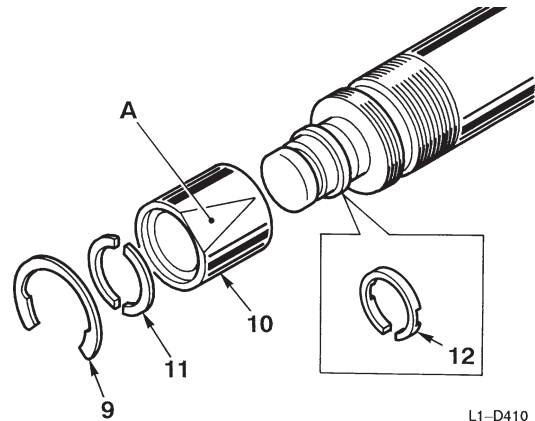


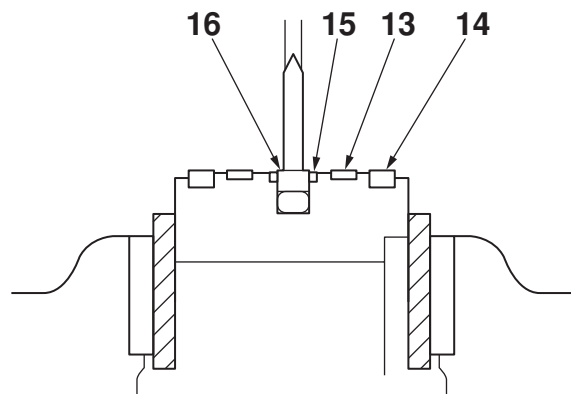
4. Remove the cushion bearing.
  - a. Remove the snap ring (9).
  - b. Move the cushion bearing (10) and remove the stopper (11).
  - c. Pull out the cushion bearing (10).
  - d. Remove the cushion seal (12).
5. Remove the rod cover from the piston rod.



L1-D410

**Piston**

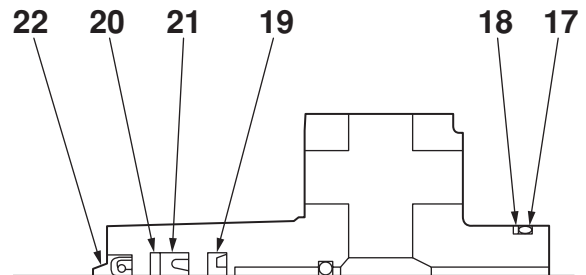
1. Remove the wear rings (13), (14) and backup ring (15) from the piston.
  - Spread the wear ring the minimum amount necessary and remove it in the axial direction.
2. Remove the piston packing (16).
  - Remove the piston packing by cutting it or using a screwdriver.



N0D408

**Rod Cover**

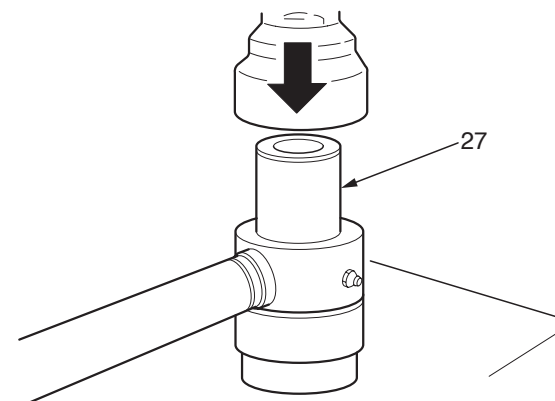
1. Remove the O-ring (17) and the backup ring (18).
2. Remove the buffer ring (19), the backup ring (20) and the rod packing (21).
  - Extract using a eyeleteer with a pointed tip.
3. Remove the dust seal (22).
  - Extract by raising the rubber part with a screwdriver, etc., and striking.



