

Diaphragm Vacuum Pumps and Compressors

Installation and Operating Instructions

N 035 ANE	N 035.1 ANE	N 035.3 ANE	N 035.3 AN.18	N 037 AN.18
N 035 AVE	N 035.1 AVE	N 035.3 AVE	N 035.3 AV.18	N 037.1 ANE
N 035 ATE	N 035.1 ATE	N 035.3 ATE	N 035.3 AT.18	N 037.2 ANE
N 035 AN.18	N 035.2 ANE	N 035.1.2 AN.18	AF 35	N 037.3 ANE
N 035 AV.18	N 035.2 AVE	N 035.1.2 AV.18	AF 35.2	N 037.1.2 AN.18
N 035 AT.18	N 035.2 ATE	N 035.1.2 AT.18	N 037 ANE	N 037.3 AN.18

Changing the diaphragm and valves

The diaphragm and valves are the only working parts subject to wear and changing these is a simple operation. On twin headed pumps the connecting pipework between the two heads must first be removed. Following this the heads of single or twin headed pumps are both treated as follows:

Changing the diaphragm:

- Mark the position of the diaphragm head C in relation to the housing A with a pencil or other marker.
- Loosen the four allen screws B and remove the head C.
- Unscrew the countersunk screw D, remove the retainer plate E and the diaphragm F.
- Loosen the four screws G and remove the cover plate H.
- Turn the counterweight J so that the connecting rod K is in the mid-position and fit the new diaphragm F.
- Replace the retainer plate E on the diaphragm and carefully but firmly tighten countersunk screw D.
- Place the diaphragm head C on the diaphragm F according to the marks made previously and tighten the screws B uniformly and diagonally, then turn the counterweight J to check that the pump runs freely.
- Replace the cover plate H and secure it with the four screws G.

Changing the valves:

I. Lower (inlet) valve

- Remove the diaphragm head C as described above.
- Undo the cheese head screw N and exchange the reed valve M.

II. Upper (pressure) valve

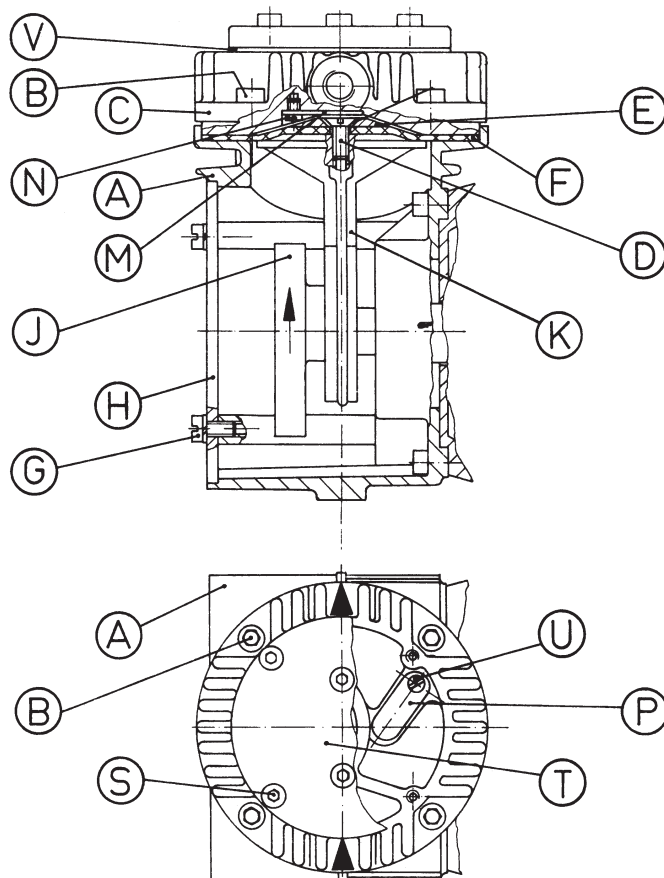
- Loosen the 6 allen screws S, remove the cover plate T and the gasket V.
- Undo the cheese head screw U and exchange the reed valve P.
- Replace the cover plate T with a new gasket V and tighten the allen screws S. Refit the head C and check for free-running as described above.

