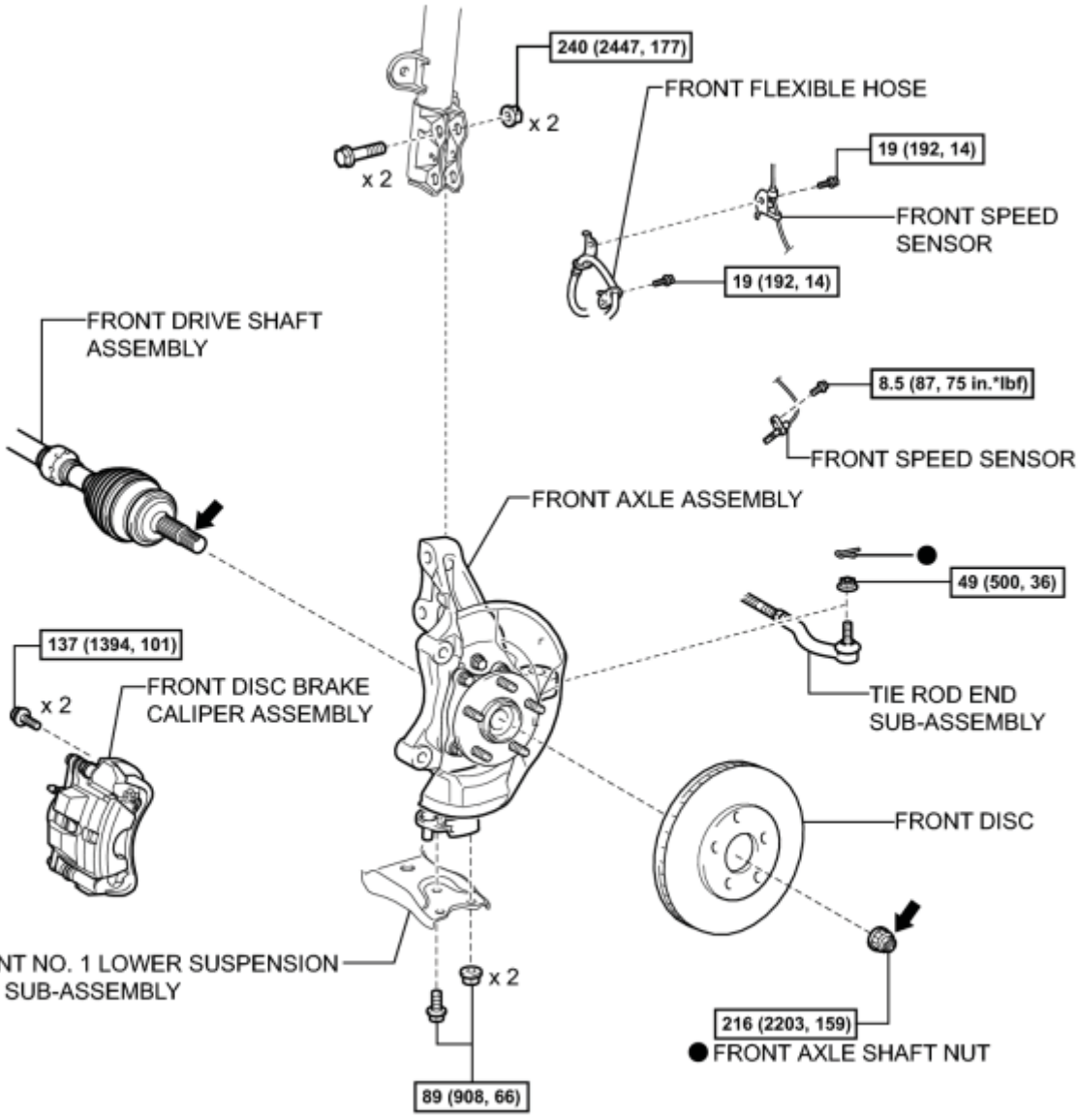
COMPONENTS

ILLUSTRATION



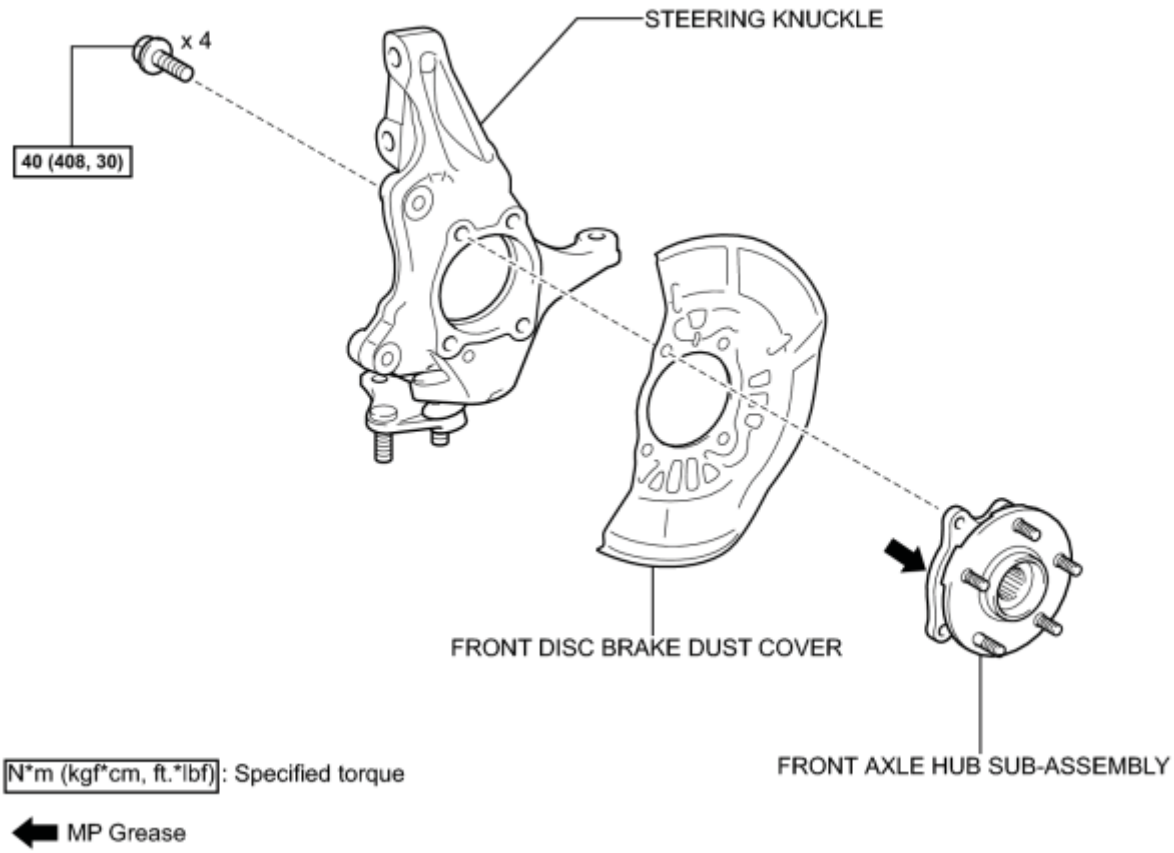
N*m (kgf*cm, ft.*lbf): Specified torque

● Non-reusable part

⬅ Do not apply lubricants to the threaded parts

c

ILLUSTRATION


x 4
40 (408, 30)
STEERING KNUCKLE
FRONT DISC BRAKE DUST COVER
FRONT AXLE HUB SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf): Specified torque
MP Grease

c 0

ON-VEHICLE INSPECTION

NOTICE:

When the brake pedal is first depressed after replacing the brake pads or pushing back the disc brake piston, DTC C1214 may be output. As there is no malfunction, clear the DTC.

HINT:

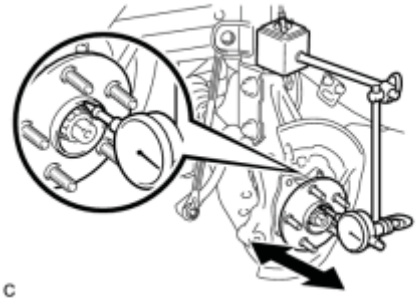
- Use the same procedure for the RH side and LH side.
- The procedure listed below is for the LH side.

1. REMOVE FRONT WHEEL

2. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY INFO

3. REMOVE FRONT DISC INFO

4. INSPECT FRONT AXLE HUB BEARING LOOSENESS



(a) Using a dial indicator, check for looseness near the center of the axle hub.

