THE SPECIALIST IN INNOVATIVE EQUIPMENT FOR INSULATION

USER MANUAL

BV Cert. 20013733
Machines d'isolation

BV Cert. 21959263
Service après-vente

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SUMMARY

CONTACTS

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PRECAUTIONARY

PLEASE READ THIS DOCUMENT UPON RECEIPT OF YOUR MACHINE BEFORE PUTTING IT INTO SERVICE.

THIS IS ESSENTIAL BEFORE IT IS PUT INTO SERVICE.

YOUR MACHINE HAS UNDERGONE NUMEROUS OPERATIONAL TESTS IN OUR WORKSHOPS, AND ACCORDING TO INTENSIVE STANDARDS.

IT IS EASY TO HANDLE AND HAS A HIGH PERFORMANCE.

DEPENDING ON THE PRODUCTS USED, THE MECHANICAL VARIATOR ADJUSTMENT ALLOWS FLOW RATES OF UP TO 10 Kg/min.

NEVER TOUCH ROTATING PARTS WITH YOUR HANDS OR ANY OTHER PART OF YOUR BODY – NEVER STAND ON THE MACHINE WHILE IT IS RUNNING UNDER ANY CIRCUMSTANCES.

1. GENERAL INFORMATION

About this document – Read this entire manual carefully before installing or using the machine.

The user manual is an integral part of the machine and must always be available near your device at all times. Strict compliance with these instructions is a necessary condition for the proper installation and use of the equipment.

The wording of this document and the commissioning instructions correspond to the version of your device and the safety standards in force on the date of its printing.

NOTES: We strongly recommend that this guide be read by the relevant managers and supervisors, as well as maintenance personnel, so that they can assist your employees who use the equipment every day. Be sure to follow all instructions mentioned in this manual..

2. SECURITY

This manual contains essential instructions that must be followed during use. It is therefore essential that the installer and operator of the equipment read them before proceeding with commissioning.
The instructions to be followed are not only those of general safety in this chapter, but also those of specific safety which appear in the following chapters, accompanied by a danger symbol.

2.1 SYMBOLS AND SIGNALS


General hazard symbol


Instructions relating to electrical risks

HAZARD != the user is subjected to an extremely dangerous situation which involves (serious) bodily harm when the indication is not followed.

ATTENTION != there is a risk of damaging organs in the system (example: polyurethanes).

2.2 STAFF QUALIFICATIONS

It is important to ensure that the personnel who will be using the equipment are qualified.

2.2 DANGERS IF INSTRUCTIONS ARE NOT FOLLOWED

Failure to comply with safety instructions may pose a danger to property and people. It may also result in the suspension of any warranty claim.

More specifically, the dangers involved may be as follows:

- Danger to people from electrical and mechanical influences
- Failure of prescribed maintenance and repair process
- Material damage

2.4 USER SAFETY INSTRUCTIONS

The instructions must be followed to prevent any risk of accidents. The user must be a qualified specialist who has read the contents of the user manual. All installation operations must only be carried out when the corresponding components are switched off.

2.5 MODIFICATION OF THE MACHINE AND USE OF NON-APPROVED SPARE PARTS

Any modification to the machine may only be carried out with prior authorization from the ISOL INTERNATIONAL® brand. The use of original spare parts and accessories authorized by the manufacturer guarantees safety.
The use of other parts releases the company from all liability.

3. UNAUTHORIZED MODES OF USE

The values indicated in the user manual or technical data sheet must not be exceeded under any circumstances, either as a maximum or a minimum. The operational safety of the delivered machine is only guaranteed if the requirements specified in this document are respected.

4. TRANSPORT AND STORAGE OF THE MACHINE

4.1 TRANSPORT

According to European directive 2006/42 of May 17, 2006, you must ensure the stabilization of the machine during transport with appropriate fixings (straps, support bars, etc.).

4.2 STORAGE

We recommend storing your machine in a dry place away from the elements.

5. GUARANTEES

ISOL INTERNATIONAL® machines are guaranteed for 24 months from the invoice date. This warranty does not include wear parts (polyurethanes, casters).

CAUTION! Risk of material damage! In case of removal, improper transport and incorrect storage may cause material damage to the machine.

