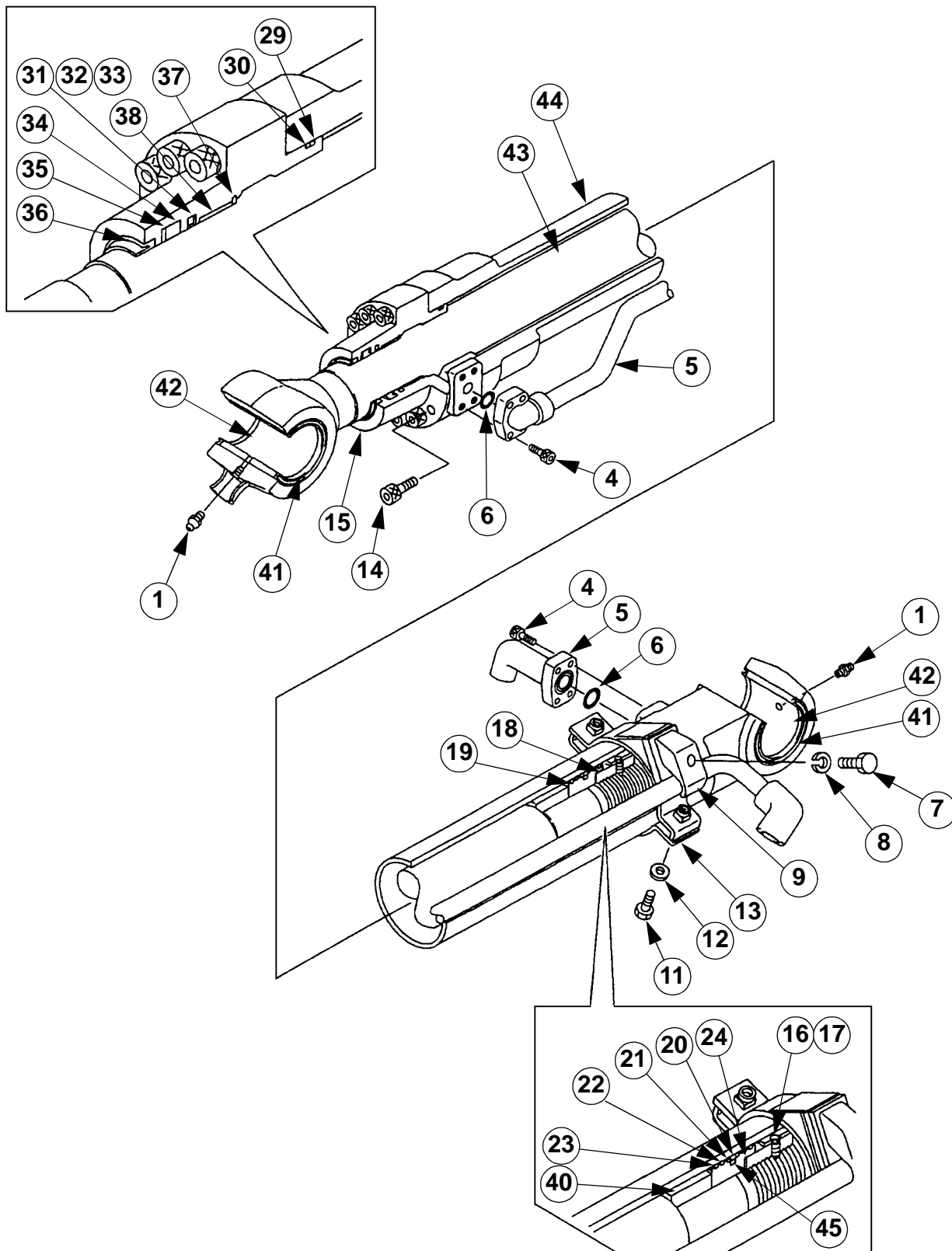


# Bucket cylinder description



- 1 LUBRICATION FITTING
- 2 NOT USED
- 3 NOT USED
- 4 SCREW
- 5 HYDRAULIC PIPE
- 6 O-RING
- 7 SCREW
- 8 WASHER
- 9 RETAINING CLIP
- 10 NOT USED
- 11 SCREW
- 12 WASHER
- 13 RETAINING CLIP
- 14 SCREW
- 15 BEARING
- 16 SCREW
- 17 STEEL BALL
- 18 PISTON NUT
- 19 PISTON
- 20 SEAL RING
- 21 BACK UP RING
- 22 WEARING RING
- 23 WEARING RING
- 24 SHIM
- 25 NOT USED
- 26 NOT USED
- 27 NOT USED
- 28 NOT USED
- 29 O-RING
- 30 BACK UP RING
- 31 WEARING RING
- 32 BACK UP RING
- 33 SQUARE SEAL
- 34 U-RING
- 35 BACK UP RING
- 36 WIPER SEAL
- 37 STOPPING RING
- 38 BUSHING
- 39 NOT USED
- 40 CUSHION BUSHING
- 41 WIPER SEAL
- 42 BUSHING
- 43 CYLINDER ROD
- 44 CYLINDER BARREL
- 45 O-RING

## Disassembly

**NOTE:** The boom, dipper and bucket cylinders are basically identical in construction. What changes is the hydraulic tube connections. Before installing the cylinder in the repair stand, remove the hydraulic tubes.

### STEP 1

#### Boom cylinder

**NOTE:** The numbers in brackets in the following steps refer to the boom cylinder schematic on page 6.

1. Remove the lubrication fitting (1) from the cylinder.
2. Remove the two plugs (2). Remove and discard the two O-rings (3).
3. Remove the screws (4) and disconnect the hydraulic tubes (5) and (10) from the cylinder. Remove and discard the two O-rings (6).
