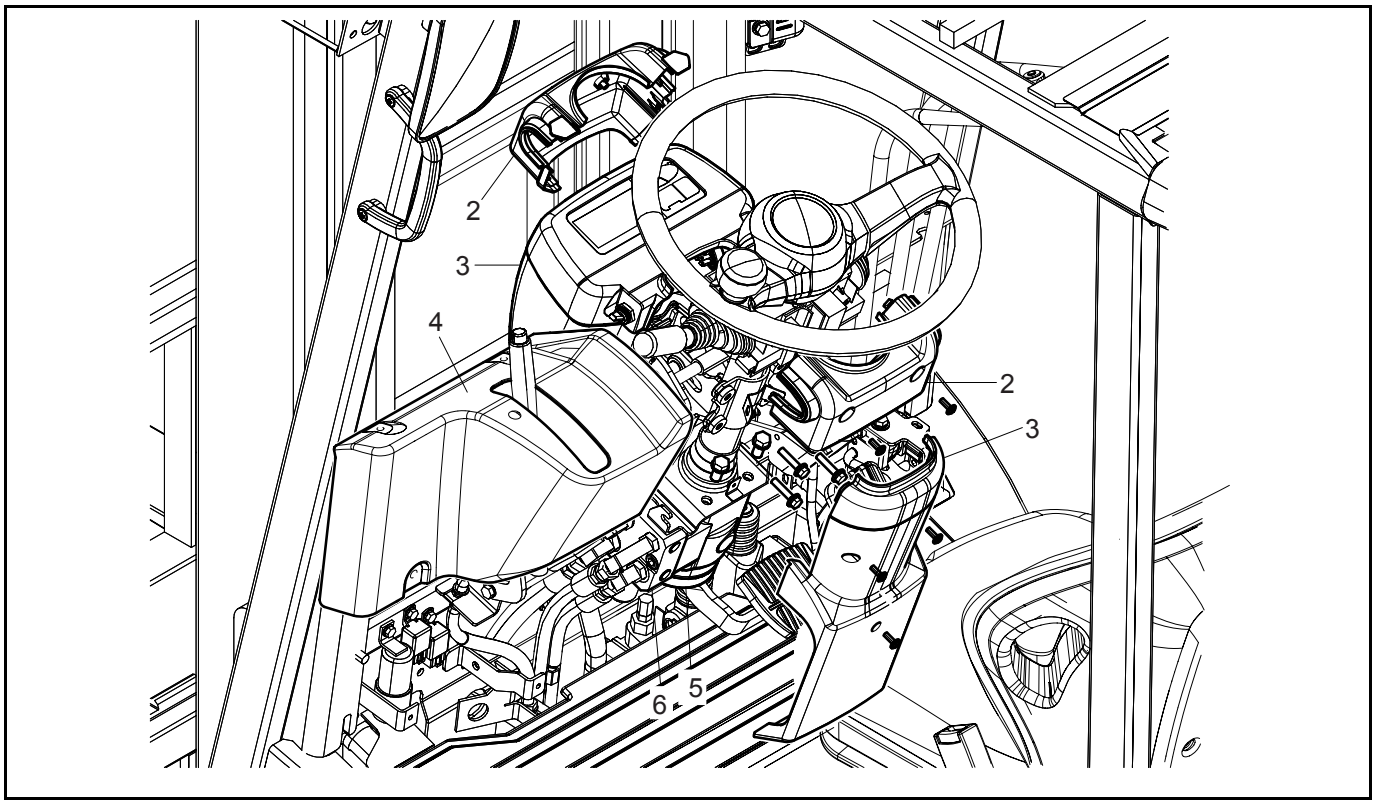
REMOVAL • INSTALLATION



Removal Procedure

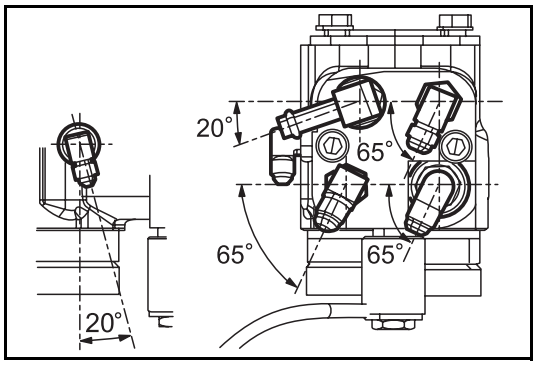
1 Disconnect the battery plug.
2 Remove the direction lever (front and rear).
3 Remove the column covers (upper, lower and rear).
4 Remove the instrument panel.
5 Remove the steering valve ASSY.
6 Remove the knob synchronizer valve.
7 Remove the fitting. **[Point 1]**

Installation Procedure

The installation procedure is the reverse of the removal procedure.