The equipment is CE standardized in accordance with European directive 2006/42/EC.

The RIVOLTA machine is designed for the projection and blowing of glass fibers, rock, cellulose, ceramic, and low-density sprayable products.

TECHNICAL SHEET

FEATURES	RIVOLTA
Dimensions (m)	L=1.50 W=0.67 H=1.55
Weight (kg)	350
Mixing Capacity (liter)	400
Air Propulsion	2 air motors
Air pressure (millibar)	0 to 250
Pipe diameter (mm)	60 Ø
Maximum pipe length (m)	40
Maximum difference in height (m)	15
Engine Power (kW)	- Motor Drive: 1.1 - Turbine Engine: 2 - Cardes Engine: 1.1
Mechanical variator	Planetary variator with an adjustment range of 1 to 7, the variation being carried out when stationary or in operation
Walking remote control **Two positions**	- On/Off + Air - Air + Product
Power supply	2 x 230 V, 16 A
Electrical protection	- 24V AC control, protected by a thermal magneto circuit breaker - Electrical panel, protected by 2 30 mA differentials - Separate thermal protection of motors

COMMISSIONING THE MACHINE

VERY IMPORTANT

Connecting the machine requires special attention for safety reasons and to prevent damage to the equipment. Connecting the machine requires special attention for safety reasons and to prevent damage to the equipment. Check that the voltage of the mains power outlet corresponds to that of the machine, and that the permitted amperage is at least 16 amps in 2 x 230 volts. If the voltage does not correspond or if there is any doubt, consult the site electrician.

FOR USE OF THE MACHINE WITH A GENERATOR, THE GENERATOR MUST HAVE A MINIMUM POWER OF 15 KVA.

ATTENTION

A) ELECTRICAL OPERATION

Connect the machine to the 230 Volt single-phase mains supply:

- either on two 230 Volt 16 Amp sockets

- disconnect the emergency stop (red button on the front of the panel) by turning the button (1/4 turn) to the right. The power indicator light, just below, should light up when you press the black power button on the electrical panel.

Otherwise:

1. There is no electricity coming to the machine
2. Check the circuit breakers
3. The indicator lamp is defective

- Operate the remote control to turn the motors:

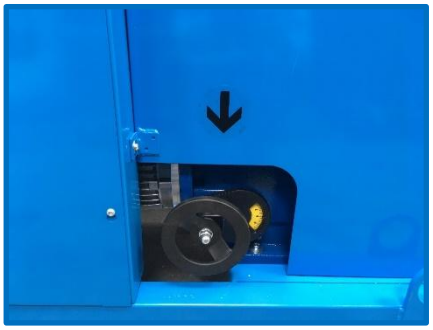
1. Left button engages the air motors, a few seconds later the carding motor starts.

2. The right button starts the variator motor and rotates the feed screw and the distributor. If nothing happens, reset the thermal relay by pressing its red button. Repeat the start-up operation.

B) SETTINGS

Card

- Move the carding disc towards the feed screws to achieve fine carding. Be careful not to bring the disc into contact with the feed screw.
- Move the disc backward, gradually, to obtain a more airy nodule



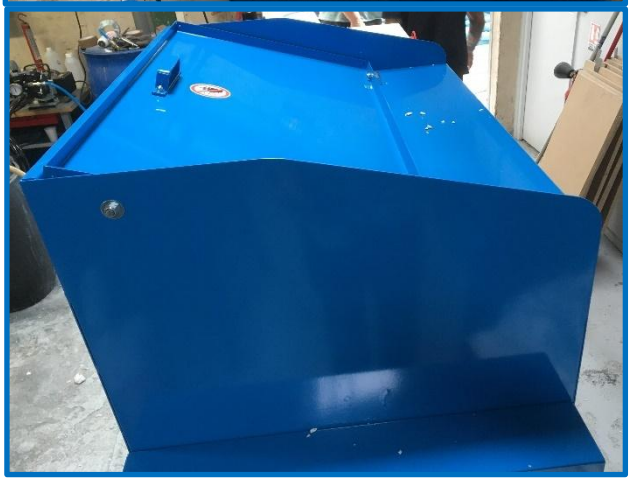
DIMMER

The variator can be adjusted while the machine is stopped or running. Graduated from 1 to 7, it allows the machine to deliver between 0.8 kg/min and 10 kg/min. Operation is done by turning the handwheel on the left side of the machine.

