



AIRMIX ® PUMP and LOW-PRESSURE PUMP air motor with reversing block *OPERATING PRINCIPLE AND START-UP*

TRANSLATION OF THE ORIGINAL MANUAL

IMPORTANT : Before assembly and start-up, please read and clearly understand all the documents relating to this equipment (professional use only).

THE PICTURES AND DRAWINGS ARE NON CONTRACTUAL. WE RESERVE THE RIGHT TO MAKE CHANGES WITHOUT PRIOR NOTICE.

KREMLIN - REXSON

150, avenue de Stalingrad

93 245 - STAINS CEDEX – France

☎ : 33 (0)1 49 40 25 25 **Fax** : 33 (0)1 48 26 07 16

www.kremlin-rexson.com

1. OPERATING PRINCIPLE

The pump (A) consists of :

- an alternating air motor (B),
- an hydraulic section (C) mechanically coupled to the air motor (B).

The air motor is supplied with compressed air by means of the regulator (D) (Red knob). The pressure is read on the gauge (E).

During its alternating movement, the air motor drives the piston of the hydraulic section (C). The fluid is drawn in (L) and forced under pressure in (N). Due to its design, the pressure is always the one read on the gauge x pump ratio.

The spray air pressure of the gun is adjusted by means of the regulator (grey knob) (F).

⇒ To adjust the fluid flow rate, turn the red knob (D) - (Gauge E).

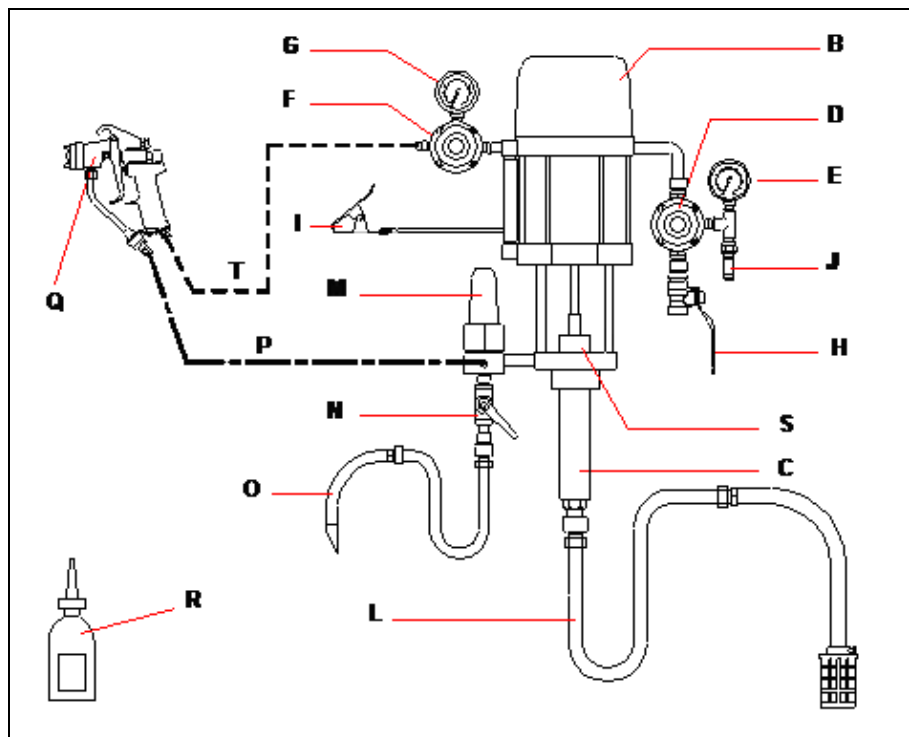
⇒ To adjust the spray air, turn the grey knob (F) - (Gauge G).

The pumps are intensive™ ones or Flowmax® ones (with bellows).

