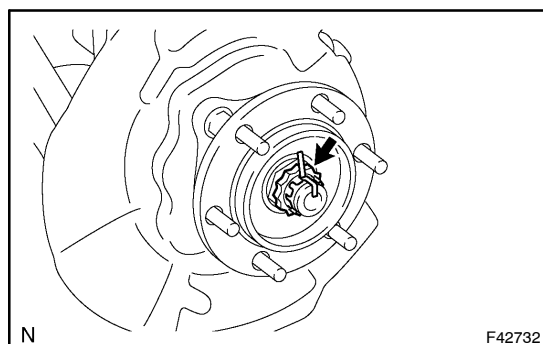
**23. INSTALL SPEED SENSOR FRONT LH (W/ ABS)**

- (a) Install the speed sensor wire harness to the steering knuckle with a bolt.

Torque: 13 N·m (133 kgf·cm, 10 ft·lbf)

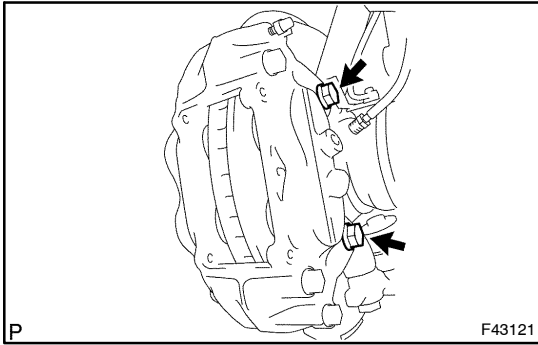
- (b) Connect the 2 clips.
(c) Using a hexagon wrench, install the speed sensor with the bolt.

Torque: 8.3 N·m (85 kgf·cm, 73 in·lbf)

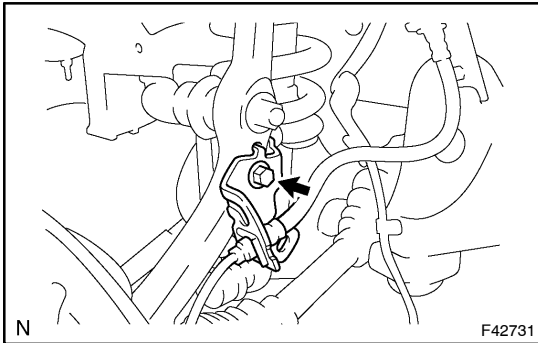
**24. INSTALL FRONT AXLE HUB LH NUT**

- (a) Install the hub nut.
Torque: 235 N·m (2,396 kgf·cm, 173 ft·lbf)
(b) Install the adjusting cap and a new cotter pin.

25. INSPECT BEARING BACKLASH (See page 30-2)**26. INSPECT AXLE HUB DEVIATION (See page 30-2)****27. INSTALL FRONT AXLE HUB GREASE CAP LH****28. INSTALL FRONT DISC**



- 29. INSTALL FRONT DISC BRAKE CALIPER ASSY LH**
(a) Install the front disc brake caliper assy LH with the 2 bolts.
Torque: 123 N·m (1,254 kgf·cm, 91 ft·lbf)



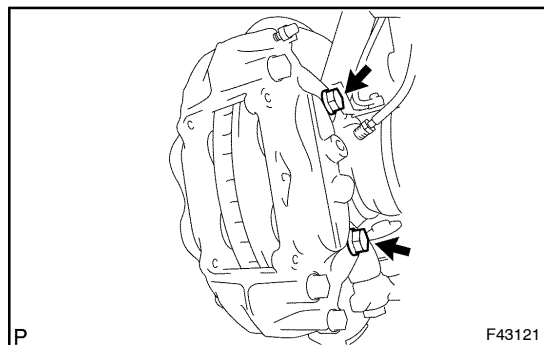
- (b) Install the brake tube bracket to the steering knuckle with a bolt.
Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)
(c) Using SST, connect the brake tube to the disc brake caliper assy.
SST 09023-00101
Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

- 30. BLEED BRAKE LINE (See page 32-4)**
31. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)
32. CHECK BRAKE FLUID LEAKAGE (See page 32-4)
33. INSTALL FRONT WHEEL
Torque: 112 N·m (1,142 kgf·cm, 83 ft·lbf)
34. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (See page 26-7)
35. CHECK ABS SPEED SENSOR SIGNAL (W/ ABS) (See page 05-738)