C) LOADING THE PRODUCT

Now it's your turn to BLOW!

Open the half bag lengthwise as shown below.Drop the product by itself towards the 2 feed screws (do not overload).Then close the safety cover.



Proceed with blowing

To stop the engine in an emergency, a stop button is located on the side of the machine on the electrical panel.

D) MAINTENANCE

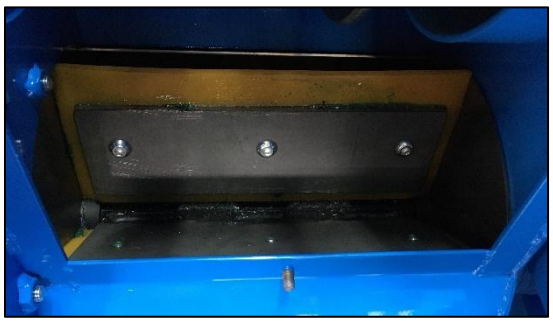
1. See notebook
2. Sealing flaps

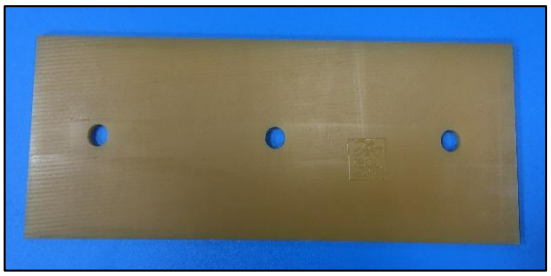
Position on the lock rotor to ensure the distributor seals with the air propulsion supplied by the motors.

To change them:

They are changed by opening the card box:

- Remove the screws from3 on the rotor plates
- Remove the clamping plate, change the defective polyurethane
- Position the variator at slow speed and turn the lock by impulse to place the next blade to be changed in front of you.





AlwaysStop the machine with the emergency stop before touching rotating parts!

Lock rotor

To change or disassemble it:

Disassembly

- Remove the front cover
- Remove the lock card drive belt
- Remove the lock card drive chain
- Loosen the pinion set screws at the end of the rotor and the bearing clamping screws on the shaft
    - -Remove the sprockets
    - -Remove the sealing flaps
    - -Unscrew the front plate of the lock (screws∅6)
    - -Remove the front plate and rotor from its housing

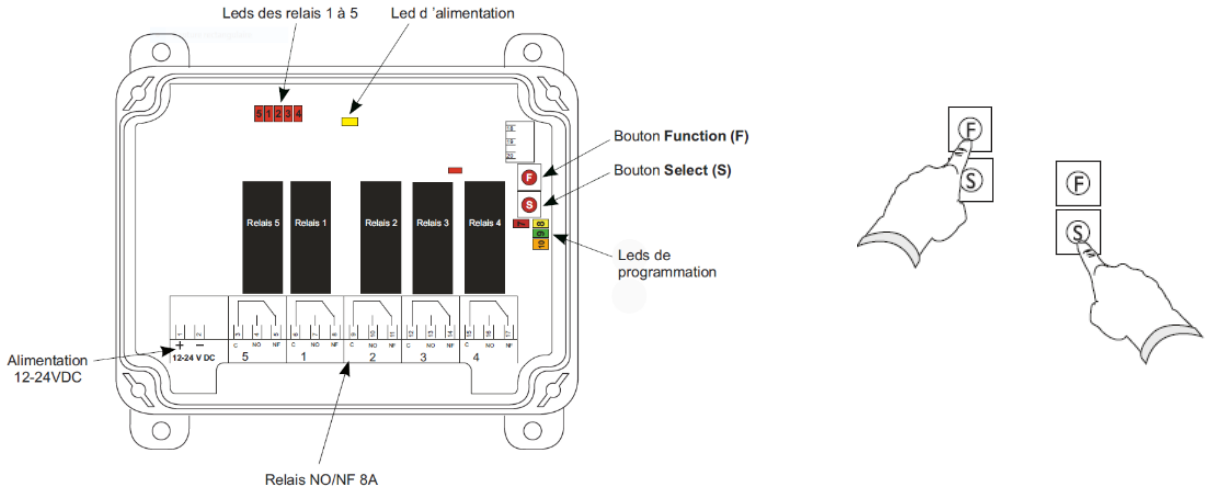
Reassembly

- Reverse direction of disassembly
- After reassembling the rotor without the sealing flap and the lock plate, check that the rotor turns freely without forcing; otherwise, adjust the bearings.