Caution:
Cover the brake with cloth to prevent hydraulic oil adhesion.

Note:
Add MP grease at the coupling between the steering shaft and steering valve.



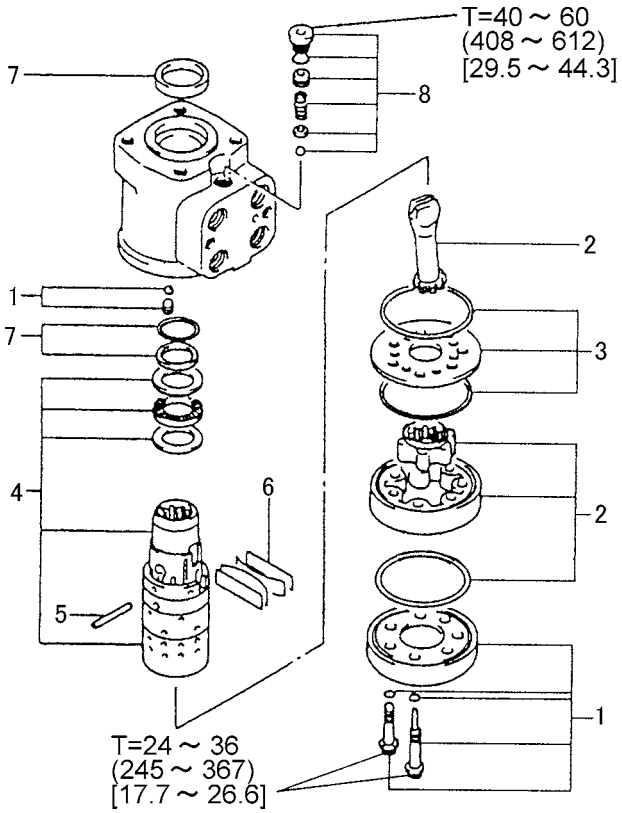
Point Operations

[POINT 1]
Reassembly:
Install the fitting with the angle shown in the illustration to the left.

DISASSEMBLY • INSPECTION • REASSEMBLY

Note:
Clean dirt from ports and joints before disassembly and perform operation in a clean place.

T=N·m (kgf·cm) [ft·lbf]



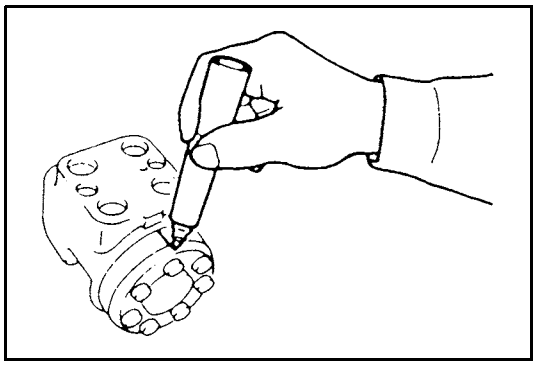
Disassembly Procedure

1 Remove the end cap. **[Point 1]**
2 Remove the star, rotor and drive shaft. **[Point 2]**
3 Remove the spacer plate and check valve.
4 Remove the spool and sleeve ASSY. **[Point 3]**
5 Remove the pin from the spool and sleeve ASSY. **[Point 4]**
6 Remove the centering spring.
7 Remove the dust seal and bearing.
8 Remove the relief valve. **[Point 5]**

Reassembly Procedure

The reassembly procedure is the reverse of the disassembly procedure.

Note:
Wash each part with clean hydraulic oil before assembly.



Point Operations

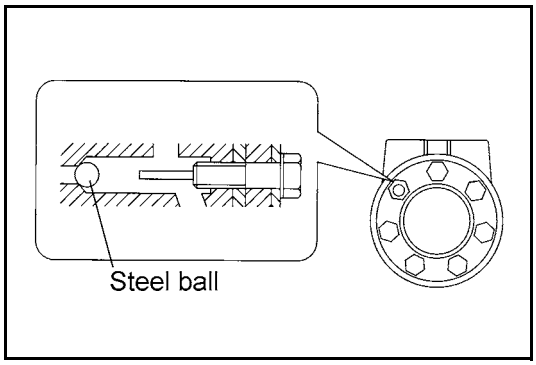
[POINT 1]

Disassembly:

Make match marks.

Reassembly:

Align match marks when reassembling.

