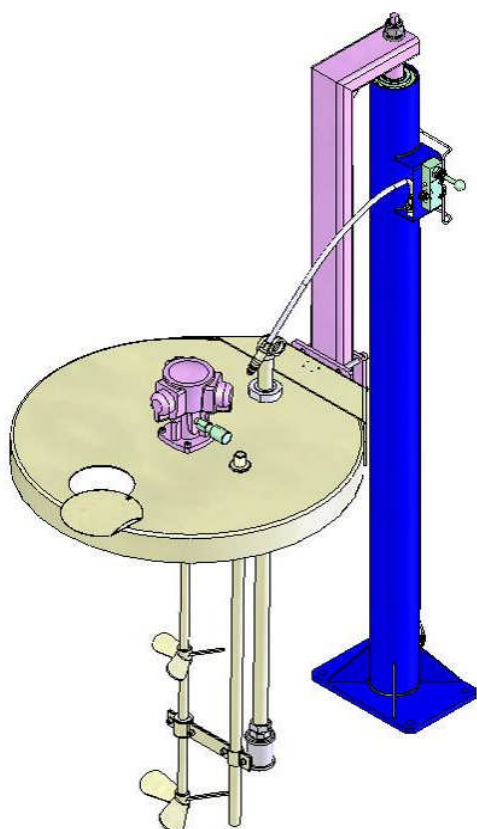




KREMLIN REXSON



INSTRUCTION MANUAL

AGITATION UNIT ON ELEVATOR

CYCLIX

**Drum, model 200 L / 52.8 US gal
→ # 105 972 xxxx**

**Drum from 20 to 40 L
/ 5.3 to 10.6 US gal
→ # 106 985 xxxx**

Manual : 574.032.112 - 0711

Date : 19/11/07 - Supersede : 20/03/07

Modif.: + elevator spare parts' list

IMPORTANT : Read and understand all instructions before storing, installing and operating concerned equipment (professional use only).

PICTURES AND DRAWINGS ARE NOT CONTRACTUAL. THE MATERIAL MAY BE CHANGED WITHOUT PRIOR NOTICE.

KREMLIN REXSON - 150, avenue de Stalingrad
93 245 - STAINS CEDEX - FRANCE
Téléphone : 33 (0)1 49 40 25 25 - Fax : 33 (0)1 48 26 07 16



**INSTRUCTION MANUAL
AGITATION UNIT ON ELEVATOR**

SUMMARY

1.	EC DECLARATION OF CONFORMITY	2
2.	WARRANTY	2
3.	SAFETY INSTRUCTIONS	3
4.	DESCRIPTION	4
5.	DIMENSIONS	5
6.	INSTALLATION	5
7.	CONNECTION OF THE SUBSETS	7
8.	ADJUSTMENT	8
9.	PREVENTIVE MAINTENANCE	9
10.	CURATIVE MAINTENANCE.....	9
11.	PART NUMBER OF THE UNITS	10
12.	SPARE PARTS' LIST.....	10

ADDITIONAL DOCUMENTATIONS :

Manual : Pneumatic agitator Doc. 574.024.110

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 advise 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. EC DECLARATION OF CONFORMITY

The manufacturer : **KREMLIN REXSON** with assets of 6 720 000 euros

Head office : 150, avenue de Stalingrad - 93 245 - STAINS CEDEX - FRANCE

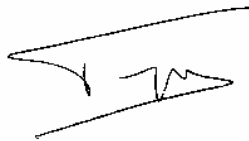
Tel. 33 (0)1 49 40 25 25 - Fax : 33 (0)1 48 26 07 16

Herewith declares that : Agitation assembly on cover, is in conformity with the provisions of :

EC - Machinery Directive (Directive 98/37/EEC) as amended and with national implementing legislation.

Ex - ATEX Directive (Directive 94/9/EEC) :  II 2 G (group II, class 2, gas).

Established in Stains, on March 1 st 2003,



D. TRAGUS
President

2. WARRANTY

We reserve the right to make changes; these changes may be carried out after the receipt of the 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 and 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 suppliers' warranty.

3. 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. 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).

FIRE - EXPLOSION - SPARKS - STATIC ELECTRICITY HAZARDS



A poor earth connection, inadequate ventilation, sparks or static electricity can cause an explosion or fire. To avoid these risks when using or servicing KREMLIN REXSON equipment, the following safety procedures must be followed :



- ensure a good earth connection and ground the parts to be handled i.e. solvents, materials, components and equipment,



- ensure adequate ventilation,



- keep working area clean and free from waste solvents, chemicals, or solid waste i.e. rags, paper and empty chemical 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

Toxic products or vapours can cause severe injury not only through contact with the body, but also if the products are ingested or inhaled. It is imperative :



- to know the material products and their risks,
- notified or hazardous materials must be stored in accordance with the regulations,



- the material must be used in an appropriate container, never place materials in a container where there is a risk of 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, 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 made with these solvents facing **aluminium** and **zinc**. The non-compliance with the instructions may cause explosion hazards causing serious or fatal injuries.

