

INSTRUCTION MANUAL

BALL FLUID SECTIONS

- «MAJOR»

588 cc / 19.9 oz, stroke : 120 mm / 4.7"

105 176 xx xx

Manual : 574.233.112 - 1203 «PMP22»

Date: 20/03/12- Supersede: 05/09/07

Modif.: Update



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

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INSTRUCTION MANUAL BALL FLUID SECTIONS - MAJOR, 588cc / 19.9 oz

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Dear Customer, You are the owner of our new equipment and we would like to take this opportunity to thank you.

To make sure your investment will provide full satisfaction, special care has been taken by KREMLIN REXSON during all designing and manufacturing processes.

To obtain the best result, safe and efficient operation of your equipment, we advice you to read and make yourself familiar with this instruction and service manual. Indeed, the non-compliance with instructions and precautions stated in this manual could reduce the equipment working life, result in operating trouble and create unsafe conditions.

1. WARRANTY

We reserve the right to make changes; these changes may be carried out after the receipt of our order. No claim will be accepted as a consequence of any change carried out in the instruction manuals or in the selection guides.

Our equipment is checked and tested prior to shipment. In the case of a problem arising with the equipment, this must be in writing, within ten days from the delivery date.

KREMLIN REXSON warrants all equipment manufactured bearing its name, to be free from defect in material or workmanship for a period of 12 months (one shift per day or 1800 hours - 1 term reached) from the date of delivery. Work life is based on single shift working - 8 hours per day. Warranty claims for defective items will only be accepted in writing and will be verified and confirmed by us.

The warranty does not cover fair wear tear, damage or wear caused by misuse, improper maintenance or non-observance of our recommendations.

KREMLIN REXSON will repair or replace parts (carriage paid to our plant and accepted as defective by us). We shall not be liable for any losses, resulting from a production breakdown. Upon request, we can carry out service work at your premises; all expenses (travelling and accommodation) for KREMLIN REXSON technicians will be chargeable.

In the event that it is found that equipment has been tampered with, this will invalidate the warranty. Equipment that is bought in will be subject to the supplier's warranty.

2. SAFETY INSTRUCTIONS

GENERAL SAFETY INSTRUCTIONS



CAUTION: The equipment can be dangerous if you do not use it according to the rules mentioned in this instruction manual. Read carefully all the instructions hereafter before operating your equipment.

Only trained operators can use the equipment. (To acquire an essential training, please contact the "KREMLIN REXSON University" training center - Stains).

The foreman must ensure that the operator has perfectly taken in the safety instructions of this equipment as well as the instructions in the manuals of the different parts and accessories.

Read carefully all instruction manuals, label markings before operating the equipment.

Incorrect use may result in injury. This equipment is for professional use only. It must be used only for what it has been designed for.

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

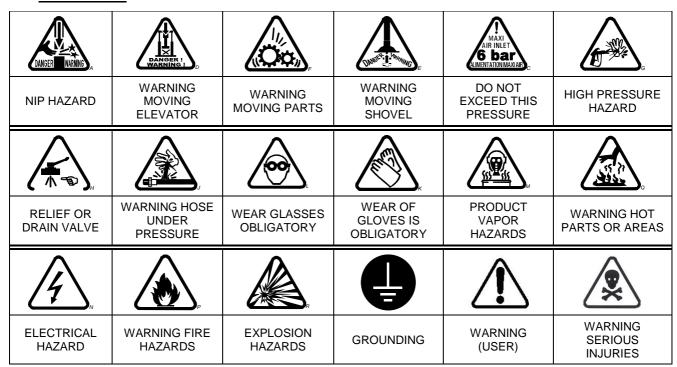
The manufacturer will not be held responsible for bodily injury or failure and / or damage to property due to removal or partial removal of the guards.

Never modify the equipment. The parts and accessories supplied must be regularly inspected. Defective or worn parts must be replaced.

Never exceed the equipment components' maximum working pressure.

Comply with regulations concerning safety, fire risks, electricity in force in the country of final destination of the material. Use only products or solvent compatible with the parts in contact with the material (refer to data sheet of the material manufacturer).