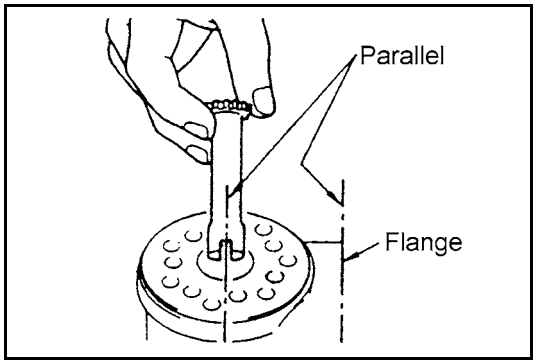


Disassembly:

When removing each retainer screw, operate carefully so as not to lose the steel ball.

Reassembly:

Position the retainer screw and steel ball as shown in the illustration.



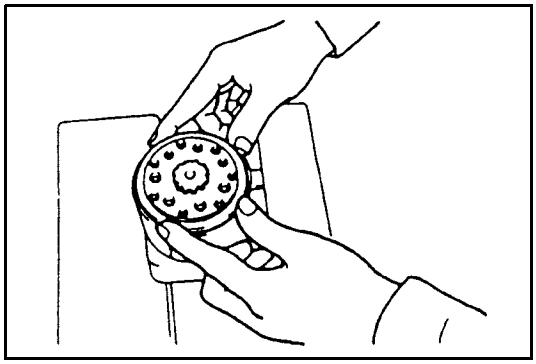
[POINT 2]

Reassembly:

Reassemble the drive shaft and star as follows:

(1) Rotate the spool and sleeve ASSY to bring the pin parallel with the housing port surface.

(2) Install the O-ring in the housing and place the spacer plate by aligning the match marks made before removal.

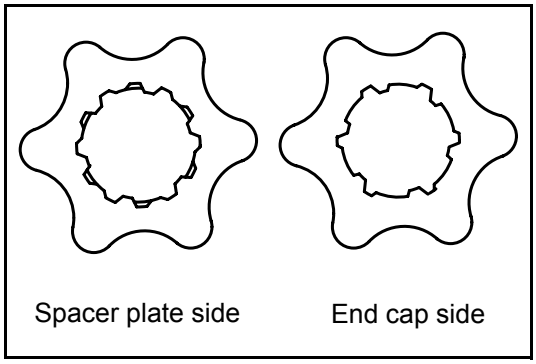


(3) Insert the drive and fit the pin.

(4) Install the rotor and O-ring.

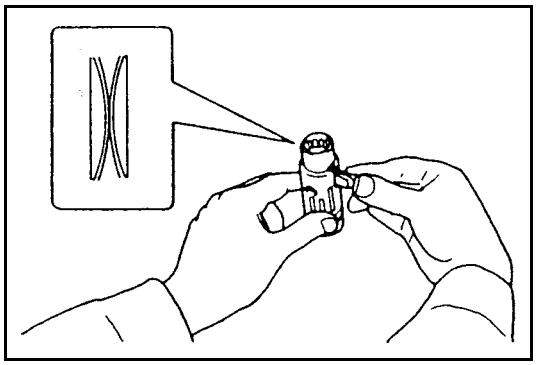
(5) Match the star gears and rotor groove.

(6) While keeping the drive shaft and star fitted together, Install the rotor by aligning the match marks made before removal.

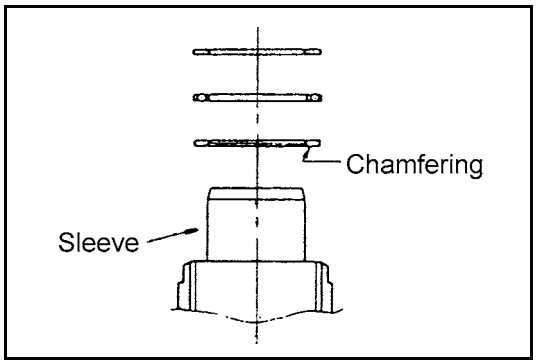


Reassembly:

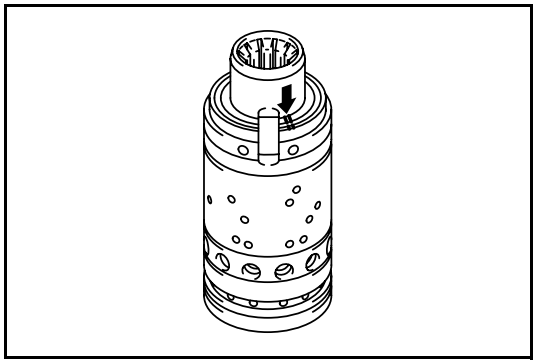
Be sure to install on the correct side of the spacer plate.



