



DIRECTIONS FOR DISASSEMBLY & REASSEMBLY OF PRICE AOD 15 STT*

*BODY: STAINLESS STEEL 316 (S)
DIAPHRAGMS: TEFLON (T)
BALLS: TEFLON (T)

CAUTION: Before any maintenance or repair is attempted, the compressed air line to the pump should be disconnected and all air pressure allowed to bleed from the pump. Disconnect all intake, discharge, and air lines. Drain the pump by turning it upside down and allowing any fluid to flow into a suitable container. Be aware of any hazardous effects of contact with your process fluid.

The **PRICE AOD 15** has a 15 mm (1/2") inlet and outlet. 1/2" BSP connection

AVAILABLE MOCs:

- Polypropylene
- PVDF
- SS

TOOLS REQUIRED:

- Wrench
- Allen Wrench
- Adjustable Wrench
- Adjustable Spanner
- Vise equipped with soft jaws (such as plywood, plastic or other suitable material)



STEP 2 (Fig 2)

Utilizing a wrench, remove the studs that fasten the discharge manifold to the liquid chambers. (Fig 2)



STEP 5 (Fig 5)

Inspect ball cage area of liquid chamber for excessive wear and damage. (Fig 6) Remove the discharge valve balls, O-rings and seats (Fig 7) from the liquid chambers and inspect for nicks, gouges, chemical attack or abrasive wear. Replace worn parts with genuine PRICE parts for reliable performance.



STEP 3 (Fig 3)

Lift away the discharge manifold to expose the valve balls and seats. (Fig 3)



STEP 6 (Fig 6)

Normally inlet and discharge manifolds should not be disassembled during regular pump maintenance. Should this be necessary, completely remove clamp bands and inspect O-rings for nicks, cuts and chemical attack. (Fig 6)

DISASSEMBLY



STEP 1 (Fig 1)

Before starting disassembly, mark a line from each liquid chamber to its corresponding air chamber. This line will assist in proper alignment during reassembly. (Fig 1)



STEP 4 (Fig 4)

Remove the discharge valve balls, O-rings and seats (Fig 4) from the liquid chambers and inspect for nicks, gouges, chemical attack or abrasive wear. Replace worn parts with genuine PRICE parts for reliable performance.



STEP 7 (Fig 7)

Remove one set of clamps, which secure one liquid chamber to the center section. (Fig 7)



STEP 10 (Fig 10)

NOTE: Due to varying torque values, one of the following two situations may occur:
 1) The lock nut (outer piston), diaphragm and holding plate (inner piston) remain attached to the shaft and the entire assembly can be removed from the center section (Fig 10).
 2) The lock nut (outer piston), diaphragm and holding plate (inner piston) separate from the shaft which remains connected to the opposite side diaphragm assembly (Fig 10). Repeat disassembly instructions for the opposite liquid chamber. Inspect diaphragm assembly and shaft for signs of wear or chemical attack. Replace all worn parts with genuine PRICE parts for reliable performance.



STEP 8 (Fig 8)

Lift liquid chamber away from center section to expose diaphragm and outer piston. (Fig 8)



STEP 9 (Fig 9)

Using an adjustable wrench, or by rotating the diaphragm by hand, remove the diaphragm assembly. (Fig 9)



STEP 11 (Fig 11)

To remove diaphragm assembly from shaft, secure shaft with soft jaws (a vise fitted with plywood or other suitable material) to ensure shaft is not nicked, scratched, or gouged. Using an adjustable wrench or by hand, remove diaphragm assembly from shaft. Inspect all parts for wear and replace with genuine PRICE parts if necessary. (Fig 11)

REASSEMBLY

Upon performing applicable maintenance to the air distribution system, the pump can now be reassembled. Please refer to the disassembly instructions for photos and parts placement. To reassemble the pump, follow the disassembly instructions in reverse order. The air distribution system needs to be assembled first, then the diaphragms and finally the wetted parts. Please find the applicable torque specifications on this page. The following tips will assist in the assembly process.

- Clean the inside of the center section shaft bushing to ensure no damage is done to new seals.
- Stainless bolts should be lubed to reduce the possibility of seizing during tightening.
- Ensure proper alignment on the sealing surfaces of intake and discharge manifolds.
- Liquid chambers are easier to attach when the diaphragm is inverted. Prior to attaching the second water chamber, push diaphragm assembly so that it is as close as possible to the center section.
- PVDF pumps require Teflon® gasket kits for improved sealing. Gasket kits may be installed on other pumps where sealing is an issue.

MAXIMUM TORQUE SPECIFICATIONS

| DESCRIPTION OF PART | PLASTIC PUMPS |
|----------------------------------|----------------------|
| AIR VALVE | 3.4m-N[30in.-lbs.] |
| LOCK NUT (OUTER PISTON) | 51.5m-N[38ft.-lbs.] |
| SMALL CLAMP BAND | 9.6m-N[85in.-lbs.] |
| LARGE CLAMP BAND (Rubber fitted) | 18.6m-N[165in.-lbs.] |
| LARGE CLAMP BAND (Teflon fitted) | 18.6m-N[165in.-lbs.] |



DIRECTIONS FOR DISASSEMBLY & REASSEMBLY OF AIR VALVE / CENTER BLOCK FOR PRICE AOD 15*

*WITH TEFLON DIAPHRAGMS

TOOLS REQUIRED:

- Adjustable Spanner
- 1/4" Spanner
- 5/16" Spanner
- Circlip Plyer
- Vise equipped with soft jaws (such as plywood, plastic or other suitable material)



STEP 2 (Fig 2)

Remove all wetted parts from the centre block. (Fig 2)



STEP 5 (Fig 5)

Remove the pilot shaft bush. Check the o-rings. Replace if worn out. (Fig 5)



STEP 3 (Fig 3)

Remove the main shaft and check it. Remove the pilot shaft. Check it. Replace it if worn out. (Fig 3)



STEP 6 (Fig 6)

Remove the piston block. (Fig 6)

DISASSEMBLY



STEP 1 (Fig 1)

Remove the locknuts with the help of a spanner.



STEP 4 (Fig 4)

Unscrew the pilot shaft bush if required by removing one circlip. Check the bush. Replace it if worn out or damaged. (Fig 4)



STEP 7 (Fig 6)

Remove the piston block circlip. (Fig 6)

ASSEMBLY

For assembly, follow the reverse procedure.



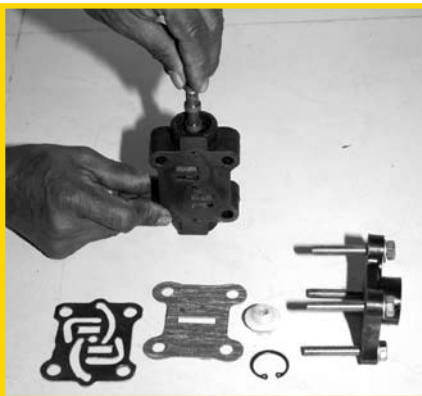
STEP 8 (Fig 7)

Remove the piston block cap, check the o-rings. Replace if damaged.(Fig 7)



STEP 9 (Fig 8)

Remove the piston. Check the piston. Replace it if worn out. (Fig 8)



STEP 10 (Fig 9)

Check the piston block gasket along with piston block cover gaskets. Replace it if worn out or damaged. (fig 9)