Maximum looseness:

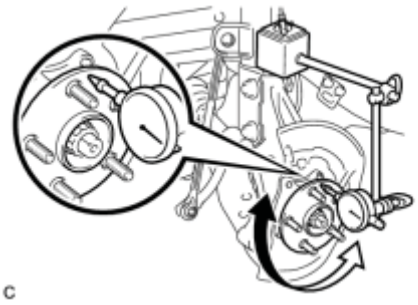
0.05 mm (0.00196 in.)

- Ensure that the dial indicator is set perpendicular to the measurement surface.
- Keep the magnet of the dial indicator away from the front speed sensor.

HINT:

If the looseness exceeds the maximum, replace the front axle hub bearing.

5. INSPECT FRONT AXLE HUB RUNOUT



(a) Using a dial indicator, check for runout on the surface of the axle hub outside the hub bolt.

Maximum runout:

0.05 mm (0.00196 in.)

- Ensure that the dial indicator is set perpendicular to the measurement surface.
- Keep the magnet of the dial indicator away from the front speed

sensor.

HINT:

If the runout exceeds the maximum, replace the front axle hub.

6. INSTALL FRONT DISC INFO

7. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY INFO

8. INSTALL FRONT WHEEL

Torque: **103 N·m (1050 kgf·cm, 76ft·lbf)**

REMOVAL

NOTICE:

When the brake pedal is first depressed after replacing the brake pads or pushing back the disc brake piston, DTC C1214 may be output. As there is no malfunction, clear the DTC.

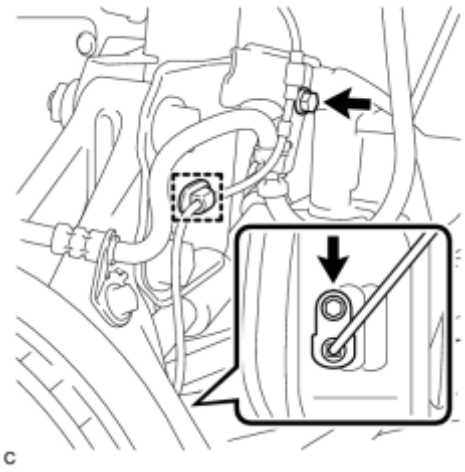
HINT:

- Use the same procedure for the RH side and LH side.
- The procedure listed below is for the LH side.

1. REMOVE FRONT WHEEL

2. REMOVE FRONT AXLE SHAFT NUT INFO

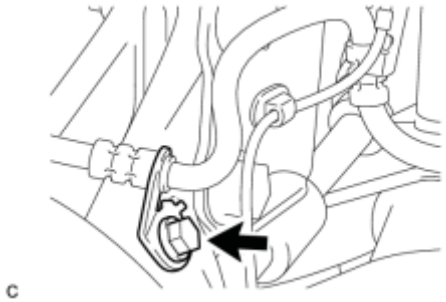
3. SEPARATE FRONT SPEED SENSOR



(a) Remove the 2 bolts and clamp, and separate the front speed sensor.

- Be sure to separate the front speed sensor from the front shock absorber with coil spring completely.
- Prevent foreign matter from attaching to the sensor tip.
- Be careful not to damage the front speed sensor.
- Clean the speed sensor installation hole and the contact surfaces every time the speed sensor is removed.

4. SEPARATE FRONT FLEXIBLE HOSE



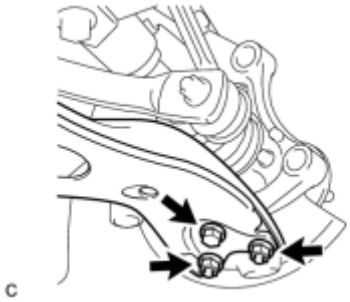
(a) Remove the bolt and separate the front flexible hose from the steering knuckle.

5. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY INFO

6. REMOVE FRONT DISC INFO

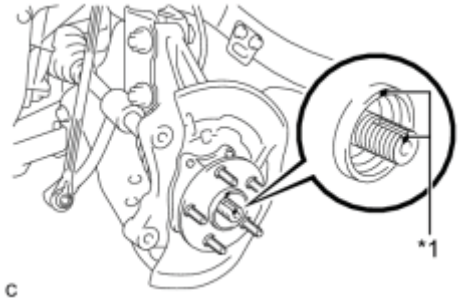
7. SEPARATE TIE ROD END SUB-ASSEMBLY INFO

8. SEPARATE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY



(a) Remove the bolt and 2 nuts, and separate the front No. 1 lower suspension arm sub-assembly from the front lower ball joint.

