OPERATING AND MAINTENANCE INSTRUCTION

PEGASO

LARIUS

ENGLISH

CE

English

APPARATUS FOR SPRAYING INTERIOR FINISHING LAYERS

				
Read this operator's manual carefully before using the equipment. An improper use of this machine can cause injuries to people or things.	It indicates an accident risk or serious damage to equipment if this warning is not followed.	It indicates a fire or explosion risk if this warning is not followed.	It is obligatory to wear suitable clothing as gloves, goggles and face shield.	It indicates important recommendations about disposal andrecycling process of products in accordance with the environmental regulations.

WE ADVISE THE USE OF THIS EQUIPMENT ONLY BY PROFESSIONAL OPERATORS.
ONLY USE THIS MACHINE FOR USAGE SPECIFICALLY MENTIONED IN THIS MANUAL.

Thank you for choosing a **LARIUS S.R.L.** product.
As well as the product purchased,
you will receive a range of support services
enabling you to achieve the results desired,
quickly and professionally.

A WORKING PRINCIPLE

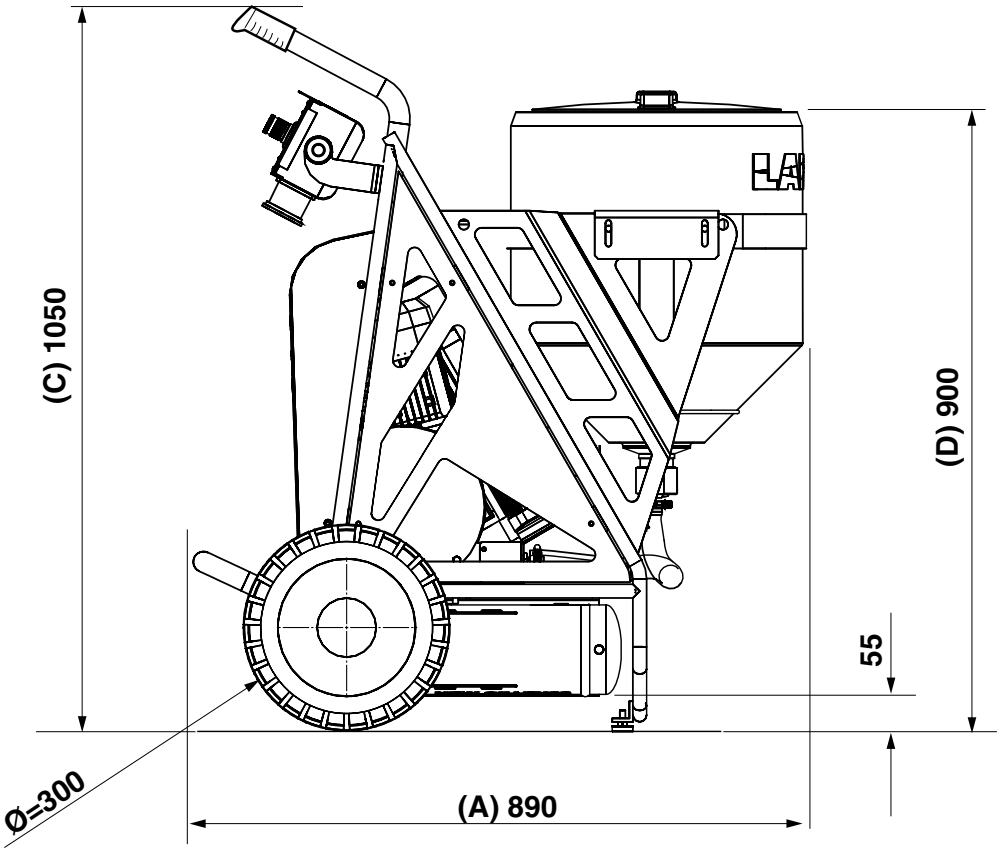
The **PEGASO** apparatus is an electric pump, used for spraying wall plaster or synthetic materials for covering indoor and outdoor walls.
The apparatus is equipped with a 50 litre tank, easy to fill and funnel-shaped, which makes it easy for the material to fall into the peristaltic pump.
The pump, easy to maintain, allows for a regular and constant flow of the product.

On the end of the feed pipe there is a maximum pressure valve, in order to eliminate choking or occlusions that can damage the pipe.
When the operator squeezes the trigger on the gun, the flow and pressure of the pump start, creating a soft flow of material. When the trigger is released, the flow stops. The supply of vaporisation air only occurs if the trigger is squeezed.