PICTOGRAMS



PRESSURE HAZARDS



Current legislation requires that an **air relief** shut off valve is mounted on the supply circuit of the pump motor to let air off when closing the supply circuit. Without this precaution, the motor residual air of the motor may let the pump beat and cause a serious injury.

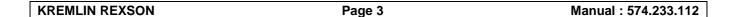
Please ensure that, a **material drain valve** is mounted on the material circuit to drain it (after shutting down air to the motor and the pressure relief) before any servicing on the equipment. These valves must be closed for air and opened for product when processing.

HIGH PRESSURE INJECTION HAZARDS

When working with high pressure equipment, special care is required. Fluid leaks can occur. Then there are injection risks in exposed parts of body that may cause severe injuries or amputations:

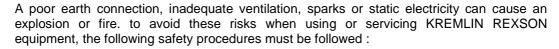


- Medical care must be handled immediately if product is injected under the skin or in other parts of the body (eyes, fingers).
- Never point the spray gun at any one. Never try to stop the spray with your hands or fingers nor with rags or similars.
- Follow the shut down procedure and always depressurize air and fluid circuits before carrying out any servicing on the gun (cleaning, checking, maintenance of the material or cleaning of the gun nozzles).
- For the guns equipped with a safety device, always lock the trigger when you do not start the gun.

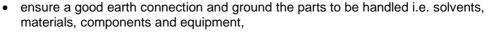


FIRE - EXPLOSION - SPARKS - STATIC ELECTRICITY HAZARDS









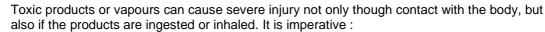


ensure adequate ventilation,



- keep working area clean and free from waste solvents, chemicals, or solid waste i.e. rags, paper and empty chemicals drums,
- never use electrical switches / power if in an atmosphere of volatile solvent vapour,
- stop working immediately in case of electrical arcs,
- never store chemicals and solvents in the working area.

TOXIC PRODUCT HAZARDS





to know the material products and their risks,



notified or hazardous materials must be stored in accordance with the regulations,



the material must be stored in an appropriate container, never place materials in a container where there is a risk o spillage or leakage,



a procedure must be applied for the safe disposal of waste material. It must comply with all prevailing regulations and legislations of the country where the equipment is to be used.



- protective clothing should always be worn in compliance with the material manufacturers' recommendations,
- depending on the application and chemical safety instructions, safety glasses, hearing protective earplug, gloves, foot wear, protective masks and possible breathing equipment should be worn to comply with the regulations

(Refer to chapter "Safety equipment of KREMLIN selection guide).



CAUTION!

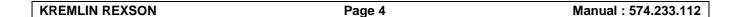


It is forbidden using any solvent or with halogenated hydrocarbon base and also products with these solvents facing aluminium or zinc. The non-compliance with the instructions may cause explosion hazards causing serious or fatal injuries.

EQUIPMENT REQUIREMENTS

Guards (air motor cover, coupling shields, housings,...) have been designed for a 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.



PUMP

Before carrying out any work, it is imperative to get used with the compatibilities of motors with pumps before coupling. The operator shall understand the equipment and the safety instructions. These instructions are available in the manuals of the pumps.





The air motor is designed to be mounted with a pump. Never modify any components or couplings. Where operating, please keep hands away from moving parts. Before starting up the equipment, please read the PRESSURE RELIEF instructions. Please ensure that any relief or drain valves fitted are in good working order.

HOSES

- · Keep hoses out of circulation areas, moving parts or hot surfaces,
- Never expose product hoses to temperature higher than + 60°C / 140° F or lower than 0°C / 32° F,
- Never pull or use the hoses to move the equipment,
- Tighten all fittings as well as the hoses before operating the equipment,
- · Check the hoses regularly; change them if they are damaged,
- Never exceed the maximum working pressure (MWP) indicated on the hose.

USED PRODUCTS

Considering the variety of products that may be used by the users and the impossibility to check off all chemical data, of possible reactions of chemicals to each other and their long term evolution, KREMLIN REXSON can not be considered as liable for:

- the bad compatibility of wetted parts,
- risks for staff and surroundings,
- for worn or out of order parts, for wrong working of equipments or units, as well as for the qualities of final product.