FRONT AXLE LH HUB BOLT REPLACEMENT

300HD-03

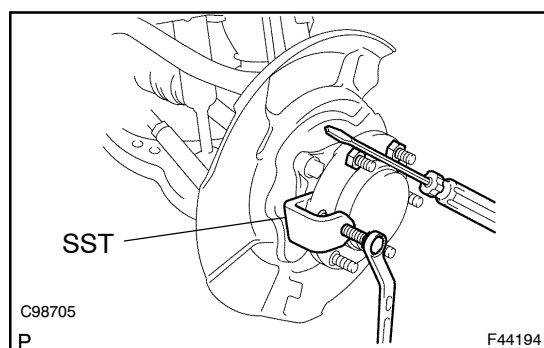
1. REMOVE FRONT WHEEL



2. REMOVE FRONT DISC BRAKE CALIPER ASSY LH

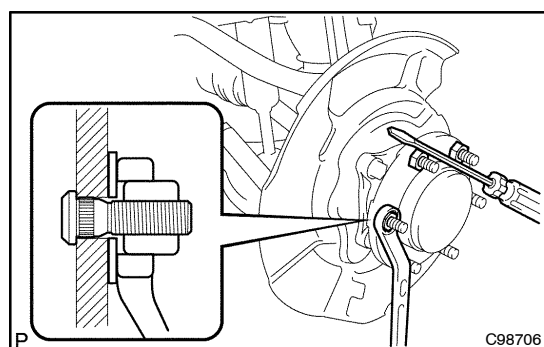
- (a) Using SST, disconnect the brake tube from the disc brake caliper assy.
SST 09023-00101
- (b) Remove the 2 bolts and disc brake caliper assy.

3. REMOVE FRONT DISC



4. REMOVE FRONT AXLE LH HUB BOLT

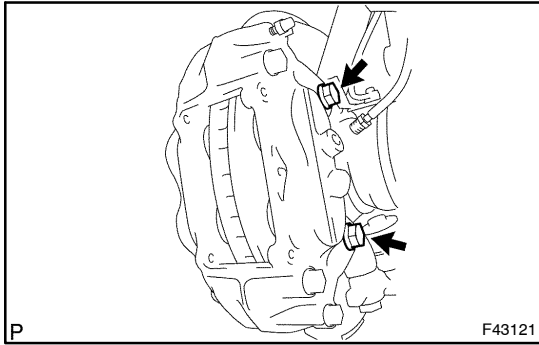
- (a) Using SST and a screwdriver, remove the hub bolt.
SST 09611-12010



5. INSTALL FRONT AXLE LH HUB BOLT

- (a) Pass a new hub bolt through the axle hub.
- (b) Pass a washer plate through the hub bolt as shown in the illustration, and install the hub bolt as tightening the hub nut.

6. INSTALL FRONT DISC



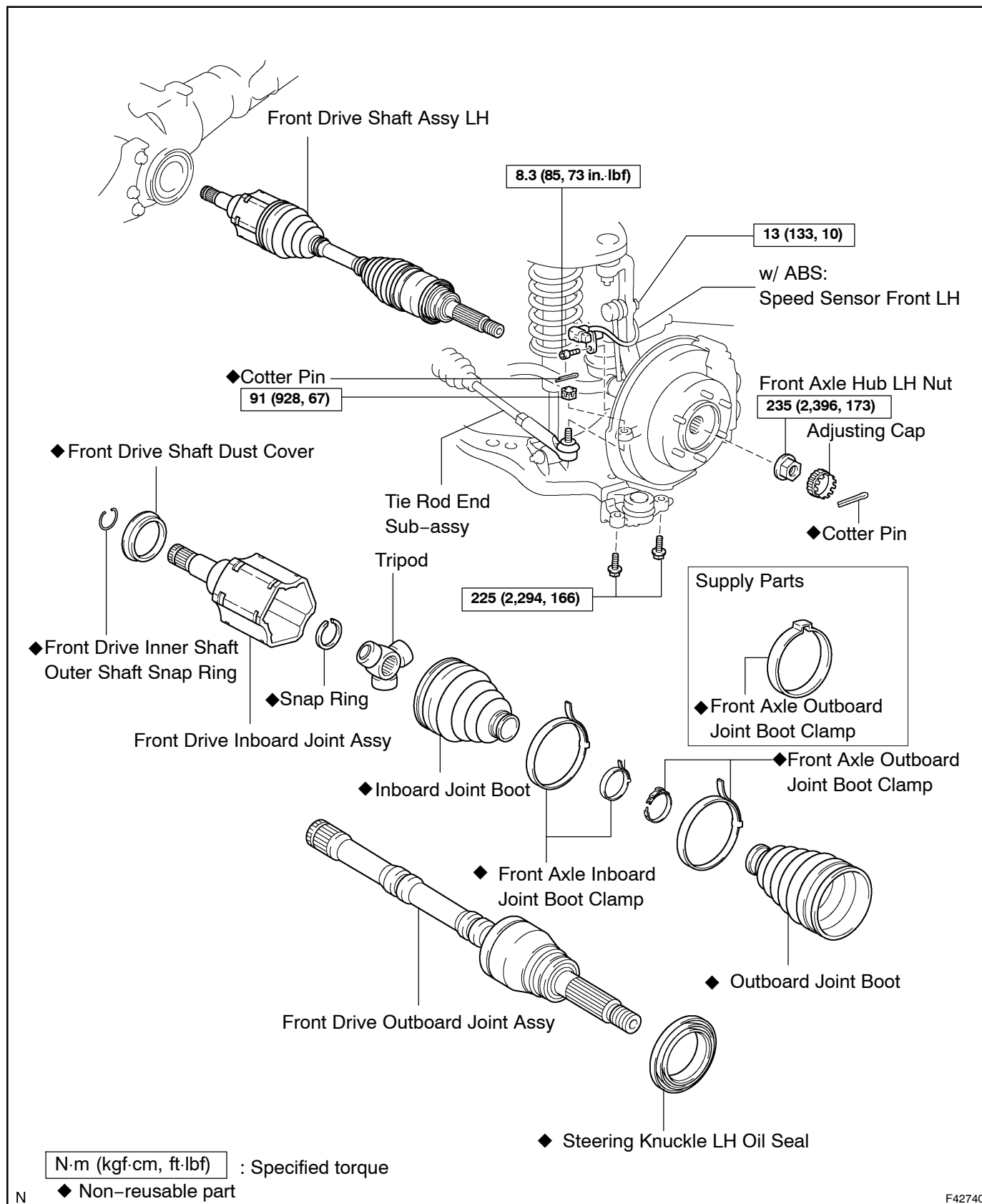
- 7. INSTALL FRONT DISC BRAKE CALIPER ASSY LH**
- (a) Install the disc brake caliper assy with the 2 bolts.
Torque: 123 N·m (1,254 kgf·cm, 91 ft·lbf)
 - (b) Using SST, connect the brake tube to the disc brake caliper assy.
SST 09023-00101
Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)

