INSTRUCTIONS 1005-B00 e

Section	1005
Effective	January 2007
Replaces	January 2006

Translation of the original instructions

AG - AG H PUMPS

INSTALLATION

OPERATION

MAINTENANCE

MOUVEX MEMBER OF PSG PUMP SOLUTIONS GROUP

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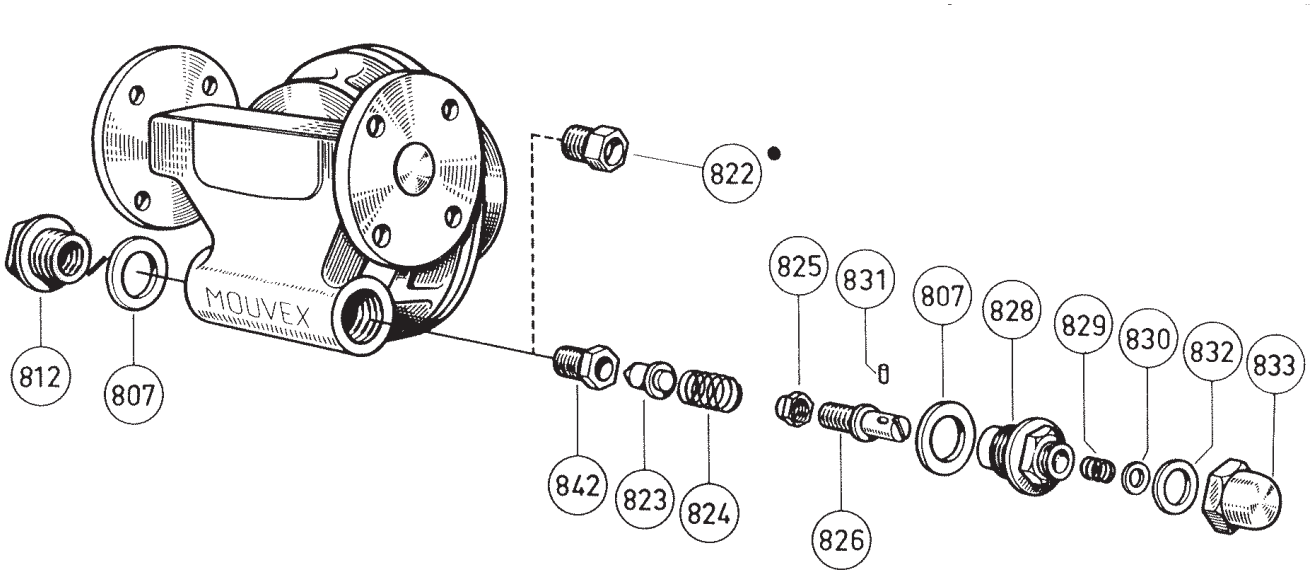
INSTALLATION



• **In compensated bypass, special seat 822 substituted to standard 842.**

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 **828** and parts coming with it.

Remove valve **823**, spring **824** and fit those parts on the opposite side.

Fit plug **812** and gasket **807** in the place of nut **828**.

(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 **833**.

To increase pressure setting, turn adjusting nut **826** clockwise.

To reduce pressure setting, turn the nut counterclockwise.

Replace cap **833**.

DELIVERY ADJUSTEMENT

When the pump does not deliver the proper flowrate, 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 **826**.

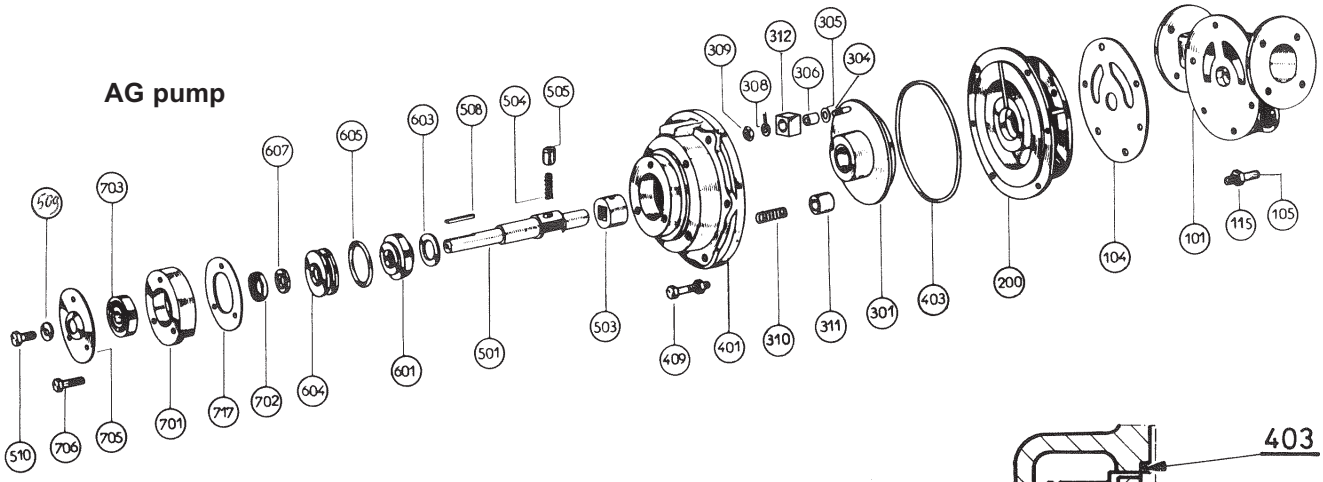
Should the spring be completely tightened or the motor operation disturbed, without getting the delivery wanted, it would mean that unit should operate at a higher pressure than the pressure for which it has been designed. Please report to our Technical Department.