FOR WATER-BASED MATERIALS ONLY

B TECHNICAL DATA

POWER SUPPLY standard	230 V - 50 Hz
to request	110 V - 60 Hz
POWER CABLE	mt 5 - c 3x2,5
MAXIMUM WORKING FLUID PRESSURE	MAX. 10 bar
MAXIMUM WORKING AIR PRESSURE	MAX. 7 bar
COMPRESSOR SPECIFICATIONS	
Air delivery	283 l/min
Power	1,5 kw
PUMP SPECIFICATIONS	
Flow rate litres/hours	144
Feed hose (lLength depending on the material)	MIN. 7mt - MAX. 30 mt
Power	0,18 kw
PRESSURE SWITCH 24 Vdc	4,00 mA - 0-20 bar
HOPPER CAPACITY	50 litres
MAXIMUM DELIVER WITH MATERIAL	7 l/minute
WETTED PARTS	PVC, anodized aluminum - inox
SOUND PRESSURE LEVEL	MAX. 70 db (A)
DIMENSIONS	980
A Lenght	730
B Width	1050
C Total height	900
D Product load height	
POIDS with hoses and gun	110 Kg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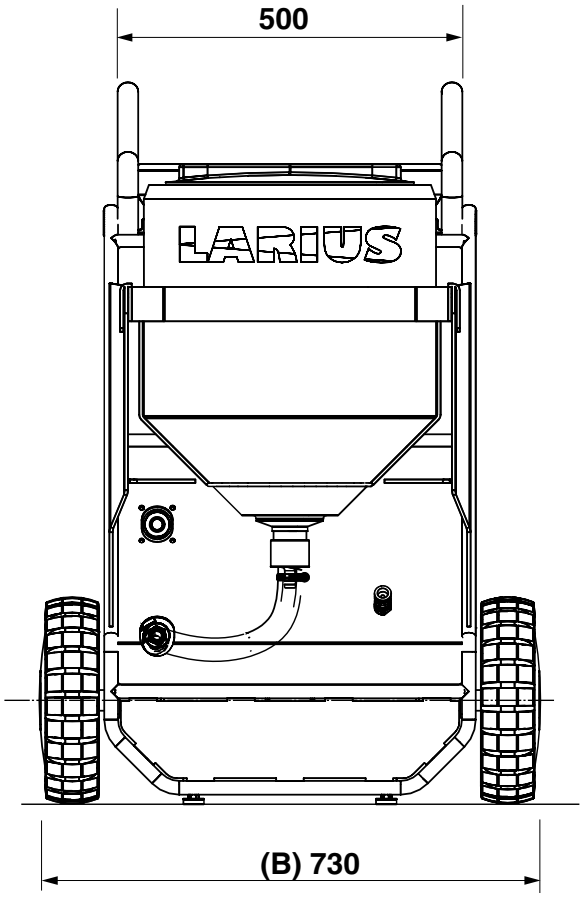
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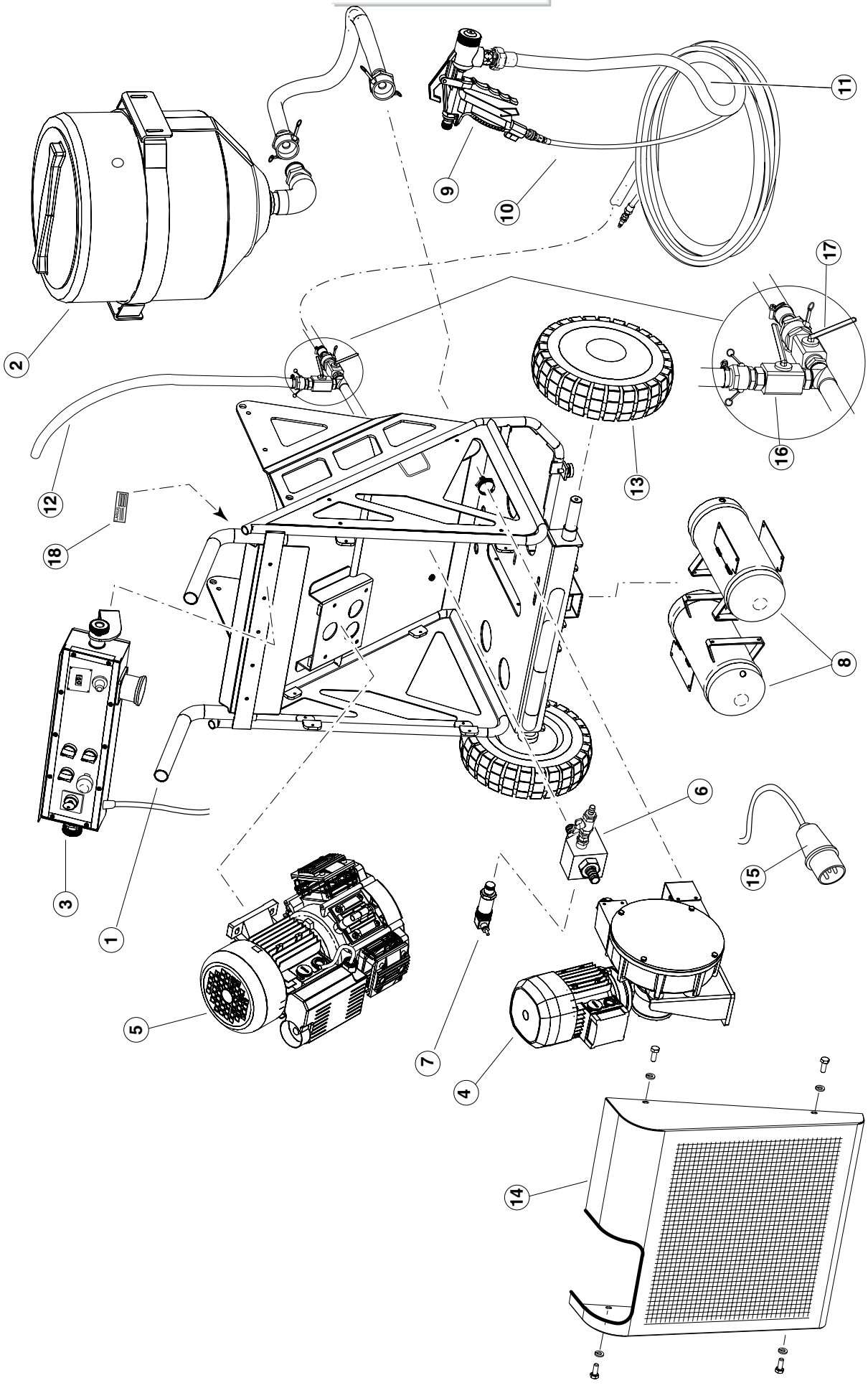
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C COMPONENTS DESCRIPTION