N0D409

**Clevis**

1. Remove the dust seal from the tube and piston rod.
2. Remove the bushing using a setting tool (27).

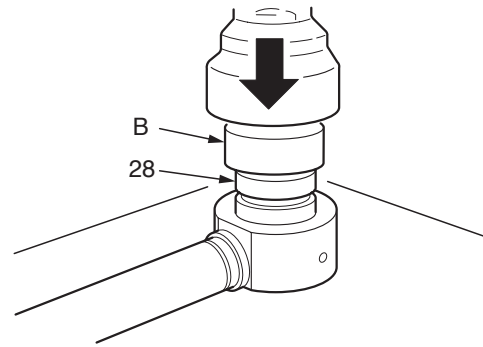


E5D424

**Assembly**

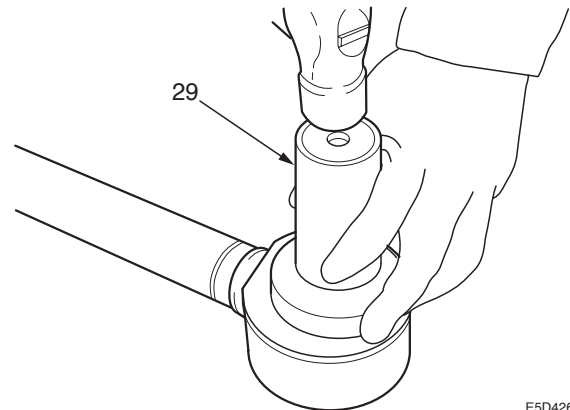
**Clevis**

1. Using installation jig (B), pressure fit the bushings (28) in the piston rod and tube.



E5D425

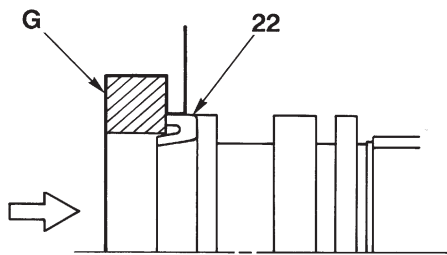
2. Using a setting tool (29), install the dust seals.



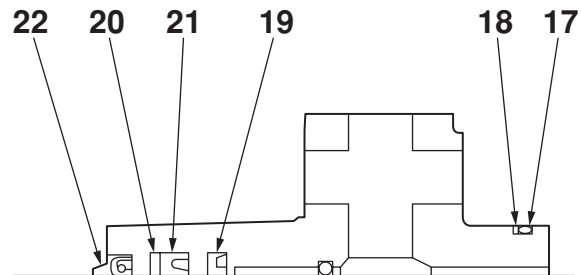
E5D426

**Rod Cover**

1. Install the O-ring (17) and the backup ring (18).
2. Using setting tool (G), pressure fit the dust seal (22).



L1-D414

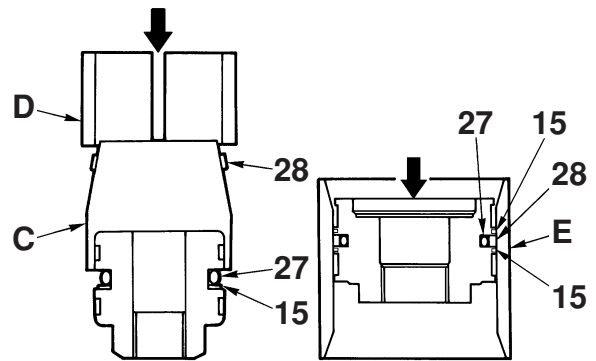


N0D409

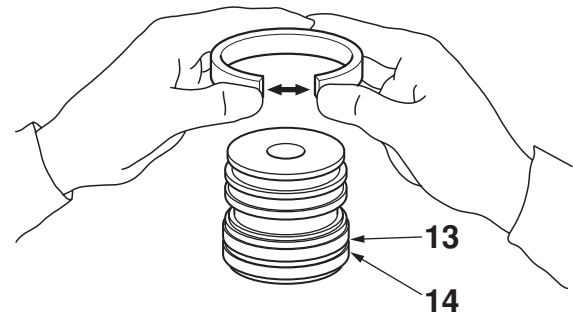
3. Install the backup ring (20) and the rod packing (21).
4. Install the buffer ring (19).
  - Be sure to install it in the proper direction.

Piston

1. Install the O-ring (27) and the backup ring (15) on the piston.
  - Install one backup ring only. The other backup ring must be installed after assembling the slipper ring.
2. Cover the piston with the sliding jig (C), then, using the fitting jig (D), insert the slipper ring (28) rapidly.
3. Install the backup ring (15).
4. Since the slipper ring (28) is extended when it is installed, correct it using the corrective jig (E).
5. Install the wear rings (13) and (14).
  - Spread the wear ring at the cut portion the minimum amount necessary, installing it on the piston from the shaft direction.
  - Displace the cut portion of the wear ring in increments of 180 degrees.