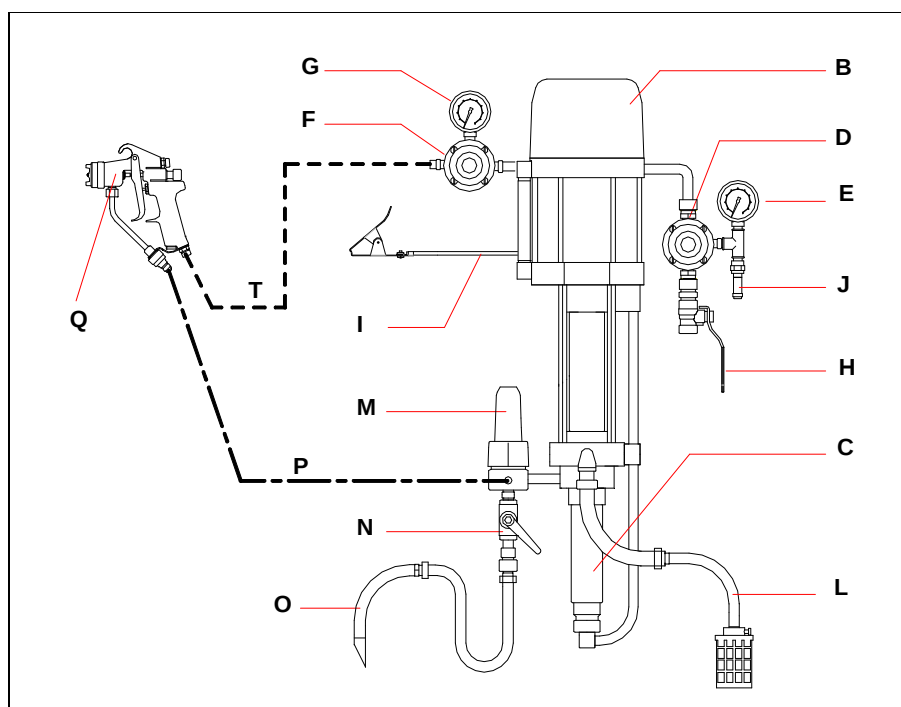
2. START UP

2-1 FILLING

INTENSIVE™ PUMP



FLOWMAX ® PUMP



Captions :

A	Intensive™ or FLOWMAX ® pump (B + C)	L	Suction rod (depending on version)
B	Air motor	M	Accumulator filter (depending on version)
C	Fluid section	N	Drain valve (depending on version)
D	Air regulator "MOTOR AIR"	O	Drain rod (depending on version)
E	Gauge	P	HP Fluid hose
F	Air regulator "GUN AIR" (depending on version)	Q	Spray gun
G	Gauge (depending on version)	R	"T" lubricant (1/4 l / 0.07 US gal) (only for intensive™ pump)
H	Air inlet valve	S	Wetting-cup (only for intensive™ pump)
I	Ground	T	Air hose (static conductor)
J	Discharge valve		

(For specific installation, please contact your KREMLIN REXSON representative).

Nota : If the pump is equipped with an accumulator filter (M), the filter is supplied with a stainless steel screen n° 6 (filtration size : 168 microns or 85 mesh). The screen is recommended for the use of an AIRMIX gun fitted with a nozzle model n° 6. If the fluid spraying is carried out by means of an other nozzle, choose an other screen (refer to the filter instruction manual). Adjust the screen to the application.

Start up procedure :

- 1 - Ground the pump.
- 2 - **If the pump is a intensive™ one, fill up the wetting-cup (S) with "T" lubricant (R) or with an appropriate solvent.**
- 3 - Unscrew the air regulators (D and F).
- 4 - Interconnect the air equipment with the air pressure network (clean air - Pressure < 6 bar / 87 psi). Install a water drop, model 3/4" (or model 3/8" if the pump is equipped with an air motor, model 500/4), if it is necessary.
- 5 - Connect all the hoses, air hose and fluid hose (P), as well as the spray gun (Q).
Nota : Comply with the diameters of hoses recommended in the specifications of the pump.
- 6 - Remove the nozzle from the spray gun.

■ **FLUSHING WITH SOLVENT**

- 7 - Immerse suction rod (L) and the drain rod (O) into the material container.
- 8 - Open the air shut off valve (N).
- 9 - Open the valve (H) of the pump air equipment to supply the air motor.