PAIRING THE REMOTE CONTROL

ERASE ALL TRANSMITTERS IN THE RECEIVER

1. In the receiver, press the Function button (F). The red LED 7 lights up.
2. Press and hold the Select (S) button. All relay LEDs will light up.
3. Hold down until the relay LEDs turn off.

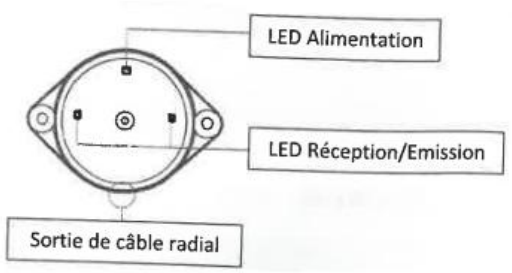


REGISTER THE TRANSMITTER IN THE RECEIVER

1. In the receiver press the Function button (F). LED 7 lights up.
2. Then press the Select (S) button. All LEDs light up.
3. On the transmitter, press and hold buttons 1 and 2 until the relay LEDs flash 3 times.

RADIO REPEATER PAIRING

DIAGNOSTIC LIGHT



The power LED is solid green when the product is powered on.

The 2 Reception/Transmission LEDs flash with each Reception/Transmission of a radio frame.

PAIRING PROCEDURE

The repeater must be powered off.

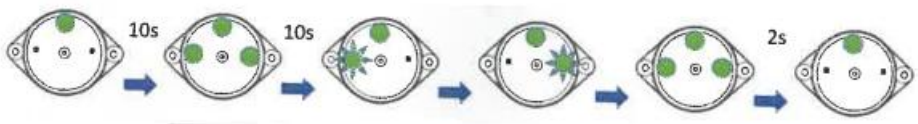
Check that the switch on the back of the product is in the [I] position.

If you have an ON/OFF function, turn on the remote control.

Press the pairing buttons on the product. Typically, these are buttons 1 and 2 or 1 and 3 if you have an ON/OFF function on button 2.
If you have a special program, consult the program sheet to identify the product pairing buttons.