The user must know and prevent the possible risks as toxic vapours, fires or explosions due to used products. He shall determine the risks of immediate reactions or pursuant to repeated exposures of the staff.

KREMLIN REXSON shall not be liable for psychic injuries, direct or indirect material damages further to the use of chemicals.

3. INSTALLATION

HANDLING

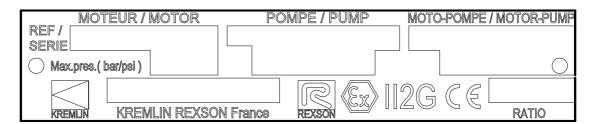
Fluid sections with important weights and dimensions must be handled with suitable means.

STORAGE

Place the equipment safe from dampness after having closed the different air inlets and ports (plugs).

■ DESCRIPTION OF THE LABEL MARKING

Marking in accordance with the ATEX directive



KREMLIN REXSON STAINS FRANCE	Name and address of the manufacturer
MOTEUR /MOTOR	-
POMPE / PUMP	Fluid section part number and serial number. The two first numbers indicate the manufacturing year.
MOTO-POMPE / MOTOR-PUMP	-
€x II 2 G CE	II : group II 2 : class 2 Surface equipment meant to area where explosive atmospheres due to gas, vapours, mists are liable to appear from time to time in usual operating. G: gas

The pumps are designed to be installed in a spray booth.



Associated to a pneumatic motor, the fluid sections must be grounded via the earth cable of that motor.

The earth cable must be grounded to a safe earth.

CONNECTIONS OF THE SUBSETS

These fluid sections are designed for the coupling of pneumatic or hydraulic motors with similar stroke. You must conform to a motor / fluid section association as planned by KREMLIN REXSON.

OPERATING PRINCIPLE

EXPECTED USE

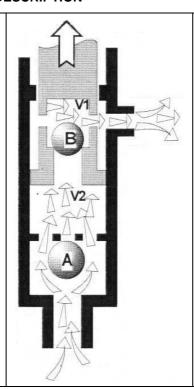
These fluid sections coupled with pneumatic or hydraulic motors are designed for the transfer, the pouring off or the spraying of different liquid or viscous fluids with a requested outlet flow and pressure.

OPERATING DESCRIPTION

A- The piston goes up = suction + exhaust

When the piston goes up, the A ball is opening and the V2 chamber is filled due to the suction of chamber. The B ball is pressed on its seat and closes the access to V2. Due to the decreasing of volume available, the fluid of V1 is forced to the outlet.

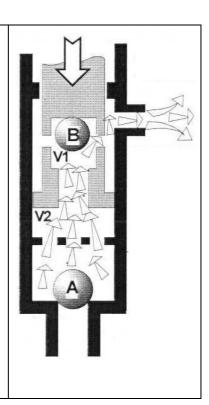
There is exhaust and pressure increasing.



B - The piston goes down = exhaust

piston goes down. The A ball is pressed on its seat. When the piston plunges inside the cylinder, decreases the volume (V1+V2) and makes once again the fluid evacuate and the pressure increase. The B ball goes up and allows the way between V1 and V2.

There is exhaust and pressure increasing.







WARNING!



The frictions due to the displacement of fluid inside the pumps and accessories, as well as the one created by the tightness seals, generate static electricity that may cause fire or explosion. This is why the pump must be grounded (refer to the instruction manual of the motor for its grounding).

5. USE









Protective clothing (gloves, protective masks, glasses, protective clothing,...) should be worn to comply with the recommendations.

The working area must be correctly ventilated.

ADJUSTMENTS

Guards (air motor cover, coupling shields, housings,...) have been designed for a 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.

Before starting the equipment, half fill the cup with T lubricant.

The cup nut must be slightly tightened. A too important tightening would damage the cup seals. A wrench is supplied to allow a correct tightening.

Tightening of the cup:

- Fill the cup with T lubricant,
- Operate the pump, then tighten the cup after 10 minutes, then after 1 hour, then after one working day,
- If there is a leak, the cup must be tightened.

Tightening instructions:

- Depressurize the motor (refer to pressure relief instructions),
- Depressurize the fluid circuit (refer to pressure relief instructions),
- Tighten the cup, clean it and fill it with T lubricant,
- Close the pump drain circuits,
- Open the motor air valve.