- 8. BLEED BRAKE LINE (See page 32-4)**
- 9. CHECK FLUID LEVEL IN RESERVOIR (See page 32-4)**
- 10. CHECK BRAKE FLUID LEAKAGE (See page 32-4)**
- 11. INSTALL FRONT WHEEL**
Torque: 112 N·m (1,142 kgf·cm, 83 ft·lbf)

FRONT DRIVE SHAFT ASSY LH

COMPONENTS

300H9-01

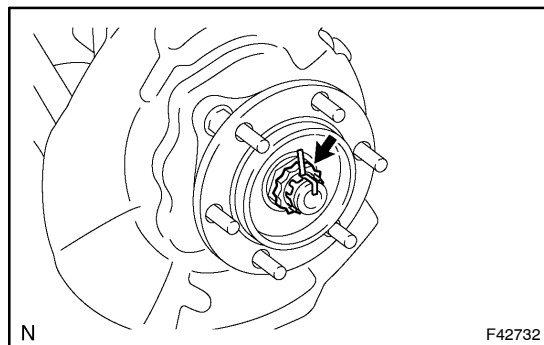


N

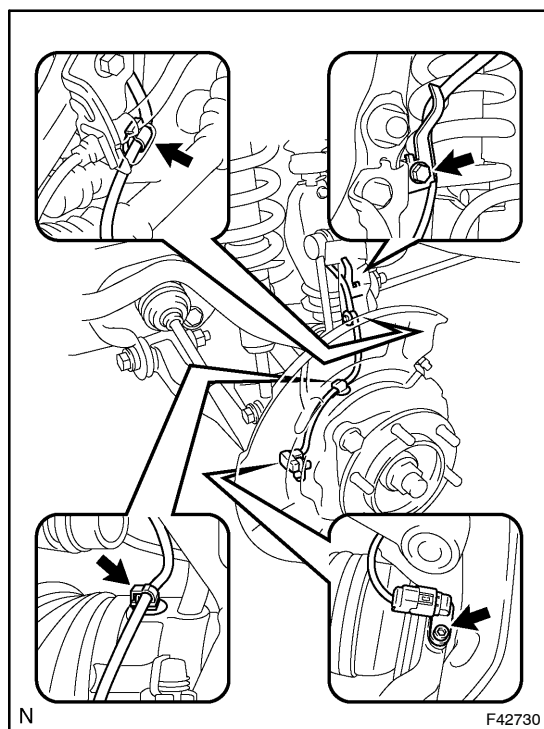
F42740

OVERHAUL

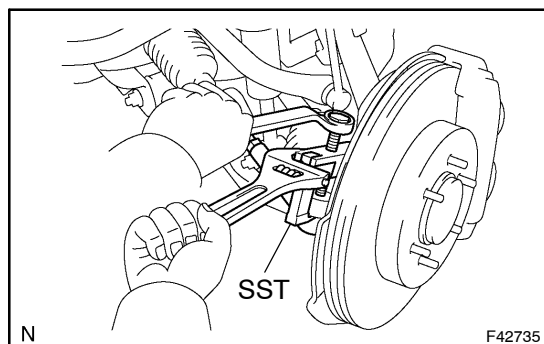
1. REMOVE FRONT WHEEL
2. DRAIN DIFFERENTIAL OIL (See page 29-3)



3. REMOVE FRONT AXLE HUB LH NUT
 - (a) Remove the cotter pin and a adjusting cap.
 - (b) Remove the front axle hub LH nut.

