

3.4 MUD PUMP & AIR COMPRESSOR CONTROLS (2-HA-1 Pilotair Valve - P59331)

Valve Portion Maintenance:

Disassembly: Refer to PBS-500 and completely disassemble the valve portion.

Cleaning:

1. Clean all metal parts with a non-flammable solvent.
2. Wash all rubber parts with soap and water.
3. Rinse parts thoroughly and blow dry with a low-pressure air jet.
4. Inspect all parts and replace those which are worn or damaged.

Reassembly: Refer to Figures 11 and 16 and reassemble the valve portion.

1. The supply valve sub-assembly (11) is designed and recommended to be serviced in kit form.
2. Lubricate all metal-to-metal contact surfaces with Number 107 Lubriplate.
3. Lubricate all rubber parts with Dow Corning No. 55 pneumatic grease.
4. After reassembly is complete, install the operator and test for correct operation and evidence of leakage.

Adjustment: The "A" PILOTAIR valve requires no adjustment after reassembly.

Cam Housing Maintenance:

NOTE: Before performing maintenance on the cam housing, the following information must be noted:

All cams in the "A" PILOTAIR valve are marked for position on the shaft and for the valve cavity that they are to operate.

1. The position index mark indicates the position of the cam on the shaft when the handle is in upright position. This mark appears on the edge of the cam.
2. The engraved cavity number indicates the valve cavity that the cam is to operate. This marking appears as an Arabic numeral on the same side of the cam as the position index mark.