START UP

Guards (air motor cover, coupling shields, housings,...) have been designed for a 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.

The pumps are tested in our workshop with lubricant.

Before starting up, you must flush the pump with the appropriate solvent.

At the end of the working day, carry out a flushing with the appropriate solvent. We advice you to stop the pump in the "low position" to prevent material spreading on the piston rod.

TROUBLESHOOTINGS



Before any intervention on the pump, please carry out the release pressure and drain general instructions.

Guards (air motor cover, coupling shields, housings,...) have been designed for a 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.

To prevent from injuries, material injections, injuries due to moving parts or sparks during the stopping of the system, the assembly, the cleaning or changing of the nozzle, **you must follow the stages hereafter** before intervening:

- Close the guns,
- Shut off the air inlet using the pressure release valve to evacuate the residual air.
- Move the gun near to a metallic drum to get back the fluid. Keep it against the drum to maintain the grounding (if necessary use a wire to ground the metallic drum).
- Open the gun to drain the circuit.
- Open the drain valve of the pump and get back the fluid in a metallic drum correctly grounded.
- Let the drain valve open during the intervention.

If the hose or the nozzle remains clogged or if the pressure remains, unscrew **carefully** a coupling of the product hose to make the pressure decrease.

Check the conformity of cabling before intervening.

DEFECTS	CAUSES	SOLUTIONS
Leakage at the cup seals	Insufficient tightening of the cup nut Bad mounting of the cup seals Damaged or worn seals Bad choice of the seals' material	Screw the cup nut. Check the mounting. Replace them. Check the compatibility.
The cup seals get rapidly damaged	No lubricant in the cup (pumped product drying on the piston rod). Compatibility product / seals.	Clean, replace parts if necessary. During a long duration shutdown, stop the pump, the piston is in the low position. Check.
Fluid leakage through pump body	Wrong tightening of the cylinder, seals missing or damaged.	Check, replace if necessary.
The pump is stopped	The fluid is polymerized, hardened, dried in the pump. The cup nut is too tightened. Broken part(s) in the pump.	Clean the pump, change the parts if necessary. Unscrew. Remove, check and replace.
The motor seems to operate but the pump does not deliver product	Internal parts of the motor defective. Defective coupling.	Check the operating of the motor. Check the coupling.
The pump operates but irregular flow	Valve clogged on the seat, incorrectly mounted or worn. Air inlet in the suction circuit.	Check mounting, state of the parts, tightening of parts and seals.
At stop, pump carries on going down.	Valve worn or incorrectly mounted. Plug on drain valve not tightened.	Check and replace parts.

DEFECTS	CAUSES	SOLUTIONS
At stop, pump carries on going up.	Head piston seals or upper valve worn or incorrectly mounted.	Check and replace parts.
	Plug or drain valve not tightened.	
	Bad feeding of the pump.	Check use parameters of the accessories (pressure on the follower plate or suction rod). Accessories can be not adapted or clogged.
The piston is going down quickly (simple effect working).	Product is too viscous.	Bad definition of the pump.
(simple effect working).	Lower valve worn.	Check and replace parts.
	A foreign product obstructs the lower valve.	Clean and check.
	Lower valve getting up too weak.	Adjust the ball cage screw to increase the getting up.
	Valve worn or damaged.	Check and replace parts.
The piston goes up quickly.	A foreign product obstructs the upper valve.	Clean and check.
The piston goes up and down at	Valves, piston head seals or cylinder worn.	Replace the parts.
different speeds.	Seals incorrectly mounted or damaged.	Check the mounting, change if necessary.
Important pressure drop when going down.	Important valve getting up	Adjust the ball cage screw to reduce the getting up. Lock the lock-nut.
	Insufficient air pressure to the motor (valve insufficiently open, air leak,)	Check, adjust.
The pump does not deliver enough pressure	Insufficient air inlet on the motor or outlet clogged (hose not adapted)	Check filter, assembly, hose.
	Cup or piston head seals too tightened.	Check the assembly or unscrew the cup nut.
Abnormal operating after racing or too important temperature.	Piston head seals or cup seals too tightened, damaged. Product drum empty.	Check assembly; reduce pumping rhythm. Replace parts if necessary. Fill the drum, check the suction circuit and possible air leakage.