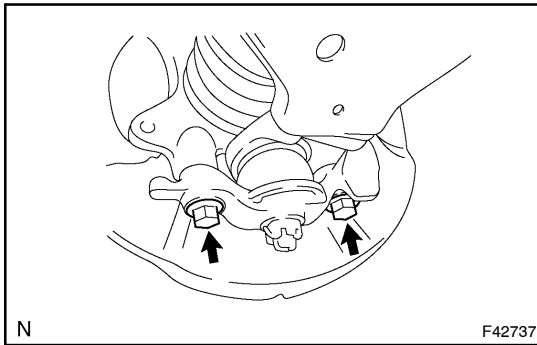


4. SEPARATE SPEED SENSOR FRONT LH (W/ ABS)
 - (a) Using a hexagon wrench, separate the speed sensor front LH.
 - (b) Disconnect the 2 clamp.
 - (c) Remove the bolt and separate the speed sensor wire harness from the steering knuckle.



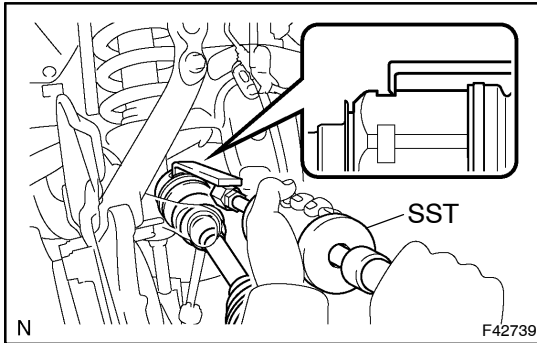
5. SEPARATE TIE ROD END SUB-ASSY LH
 - (a) Remove the cotter pin and nut.
 - (b) Using SST, separate the tie rod end from the steering knuckle.

SST 09628-62011



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

- (a) Remove the 2 bolts and separate the front suspension arm from the lower ball joint.



7. REMOVE FRONT DRIVE SHAFT ASSY LH

- (a) Using SST, remove the front drive shaft assy LH.
SST 09520-01010, 09520-24010 (09520-32040)

NOTICE:

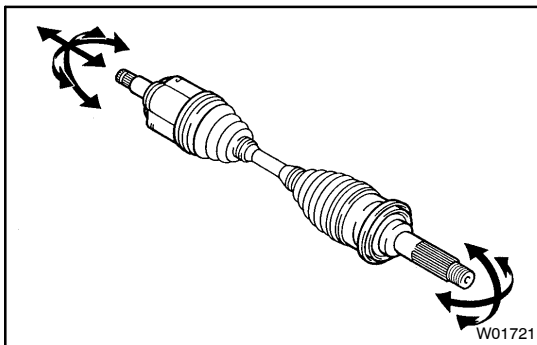
Be careful not to damage the oil seal.

8. REMOVE FRONT DRIVE SHAFT ASSY RH

HINT:

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

SST 09520-01010, 09520-24010 (09520-32040)



9. INSPECT FRONT DRIVE SHAFT ASSY LH

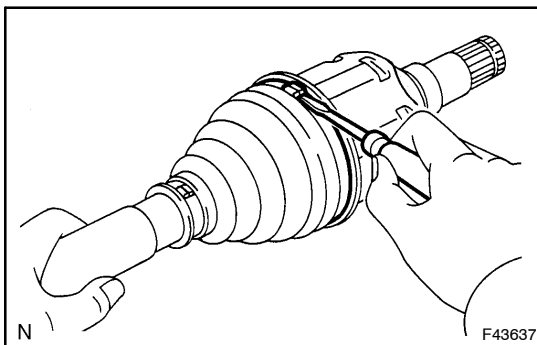
- (a) Check to see that there is no remarkable play in the outboard joint.
(b) Check to see that the inboard joint slides smoothly in the thrust direction.
(c) Check to see that there is no remarkable play in the radial direction of the inboard joint.
(d) Check the boots for damage.

NOTICE:

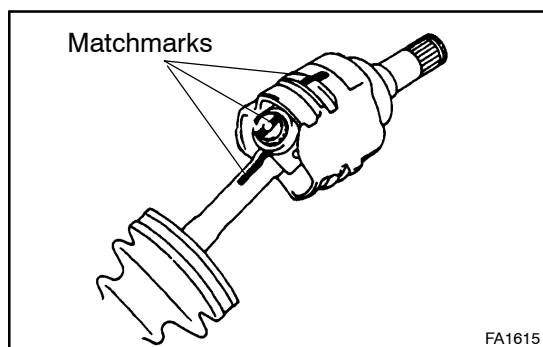
Move the drive shaft assy keeping it level.