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 owing to 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.

4. DESCRIPTION

These equipments are designed to be installed on drums (20, 40, 60 or 200 L / 5.3, 10.6, 15.8 or 52.8 US gal). They are designed to ensure the homogenization and to bring liquids or semi liquid products the drum contain.

Each assembly consists of an elevator, a cover fitted with an agitator, a suction rod and a return rod.

The elevator makes easier the installation and filling of the drum.

Captions :

A : One column elevator

B : Elevator control

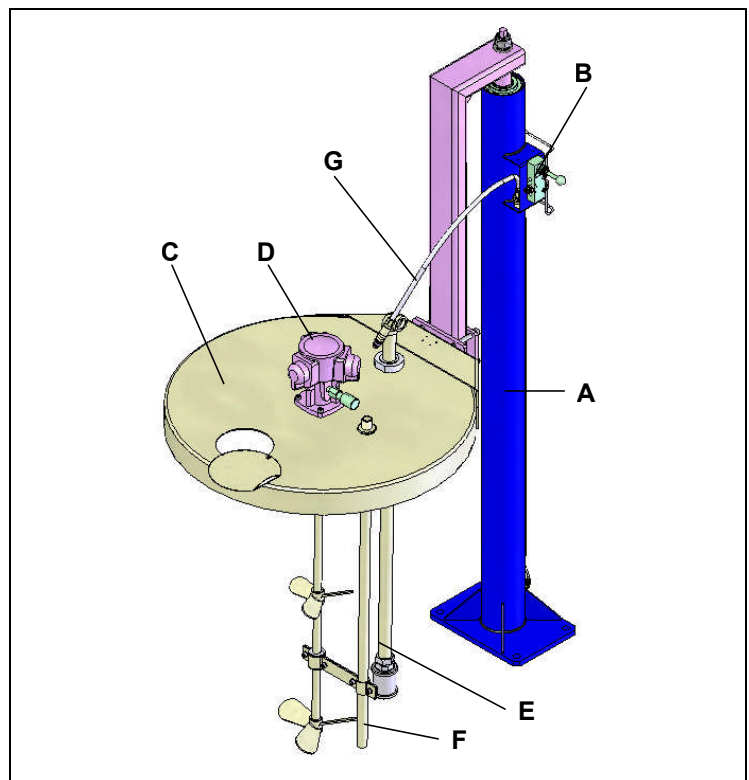
C : Cover

D : Agitator

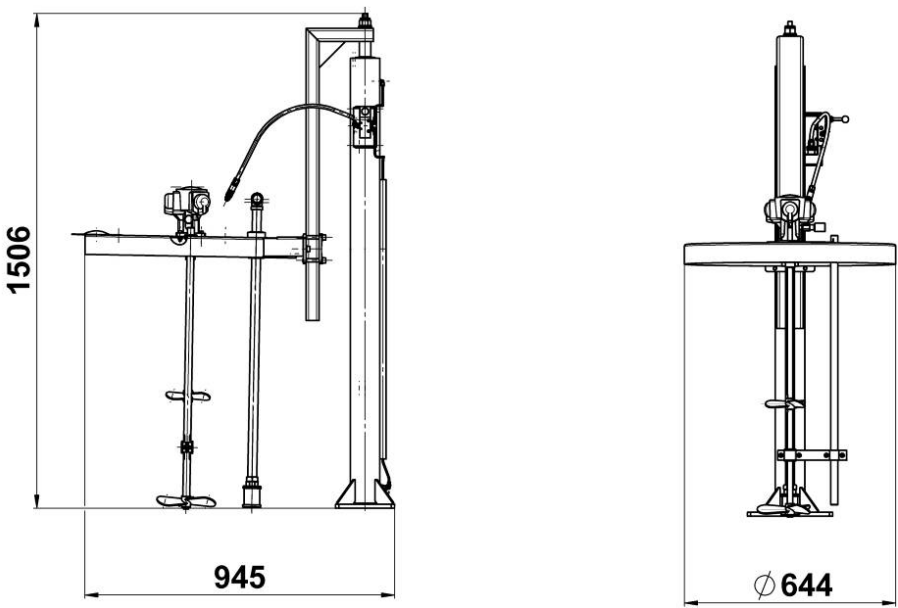
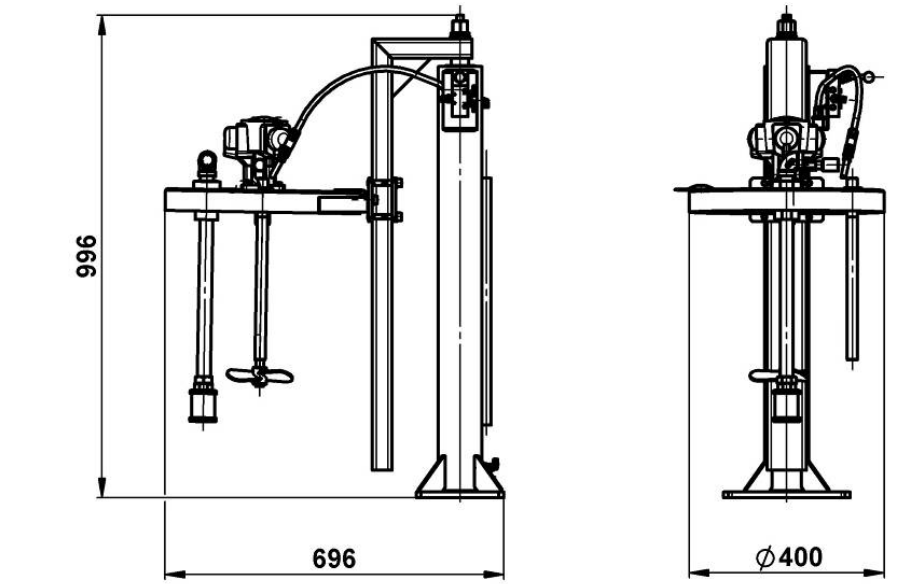
E : Suction rod