6. MAINTENANCE



WARNING!

Before any intervention, please follow the pressure release instructions and read carefully the safety instructions.

During a long duration shutdown, stop the pump when the piston is in low position.

Guards (air motor cover, coupling shields, housings,...) have been designed for a 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.

PREVENTIVE MAINTENANCE

Daily care:

Check if there are leaks. Check that the hoses are in good conditions.

Keep the piston of the piston clean to prevent from material drying.

Check the PE level inside the cup (keep the level halfway up). Fill it if necessary. The lubricant will normally be coloured by the material.

Tighten moderately if necessary the cup nut with the wrench provided.

Check the tightening of the different parts.

If the pump is fitted with a follower plate: check that the plate seal is in good condition, clean top and bottom parts of the follower plate.

Manipulate (open and close) all the valves of the installation.

Keep the spray area clean.

Bimonthly care:

If the lubricant is excessively coloured in the cup, fill the cup with new lubricant. Leave the cup clean and clean it regularly with lubricant after having drained the lubricant.

Yearly:

Remove the fluid section completely. Clean the parts. Install new seals during the pump assembly (refer to spare parts' seals).

CURATIVE MAINTENANCE

We advice you to schedule a systematic maintenance after a given working time. The rhythm is defined by the maintenance staff of the user and is done according to the product, the rate of work and the regular using pressure.

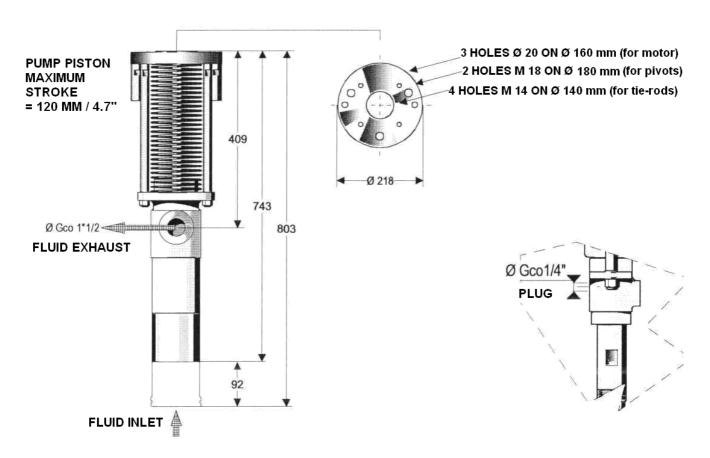
Before intervening:

- Clean the parts with the appropriate cleaning solvent,
- Install new seals if necessary after having lubricated them,
- Lubricate the piston and the inside of the cylinder to prevent from damaging the seals,
- Install new parts if necessary.

7. CODIFICATION OF THE BALL FLUID SECTIONS - "MAJOR" 588 cc / 19.9 oz

# Fluid sections	N	Motors associate	Description	
	6000	7000	9000	
	11/1	19/1	30/1	Pressure ratio
105 176 01xx	Х	X	X	Standard fluid section
105 176 03xx	Х	Х	Х	Fluid section for follower plate, model Ø 571
105 176 10xx	Х	Х	Х	Stainless steel fluid section

8. SPECIFICATIONS



Features of the fluid sections	# 105 176 01 xx	# 105 176 03 xx	# 105 176 10 xx				
Capacity		294 cc / 9.9 oz					
Delivery per cycle		588 cc / 19.9 oz					
Stroke		120 mm / 4.7"					
Fluid inlet	F 1" 1/2 + M 105x200 (External thread on valve)	+ M 105x200 Follower plate adaptation, (External thread on model Ø 105 mm					
Fluid outlet		F 1" 1/2					
Weight		36 kg / 79.4 lbs					
Maximum fluid temperature		80°C / 176° F					
Wetted parts							
Cylinder	Hard chromium steel	Hard chromium steel	Hard chromium steel				
Piston	Treated steel	Treated steel	Treated steel				
Seat	Treated steel	Treated steel	Treated steel				
Balls	Steel	Steel	Stainless steel (420C)				
Packings	Depending up	Depending upon version (refer to package of seals)					

9. DISASSEMBLY / ASSEMBLY



WARNING!

