

### 3. Tightening torques for steering

Tightening torques of screws, bolts and nuts on the table below are especially specified.

| Item                                   | N · m    | kgf · m    | lbf · ft |
|--|----------|------------|----------|
| Steering wheel mounting nut            | 20 to 25 | 2.0 to 2.6 | 15 to 18 |
| Power steering hose                    | 24 to 27 | 2.4 to 2.8 | 18 to 20 |
| Power steering cylinder mounting screw | 48 to 55 | 4.9 to 5.7 | 36 to 41 |
| Tie-rod slotted nut                    | 18 to 34 | 1.8 to 3.5 | 13 to 25 |
| Tie-rod screw                          | 74 to 84 | 7.5 to 8.6 | 55 to 62 |

—— RELATED PAGE ——

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## 4. Checking and adjusting

### 4.1 Checking relief valve operating pressure

#### NOTE

- After setting a pressure gauge, be sure to bleed air.
- Note that the pressure value changes by the pump action of the power steering controller when the steering operation is continued after the steering wheel is lightly locked and accurate relief valve pressure cannot be measured.



1. Disconnect the power steering hose L (or R) from steering controller, and set a pressure gauge and hose.

#### (Reference)

|                       |                        |
|-----------------------|------------------------|
| Hose and adapter size | 9/16-18 UNF, 37° flare |
|-----------------------|------------------------|

2. Start the engine and set at maximum speed.
3. Fully turn the steering wheel to the left (or right) to check the feeling which the steering wheel lightly locks. Read the relief valve operating pressure when the steering wheel to the above-mentioned lock position by operation force.

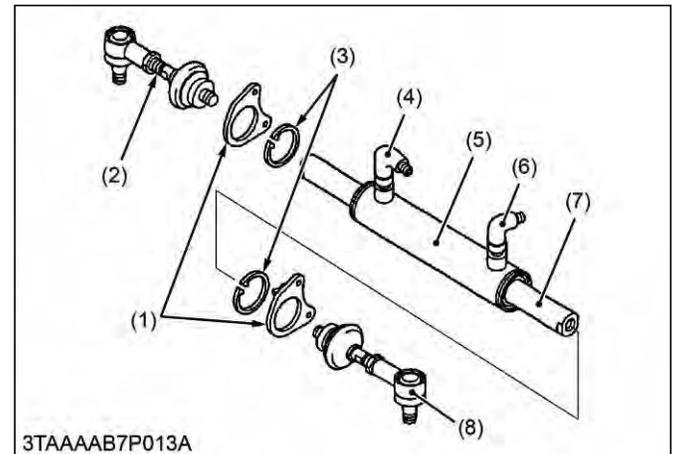
|                                  |             |                             |
|----------------------------------|-------------|-----------------------------|
| Operation force (Steering wheel) | Approximate | 9,8 N<br>1.0 kgf<br>2.2 lbf |
|----------------------------------|-------------|-----------------------------|

|                                 |                       |  |
|---------------------------------|-----------------------|--|
| Relief valve operating pressure | Factory specification | 8,34 to 8,82 MPa<br>85,0 to 90,0 kgf/cm <sup>2</sup><br>1210 to 1280 psi |
|---------------------------------|-----------------------|--|

## 5. Disassembling and assembling

### 5.1 Power steering cylinder

#### 5.1.1 Removing adapter and tie-rod



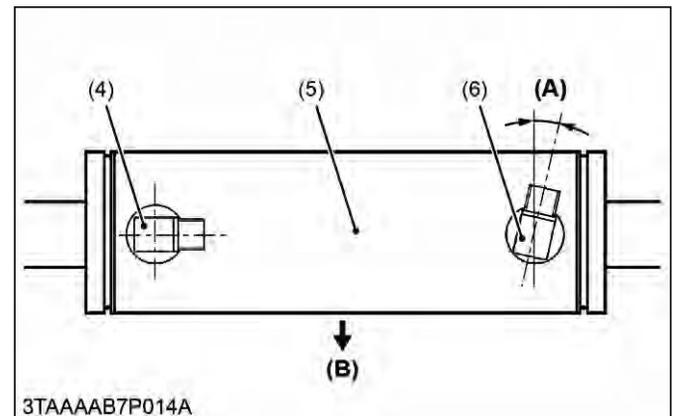
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- |                       |                       |
|-----------------------|-----------------------|
| (1) Cylinder holder   | (5) Cylinder          |
| (2) Tie-rod R.H.      | (6) Hose adapter L.H. |
| (3) Internal circlip  | (7) Piston rod        |
| (4) Hose adapter R.H. | (8) Tie-rod L.H.      |

1. Remove the cylinder hose adapters (4), (6).
2. Remove the tie-rods (2), (8) from piston rod (7).
3. Remove the cylinder holder (1) and internal circlip (3).