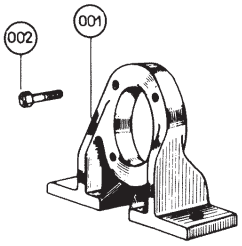
STANDARD BYPASS USE

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

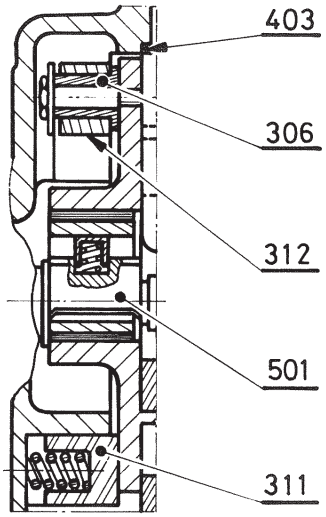
AG pump





AG H pump

Special parts



DISASSEMBLY

To remove head and piston

Remove head bolts **409**.

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 :

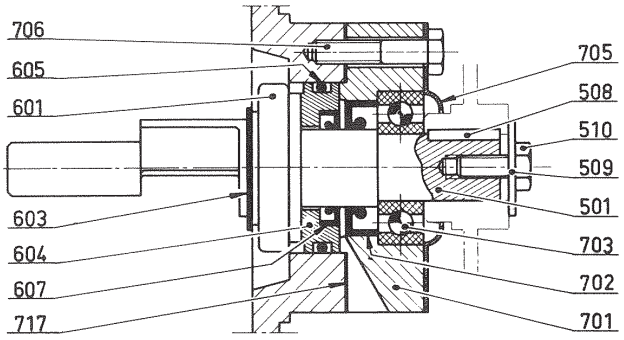
- spring **504** of piston bearing has not weakened (18 mm mini).
- piston backsprings **310** (22,5 mm mini) have not weakened.

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 AG



OPERATION

The MONOSIR **601** unit is held solid with the shaft by its rubber section. Counterpart **604** is held solid with the pump by seal **605**. Sealing is therefore ensured by the vertical contact surface of these 2 parts, lip seal **607** housed in counterpart **604** and rubbing on the shaft, giving an additional guarantee.

Sealing therefore depends on the condition of the rubber membrane of unit **601** and on the condition of the contact surfaces and of the seals.

DISASSEMBLY

After opening the pump :

- remove the 3 screws **706**, cover **705** and draw out cage **701** with the shaft, the bearing and all the parts forming the packing gland.
- drive the shaft out of the bearing by tapping lightly on the shaft end on the drive side and withdraw assembly **701, 703, 702**.
- then remove assembly **604, 607, 605** and the whole unit **601** by pushing its thrust washer **603**.

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

REASSEMBLY

Check condition of seals **702, 607** and **605** and also the rubber part of unit **601**.

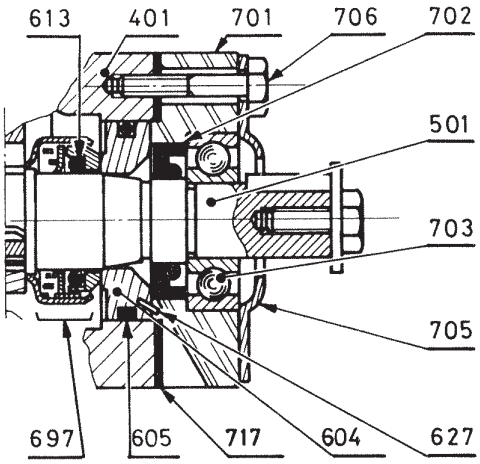
Check that the contact surfaces of counterpart **604** and unit **601** are perfectly flat and polished.

Reassemble all parts on the shaft in reverse order of disassembly.

Replace the shaft, bearing and shaft seal assembly on the pump, taking care to include seal **717** and to place the leak discharge port downwards. Then fit cover **705** and the 3 screws **706**.

NB : Look the hub of the coupling piece that is keyed to the shaft, against the inside bearing ring using washer **33** and screw **510**.

BLOCDIR SHAFT SEAL AG H



OPERATION

Shaft **501** rotates monobloc assembly **697** by 2 notches on the shaft that mesh with 2 tabs on the rotating assembly.

Counterpart **604** is held solid with the pump body by seal **605** and stop **627**.

Sealing is ensured :

1) On the shaft, by seal of monobloc rotating assembly **697**.
2) By the contact surface against monobloc rotating assembly **697** and immobile counterpart **604**.
3) In the bore of bottom **401** by seal **605** that is tight against the bottom and fixed counterpart **604.**

Sealing therefore depends on the condition of the contact surfaces and on the seals.

DISASSEMBLY

After opening the pump :

- remove the 3 screws **706,** cover **705** and remove cage **701** with the shaft, the bearing and all the parts forming the shaft seal.
- drive the shaft out of the bearing by tapping slightly on the shaft end on the drive side and withdraw assemblies **701**, **703** and **702**, **717.**
- then remove **604**, **605** and monobloc rotating assemblies **697.**

REASSEMBLY

Check condition of seals **605** and **717** and of rotating monobloc **697**.

Check that the contact surfaces of counterpart **604** and monobloc assembly **697** are flat and polished.

- Reassembly all the parts on the shaft in reverse order of disassembly.
- Ensure that the 2 tabs of monobloc rotating assemblies **697** mesh with the notches of shaft **601**.
- Ensure that stop **627** of counterpart **604** enters the leak port of bearing cage **701**.
- Take care not to damage lip seal **702**.
- Replace the shaft, bearing and shaft seal assembly on the pump, taking care to place the leak discharge orifice at the bottom and then fit cover **705** and the 3 screws **706**.