Before any intervention, please follow the pressure release instructions and read carefully the safety instructions.

The equipment is manufactured under the ATEX agreement and can not be modified. KREMLIN REXSON will not be held responsible for any failure to comply with that instruction.

Guards (air motor cover, coupling shields, housings,...) have been designed for a 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.

Fluid section:

- Make sure that a sufficient draining of the pump has been carried out,
- Unscrew the 4 nuts (3) and put aside the flange (1), the tie-rods (2) and the protection spring (5),
- Clamp the pump horizontally through the body (8) with a vice.

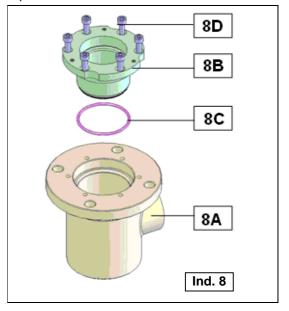
Reinstall the parts in the reverse order of the disassembly sequence.

Cup seals:

Nota: the pump body (8) consists of a cartridge (8B) to make easier the changing of the seals.

- Unscrew the cup (6),
- Take off the 6 screws (8D) that tighten the cartridge (8B) in the body (8A),
- Take off the cartridge (8B) screwing the extractors in the 3 M8 holes of the cartridge,
- Take off the washers (25 & 26) and the seals (40),
- Change the seals (40).
- Change the seal (8C).

Clean and reinstall the parts in the reverse order of the disassembly sequence.



Valve :

- Unscrew the suction valve body (17),
- Put aside the ball cage (12),
- Pull the ball (14),
- Take off the seat (13) and the seal (46),
- Take off the seals (44 & 45),

Clean the parts, change them if necessary and install them changing the seals. When assembling, tighten slightly the valve body.

Piston:

- Unscrew and take off the cylinder (9),
- Take off the seal (44),
- Take off the piston (7) from the cylinder downwards,
- Unscrew the exhaust seat (10) removing the ball (11),
- Take off the 'M' washer (27), the piston packing (42) and the 'F' washer (28),
- Clean the parts, change them if necessary and reinstall them changing the seals.

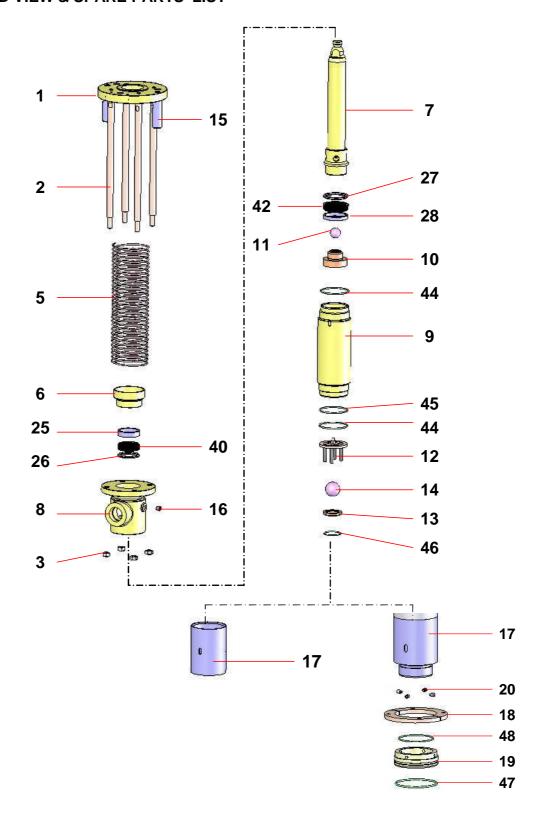
When reassembling, do not forget to lubricate the piston head. Slide the piston inside the cylinder (9) and insert it upwards.

Reinstall the parts in the reverse order of the disassembly sequence.

Before intervening:

- Clean the parts with the appropriate cleaning solvent,
- Install new seals if necessary after having lubricated them,
- Lubricate the piston and the inside of the cylinder to prevent from damaging the seals,
- Install new parts if necessary.

