INSTRUCTIONS 1005-A00 e

Section	1005
Effective	January 2006
Replaces	May 2004

Translation of the
original instructions

AB - AB H PUMPS

INSTALLATION

OPERATION

MAINTENANCE

MOUVEX
MEMBER OF
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A DOVER COMPANY

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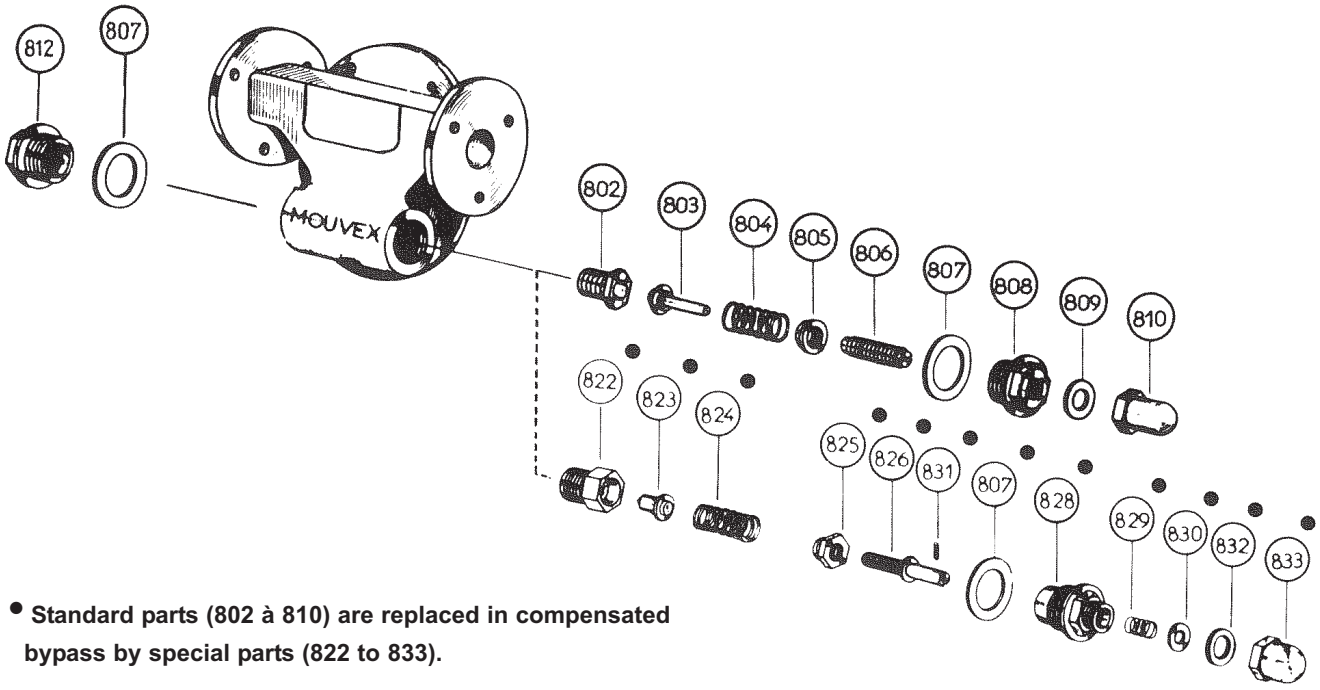
Your distributor :

INSTALLATION



- **Standard parts (802 à 810) are replaced in compensated bypass by special parts (822 to 833).**

ROTATION

MOUVEX pump is reversible. Suction and discharge ends are bound to rotation as indicated on plate fixed to pump.

BYPASS ORIENTATION

Functioning

Acting as a relief valve, the MOUVEX bypass protects pump and auxiliary equipment from damage due to excessive pressures that may be built up when the pump runs against some obstruction in the discharge piping.

When discharge pressure reaches the pressure limit for which the bypass is set, the valve opens and thus allows the liquid to be circulated from the suction side back to the suction side.

Orientation

The bypass protects the pump is one direction of rotation only. Therefore make sure it is rightly installated by checking that bypass cap is on the suction side and reverse bypass if necessary.

Reversing

Remove adaptor **808** and parts coming with it (**805-806-807-808-809-810**). Remove valve **803**, spring **804** and fit those parts on the opposite side.

Fit plug **812**, and gasket **807** in the place of nut **808** (in special low-pressure bypass, seat **822** must be reversed).

MOTOR PROTECTION

As the bypass protects the pump only, electric motors should be equipped with their own protection device.