POS.	*COMPONENTS DESCRIPTION*	SEE TABLE
1	Frame	TABLE 01 - page 27
2	Tank 50 L	TABLE 02 - page 28
3	Group of control	TABLE 03 - page 29
4	Pump	TABLE 06 - page 32
5	Compressor	TABLE 04 - page 30
6	Support pressure	TABLE 06 - page 32
7	Pressure sensor	TABLE 06 - page 32
8	Reservoir air	TABLE 08 - page 35
9	High pressure Gun	TABLES 09/10 - pages 36-37
10	Air hose	-
11	Air material	-
12	Recirculation tube	TABLE 06 - page 32
13	Wheel	TABLE 01 - page 27
14	Cover	TABLE 01 - page 27
15	Power Cord	TABLE 01 - page 27
16	Re-circulation tap	TABLE 06 - page 32
17	Material passage tap	TABLE 06 - page 32

18 Machine nameplate and name of the manufacturer

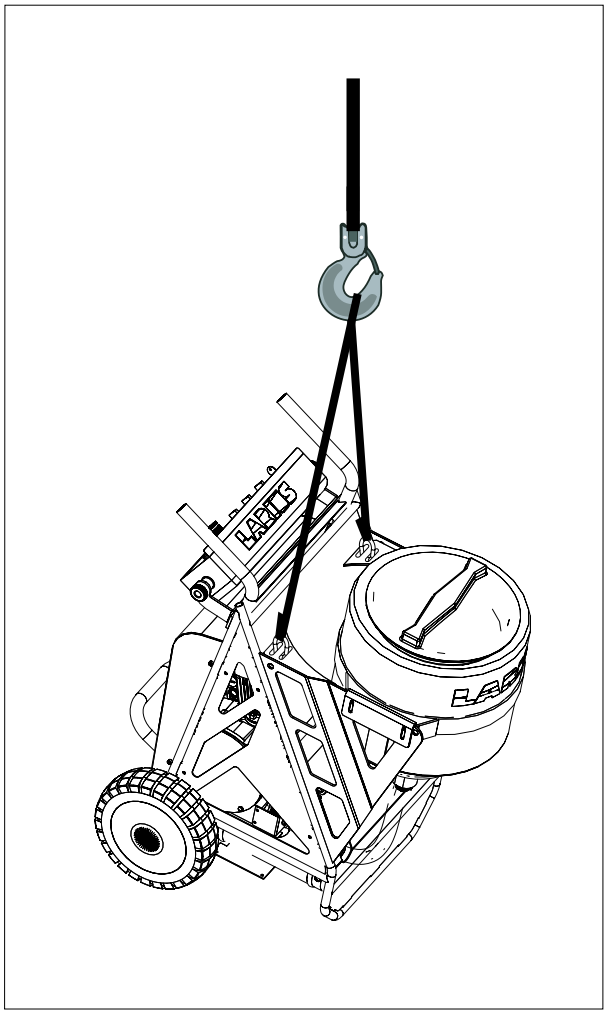
PLEASE NOTE: To be sure about the perfect working of all mechanical parts, use only original spare parts. In case of order of spare parts or for any information about orders it is always necessary to specify:

- Type of models
- Serial number
- Production year

☞ **PLEASE NOTE :**
All red coloured component support assembled groups that are easy to disassemble.

D TRANSPORT AND UNPACKING

- The packed parts should be handled as indicated in the symbols and markings on the outside of the packing.
- Before installing the equipment, ensure that the area to be used is large enough for such purposes, is properly lit and has a clean, smooth floor surface.
- The user is responsible for the operations of unloading and handling and should use the maximum care so as not to damage the individual parts or injure anyone.
  To perform the unloading operation, use only qualified and trained personnel (truck and crane operators, etc.) and also suitable hoisting equipment for the weight of the installation or its parts.
  Follow carefully all the safety rules.
  The personnel must be equipped with the necessary safety clothing.
- Ringbolt attachments have been installed for lifting the machine. Lift the machine as indicated in the drawing.



- The manufacturer will not be responsible for the unloading operations and transport to the workplace of the machine.
- Check the packing is undamaged on receipt of the equipment. Unpack the machine and verify if there has been any damage due to transportation.
  In case of damage, call immediately **LARIUS** and the Shipping Agent. All the notices about possible damage or anomalies must arrive timely within 8 days at least from the date of receipt of the plant through Registered Letter to the Shipping Agent and to **LARIUS**.
- The disposal of packaging materials is a customer's competence and must be performed in accordance with the regulations in force in the country where the plant is installed and used. It is nevertheless sound practice to recycle packaging materials in an environment-friendly manner as much as possible.

E SAFETY RULES

- THE EMPLOYER SHALL TRAIN ITS EMPLOYEES ABOUT ALL THOSE RISKS STEMMING FROM ACCIDENTS, ABOUT THE USE OF SAFETY DEVICES FOR THEIR OWN SAFETY AND ABOUT THE GENERAL RULES FOR ACCIDENT PREVENTION IN COMPLIANCE WITH INTERNATIONAL REGULATIONS AND WITH THE LAWS OF THE COUNTRY WHERE THE PLANT IS USED.
- THE BEHAVIOUR OF THE EMPLOYEES SHALL STRICTLY COMPLY WITH THE ACCIDENT PREVENTION AND ALSO ENVIRONMENTAL REGULATIONS IN FORCE IN THE COUNTRY WHERE THE PLANT IS INSTALLED AND USED.

Read carefully and entirely the following instructions before using the product. Please save these instructions in a safe place.

The unauthorised tampering/replacement of one or more parts composing the machine, the use of accessories, tools, expendable materials other than those recommended by the manufacturer can be a danger of accident.
The manufacturer will be relieved from tort and criminal liability.

- KEEP YOUR WORK PLACE CLEAN AND TIDY. DISORDER WHERE YOU ARE WORKING CREATES A POTENTIAL RISK OF ACCIDENTS.
- ALWAYS KEEP PROPER BALANCE AVOIDING UNUSUAL STANCE.