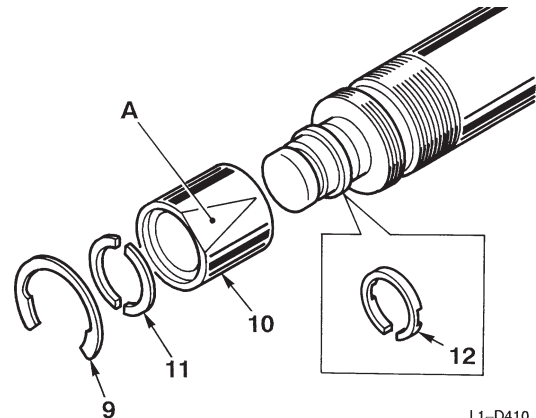
N0D410



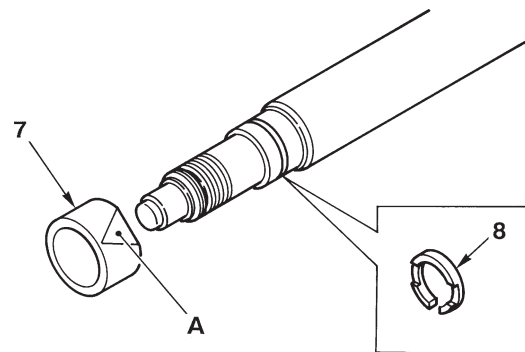
N0D411

Piston Rod Assembly

1. Fasten the piston rod so that it is flat and install the rod cover.
  - Cover the piston rod thread with tape, etc., to protect the seals from being scratched.
2. Install the cushion bearing (10).
  - a. Install the cushion seal (12).
    - Set the side with the slits facing the screw side.
  - b. Install the cushion bearing (10).
    - Be sure to set with the flat side (A) in the proper direction.
  - c. Install the stopper (11) on the piston rod, and move the cushion bearing (10).
  - d. Install the snap ring (9).
3. Install the cushion seal (8) and cushion bearing (7).
  - Set the side of the cushion seal with the slits facing the screw side.
  - Be sure to set with the flat side (A) of the cushion seal in the proper direction.

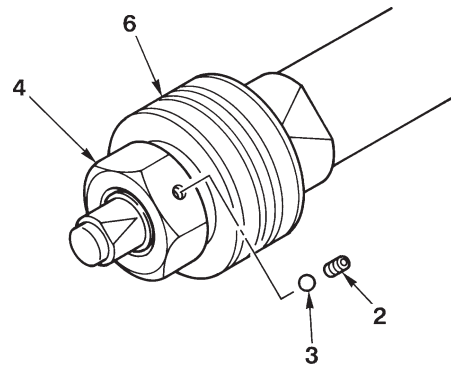


L1-D410



L1-D417

4. Install the piston.
  - a. Install the piston (6).
  - b. Install the piston nut (4) and tighten it.
    - ☞ Piston Nut: Refer to the table below.
  - c. Insert the steel ball (3).
  - d. Tighten the set screw (2) and caulk it at two places with a punch.
    - ☞ Set Screw: Refer to the table below.



L1-D418

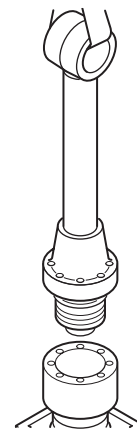
☞ Piston Nut, Set Screw

Unit: N·m

Place	Piston Nut	Set Screw
Boom Cylinder	2690	31.5 ±5.88
Arm Cylinder	5680	56.9 ±10.7
Bucket Cylinder	3970	31.5 ±5.88
Swing Cylinder	7400	56.9 ±10.7

Cylinder Assembly

1. Fix the tube as follows:
  - a. Fix the head hole of the tube with the pin, and hoist the tube.
  - b. Fix the tube by applying the support to prevent the tube from falling.
2. Insert the piston rod assembly in the tube.



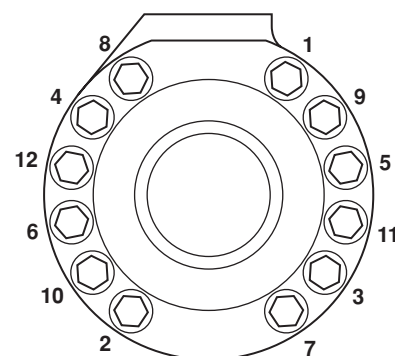
N0D412

3. Tighten the rod cover with the cap screws.
  - Tighten the cap screws in the order shown in this figure.

☞ Cap Screw

Unit: N·m

Boom Cylinder	171
Arm Cylinder	171
Bucket Cylinder	171
Swing Cylinder	367



N0D413