KNF Neuberger diaphragm compressors and vacuum pumps are fully maintenance free. The following guide

- The power supply must be the same as shown on the identification plate.
- The ambient or surrounding temperature should not exceed 40° C. Where a customer is building the pump into equipment, sufficient ventilation in and out of the cabinet must be available.
- The standard model is not designed to start under load (pressure or vacuum). Compressor models with the suffix .20 will start against pressure, pumps with the suffix .21 will start against vacuum.

lines should be observed to promote safety in operation and a long running life.

- The pump is designed to convey air, gases and vapours but not liquids. Corrosive media can be pumped using corrosion-resistant models.
- The apparatus must be protected from water, in spray or droplet form, and excessive dust. The suction filter should be examined from time to time and changed, when necessary.
- It is important to ensure that the maximum operating pressure is not exceeded – particularly if the pressure side is restricted.



Spare Parts see back side

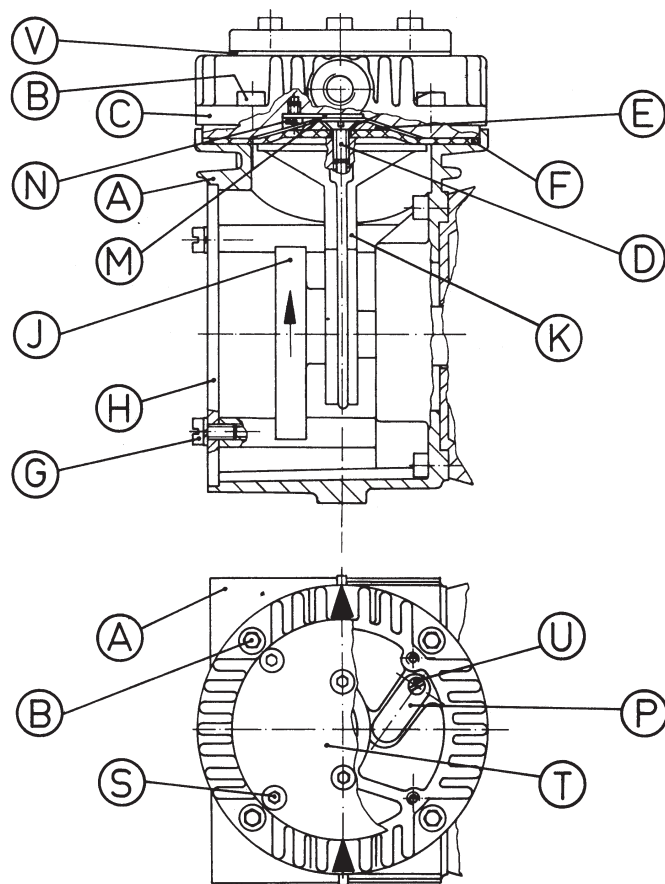
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N 035 AN.18	N 035.2 ANE	N 035.1.2 AN.18	AF 35	N 037.3 ANE
N 035 AV.18	N 035.2 AVE	N 035.1.2 AV.18	AF 35.2	N 037.1.2 AN.18
N 035 AT.18	N 035.2 ATE	N 035.1.2 AT.18	N 037 ANE	N 037.3 AN.18

Spare Parts

Ident.	Description	Part No.
B	Allen screw	02173
D	Countersunk screw	10490
E	Retainer plate N 035 AN/AV N 037 AN/AF N 035 AT	04239 04238
F	Diaphragm Neoprene Viton PTFE coated	01312 01405 01406
M, P	Reed valve N 035 AF N 037	01328 01347
N, U	Cheese head screw	01410
S	Allen screw	01192
V	Gasket N 035 AN AF 35 N 035 AV N 035 AT	01326 01326 11796 01316



Important! For safety reasons, when returning a pump for service please state which gas or vapour it was pumping.

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