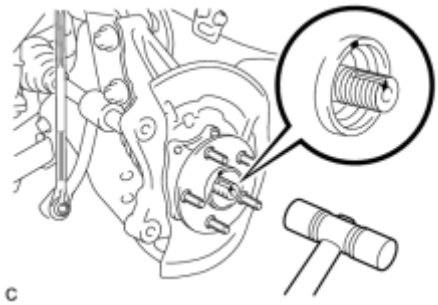
9. SEPARATE FRONT DRIVE SHAFT ASSEMBLY



(a) Put matchmarks on the front drive shaft assembly and front axle hub sub-assembly.

Text in Illustration

*1	Matchmark

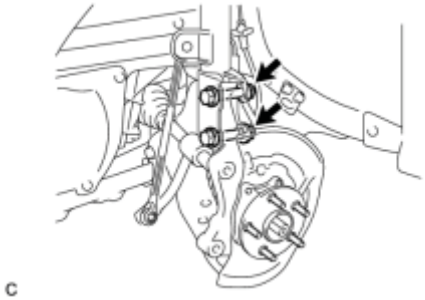


(b) Using a plastic hammer, separate the front drive shaft assembly from the front axle assembly. If it is difficult to separate, tap the end of the front drive shaft assembly using a brass bar and a hammer.

NOTICE:

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

10. REMOVE FRONT AXLE ASSEMBLY



(a) Remove the 2 bolts, 2 nuts and front axle assembly.

- When removing the nuts, keep the bolts from rotating.
- Be careful not to damage the drive shaft boot and speed sensor rotor.

11. REMOVE FRONT AXLE HUB SUB-ASSEMBLY

(a) Secure the front axle assembly between aluminium plates in a vise.

NOTICE:

Do not overtighten the vise.

C

(b) Remove the 4 bolts, front axle hub sub-assembly and front disc brake dust cover.

NOTICE:

Do not drop the front axle hub sub-assembly.

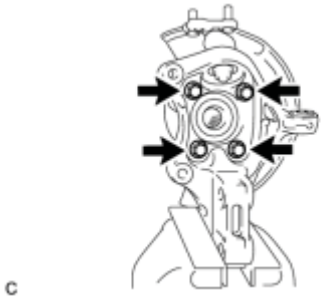
INSTALLATION

1. INSTALL FRONT AXLE HUB SUB-ASSEMBLY

(a) Secure the steering knuckle between aluminium plates in a vise.

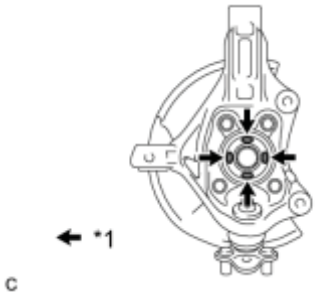
NOTICE:

Do not overtighten the vise.



(b) Install the front axle hub sub-assembly and front disc brake dust cover with the 4 bolts.

Torque: **40 N·m (408 kgf·cm, 30ft·lbf)**



(c) Apply MP grease to the areas indicated by the arrows in the illustration on the front drive shaft assembly contact surface of the front axle hub sub-assembly.

Text in Illustration

*1	MP grease

HINT:

Apply 0.1 to 0.3 g (0.00353 to 0.0106 oz.) of MP grease to each area.

2. INSTALL FRONT AXLE ASSEMBLY

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

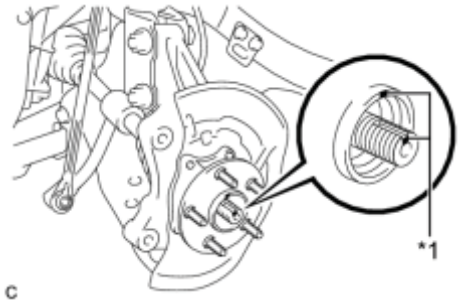
Torque: **240 N·m (2447 kgf·cm, 177ft·lbf)**

NOTICE:

When installing the nuts, keep the bolts from rotating.

3. INSTALL FRONT DRIVE SHAFT ASSEMBLY

(a) Align the matchmarks and install the front drive shaft assembly to the

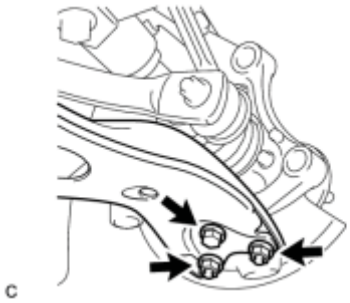


front axle hub sub-assembly.