F : Return rod

G : Air hose with quick release fitting



5. DIMENSIONS

<p>Unit for drum, model 200 L / 52.8 US gal</p> <p>Elevator stroke : 950 mm / 37.4"</p> <p>Weight : 53 kg / 116.8 Lbs</p>	
<p>Unit for drum from 20 to 40 L / 5.3 to 10.6 US gal</p> <p>Elevator stroke : 450 mm / 17.7"</p> <p>Weight : 43 kg / 95 Lbs</p>	


6. INSTALLATION

The agitation units are designed to be installed in a spray booth.

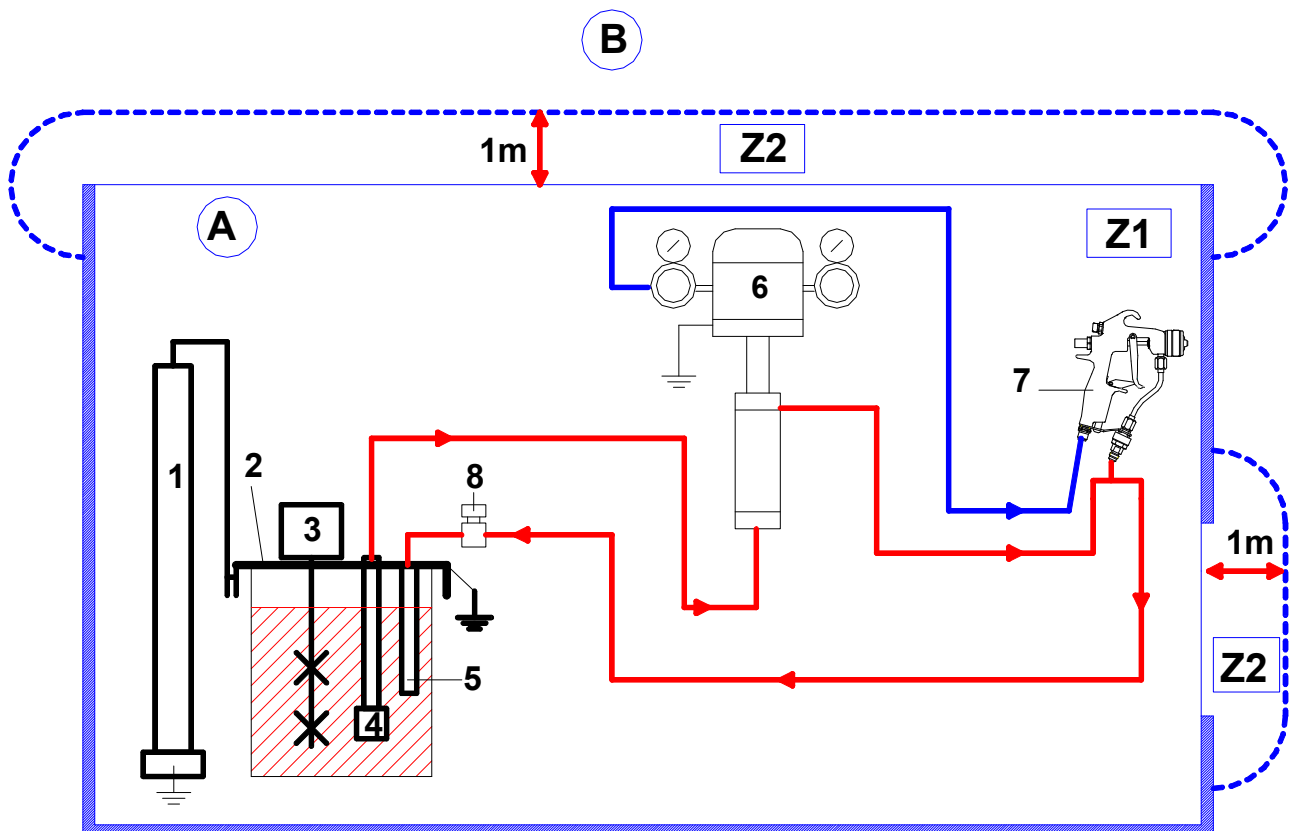
■ DESCRIPTION OF THE LABEL MARKING

Marking according to
the ATEX directive



	Name of the manufacturer
 II 2 G	II : group II 2 : class 2 Surface equipment meant to an area where explosive atmospheres due to gas, vapours, mists are liable to appear from time to time in usual operating. G : gas
CE	European conformity
REF.	Part number of the unit
Serie / Serial	Number given by KREMLIN REXSON

■ INSTALLATION DIAGRAM



A	Explosive area Area 1 (Z1) or area 2 (Z2) : spray booth
B	Non explosive area