OPERATION

PRESSURE SETTING

To set bypass, remove cap.

To increase pressure setting, turn adjusting nut **806** (or **826**) clockwise.

To reduce pressure setting, turn the nut counterclockwise.

Replace cap **833**.

DELIVERY ADJUSTEMENT

When the pump does not deliver the proper flow rate, the trouble may come from bypass spring not being adjusted at the correct pressure setting.

After making sure that the rotation speed is correct, tighten adjusting screw **806**.

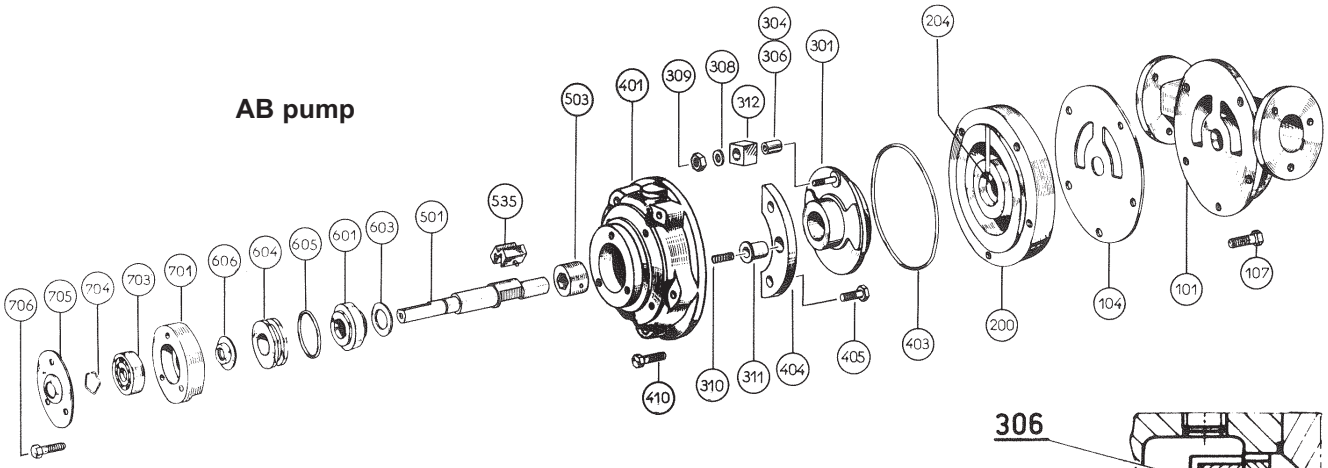
Should the spring be completely tightened or the motor operation disturbed, without getting the delivery wanted, it would mean that the unit should operate at a higher pressure than the pressure for which it has been designed. Please report to our Technical Department.

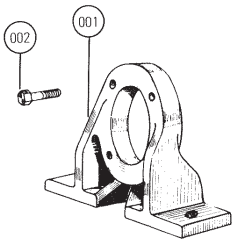
STANDARD BYPASS USE

Standard bypass should not be operated too frequently-even less permanently-since it would result in useless power consumption and material fatigue detrimental to equipment life.

DISASSEMBLY / ASSEMBLY

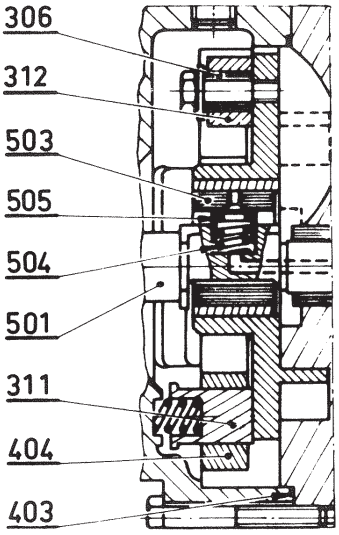
AB pump





AB H pump

Special parts



DISASSEMBLY

To remove head and piston

Remove head bolts **410**.

Remove end-plate **401** by prying it loose.

Using a screwdriver as a lever, back piston **301** away from pump and remove it.

To remove shaft seal and shaft

Refer to § SHAFT SEAL.