10. SEPARATE FRONT AXLE INBOARD JOINT BOOT CLAMP

- (a) Using a screwdriver, disclamp the inboard joint boot clamp.
(b) Using the same manner to the inboard joint small boot clamp.



11. SEPARATE INBOARD JOINT BOOT



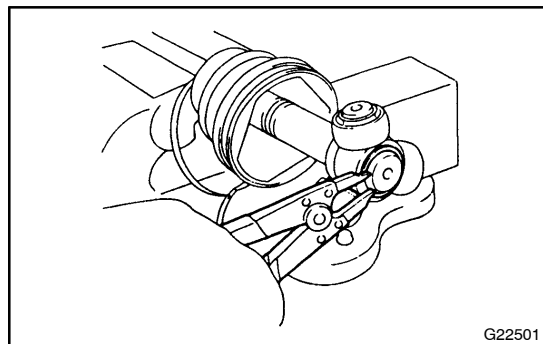
12. REMOVE FRONT DRIVE INBOARD JOINT ASSY LH

- (a) Place matchmarks on the tripod, inboard and outboard joint shafts.

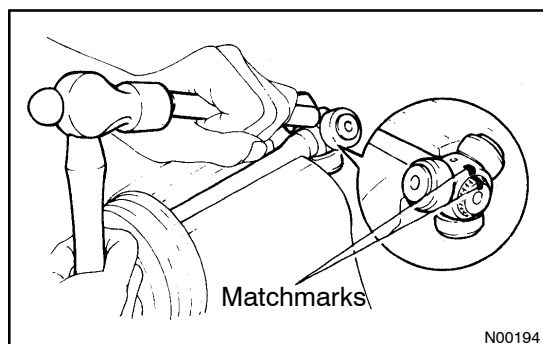
NOTICE:

Do not punch the marks.

- (b) Remove the inboard joint shaft from the outboard joint shaft.



- (c) Using a snap ring expander, remove the snap ring.



- (d) Place matchmarks on the outboard joint shaft and tripod.

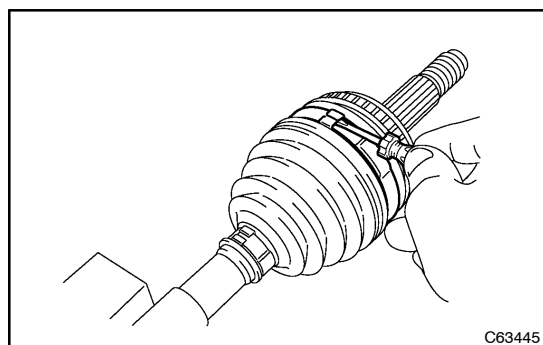
NOTICE:

Do not punch the marks.

- (e) Using a brass bar and hammer, remove the tripod from the drive shaft.

NOTICE:

Do not tap the roller.



13. REMOVE FRONT AXLE OUTBOARD JOINT BOOT CLAMP

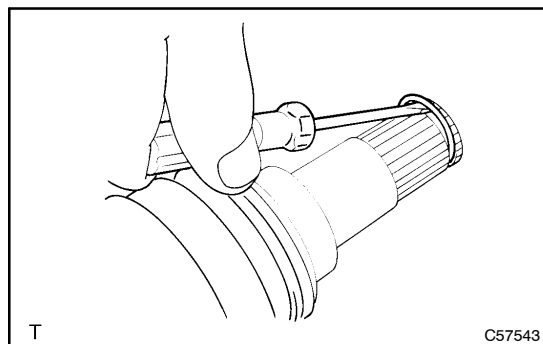
- (a) Using a screwdriver, disclamp the outboard joint large boot clamp.

HINT:

If the outboard joint boot clamps have been replaced, use a side cutter to remove them.

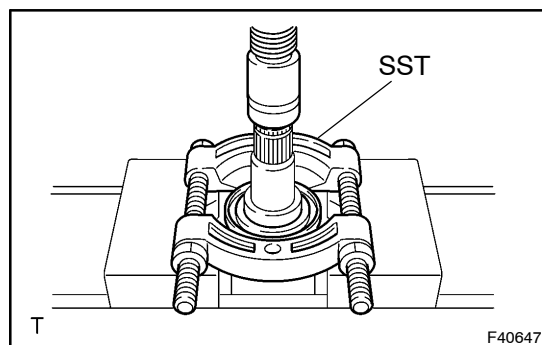
- (b) Use the same manner to the outboard joint small boot clamp.

14. REMOVE OUTBOARD JOINT BOOT



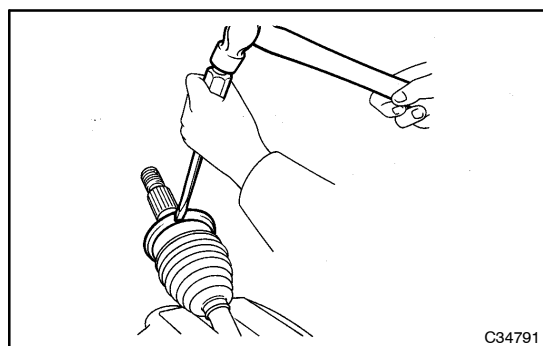
15. REMOVE FRONT DRIVE INNER SHAFT OUTER SHAFT SNAP RING

- (a) Using a screwdriver, remove the snap ring.