[POINT 3]
Reassembly:
Install the spring as shown in the illustration.

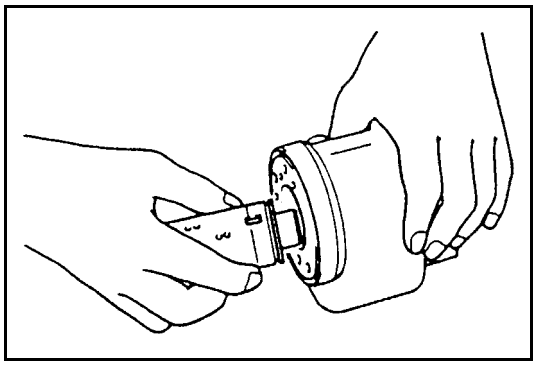


Reassembly:
Install the bearing by positioning the race bearing as shown in the illustration.

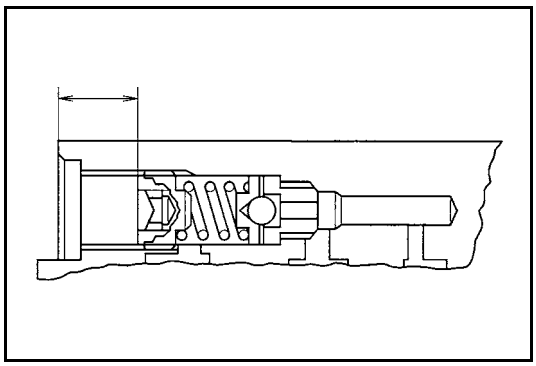


[POINT 4]
Reassembly:
Assemble the spool ASSY by aligning the positioning mark.

Disassembly:
If the positioning mark for the spool and sleeve is not provided, provide it with a marker.

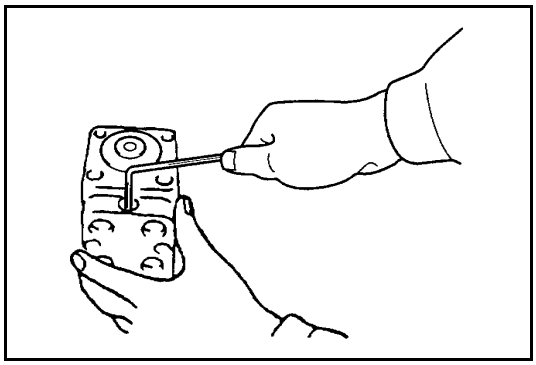


Reassembly:
Install the spool and sleeve by holding the cross pin with the flange facing downward.



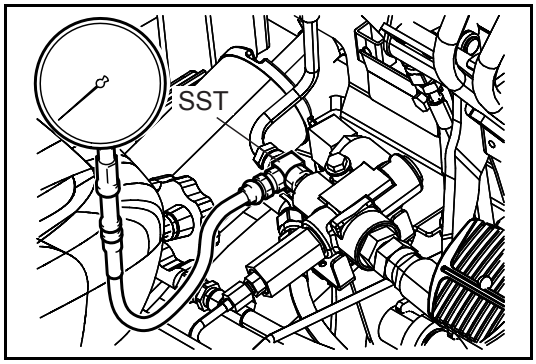
[POINT 5]
Disassembly:
Measure the relief valve length before removal.

Caution:
Remove the relief valve only when abnormality of relief valve is found.



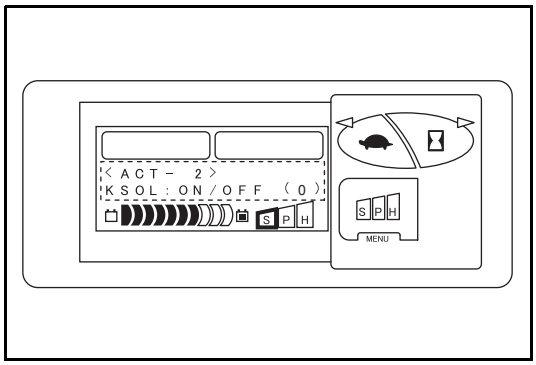
Reassembly:

Make sure that the relief valve length is the same length as before the removal.Adjust the relief valve length when not meeting the standard.

