## **GROUP 8 TURNING JOINT**

#### 1. REMOVAL AND INSTALL

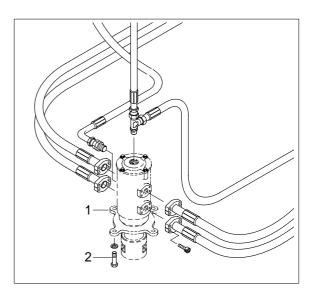
#### 1) REMOVAL

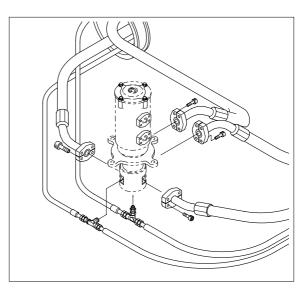
- (1) Lower the work equipment to the ground and stop the engine.
- (2) Operate the control levers and pedals several times to release the remaining pressure in the hydraulic piping.
- (3) Loosen the breather slowly to release the pressure inside the hydraulic tank.
- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- When pipes and hoses are disconnected, the oil inside the piping will flow out, so catch it in oil pan.
- (4) Disconnect all hoses.
- (5) Sling the turning joint assembly (1) and remove the mounting bolt(2).
  - · Weight : 36kg(79lb)
  - $\cdot$  Tightening torque : 12.2  $\pm$  1.3kgf  $\cdot$  m (88.2  $\pm$  9.4lbf  $\cdot$  ft)
- (6) Remove the turning joint assembly.
- \* When removing the turning joint, check that all the hoses have been disconnected.

#### 2) INSTALL

- (1) Carry out installation in the reverse order to removal.
- \* Take care of turning joint direction.
- \* Assemble hoses to their original positions.
- \* Confirm the hydraulic oil level and check the hydraulic oil leak or not.

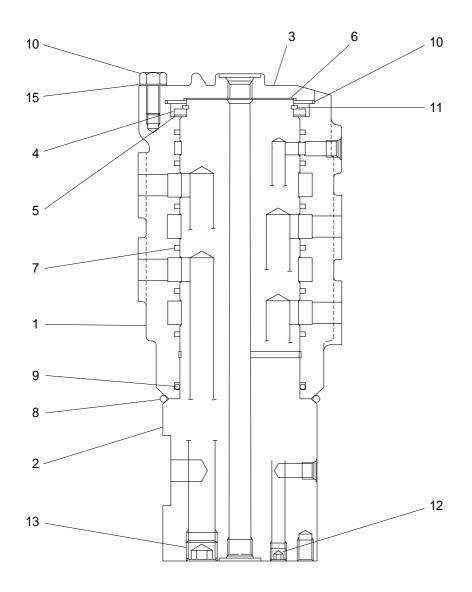






### 2. DISASSEMBLY AND ASSEMBLY

# 1) STRUCTURE



- 1 Hub
- 2 Shaft assembly
- 3 Cover
- 4 Spacer
- 5 Shim

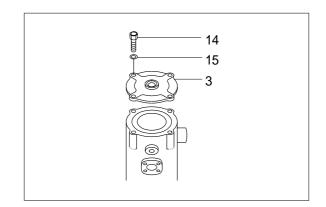
- 6 Shim
- 7 Sipper seal
- 8 O-ring
- 9 O-ring
- 10 O-ring

- 11 Retaining ring
- 12 Plug
- 13 Plug
- 14 Hexagon head bolt
- 15 Spring washer

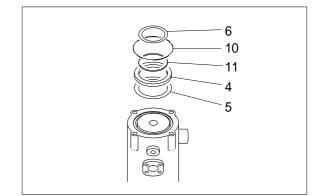
### 2) DISASSEMBLY

(1) Before the disassembly, clean the turning joint.

Remove bolts(14), washer(15) and cover (3).

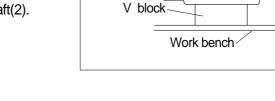


- (2) Remove shim(6) and O-ring(10).
- (3) Remove retainer ring(11), spacer(4) and shim(5).



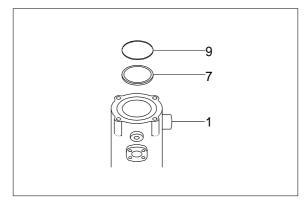
Secure with hand

- (4) Place hub(1) on a V-block and by using a wood buffer at the shaft end, hit out shaft(2) to about 1/2 from the hub with a hammer.
- \* Take care not to damage the shaft(2) when remove hub(1) or rest it sideway.
- \* Put a fitting mark on hub(1) and shaft(2).



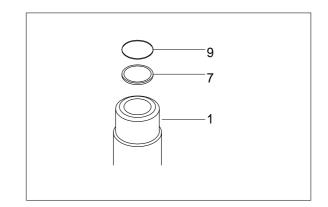
Wooden block

(5) Remove six slipper seals(7) and O-ring(9) from hub(1).

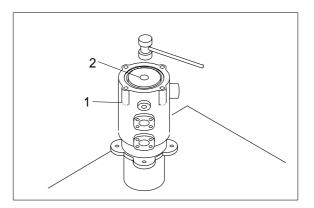


### 3) ASSEMBLY

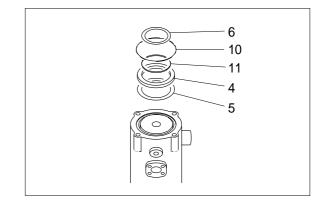
- \* Clean all parts.
- \* As a general rule, replace oil seals and Oring.
- \* Coat the sliding surfaces of all parts with engine oil or grease before installing.
- (1) Fix seven slipper seal(7) and O-ring(9) to hub(1).
- (2) Fit O-ring(8) to shaft(2).



(3) Set shaft(2) on block, tap hub(1) with a plastic hammer to install.



- (4) Fit shim(5), spacer(4) and retainer ring(11) to shaft(2).
- (5) Fit O-ring(10) to hub(1).
- (6) Fit shim(6) to shaft(2).



(7) Install cover(3) to hub(1) and tighten bolts(14).

 $\cdot$  Torque : 5.5 ~ 12.5kgf  $\cdot$  m(40 ~ 90lbf  $\cdot$  ft)