10. EXPLODED VIEW & SPARE PARTS' LIST

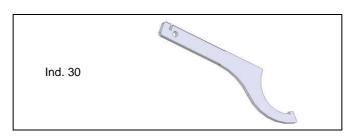


■ SPARE PARTS' LIST

		105 176 01 xx	105 176 03 xx	105 176 10 xx			
Ind	Description		#				
1	Connecting flange		210 620				
2	Tie-rod	210 621					
3	Lock-nut		88 339				
5	Protective spring		210 622				
6	Cup nut	210 700					
7	Piston	210 704	210 704	210 892			
8	Body		210 701				
8A	■ Body	NSS					
8B	■ Cartridge	NSS					
8C	■ Seal		Refer to packages of seals	3			
8D	■ Screw, model CHc M 8x20		930 151 279				
9	Cylinder	210 706	210 706	210 893			
* 10	Seat (exhaust)	210 705	210 705	210 734			
* 11	Ball (Ø 32)	86 032	86 032	87 332			
12	Ball cage		107 161				
* 13	Seat (suction)	210 708	210 708	210 896			
* 14	Ball (Ø 45)	86 045	86 045	87 344			
15	Pivot		209 582				
16	Plug	906 333 102	906 333 102	552 237			
* 17	Suction valve body	210 707	210 714	210 897			
18	Flange (2 parts)	-	210 686	-			
19	Follower plate adaptation	-	210 966	-			
20	Screw	-	88 253	-			
25	'F' washer		210 730				
26	'M' washer		210 731				
27	'M' washer		210 712				
28	'F' washer		210 713				
30	Wrench		210 946				
31	T lubricant (1/4 L)		149 990 020				
*	Package of seals	Depend	ding upon choice (see ne	xt page)			

^{*} Preceding the index number denotes a suggested spare part.

N S S: Not serviceable separately.



■ PACKAGES OF SEALS' COMPOSITION

FLUID SECTIONS		ID SECTIONS 01			02			03			
	#		106 321			106 322			106 323		
Ind.	Description	Qty	#	Material	Qty	#	Material	Qty	#	Material	
40	Cup packing	9	210 721	PTFE	9	210 721	PTFE	4	210 721	PTFE	
								5	210 722	PE	
41	Ring		-			-			-		
42	Piston packing	6	210 725	PTFE	6	210 725	PTFE	3	210 726	PE	
								3	210 725	PTFE	
43	Adjustment block		-			-			-		
44	O-Ring	2	84 456	FPM	2	84 473	FEP / FPM	2	84 456	FPM	
45	O-Ring	1	84 456	FPM	1	84 456	FPM	1	84 456	FPM	
46	O-Ring	1	84 458	PTFE	1	84 458	PTFE	1	84 458	PTFE	
47	O-Ring	1	84 457	FPM	1	84 457	FPM	1	84 457	FPM	
48	O-Ring	1	84 470	FPM	1	84 470	FPM	1	84 470	FPM	
8C	Cartridge seal	1	909 420 265	FPM	1	909 420 265	FPM	1	909 420 265	FPM	

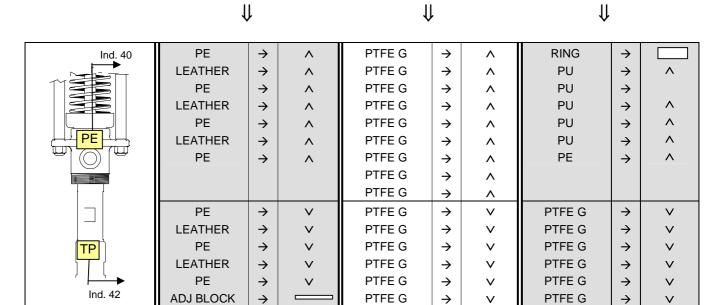
Nota: seals (Ind. 47 & 48) for follower plate adaptation (pumps # 105 176 03xx)