4. Remove the screw (7), the washer (8) and the clamp (9) from the tubes. Remove the hydraulic tubes (5) and (10) from the cylinder.
5. Remove the screws (11), the washers (12) and the clamp (13) from the cylinder.

### STEP 2

#### Dipper cylinder

**NOTE:** The numbers in brackets in the following steps refer to the dipper cylinder schematic on page 8.

1. Remove the lubrication fitting (1) from the cylinder.
2. Remove the plug (2) from the hydraulic tube. Remove and discard the O-ring (3).
3. Remove the screws (4) and disconnect the hydraulic tube (5) and the clamp from the cylinder. Remove and discard the two O-rings (6).
4. Remove the screw (7), the washer (8) and the clamp (9) from the cylinder.
5. Remove the screws (11), the washers (12). Remove the clamp (13) from the cylinder. Remove the hydraulic tube (5) from the cylinder.

### STEP 3

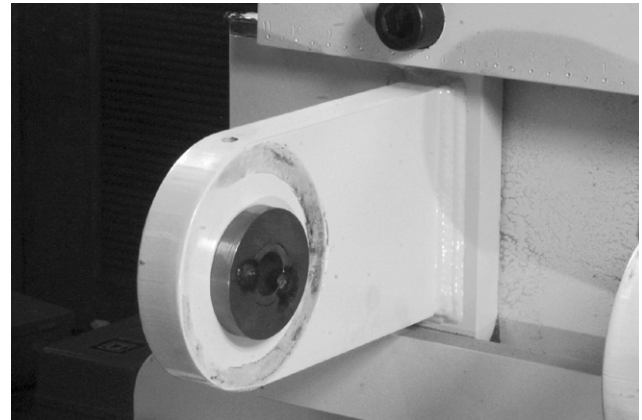
#### Bucket cylinder

**NOTE:** The numbers in brackets in the following steps refer to the bucket cylinder schematic on page 10.

1. Remove the two lubrication fittings (1) from the cylinder.
2. Remove the screws (4). Disconnect the hydraulic tubes (5) from the cylinder. Remove and discard the two O-rings (6).
3. Remove the screw (7), the washer (8) and the clamp (9) from the cylinder.
4. Remove the screws (11), the washers (12) and the clamp (13) from the cylinder. Remove the hydraulic tube (5) from the cylinder.