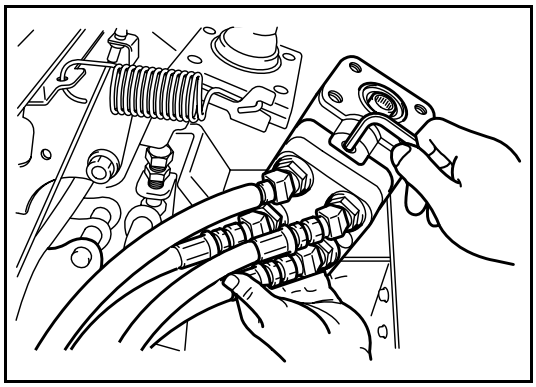


INSPECT AND ADJUST THE RELIEF PRESSURE.

1. Install a pressure gauge on the P port of the priority valve.
   (1) Disconnect the hose from the P port and connect the adapter.
   SST 09450-23320-71
   (2) Install the pressure gauge.
   Fitting size: PT1/8



2. Set the steering synchronizer solenoid to ON in the analyzer mode. (See page 3-26.)
3. When the steering wheel is rotated to the end, relief state is achieved, so read the pressure on the pressure gauge at that time.



Standard:

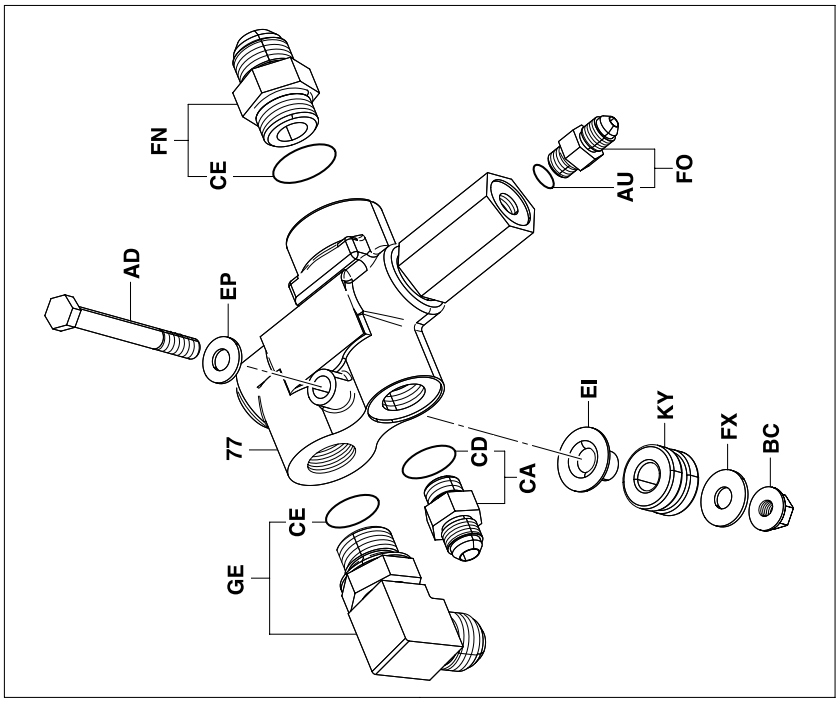
All Models MPa (kgf·cm^2) [psi]	10.6 to 11.1 (108 to 113) [1535.8 to 1606.9]

