INSTRUCTIONS 1005-C00 e

Section	1005
Effective	January 2006
Replaces	May 2004

Translation of the original instructions

AF TM - AF TM H PUMPS

INSTALLATION

OPERATION

MAINTENANCE

MOUVEX MEMBER OF PSG PUMP SOLUTIONS GROUP

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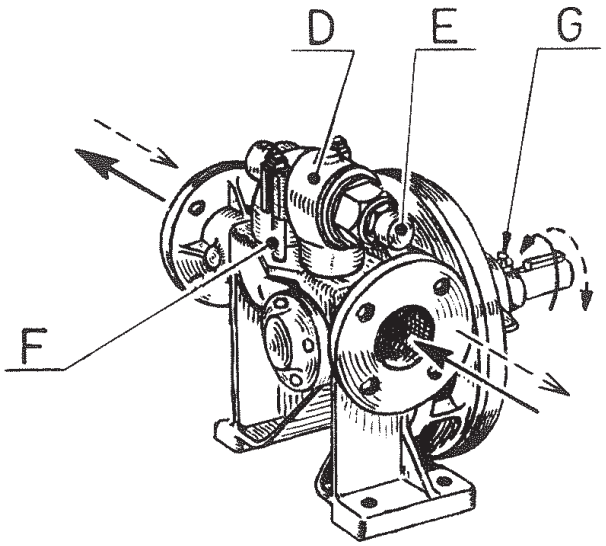
INSTALLATION



D : Bypass
E : Bypass cap
F : Fixing stud and nut
G : Bearing nipple

ROTATION

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

BYPASS ORIENTATION

Operation

Acting as a relief valve, the 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, valve **803** opens and thus allows the liquid to be circulated from the discharge side back to the suction side.

Orientation

The single bypass protects the pump in one direction of rotation only.

Therefore make sure it is rightly installed by checking that bypass cap is on the suction side and reverse bypass if necessary.

Reversing

To reverse bypass, remove nuts **814** and rotate bypass body by 180°.

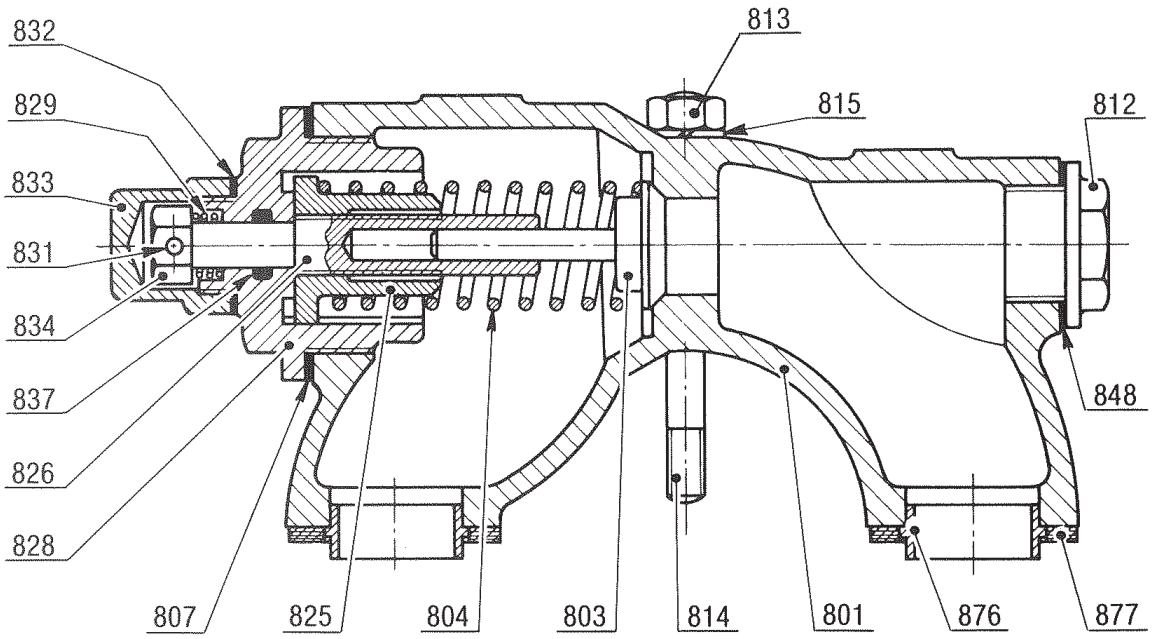
Check gaskets **877**.