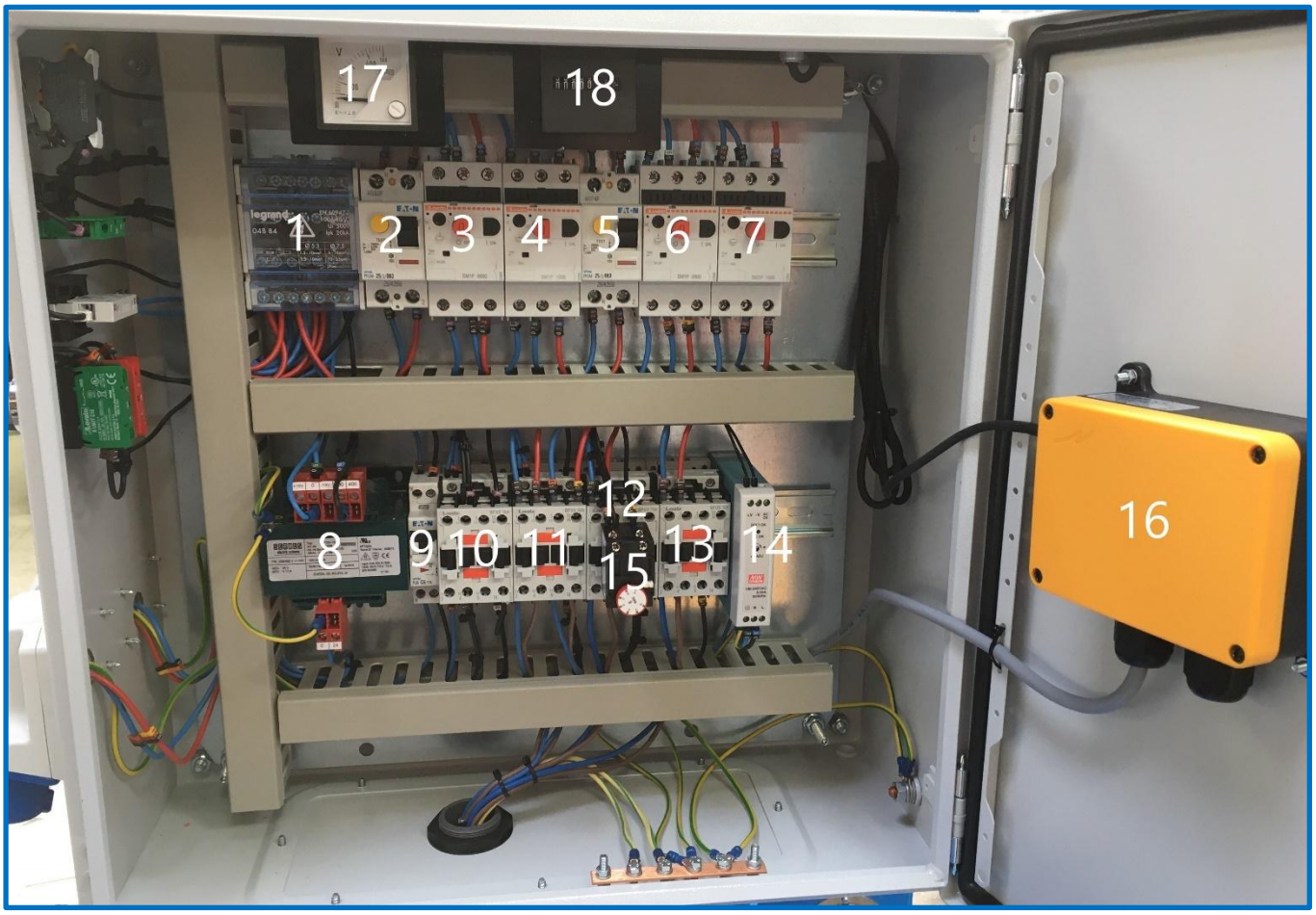
Hold down throughout the repeater startup phase below.

Power on the repeater.



Release the pairing buttons.

ELECTRICAL PANEL



ELECTRICAL COMPONENTS

1. Phase splitter
2. Differential switch (power supply 1) (VALUE) 25A ma
3. Magneto thermal circuit breaker (air motor 1) (VALUE) 0650
4. Magneto thermal circuit breaker (card motor) (VALUE) 1000
5. Differential switch (power supply 2) (VALUE)
6. Magneto thermal circuit breaker (air motor 2) 0650
7. Magneto thermal circuit breaker (motor variator) 1460
8. 230 VAC / 24 VAC transformer
9. Control circuit breaker
10. Self-maintaining contactor when energized (VALUE) 24V
11. Air motor contactor (VALUE) 230V
12. Card motor contactor (VALUE) 230V
13. Motorbike contactor variator (VALUE) 230V
14. 230 VAC / 24 VDC transformer
15. Timeout
16. Radio receiver
17. Voltmeter
18. Hour meter

STARTING THE PUMP

1) Before using the pump, make sure the box is half full. 20 W/ 30 oil.

2) Ensure that the suction pipe joints are properly sealed to prevent air from entering and check that the suction filter is still in place.

3) From time to time, check the pressure in the air bell. It should be 1/10 of the working pressure.

4) Open the pressure adjustment valve, open the tap.
Run the pump for a few minutes without pressure to facilitate priming and to allow complete evacuation of air.

5) Adjust the pressure until you obtain the desired working pressure.

INTERVIEW

1) After each use, run the pump for a few minutes with clean water to prevent deposits from forming, which are always detrimental to its proper functioning. To allow complete drainage, run the pump with the suction pipe out of the water.