4. If the relief pressure is out of the standard range, remove the steering valve and adjust at the adjusting section.

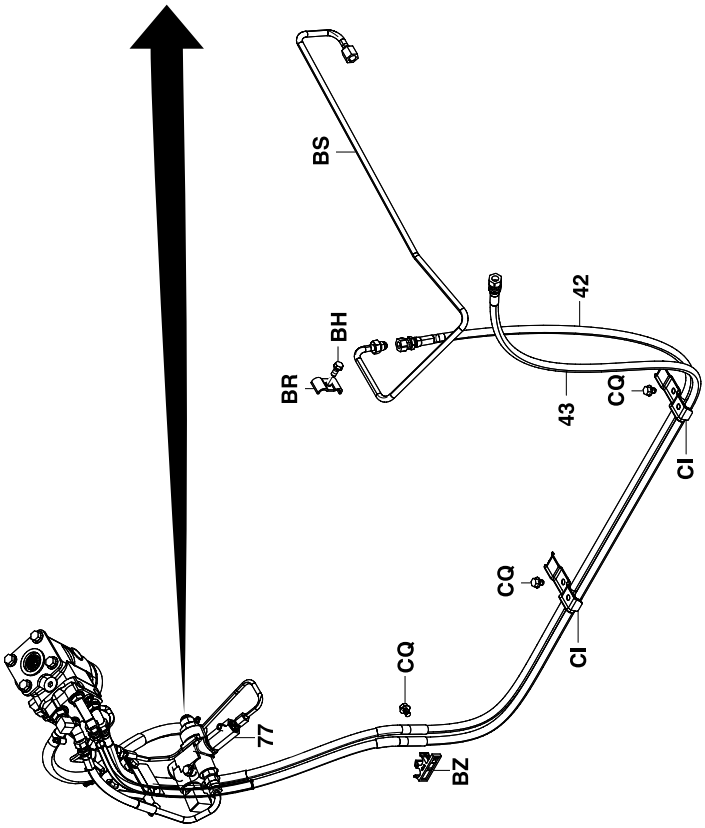
PRIORITY VALVE

COMPONENTS

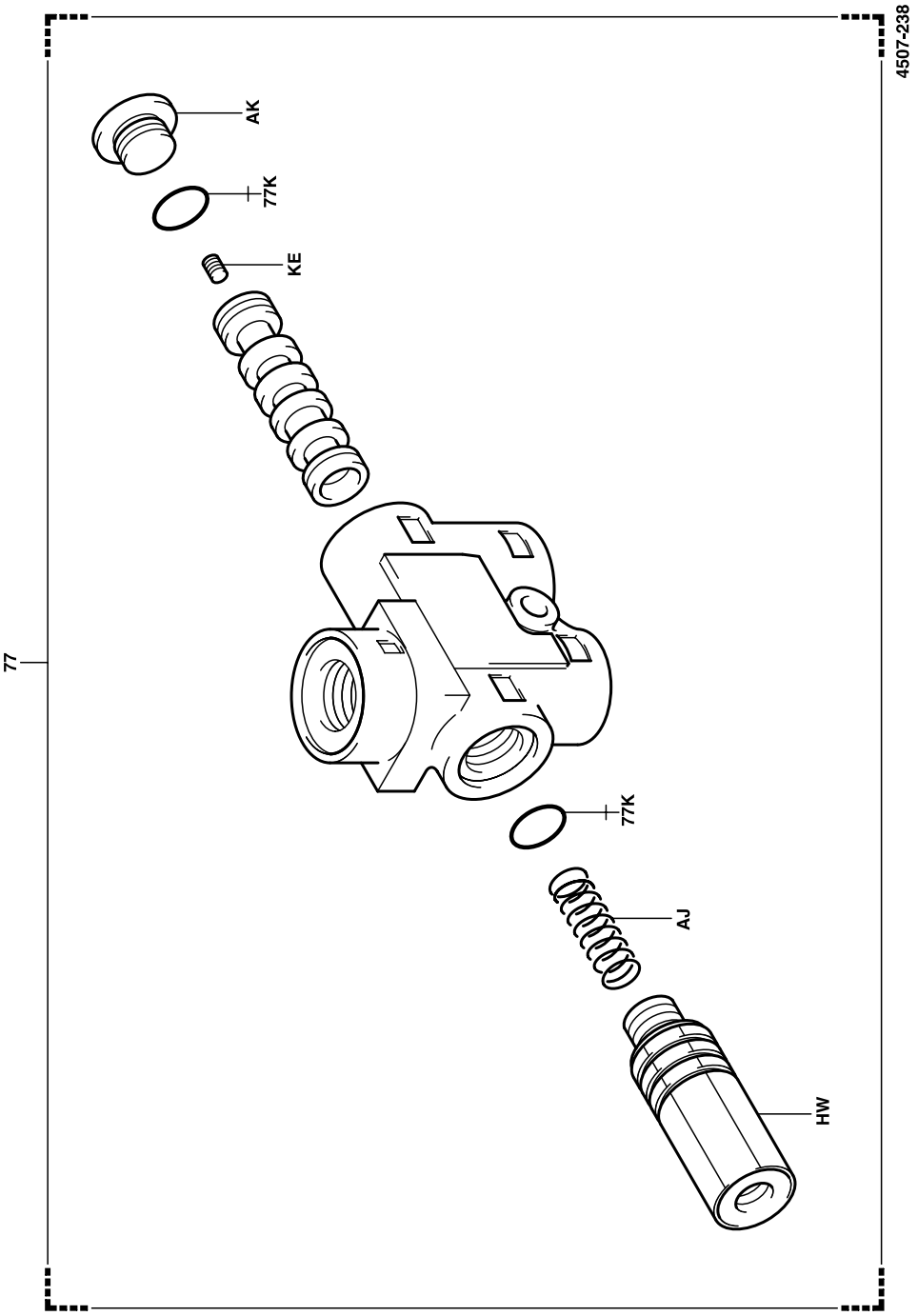
4507



4507-230

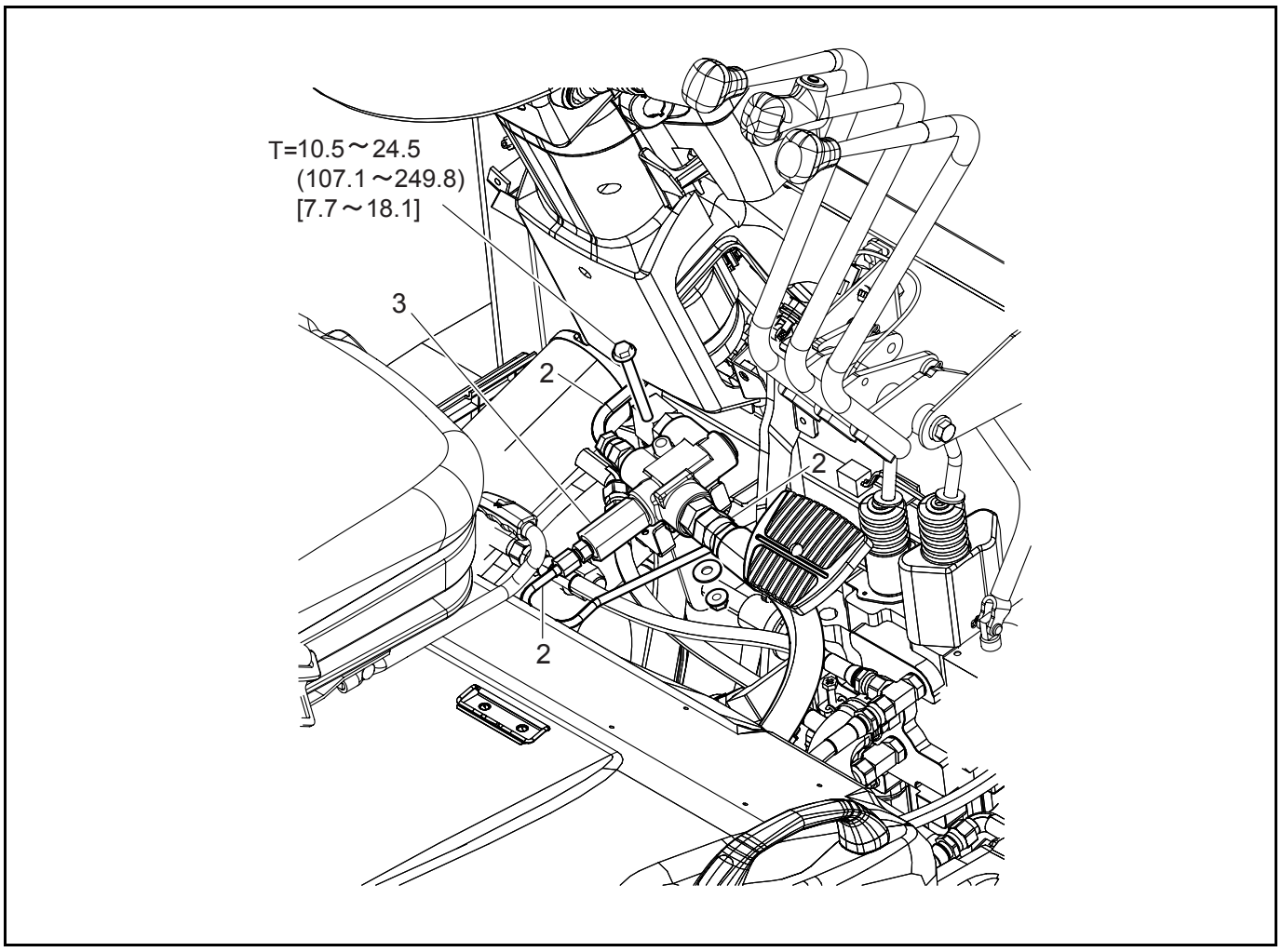


4507



REMOVAL • INSTALLATION

T=N·m (kgf·cm) [ft·lbf]



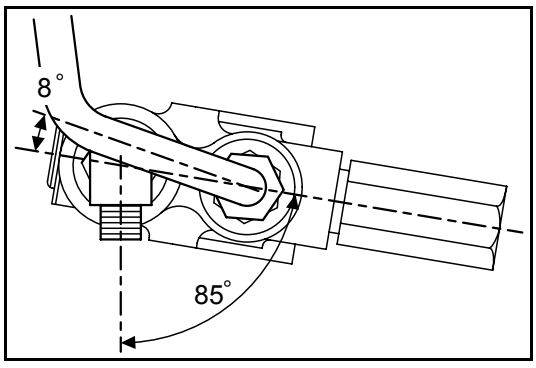
Removal Procedure

1 Remove the toe board (front and rear) and tilt cover.
2 Disconnect the piping.
3 Remove the priority valve.

Installation Procedure

The installation procedure is the reverse of the removal procedure.