1	Elevator
2	Cover with earth cable
3	Agitator

4	Suction rod
5	Return rod
6	Pump
7	Gun
8	Circulating valve or back pressure regulator

7. CONNECTION OF THE SUBSETS

■ ASSEMBLY

Install the elevator (1) at the desired location and fix it to the floor (flat floor) or to a plate (refer to accessories).

Place the cover (2) on the empty drum.

Locate the empty drum with the cover in front of the elevator.

Adjust the plate and the counter plate in relation to the cover. Make them slide along the elevator arm, then tighten the 2 screws and washers (6 & 7) on the cover. Tighten the counter plate on the elevator arm.

Connect the air supply of the elevator to the compressed air network (maximum 6 bar / 87 psi).

Supply air to the elevator and lift the arm / cover assembly to remove the drum.

Install the suction rod (4)

Install the return rod (5)

Agitator assembly :

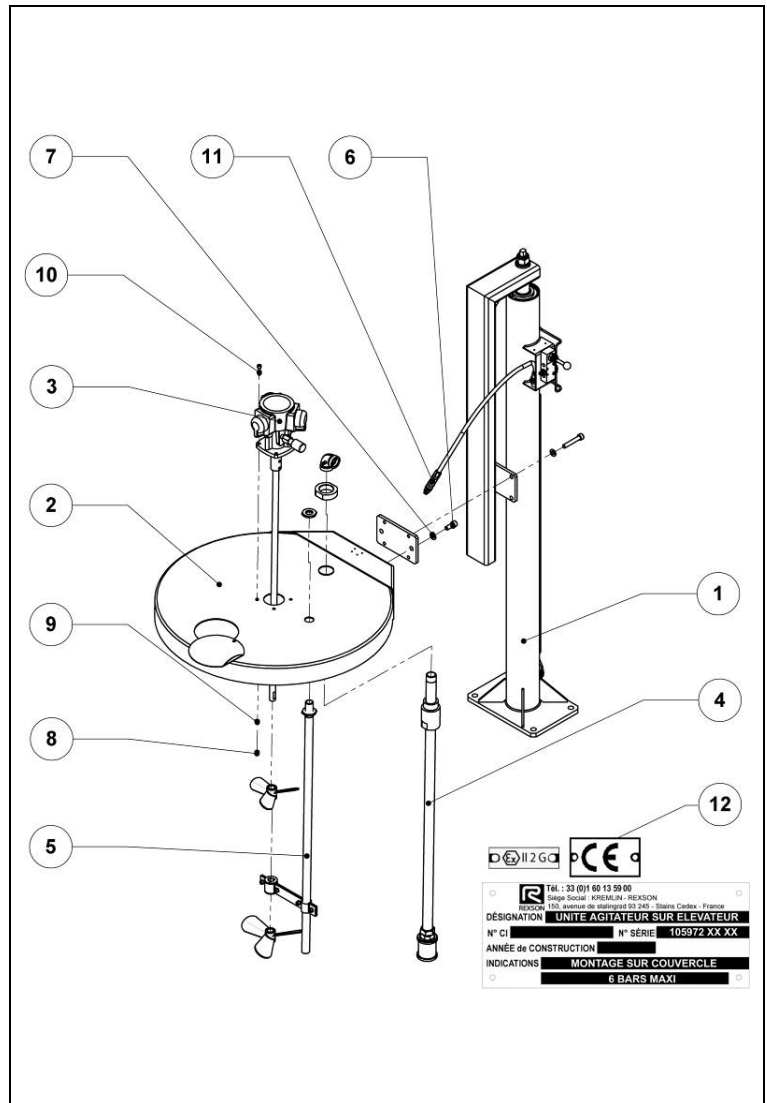
Remove the propellers of the agitator (3)