#### (When reassembling)

- Be sure to install the hose adapters (4), (6).



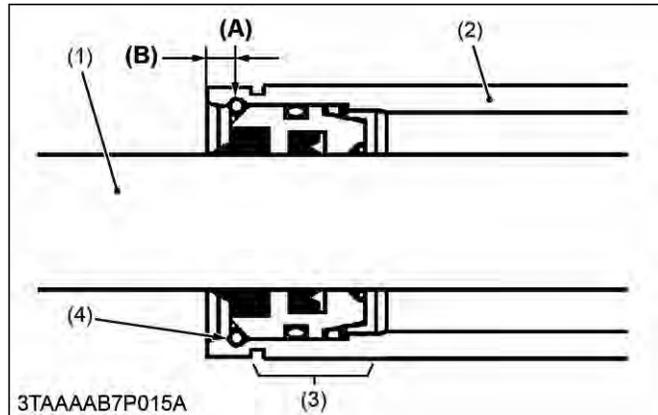
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- |                       |                    |
|-----------------------|--------------------|
| (4) Hose adapter R.H. | (A) 0.26 rad (15°) |
| (5) Cylinder          | (B) Front          |
| (6) Hose adapter L.H. |                    |

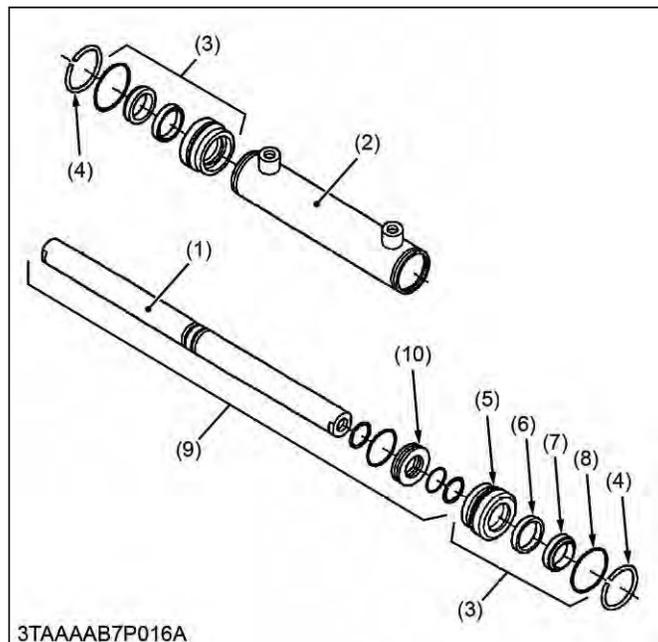
- After reassembling the tie-rod, be sure to adjust the toe-in.

|                   |               |   |
|-------------------|---------------|---|
| Tightening torque | Tie-rod screw | 74 to 84 N·m<br>7,5 to 8,6 kgf·m<br>55 to 62 lbf·ft |
|-------------------|---------------|---|

## 5.1.2 Disassembling steering cylinder



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- |                    |                         |
|--------------------|-------------------------|
| (1) Piston rod     | (7) Wiper ring          |
| (2) Cylinder tube  | (8) O-ring              |
| (3) Guide assembly | (9) Piston rod assembly |
| (4) Circlip        | (10) Center piston      |
| (5) Guide          | (A) Drill a hole.       |
| (6) Seal ring      | (B) 5.25 mm (0.207 in.) |

- Carefully clamp the cylinder in a vise.
- Push one of the guide assembly (3) to inside of cylinder tube (2).
- Drill a hole on the cylinder tube (2) just over the circlip (4).

|      |                       |                               |
|------|-----------------------|-------------------------------|
| Hole | Factory specification | 2.5 mm dia.<br>0.098 in. dia. |
|------|-----------------------|-------------------------------|

- Take a little screwdriver and lift off the circlip (4) from its groove. Simultaneous support this action by pushing from the outside of the cylinder tube with another little screwdriver or another tool.
- Push out the piston rod assembly (9) and take off the guide assembly (3).

(When reassembling)

## NOTE

- Seals must be exchanged after disassembling.
- Apply transmission fluid to the exchanged seals.
- Enter the piston rod and block the guide assemblies with the circlips.

## 5.2 Separating power steering controller

## 5.2.1 Removing battery

## WARNING

To avoid serious injury or death:

- When disconnecting the battery cables, disconnect the negative cable from the battery first.
- When connecting, connect the positive cable to the battery first.

- Remove the under panel (1).



- Under panel

- Disconnect the negative cable (3) from the battery (2).