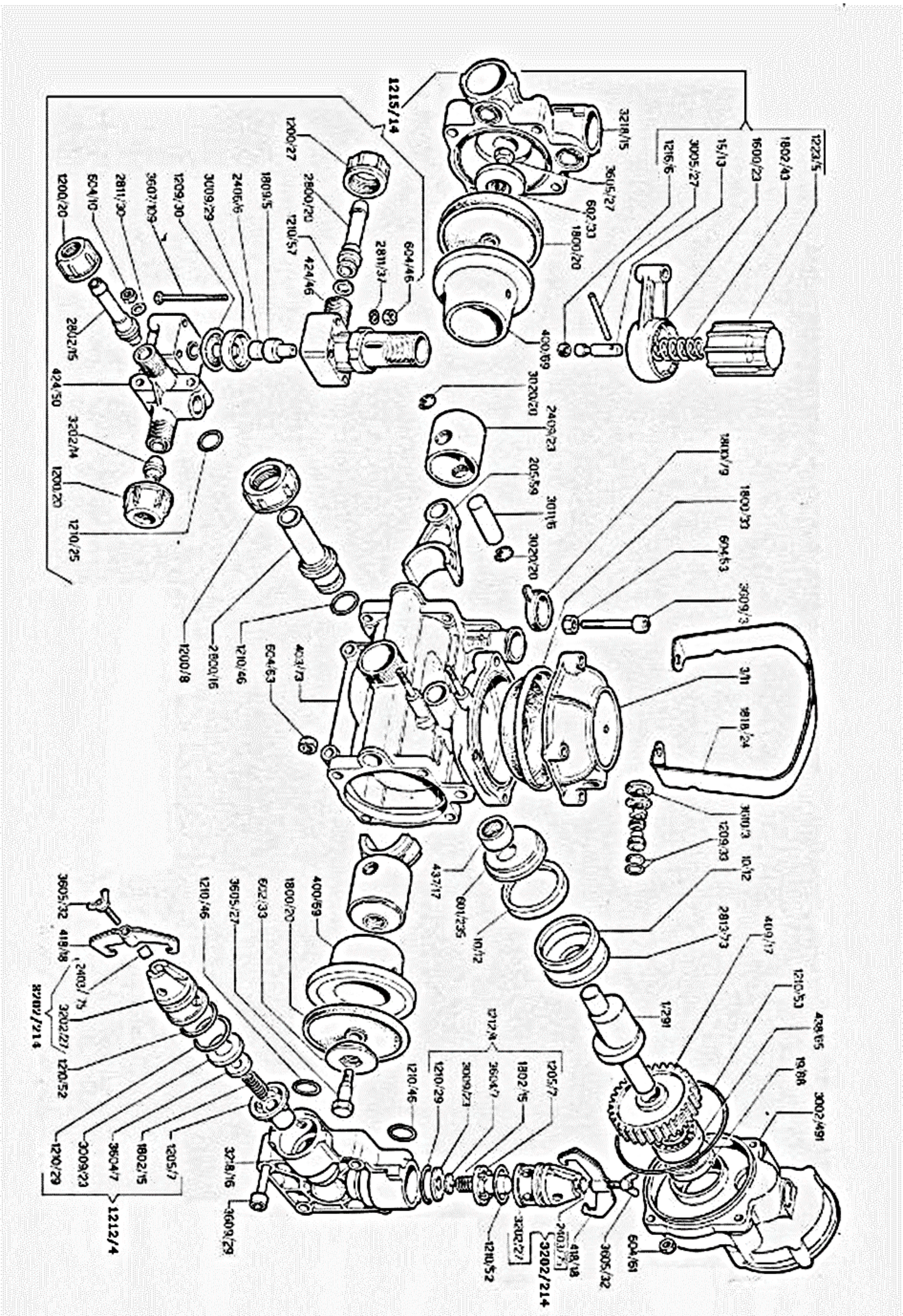
2) The special material used for the valves and membranes, as well as the lubrication (oil bath) of all moving parts, limits maintenance operations to an occasional check of the oil level. Top up if necessary.

3) Carry out an oil change every 200 hours or after each job.
To do this, remove the reservoir cap, turn the pump over and turn the shaft by hand until the oil has completely drained.
Top up with ½ liter of oil, fluidity 20 W/30.

ATTENTION

During the winter period, make sure that the pump is completely drained, particularly the pipes of the lower cylinder head manifolds.