Place the motor of the agitator in the centre of the cover (2) and fix it by means of the screws, washers and nuts.

Mount the upper propeller.

Install the flange with its ring between the agitator rod and the return rod.

Mount the lower propeller.



Keep a sufficient gap between the bottom of the drum and the blades of the agitator to avoid frictions and sparks.

■ GROUNDING



The cover is fitted with an earth cable. This cable is mounted at the level of one of the cover handles. Connect the other end to a safe earth.

The agitator is grounded by means of the cover.

Nota : The foot of the elevator is fitted with a threaded rod. You can connect a second earth cable.

■ CONNECTION TO THE COMPRESSED AIR SUPPLY



**Install a filter and a lubricator on the agitator air supply.
To ensure a correct operating and an optimum working life of the agitator, the supply air must be filtered and lubricated.**

Connect the installation to the compressed air network (maximum 6 bar / 87 psi).
Adjust the lubricator to get a flow of one drop / minute when high speed or continuous operating.

■ FLUID CONNECTION

Suction rod	Elbow, model F 3/4 "
Return rod	Male 1/2 "

■ SPECIFIC INSTRUCTIONS



Before operating the equipment, please ensure that the operators have been trained to use the equipment correctly.

The foreman must ensure that the operators have perfectly taken in the safety instructions of this equipment as well as the instructions in the manuals of the different parts and accessories (refer to agitator instruction manual).

The operator must wear the appropriate clothing (protective masks, gloves, glasses...) depending on the use of the equipment.

Keep away from moving parts. Do not stay in front of the exhaust.

Do not supply the equipment with air pressures up to the ones recommended. Damages can occur if you use the equipment with speeds up to the ones recommended.

The operator must check that the equipment is used in a well ventilated area.

Nota : You must lubricate the motor of the agitator. Dirts due to oil can be present on the cover. To avoid them, mount a grease recovery assembly to the motor exhaust (see option).



Keep away hands and fingers from the blades of the agitator. Serious injuries can occur.

8. ADJUSTMENT

Before operating the equipment, check that the agitator is correctly grounded on the cover and that ground is carried out.



**A lubrication of the agitator is necessary.
Supply air must be filtered and lubricated.
The maximum air supply pressure is 6 bar /87 psi.**

The hoses fitted with a quick release fitting can be connected to the elevator or the agitator depending upon the working stage.

⇒ *When you have to go up or go down the cover, the air hose must be connected to the elevator, there is no air on the agitator motor.*

Take the quick release fitting and insert it in the air inlet of the elevator distributor.

Leave the distributor lever upwards to get the whole in high position.

Locate the drum under the cover of the elevator.

Make the whole get down holding the distributor lever downwards (careful to center the drum in relation to the cover to prevent from damaging the components). Bring into contact the cover with the drum.

Check that the agitator air inlet is correctly closed.

Disconnect the quick release fitting of the elevator and connect it on the agitator air inlet.

Unscrew slightly the knob of the agitator air flow regulator to make the motor operate **very slowly** for a while, then make it work normally.

NOTA : Do not operate the agitator to a too important speed. It can lead to a deterioration of the paint, vibrations and an early wear of the parts. The agitator is for the homogenization of the paint.

Before starting the equipment, make a test to check that you have understood how to use the equipment.

■ CHANGING THE DRUM

Disconnect the air hose that supplies the motor of the agitator. It stops.

Connect the hose to the elevator distributor air inlet.

Leave the distributor lever upwards to put the whole in high position.

Take off the empty drum.

Mount the new drum under the elevator cover.

Make the whole get down holding the distributor lever downwards.

Bring into contact the cover with the drum.

Disconnect the quick release fitting of the elevator and connect it on the agitator air inlet. It starts up.

Nota : Do not change the adjustment of the flow regulator mounted at the agitator air inlet because it will throw out of order the rotative speed of the agitator.

9. PREVENTIVE MAINTENANCE



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 a component, you must **shut off the air inlet** of the agitator before intervening

Refer to instruction manual of each component (see page 1).

10. CURATIVE MAINTENANCE



Before any intervention on the equipment, shut off the air supply of the agitator and follow the general safety instructions.