ASSEMBLY

Before assembling pump in the reverse order, check the following points :

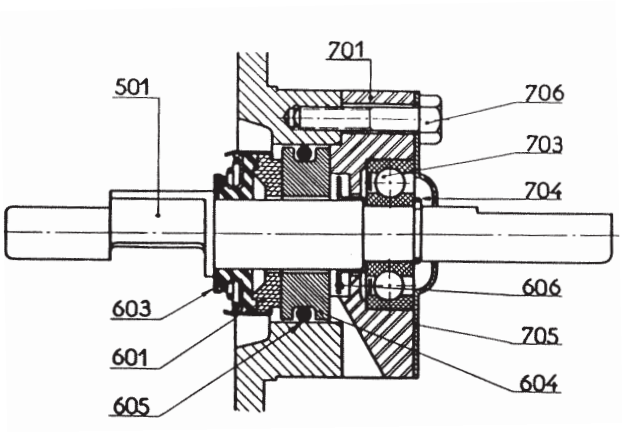
- piston backsprings **310** (23,5 mm mini).
- spring **504** (AB.H) of piston bearing has not weakened.
- bearing clamp **535** (AB) is in good condition.

Replace shaft and shaft seal (see § SHAFT SEAL).

Before refitting end-plate, do not forget to refit gasket **403** after making sure it is in good condition.

SHAFT SEAL

MONOSIR SHAFT SEAL AB



OPERATION

The MONOSIR **601** unit is held solid with the shaft by its rubber assembly, counterpart **605** is held with the pump by seal **605**, sealing is thus ensured by the vertical contact surface of these 2 parts and depends on the condition of the rubber membrane of unit **601**, of the contact surfaces and of the efficiency of seal **605**.

DISASSEMBLY

After opening the pump :

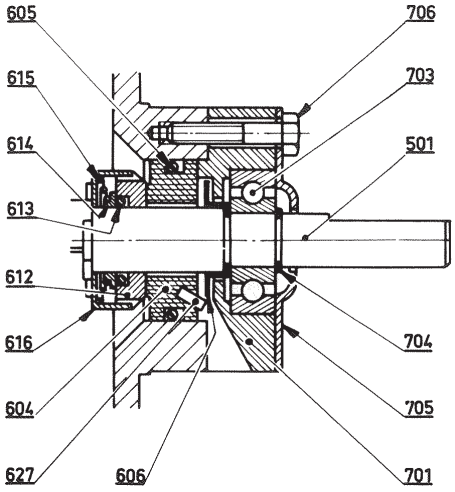
- Remove the 3 screws **706** and cover **705**, draw out cage **701** with the shaft, the bearing and all the parts forming the shaft seal.
- Remove retainer ring **704**.
- Drive the shaft out of the bearing by tapping slightly on the shaft on the drive side and withdraw assembly **701**, **703**.
- Remove assembly **604**, **605** and then unit **601** by pushing on its thrust washer **603**.

The MONOSIR **601** unit forms an assembly that must never be separated.

REASSEMBLY

- Check condition of seal **605** and of the rubber part of unit **601**.
- Check that the contact surfaces of counterpart **604** and of bloc **601** are perfectly flat and polished.
- Reassemble all the parts on the shaft in reverse order of disassembly and fit retainer ring **704**.
- Replace the shaft, bearing and shaft seal assembly on the pump, taking care to place the leak drain port downwards and then fit cover **705** and the 3 screws **706**.

BLOCDIR SHAFT SEAL AB H



OPERATION

Shaft **501** rotates through driver **616**, cup **612**, spring **615**, thrust spring **614** and seal **613**.

Counterpart **604** is held solid with the pump body by seal **605**.

Sealing is ensured :

1) On the shaft, by seal **613** that turns with the shaft.
2) By the contact surface between rotating cup **612** and immobile counterpart **604**.
3) In the bore of the pump body, by seal **605** held tightly between counterpart **604** and the pump body.

Sealing therefore depends on the condition of the contact surfaces and of the sealing provided by seal **605** and **613**.

DISASSEMBLY

After opening the pump :

- Remove the 3 screws **706** and cover **705**, draw out cage **701** with the shaft, the bearing and all the parts forming the shaft seal.
- Remove retainer ring **704**.
- Drive the shaft out of the bearing by tapping slightly on the shaft on the drive side and withdraw assembly **701**, **703** and also **606**.
- Remove **604** and **605** and then assembly **612-613-614-615-616**.

REASSEMBLY

Check condition of seal **605** and **613**.

Check that the contact surfaces of counterpart **604** and of cup **612** are flat and polished.

Reassemble all the parts on the shaft in reverse order of disassembly and fit retainer ring **704**. Check that stud **727** of counterpart **604** enters the leak port of bearing cage **701**.

Replace the shaft, bearing and shaft seal on the pump, taking care to place the leak drain port downwards and then fit cover **705** and the 3 screws **706**.