Caution:
Cover the brake with cloth to prevent hydraulic oil adhesion.

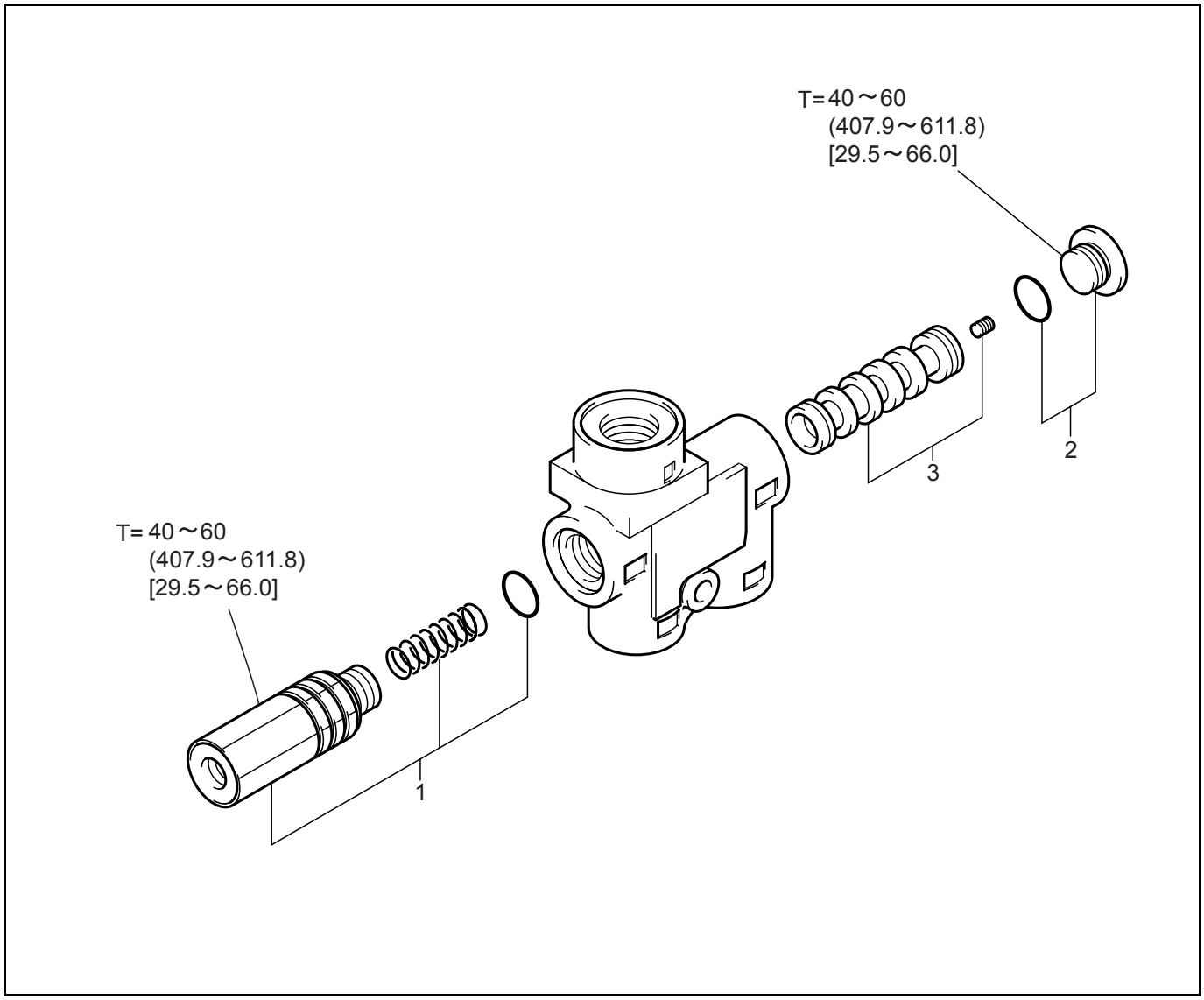


Point Operations

[POINT 1]
Reassembly:
Install the priority valve fitting with the angle shown in the illustration to the left.

DISASSEMBLY • INSPECTION • REASSEMBLY

T=N·m (kgf·cm) [ft·lbf]



Disassembly Procedure

1 Remove the plug.
2 Remove the plug.
3 Remove the shaft.

Installation Procedure

The reassembly procedure is the reverse of the disassembly procedure.