We recommend checking the membranes and, if necessary, replacing them.



1215/14
1200/27
2800/20
1210/57
424/46
2811/37
604/46
1809/5
2401/6
3009/29
1209/30
3607/109
2811/30
604/10
1200/20
2802/15
424/50
3202/14
1210/25
3218/15
3605/27
602/33
1800/20
400/69
3020/20
2409/23
205/59
3011/6
1800/33
604/53
3609/3
3/11
1818/24
3010/3
1209/33
10/12
2813/73
1291
409/17
1210/53
438/15
19/88
3002/491
604/61
3605/32
418/18
2403/75
3202/27
3202/214
1210/52
1212/4
1205/7
1802/15
3604/7
3009/23
1210/29
1210/46
3218/16
3609/29
437/17
601/235
1200/8
2800/16
604/63
403/73
1223/5
1802/43
1600/23
15/13
3005/27
1216/6

COMET MC 20/20 PUMP SPARE PARTS LIST

Nouveau n° de Réf.	N° de Réf. de commande	Description	Quantité
.0001029100	**.1/291**	arbre excentrique	1
.0003001100	**.3/11**	accumulateur de pression partie haute	1
.0010001200	**.10/12**	anneau de bielle	2
.0015001300	**15/13**	soupape de régulation	1
.0019008800	**19/88**	anneau de tenue de l'arbre tournant	1
.0205005900	**205/59**	bielle 2 secteurs	1
.0400006900	**400/69**	chemise	2
.0403007300	**403/73**	carter de pompe	1
.0409001700	**409/17**	pignon d'entraînement Z = 54 (moteur thermique)	1
.0409001900	**409/19**	pignon d'entraînement Z = 52 (moteur électrique)	1
.0418001800	**418/18**	chemise	4
.0424004600	**424/46**	corps de la tête de régulation	1
.0424005000	**424/50**	corps de la tête de commande	1
.0437001700	**437/17**	roulement aiguille	1
.0438006500	**438/65**	roulement de la couronne	1
.0601023500	**601/235**	rondelle de calage de bielle	1
.0602003300	**602/33**	disque de tenue membrane	2
.0604001000	**604/10**	écrou UNI 5587 6MA x 10 x 6	2
.0604004600	**604/46**	écrou autobloquant 5MA x 8 x 6,7	4
.0604006100	**604/61**	écrou 5MA x 8 x 5 6S	4
.0604006300	**604/63**	écrou UNI 5588 8MA x 13 x 6,5	12
1200000800	**1200/8**	écrou plastique	1
1200002000	**1200/20**	écrou plastique	2
1200002700	**1200/27**	écrou plastique	1
1205000700	**1250/7**	Support de clapet. Mand.	4
1209003000	**1209/30**	joint torique normale ∅ 11 x 29 x 12,5	1
1209003300	**1209/33**	joint torique normale ∅ 6 x13 x 1,8	2
1210002500	**1210/25**	joint torique OR ∅ 13,8 x 19,6 x 2,9	1
1210002900	**1210/29**	joint torique OR ∅ 25,07 X 30,31 X 2,62	4
1210004600	**1210/46**	joint torique OR ∅ 17,13 x 22,37 x 2,62	5
1210005200	**1210/52**	joint torique OR ∅ 21,82 x 28,88 x 3,53	4
1210005300	**1210/53**	joint torique OR ∅ 71,5 x 1,78 x 75,06	1
1210005700	**1210/57**	joint torique OR ∅ 10,78 x 16,02 x 2,62	1
1212000400	**1212/4**	clapet d'aspiration complet	4
1215001400	**1215/14**	valve de régulation complète	1
1216000600	**1216/6**	joint Gaco ∅ 6,2 x 10,1 x 3,2	1
1223000500	**1223/5**	molette de pression	1
1600002300	**1600/23**	levier de mise en pression	1
1800002000	**1800/20**	membrane de pompe	2
1800003300	**1800/33**	membrane accumulation de pression	1
1800007900	**1800/79**	membrane bouchon d'huile	1
1802001500	**1802/15**	ressort de la valve d'aspiration	4
1802004300	**1802/43**	ressort de pression de régulation	1
1809000500	**1809/5**	tige de commande de soupape de régulation	1
1818002400	**1818/24**	poignée	1