Refer to instruction manual of each component (see page 1).

■ DISASSEMBLY

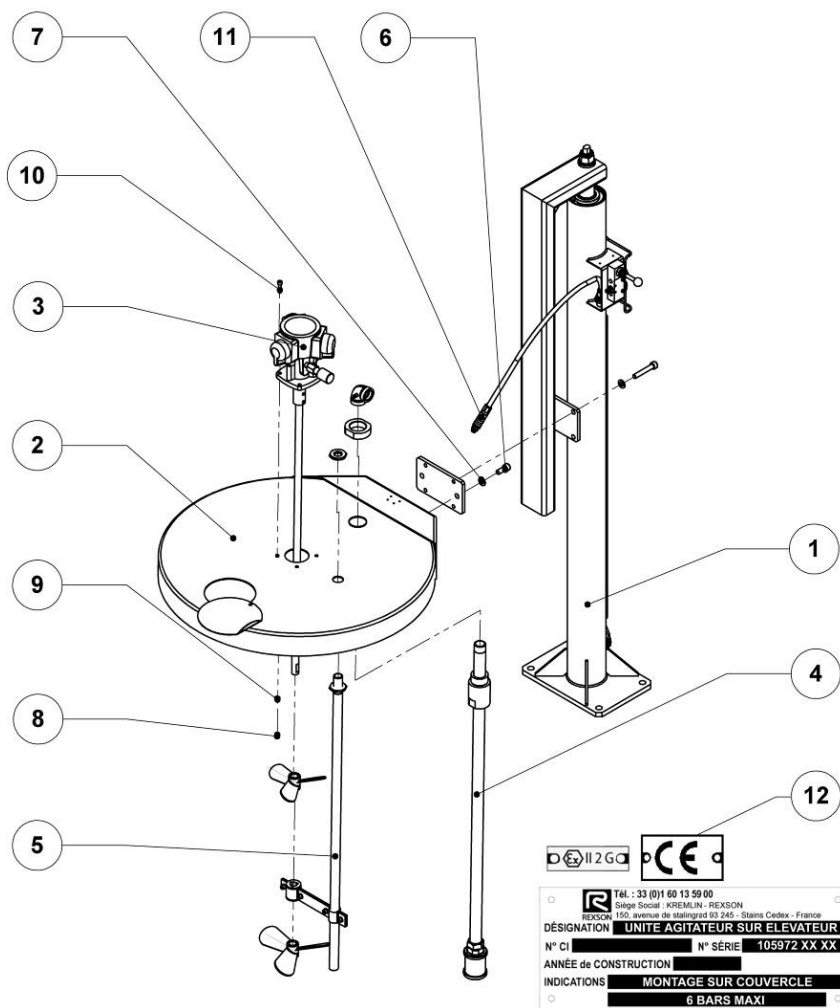
Carry out the disassembly in the reverse order of the assembly sequence (refer to § 7)

11. PART NUMBER OF THE UNITS

Agitation unit on elevator		Agitator version	
	#	Motor version	Propeller version
For drum, model 200 L / 52.8 US gal	105972 23 10	M 1	2 "navy" propellers
	105972 25 10	M 3	2 "navy" propellers
	105972 27 10	M 5	2 "navy" propellers
	105972 29 10	M 3R	2 perforated propellers
	105972 65 10	M 3	2 "sabre propellers"
	105972 67 10	M 5	2 "sabre"propellers
	105972 69 10	M 3R	2 "sabre"propellers
For drum from 20 to 40 L / 5.3 to 10.6 US gal	106985 13 10	M 1	1 "navy" propeller
	106985 15 10	M 3	1 "navy" propeller
	106985 17 10	M 5	1 "navy" propeller
	106985 19 10	M 3R	1 perforated propeller