	U			\Downarrow			\downarrow		
Ind. 40	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PE	→	٨
	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PTFE	\rightarrow	^
	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PE	\rightarrow	^
	PTFE	\rightarrow	^	PTFE	\rightarrow	٨	PTFE	\rightarrow	^
	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PE	\rightarrow	^
PE PE	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨
	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PE	\rightarrow	^
	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PTFE	\rightarrow	^
	PTFE	\rightarrow	٨	PTFE	\rightarrow	٨	PE	\rightarrow	^
	PTFE	\rightarrow	V	PTFE	\rightarrow	V	PE	\rightarrow	V
	PTFE	\rightarrow	V	PTFE	\rightarrow	V	PTFE	\rightarrow	V
TP	PTFE	\rightarrow	V	PTFE	\rightarrow	V	PE	\rightarrow	V
	PTFE	\rightarrow	V	PTFE	\rightarrow	V	PTFE	\rightarrow	V
¹ ⁴	PTFE	\rightarrow	V	PTFE	\rightarrow	V	PE	\rightarrow	V
Ind. 42	PTFE	\rightarrow	V	PTFE	\rightarrow	V	PTFE	\rightarrow	V

FLUID SECTIONS			04			05			06		
	#		106 324			106 325			106 326		
Ind.	Description	Qty	#	Material	Qty	#	Material	Qty	#	Material	
40	Cup packing	4	210 722	PE	9	210 603	PTFE G	1	210 722	PE	
		3	210 723	LEATHER				5	84 395	PU	
41	Ring		-			-		1	210 724	ST STEEL	
42	Piston packing	3	210 726	PE	6	210 727	PTFE G	6	210 727	PTFE G	
		2	210 728	LEATHER							
43	Adjustment block	4 210 729 ST STEEL				-			-		
			Qty mounted according to need								
44	O-Ring	2	84 456	FPM	2	84 456	FPM	2	84 456	FPM	
45	O-Ring	1	84 456	FPM	1	84 456	FPM	1	84 456	FPM	
46	O-Ring	1	84 458	PTFE	1	84 458	PTFE	1	84 458	PTFE	
47	O-Ring	1	84 457	FPM	1	84 457	FPM	1	84 457	FPM	
48	O-Ring	1	84 470	FPM	1	84 470	FPM	1	84 470	FPM	
8C	Cartridge seal	1	909 420 265	FPM	1	909 420 265	FPM	1	909 420 265	FPM	

Nota: seals (Ind. 47 & 48) for follower plate adaptation (pumps # 105 176 03xx)

 $\downarrow \downarrow$



PTFE G = Graphited PTFE

■ PACKAGES OF SEALS RECOMMENDED

Code	Composition	Use
01	PTFE (+ FPM)	Solvent - Ether - Ketone - Aromatic alcohol - some varnishes and paints
02	PTFE (+ FPM / FEP)	Solvent - Ether - Ketone - Aromatic alcohol - some varnishes and paints, PU paints - Pharmacy - Cosmetics - Some foodstuffs
03	PTFE + PE (+ FPM)	Epoxy glue - Butyl - Silicone - Some varnishes - Paint
04	PE + LEATHER (+ FPM)	Paint - Varnishes - Grease - Oil - Ink - Hydro soluble paint
05	GRAPHITED PTFE (+ FPM)	Paints - Varnishes - Inks - PVC compounds - Butyl
06	PU + GRAPHITED PTFE (+ FPM)	Mastics - PVC - Butyl

OPTIONS

Ind.	Description	#	Qty
35	Package of seals (code 10) (PU + PE) + (PE + PTFE V) + (FPM)	106 591	1
-	Balls / carbide seat assembly (Ind. 11, 13, 14)	107 148	1

PACKAGE OF SEALS' COMPOSITION (CODE 10)

PACKAGES code #		10 106591		
Ind	Description	Qt	#	Material
40	Cup packing	1 5	210 722 84 395	PE PU
41	Ring	1	210 724	ST STEEL
42	Piston packing	3	210 726 211 318	PE PTFE V
44	O-Ring	2	84 456	FPM
45	O-Ring	1	84 456	FPM
46	O-Ring	1	84 458	PTFE
47	O-Ring	1	84 457	FPM
48	O-Ring	1	84 470	FPM
8C	Cartridge seal	1	909 420 265	FPM

Ind. 41	RING	
	PU	\Diamond
Ind. 40	PU	\Diamond
	PE	\Diamond

	PE	\bigvee
	PTFE V	\bigvee
Ind. 42	PE	\bigvee
	PTFE V	\bigvee
	PE	\bigvee
	PTFE V	