Tighten nuts **814** taking care to keep bypass on end.

MOTOR PROTECTION

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

UTILISATION



TEMPERATURE OF THE PUMPED PRODUCT

AF TM and AF TM H pumps are suitable for pumping domestic fuel, and heavy fuel heated up to :

AF-TM.....50° C and 80° C

AF-TM H.....0° C and 180° C

before transfering heavy fuel, preheat the whole installation and rinsing the installation with domestic fuel immediatly after each operation with heavy fuel.

For others conditions of use, report to our Technical Department.

PRESSURE SETTING

To set bypass, remove cap **833**. To increase pressure setting, turn adjusting nut **834** clockwise. To reduce pressure setting, turn the nut counterclockwise.

When the setting is finished, dont forget to replace cap **833**.

With the bypass spring, it is possible to set the pressure between 1,7 and 6,5 kg/cm2 (valve closed).

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.

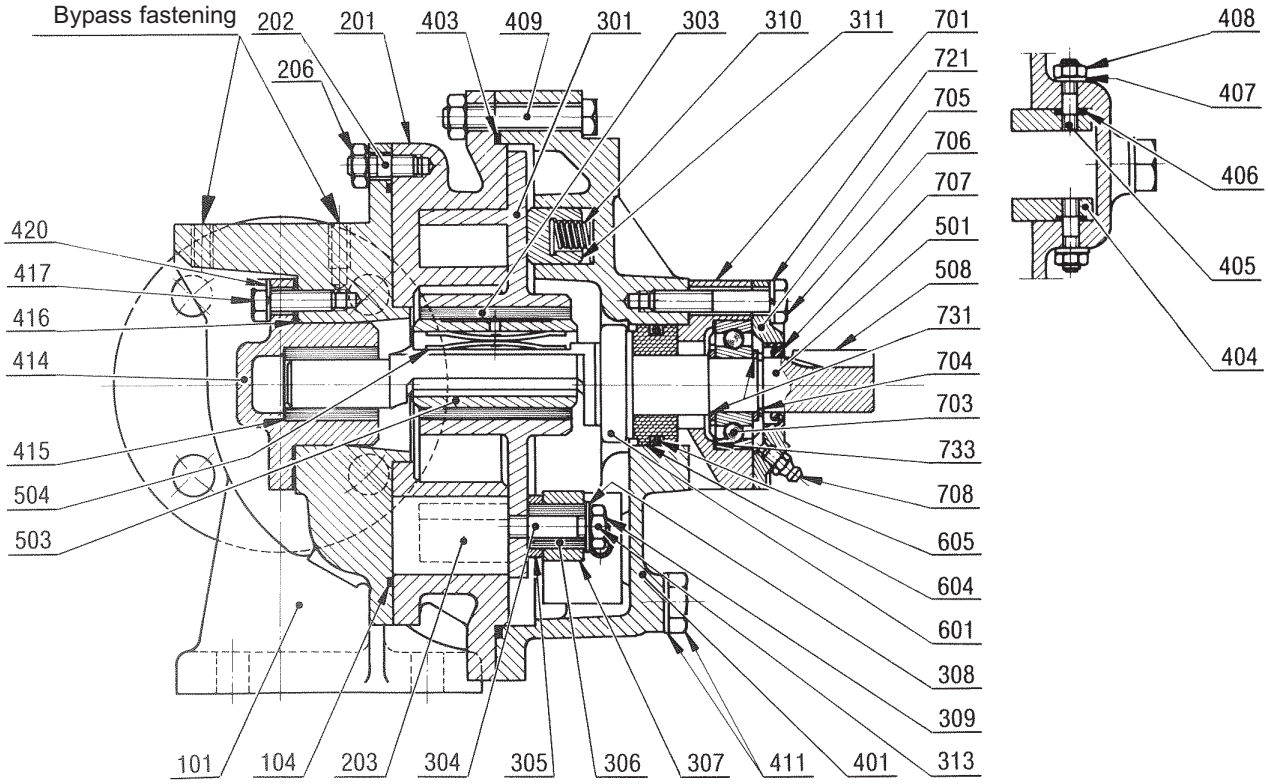
After making sure that the rotation speed is correct, tighten adjusting nut **834**.