Text in Illustration

*1	Matchmark

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



(a) Install the front No. 1 lower suspension arm sub-assembly to the front lower ball joint with the bolt and 2 nuts.

Torque: **89 N·m (908 kgf·cm, 66ft·lbf)**

5. CONNECT TIE ROD END SUB-ASSEMBLY INFO

6. INSTALL FRONT DISC INFO

7. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY INFO

8. TEMPORARILY INSTALL FRONT AXLE SHAFT NUT

(a) Clean the threaded parts on the front drive shaft assembly and a new front axle shaft nut using a non-residue solvent.

NOTICE:

- Be sure to perform this work even when using a new drive shaft.
- Keep the threaded parts free of oil and foreign matter.

(b) Using a socket wrench (30 mm), while applying the brakes, temporarily install the front axle shaft nut.

Torque: **216 N·m (2203 kgf·cm, 159ft·lbf)**

NOTICE:

Stake the front axle shaft nut after inspecting for looseness and runout in the following steps.

HINT:

Keep depressing the brake pedal to prevent the drive shaft from rotating.

9. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY INFO

10. REMOVE FRONT DISC INFO

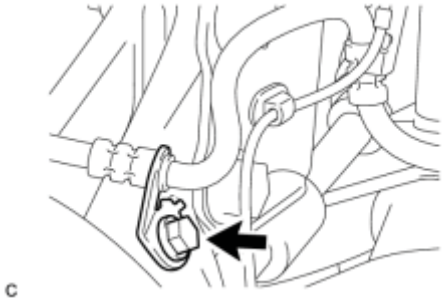
11. INSPECT FRONT AXLE HUB BEARING LOOSENESS INFO

12. INSPECT FRONT AXLE HUB RUNOUT INFO

13. INSTALL FRONT DISC INFO

14. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY INFO

15. INSTALL FRONT FLEXIBLE HOSE

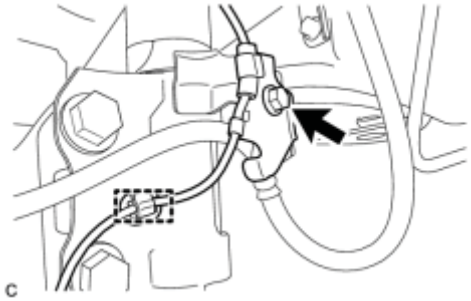


(a) Install the front flexible hose to the steering knuckle with the bolt.

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

16. INSTALL FRONT SPEED SENSOR

(a) Install the front speed sensor and front flexible hose to the front shock absorber with the bolt and clamp.



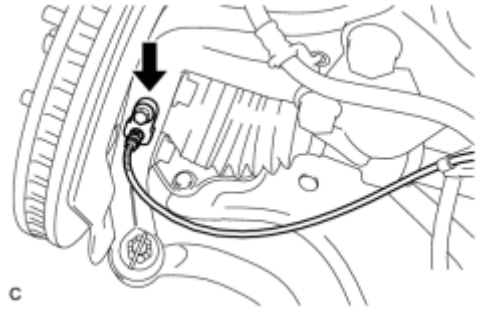
Torque: **19 N·m (192 kgf·cm, 14ft·lbf)**

NOTICE:

Do not twist the front speed sensor when installing it.

HINT:

Install the font flexible hose first and then the speed sensor harness bracket.



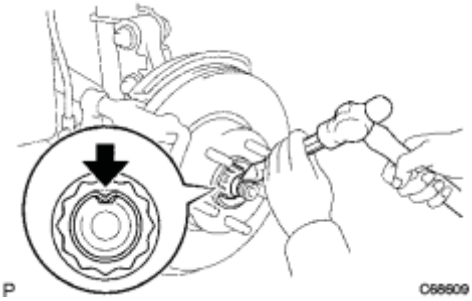
(b) Install the front speed sensor to the steering knuckle with the bolt.

Torque: **8.5 N·m (87 kgf·cm, 75in·lbf)**

NOTICE:

Do not twist the front speed sensor when installing it.

17. INSTALL FRONT AXLE SHAFT NUT



(a) Using a chisel and hammer, stake the front axle shaft nut.

18. INSTALL FRONT WHEEL

Torque: **103 N·m (1050 kgf·cm, 76ft·lbf)**

19. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

HINT: INFO

20. CHECK FOR SPEED SENSOR SIGNAL

HINT: INFO