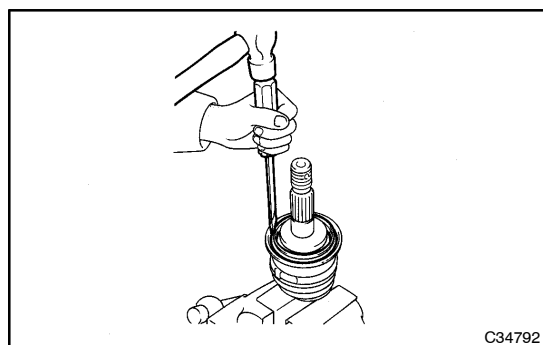
16. REMOVE FRONT DRIVE SHAFT DUST COVER

- (a) Using SST and a press, remove the dust cover.
SST 09950-00020



17. REMOVE STEERING KNUCKLE LH OIL SEAL

- (a) Using a screwdriver and a hammer, remove the oil seal.

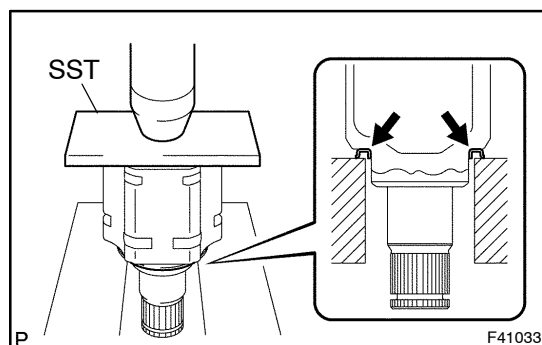


18. INSTALL STEERING KNUCKLE LH OIL SEAL

- (a) Using a screwdriver and a hammer, install a new oil seal.

NOTICE:

Do not damage the oil seal.

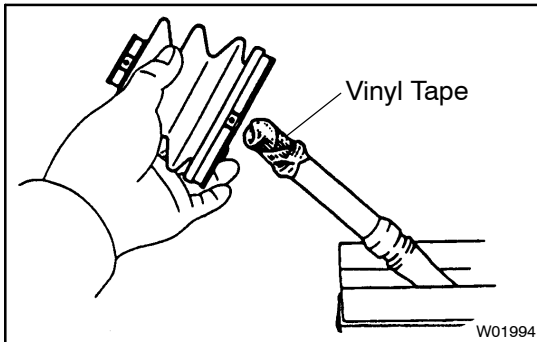


19. INSTALL FRONT DRIVE SHAFT DUST COVER

- (a) Using SST and a press, install a new dust cover.
SST 09527-10011

20. INSTALL FRONT DRIVE INNER SHAFT OUTER SHAFT SNAP RING

- (a) Install a new snap ring.

**21. INSTALL OUTBOARD JOINT BOOT****HINT:**

Before installing the boots, wrap the spline of the drive shaft with vinyl tape to prevent the boots from being damaged.

- (a) Temporarily install a new outboard joint boot with 2 clamps to the drive shaft.
 (b) Pack the outboard joint assy and boot with grease in the boot kit.

Grease capacity:

260 – 270 g (9.2 – 9.5 oz.)

22. INSTALL FRONT AXLE OUTBOARD JOINT BOOT CLAMP

- (a) Mount drive shaft in a soft vise.
 (b) Secure the outboard joint boot clamps onto the boot.
 (c) Place SST onto the outboard joint large boot clamp.

SST 09240-00020, 09521-24010

Clearance: 0.8 mm (0.031 in.) or less

- (d) Tighten the SST so that the large clamp is pinched.

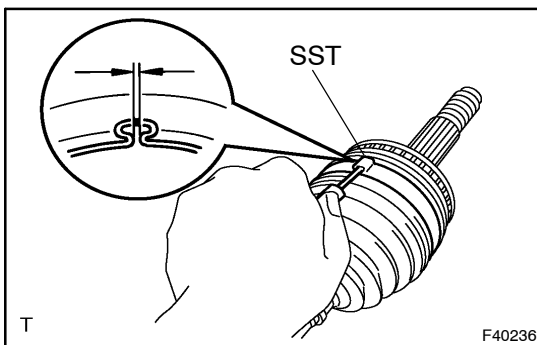
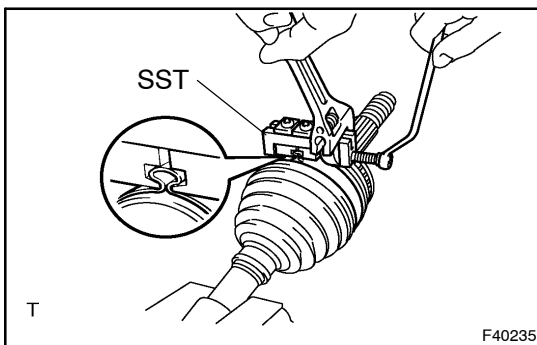
NOTICE:

Do not overtighten the SST.