Nota : If the pump air motor is a 5000 version, it needs pilot air to operate. The pump air equipment supplies pilot air to the air motor. The air supply pressure is adjusted previously in the factory to 4 bars / 58 psi maximum.

- 10 - Increase **progressively** the air regulator (D) so that the pump runs slowly (Pressure between 0,5 to 1 bar / 7.25 to 14.503 psi).
- 11 - Observe the drain (O); air bubbles come out from it. When bubbles no longer come out from it, shut off the drain valve (N).

■ **PRIMING WITH MATERIAL**

- 12 - Remove the suction rod (L) and the drain rod (O) from the material container and immerse them in a solvent filled container.
- 13 - Open the drain valve (N), wait until the material flows out regularly, then shut off the drain valve (N).
- 14 - Point the spray gun towards the material container and trigger the spray gun until the material flows out regularly.

■ **WORK**

- 15 - Reinstall the ring and the aircap on the spray gun.
- 16 - Adjust air regulator (D) to obtain the appropriate material pressure and flow rate.
- 17 - **Gradually** open the air regulator (F) to adjust the spraying air to obtain the required spray pattern.

Nota : Some of these pumps are not equipped in the intensiv™ version with the air regulator (F).

A spraying air kit can be mounted on the pump air equipment in order to supply compressed air to the spray gun if it is necessary.

2-2 PUMP SUPPLIED IN FILLING (CIRCULATING)

Interconnect the pump fluid inlet with the circulating supply hose and start up the pump as it is specified previously.

If the pump is a FLOWMAX ® one :

WARNING:

- **Fluid section filling pressure** : 2 bar / 29 psi maximum
- **WARNING : Do not create overpressure**
- **NEVER use** the pump when **an isolating gate on the supply circuit** (upstream from the FLOWMAX ® fluid section) is shut : **it would damage the bellows.**
- **Do not install** a material regulator on the supply circuit or any arrangement that could perform as a non-return valve.

3. SHUTDOWN AT THE END OF THE WORK

■ SHORT DURATION SHUTDOWN

- 1 - Decrease the material pressure of air regulator (D) until reading **0 bar / 0 psi** on the gauge (E).
- 2 - Trigger the spray gun to depressurize the system.
- 3 - Unscrew the spray gun air regulator (F) or disconnect the spray gun air inlet.
- 4 - Remove the aircap from the spray gun, (aircap and nozzle for Airmix ® spray gun) and soak it into solvent.

■ LONG DURATION SHUTDOWN

- 1 - Decrease the air regulator (D) until reading **1 bar / 14.503 psi** on gauge (E).
- 2 - Unscrew the spray gun air regulator (F) or disconnect the spray gun air inlet.
- 3 - Remove the spray gun aircap, (aircap and nozzle for AIRMIX ® spray gun) and soak it into solvent.
- 4 - Open the drain valve. The pump must operate slowly. If the speed is too high, decrease the air regulator (D) pressure.
- 5 - Remove the suction rod and the drain rod from the material container and immerse them in a solvent-filled container. Take all the appropriate precautions in the presence of flammable solvents.
- 6 - When the solvent flows out regularly, close the drain valve.
- 7 - Point the spray gun towards the material container and press the gun trigger. When the solvent flows out, point the spray gun towards the recovery container.
- 8 - When the solvent flows out, release the spray gun trigger.

Nota : If the pump is a intensive™ one, release the spray gun trigger when the pump is in a low position. To prevent from damaging the seals when starting the pump, the piston must be immersed into solvent.

- 9 - Fully unscrew the air regulator (D) and shut off the main compressed air valve (valve H).
- 10 - Press the spray gun trigger to decompress the hoses. Therefore, the pump and the hose remain filled with solvent at the atmospheric pressure

4. SAFETY DEVICE

Guards (air motor cover, coupling shields, housings ...) have been designed for safe use of the equipment.

The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards

A relief-valve (setting : 6,5 bar / 94 psi) is fitted on the pump air motor - thus protecting this one from an overpressure which could damage it.