LISTE DES PIECES DETACHEES DE LA POMPE COMET MC 20/20

Nouveau n° de Réf.	N° de Réf. de commande	Description	Quantité
2406000600	**2406/6**	pastille de la commande de régulation	1
2403007500	**2403/75**	pastille métallique	4
2409002300	**2409/23**	piston ∅ 45	2
2800001600	**2800/16**	raccord d'aspiration ∅ 18	1
2800002000	**2800/20**	raccord de retour pression	1
2802001500	**2802/15**	raccord de pression	1
2811003000	**2811/30**	rondelle métallique	2
2811003700	**2811/37**	rondelle métallique	4
28 3007300	**2813/73**	ro delle de calage de bielle	1
3002049100	**3002/491**	support manomètre p.d.f.	1
3005002700	**3005/27**	goupille	1
3009002300	**3009/23**	siège de clapet	4
3009002900	**3009/29**	siège de clapet	1
3011000600	**3011/6**	goujon	2
3020002000	**3020/20**	circlips	4
3202021400	**3202/14**	pastille de fermeture de pression	1
3202002700	**3202/27**	tête de support clapet	4
3202021400	**3202/214**	kit tête de clapet	4
3218001500	**3218/15**	culasse de pompe droite	1
3218001600	**3218/16**	culasse de pompe gauche	1
3604000700	**3604/7**	clapet d'aspiration	4
3605002700	**3605/27**	vis de fixation membrane	2
3605003200	**3605/32**	vis de fixation de tête de clapet 6 MA x 20	4
3607010900	**3607/109**	vis UNI 5737 5 MA x 45	4
3609000300	**3609/3**	vis UNI 5931 8 MA x 35	4
3609002900	**3609/29**	vis UNI 5931 8 MA x 40	8
3610000300	**3610/3**	soupape d'air	1

Toutes les pièces détachées doivent être commandées avec le n° de référence de commande

DAILY MAINTENANCE

- CLEANING THE SUCTION FILTER
- CLEANING AIR MOTORS BY DUSTING THEM
- CLEANING THE WATER PUMP
- CHECK BELT TENSION

MAINTENANCE EVERY 200 HOURS

- CHECK THE BELT AND ITS TENSION
- CHECK THE OIL LEVEL IN THE PUMP
- CHECK THE PUMP DIAPHRAGM
- DISASSEMBLE THE CASINGS, GREASE THE BEARINGS AND CHAINS
- CHECK THE FIXING OF THE PULLEYS ON THEIR SHAFT
- CHECK THE TIGHTNESS OF THE SET SCREWS ON ALL SPROCKET GEARS

TROUBLESHOOTING

ANOMALY	RESOLUTION
The machine is blocked at the carding area. The product comes out irregularly.	Check the tightness of the polyurethane lock The card adjustment disc may be too tight
The air flow at the machine outlet has decreased	Check the condition of the air filter Check the tightness of the polyurethane mill
The machine is banging	Check the chain tension
There is a whistling sound when the machine starts	Check the belt tension
There is a significant oscillation at the pressure gauge, maximum pressure = 250 MB	Check the condition of the sealing parts
The pump no longer sucks water. One or more valves no longer hold.	Check the seats and valves and clean them.
The pressure gauge is jerking. The pump may be sucking in air or the air may not have been evacuated.	Check the suction hose. Run the pump with the discharge valve and taps open.
The water outlet is irregular. The air bell is deflated.	Inflate the air bell (1/10 of the working pressure).
Water is coming out but the pump is not building up pressure. The discharge valve pad is worn.	Replace the pad and, if necessary, also the seat.
The flow rate decreases and the pump makes noise. The oil level has dropped.	Fill the oil tank halfway.
Oil is leaking from the discharge. One or more membranes are damaged.	Drain the oil box, remove the cylinder heads and replace the diaphragms

Before any intervention, we advise you to take a photo before any intervention in order to facilitate the reassembly of the equipment.

In the event of a problem, our technical department is available to resolve the anomaly with you and help you use your equipment in optimal conditions.

WORKSHOP CONTACT:
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atelier@isolinternational.com

Depending on the case, we can offer you troubleshooting via video assistance.