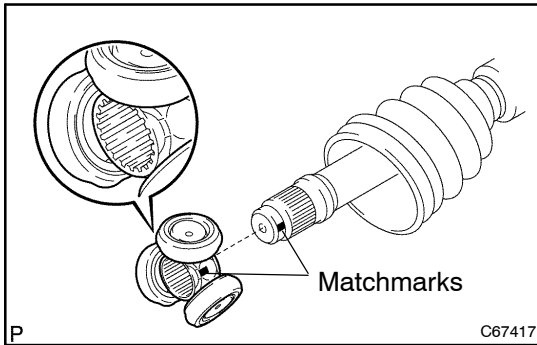
- (e) Using SST, adjust the clearance of the large clamp.
 SST 09240-00020

Clearance: 0.8 mm (0.031 in.) or less

- (f) Employ the same manner to the outboard joint small boot clamp.

**23. INSTALL INBOARD JOINT BOOT**

- (a) Install a new inboard joint boot to the outboard joint shaft.

**24. INSTALL FRONT DRIVE INBOARD JOINT ASSY LH**

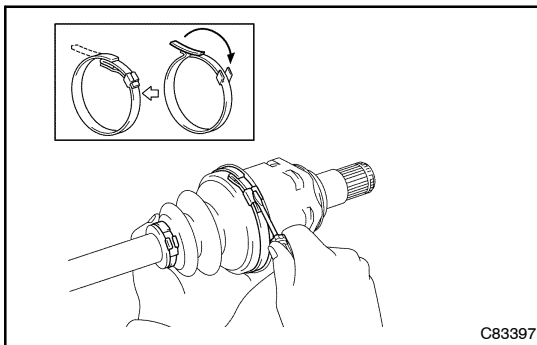
- Place the beveled side of the tripod axial spline toward the outboard joint.
- Align the matchmarks placed before removal.
- Using a brass bar and hammer, tap in the tripod to the drive shaft.

NOTICE:**Do not tap the roller.**

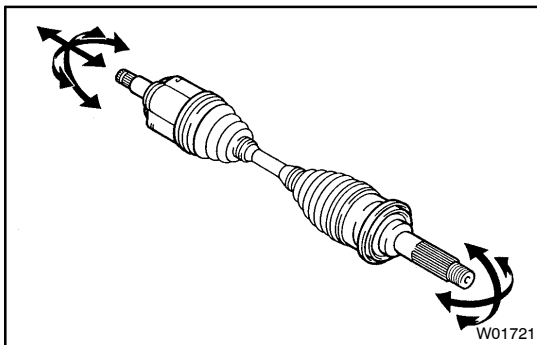
- Pack the inboard joint assy and boot with grease in the boot kit.

Grease capacity:**231 – 241 g (8.1 – 8.5 oz.)**

- Using a snap ring expander, install a new snap ring.

**25. INSTALL FRONT AXLE INBOARD JOINT BOOT CLAMP**

- Bend the band and lock a new inboard joint large boot clamp with a screwdriver.
- Using the same manner to the inboard joint small boot clamp.

**26. INSPECT FRONT DRIVE SHAFT ASSY LH**

- Check to see that there is no remarkable play in the outboard joint.
- Check to see that the inboard joint slides smoothly in the thrust direction.
- Check to see that there is no remarkable play in the radial direction of the inboard joint.
- Check the boots for damage.

NOTICE:**Move the drive shaft assy keeping it level.****27. INSTALL FRONT DRIVE SHAFT ASSY LH**

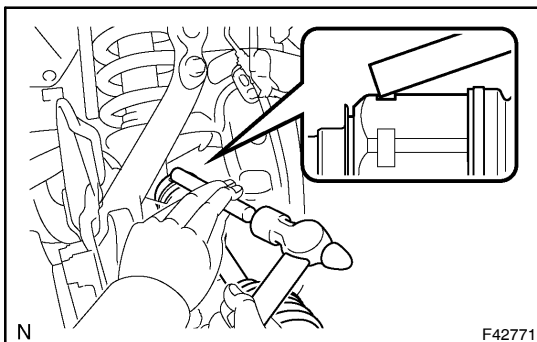
- Coat the spline of the inboard joint shaft assy with ATF.
- Align the shaft splines and install the drive shaft assy with brass bar and hammer.