**NOTE:** As an example, the repairing bench CAS 10918 is used.

### STEP 4



JD00620A

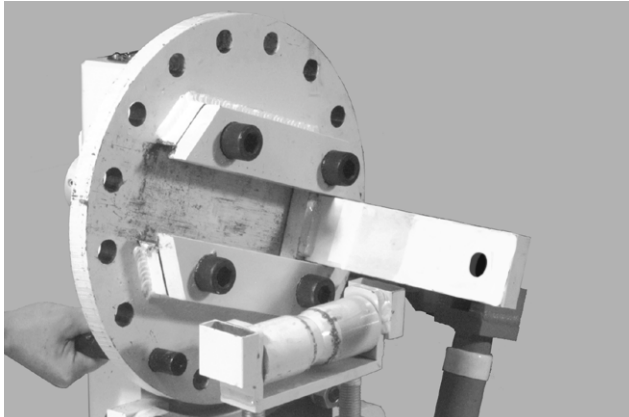
Install suitable bushings on the cylinder head stock chuck wings.

### STEP 5



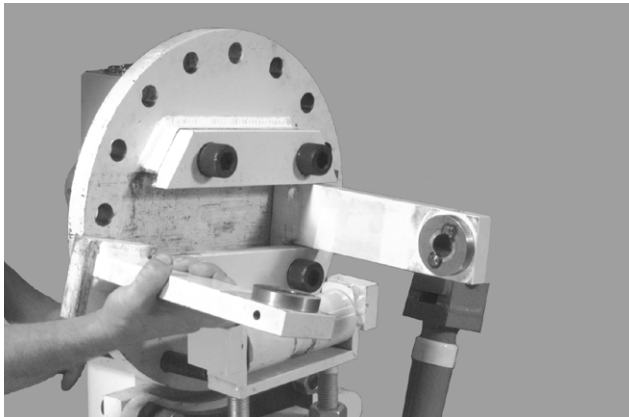
JD00621A

Tighten the bushing retaining screws.

**STEP 6**

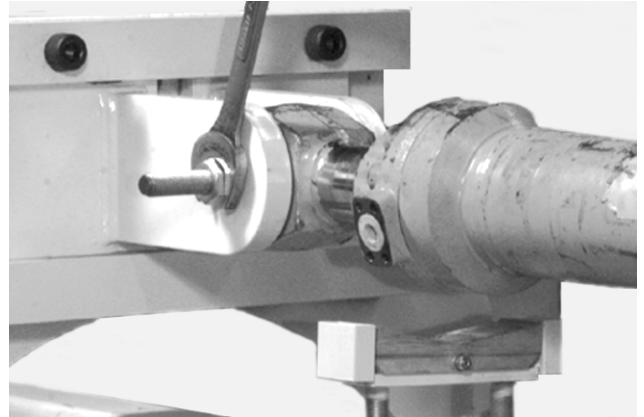
JD00623A

Install the stop pins on the boom tail stock.

**STEP 7**

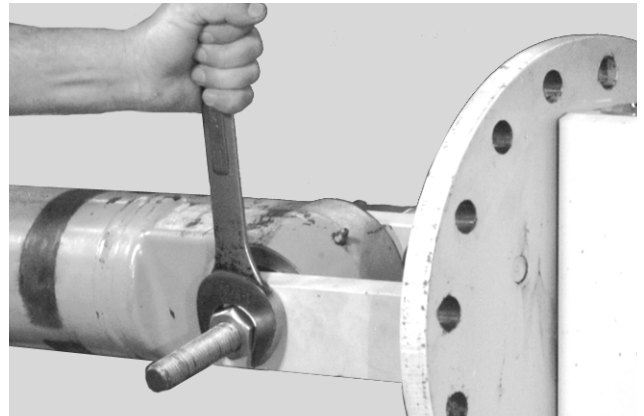
JD00624A

Install suitable bushings on the cylinder tail stock chuck wings. Tighten the retaining screws. Install the chuck wings on the cylinder tail chuck. Tighten the locking screws. Use the scale on the face of the chuck to aid in centering the chuck wings.

**STEP 8**

JD00625A

Connect lifting equipment, if necessary, to the cylinder. Position the cylinder in the repair stand with the rod end of the cylinder at the head stock chuck. Loosen the retaining screws of the tail stock chuck wings. When positioning the cylinder rod end on the head stock chuck wing, be sure that the chuck wing bushings are centred in the rod bushing. Install the screw and nuts to secure the cylinder rod end to the repair stand.

**STEP 9**

JD00626A

On the cylinder repair stand, loosen the retaining screws of the tail stock chuck wings. When positioning the cylinder barrel end on the head stock chuck wing, be sure that the bushings are centred in the cylinder barrel bushing. Install the screw and nuts to secure the cylinder barrel end to the repair stand.