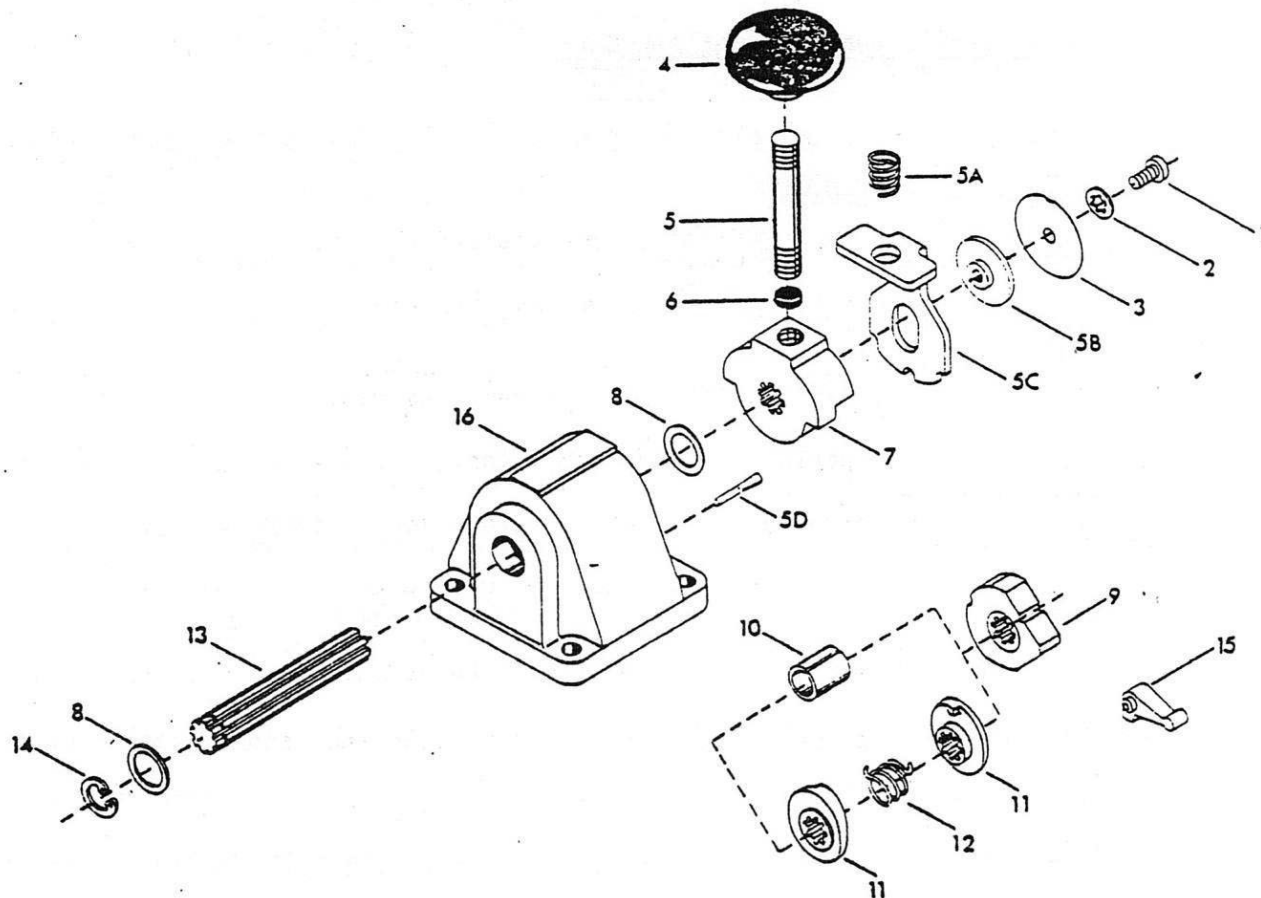


Figure 18-2-HA-1 PILOTAIR Valve Cam Housing Exploded View

PARTS LIST

| REF. | QTY. | DESCRIPTION | P.C. NO. |
|------|------|---|-------------|
| F | 1 | SCREW | P49526-0003 |
| 1A* | 1 | SCREW (Latching Models Only) | P49526-0005 |
| 2 | 1 | WASHER | P49898-0007 |
| 2A* | 1 | WASHER (Latching Models Only) | P49898 |
| 3* | 1 | NAMEPLATE | P49408 |
| 4 | 1 | KNOB, Handle | P57662 |
| 5 | 1 | HANDLE | P59312 |
| 5A | 1 | SPRING, Handle Latch (Latching Models Only) | P59957 |
| 5B | 1 | COLLAR (Latching Models Only) | P61762 |
| 5C | 1 | LATCH, Handle (Latching Models Only) | P61744 |
| 5D | 1 | PIN, Driv-Lok (Latching Models Only) | P49705-0008 |
| 6 | 1 | PLUG | P49958-0008 |
| 7 | 1 | HUB, Handle | P59311 |
| 8 | 2 | WASHER | P49804-0039 |
| 9 | 1 | CAM | P59060 |
| 10 | 1 | SPACER | P49410-0001 |
| 11 | 2 | ARBOR, Spring (Spring Returned Models Only) | P59307 |
| 12 | 1 | SPRING (Spring Returned Models Only) | P59306 |
| 13 | 1 | SHAFT, Handle | P59313 |
| 14 | 1 | RING, Retaining | P49857-0007 |
| 15* | 1 | FOLLOWER, Cam | P59370-0001 |
| 16 | 1 | HOUSING, Cam | P59299-0001 |
| 16A | 1 | HOUSING, Cam (Latching Models Only) | P61766 |

*Not included in cam housing portion, order separately when required.

Cam Housing Maintenance (Cont'd)

With the front (vertical side) of the cam housing facing the operator and with the handle facing toward the right (single handle models), the position index marks and engraved cavity numbers appear on the right side of the cams.

The valve cavities are numbered 1, 2, 3 and 4 from the left with the cam housing in the same position as above.

2-HA-1 PILOTAIR Valve

Housing Disassembly: Refer to PBS-500 and disassemble the cam housing.

Cleaning:

1. Clean all parts with a non-flammable solvent.
2. Rinse parts thoroughly and blow dry with a low-pressure air jet.
3. Lubricate bronze bearings located in cam housing with Number 107 Lubriplate.
4. Lubricate cam surfaces and cam follower surfaces with Number 107 Lubriplate after they have been reassembled in cam housing.

Reassembly: Refer to Figure 18.

1. Position handle hub (7) onto shaft (13). Hub end must be flush with end of shaft.
2. Insert rubber plug (6) into hole of handle hub. Screw handle (5) into hub and tighten to secure hub against shaft.
3. Position washer (8) onto shaft.
4. Insert handle and hub assembly into right side of cam housing just enough to allow cam (9) to be positioned on shaft.
5. Position cam (9) on shaft so that the position index mark is facing toward the handle and, at the same time, appears at bottom center when the handle is in the upright position.
6. Place spacer (10) on shaft.
7. Slide shaft through hole in left side of cam housing.
8. Add washer (8) and secure with retaining ring (14).