12. SPARE PARTS' LIST

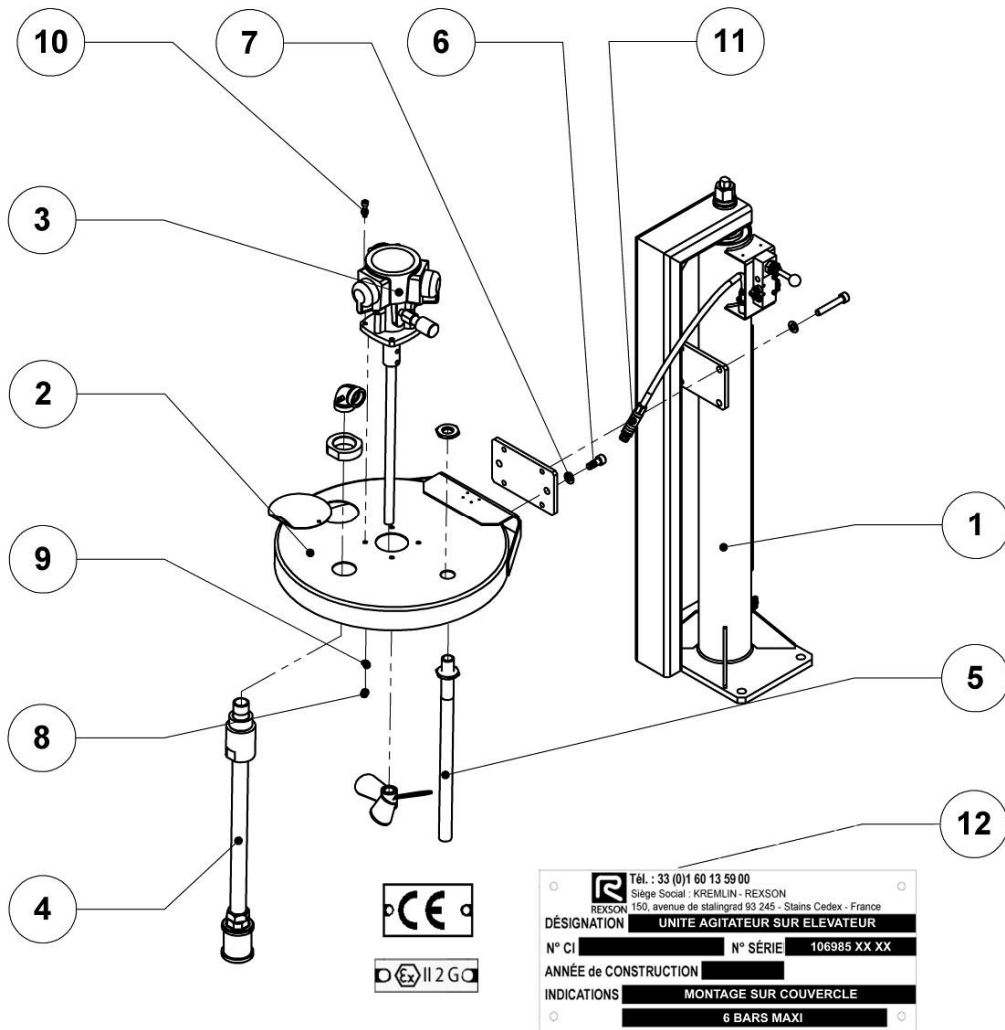
- AGITATION UNIT ON ELEVATOR for drum, model 200 litres / 52.8 US gal : # 105972 xx 10



Ind.	Description	Qty	105972 2310	105972 2510	105972 2710	105972 2910	105972 6510	105972 6710	105972 6910
1	Elevator	1	105972 0110						
2	Cover (st. steel) (Ø 644 mm / 25.4")	1	N S S						
3	Agitator (refer to instruction manual 574.024.112)	1	107059 0703	107047 0703	107048 0703	107128 0704	107047 0705	107048 0705	107128 0705
4	Suction rod for 200L / 52.8 US gal drum (stainless steel)	1	107127 01 01			-	107127 01 01		
-	▪ Strainer	1	211034			-	211034		
5	Return rod for 200 L / 52.8 US gal drum (stainless steel)	1	106595 01 00			-	106595 01 00		
-	Agitator support	1	054.260.599			-	054.260.599		
11	Air supply kit	1	91863						
-	Earth cable	1	901.180.024						

N S S : Denotes parts are not serviceable separately.

■ **AGITATION UNIT ON ELEVATOR for drum from 20 to 40 L / 20 to 10.6 US gal : # 106 985 xx 10**



Ind.	Description	Qty	106985 13 10	106985 15 10	106985 17 10	106985 19 10
1	Elevator	1	106985 0110			106985 0110
2	Cover (St. steel) (Ø 400 mm / 15.7")	1	N S S			N S S
3	Agitator (refer to instruction manual 574.024.112)	1	107059 0101	107047 0101	107048 0101	107128 0104
4	Suction rod	1	107127 0201			-
-	▪ Strainer	1	211034			-
5	Return rod	1	106595 0200			-
11	Air supply kit	1	91863			91863
-	Earth cable	1	901.180.024			901.180.024

N S S : Denotes parts are not serviceable separately.