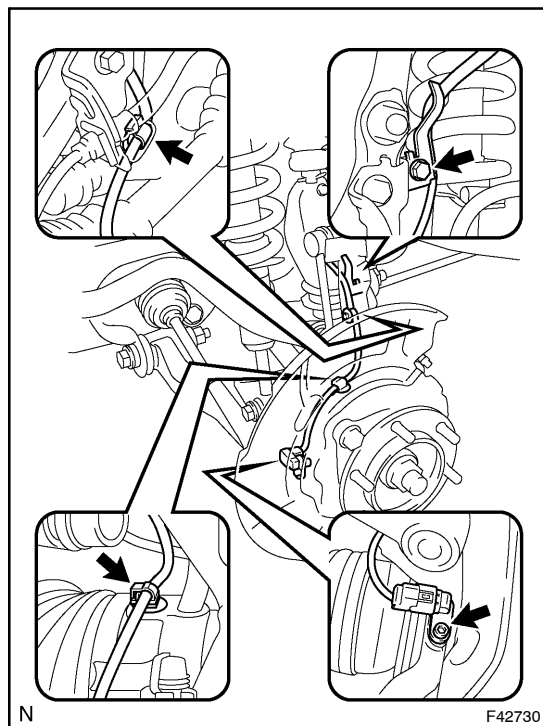
NOTICE:

- Set the snap ring with opening side facing downward.**
- Be careful not to damage the oil seal.**

HINT:

Whether the inboard joint shaft is in contact with the pinion shaft or not can be known from the sound or feeling when driving it.



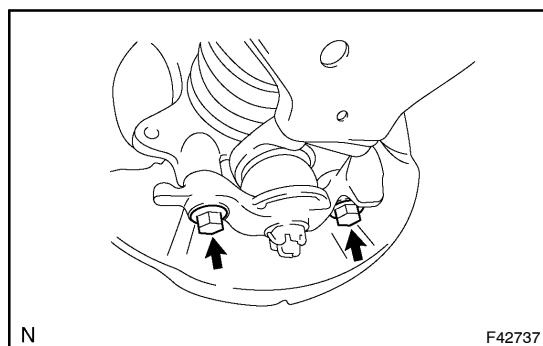
**28. INSTALL SPEED SENSOR FRONT LH (W/ ABS)**

- (a) Install the speed sensor wire harness to the steering knuckle with the bolt.

Torque: 13 N·m (133 kgf·cm, 10 ft·lbf)

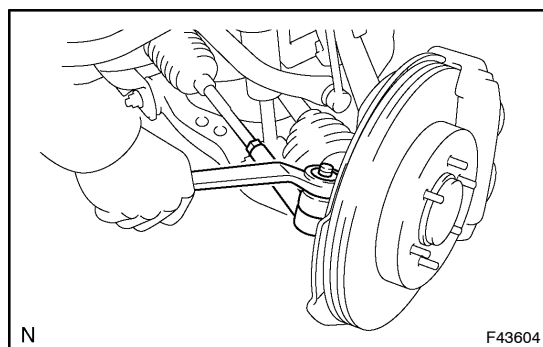
- (b) Connect the 2 clips.
(c) Using a hexagon wrench, install the speed sensor with the bolt.

Torque: 8.3 N·m (85 kgf·cm, 73 in·lbf)

**29. INSTALL FRONT SUSPENSION ARM SUB-ASSY LOWER NO.1 LH**

- (a) Install the lower ball joint to the lower suspension arm with the bolt and nut.

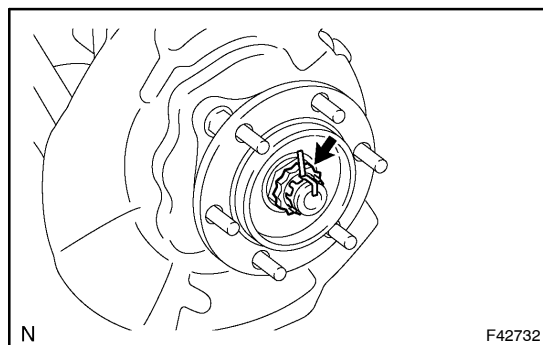
Torque: 225 N·m (2,294 kgf·cm, 166 ft·lbf)

**30. INSTALL TIE ROD END SUB-ASSY LH**

- (a) Install the tie rod end to the steering knuckle with the nut.
Torque: 91 N·m (928 kgf·cm, 67 ft·lbf)
(b) Install a new cotter pin.

NOTICE:

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

**31. INSTALL FRONT AXLE HUB LH NUT**

- (a) Install the hub nut.
Torque: 235 N·m (2,396 kgf·cm, 173 ft·lbf)
(b) Install a new cotter pin and adjusting cap.

- 32. FILL UP DIFFERENTIAL OIL (See page [29-3](#))
- 33. INSPECT DIFFERENTIAL OIL (See page [29-3](#))
- 34. INSTALL FRONT WHEEL
Torque: 112 N·m (1,142 kgf·cm, 83 ft·lbf)
- 35. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (See page [26-7](#))
- 36. CHECK ABS SPEED SENSOR SIGNAL (W/ ABS) (See page [05-738](#))