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 use should not be operated too frequently (even less permanently) since it would result in useless power consumption and material fatigue detrimental to equipment.

DISASSEMBLY / ASSEMBLY



DISASSEMBLY

Opening the pump :

- Remove end-plate bolts **409**.
- Remove end-plate **401** by prying it loose. Using a screw-driver as a lever, back piston **301** and shaft **501** away from pump.

To remove piston :

- Free the piston **301** by sliding it along the shaft **501**.

To remove shaft seal, bearing and shaft :

- Refer to § SHAFT SEAL.

ASSEMBLY

Assembly is undertaken in the reverse order of dismantling. Before assembling, check that spring **504** of piston bearing **503** and piston backsprings **310** has not weakened.

To reassemble shaft seal, bearing and shaft :

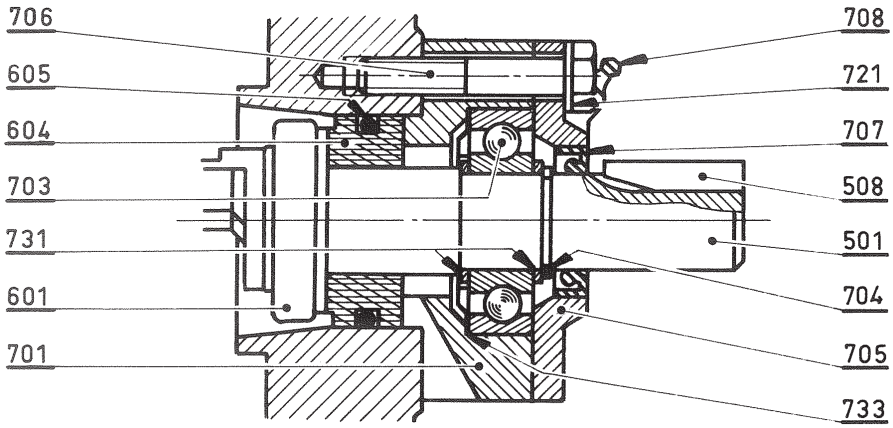
- Refer to § SHAFT SEAL.

To reassemble piston and to close the pump :

- After remounting in place the seal end-plate **403**, engage the piston **301** on the shaft **501**.
- Insert the piston **301** in the cylinder **201**, by making bend the spring **504** of piston bearing **503** and push tight to the end.
- The end-plate **401** has to come effortlessly to apply on the cylinder **201**.
- Screw the end-plate bolts **409**.

Nota - When you reassemble the pump, make sure seals are in good condition.

SHAFT SEAL



OPERATION

MONOSIR block **601** is held in shaft by its rubber face. Stationary seal **604** is held in pump body by ring **605**. Tight sealing depends on :

- ring **605** and rubber face of **601**.
- sealing faces being perfectly flat and mirror smooth, of stationary seal **604** and **601**.

DISASSEMBLY

After opened the pump :

- remove screws **706** and washers **721**, cap **705**, outer seal **707** and drive out retainer **701** with shaft, bearing and all parts contituting the shaft seal.
- remove snap ring **704**, drive out shaft from bearing by tapping on shaft end and remove the set **701**-**731**-**733**-**703**.
- remove the set **604**-**605**, then all MONOSIR block **601**.

MONOSIR block **601** must not be dissociated.

REASSEMBLY

- Check rings **707**, **605** and rubber faces of block **601**.
- Check that sealing faces of **604** and block **601** are flat and mirror smooth.
- Replace all parts on shaft in the reverse order and install snap ring **704.**
- Replace on the pump shaft, ball beaing and shaft seal making sure one of the drain vents is turned downwards.
- Then, install seal **707** taking care not to damage seal **707** on key-groove, bearing cap **705** (bearing grease nipple turned upwards), screws **706** and washers **721**.