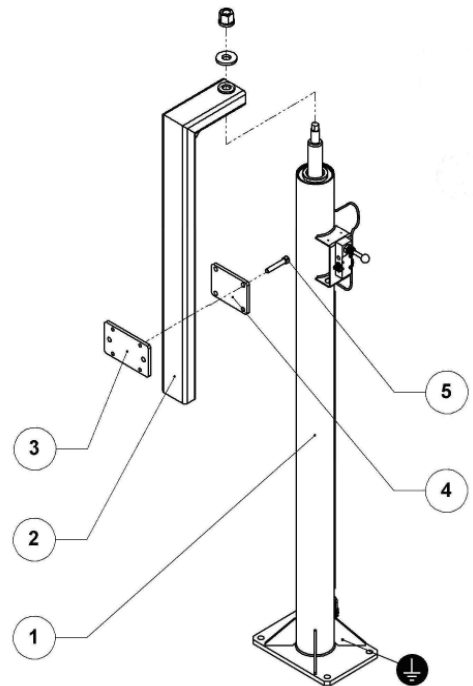
COVERS FOR ASSEMBLY ON ELEVATOR WITH HATCH ONLY

Description	#
Cover for drum, model 200 L / 52.8 US gal (Ø 644 mm / 25.3")	106996 03 00
Cover for drum from 20 to 40 L / 5.3 to 10.6 US gal (Ø 400 mm / 15.7")	106985 03 00

SINGLE RAM ELEVATOR

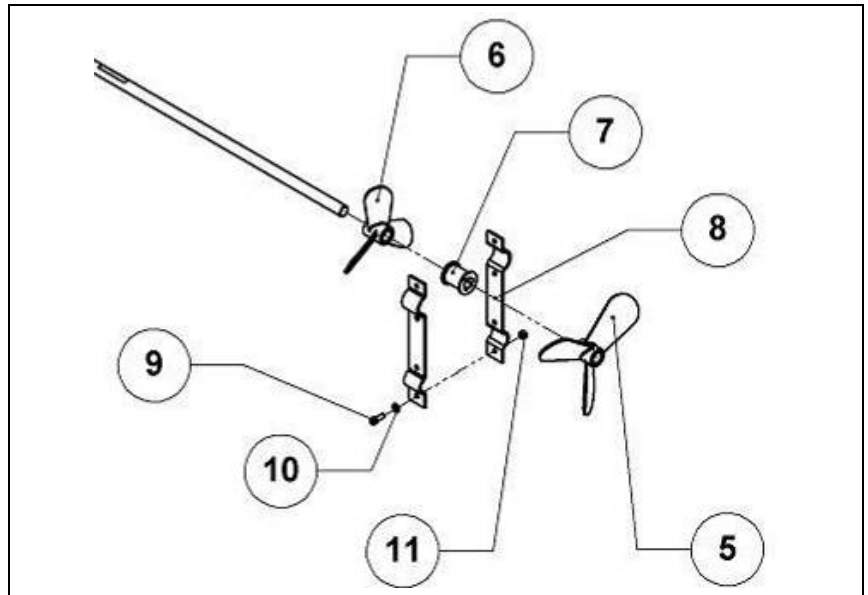
For drum, model 200 I / 52.8 US gal
(stroke : 950 mm / 37.4")
⇒ # 105 972 01 10

For drum from 20 to 40 I / 5.3 to 10.6 US gal
(stroke : 475 mm / 18.7")
⇒ # 106 985 01 10







Ind.	Description	#	Qty
1	Single ram elevator	NSS	1
* -	▪ Package of spare seals	106 061	1
-	▪ Pneumatic distributor, model 5/3	91 588	1
2	Arm	211 242	1
3	Counter plate	211 244	1
4	Plate	211 243	1
5	Screw	88 754	4

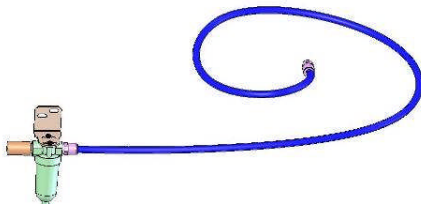

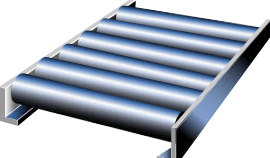
Agitator support
 (for unit,
 model 200 L / 52.8 US gal)
 # 054.260.599



Ind.	Description	Qty	Material	#
7	Ring	1	PE	210930
8	Flange	2	Stainless steel	054.260.598
9	Screw, model CHC M 6x16	4	Stainless steel	88512
10	Washer, model M 6	4	Stainless steel	88548
11	Nut, model HM 6	4	Stainless steel	954.010.016

ACCESSORIES

Air lubricator	Air filter	Lubricator support	Filter support
			
1/4 " → # 91554 3/4 " → # 91535	1/4 " → # 91553 3/4 " → # 91534	1/4 " → # 91548 3/4 " → # 91546	# 91547

Exhaust assembly with oil recovery (hose length : 1 m / 39.4")	Floor plate	Rolling table
		
# 107159	# 210 100	# 104 668