- BEFORE USING THE TOOL, ENSURE THERE ARE NOT DAMAGED PARTS AND THE MACHINE CAN WORK PROPERLY.
- ALWAYS FOLLOW THE INSTRUCTIONS ABOUT SAFETY AND THE REGULATIONS IN FORCE.
- KEEP THOSE WHO ARE NOT RESPONSIBLE FOR THE EQUIPMENT OUT OF THE WORK AREA.
- **NEVER** EXCEED THE MAXIMUM WORKING PRESSURE INDICATED.
- **NEVER** POINT THE SPRAY GUN AT YOURSELVES OR AT OTHER PEOPLE. THE CONTACT WITH THE CASTING CAN CAUSE SERIOUS INJURIES.
- IN CASE OF INJURIES CAUSED BY THE GUN CASTING, SEEK IMMEDIATE MEDICAL ADVICE SPECIFYING THE TYPE OF THE PRODUCT INJECTED. **NEVER** UNDERVALUE A WOUND CAUSED BY THE INJECTION OF A FLUID.
- ALWAYS DISCONNECT THE SUPPLY AND RELEASE THE PRESSURE IN THE CIRCUIT BEFORE PERFORMING ANY CHECK OR PART REPLACEMENT OF THE EQUIPMENT.
- NEVER MODIFY ANY PART IN THE EQUIPMENT. CHECK REGULARLY THE COMPONENTS OF THE SYSTEM. REPLACE THE PARTS DAMAGED OR WORN.
- TIGHTEN AND CHECK ALL THE FITTINGS FOR CONNECTION BETWEEN PUMP, FLEXIBLE HOSE AND SPRAY GUN BEFORE USING THE EQUIPMENT.
- ALWAYS USE THE FLEXIBLE HOSE SUPPLIED WITH STANDARD KIT. THE USE OF ANY ACCESSORIES OR TOOLING OTHER THAN THOSE RECOMMENDED IN THIS MANUAL, MAY CAUSE DAMAGE OR INJURE THE OPERATOR.
- THE FLUID CONTAINED IN THE FLEXIBLE HOSE CAN BE VERY DANGEROUS. HANDLE THE FLEXIBLE HOSE CAREFULLY. DO NOT PULL THE FLEXIBLE HOSE TO MOVE THE EQUIPMENT. NEVER USE A DAMAGED OR A REPAIRED FLEXIBLE HOSE.

The high speed of travel of the product in the hose can create static electricity through discharges and sparks. It is suggested to earth the equipment. The pump is earthed through the earth cable of the supply.
The gun is earthed through the high pressure flexible hose.
All the conductors near the work area must be earthed.

- NEVER SPRAY OVER FLAMMABLE PRODUCTS OR SOLVENTS IN CLOSED PLACES.
- NEVER USE THE TOOLING IN PRESENCE OF POTENTIALLY EXPLOSIVE GAS.

Always check the product is compatible with the materials composing the equipment (pump, spray gun, flexible hose and accessories) with which it can come into contact. Never use paints or solvents containing halogen hydrocarbons (as the methylene chloride).
If these products come into contact with aluminium parts can provoke dangerous chemical reactions with risk of corrosion and explosion.

IF THE PRODUCT TO BE USED IS TOXIC, AVOID INHALATION AND CONTACT BY USING PROTECTION GLOVES, GOGGLES AND PROPER FACE SHIELDS.

TAKE PROPER SAFETY MEASURES FOR THE PROTECTION OF HEARING IN CASE OF WORK NEAR THE PLANT.

Electrical safety precautions

- Check the switch is on the "OFF" position before connecting the cable to the mains.
- Never carry a plugged-in equipment.
- Disconnect the equipment before storing it and before performing any maintenance operation or replacing of accessories.
- Do not carry the equipment neither unplug it by pulling the electric cable. Protect the cable from heat, oil and sharp edges.
- When the tool is used outdoors, use only an extension cable suited for outdoor use and so marked.

Never attempt to tamper with the calibre of instruments.

- Take care when the pumping rod is moving.
  Stop the machine whenever someone is within its vicinity.
- Repairs of the electrical equipment should only be carried out by skilled personnel, otherwise considerabledanger to the user may result.

F SETTING-UP

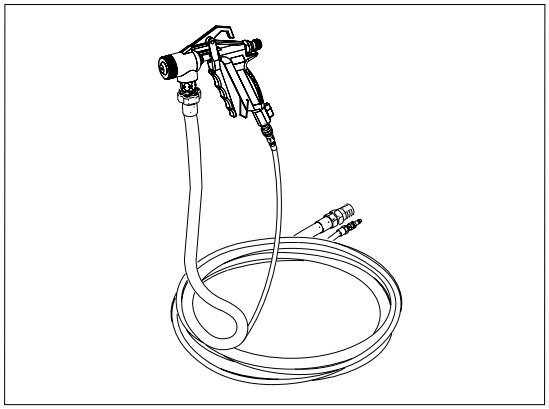
CONNECTION OF THE FLEXIBLE HOSE TO THE GUN

- Connect the pressure flexible hose to the pump and the gun tightening the metal clamps.

NEVER use sealants on fittings threads.

The type of materiel you are spraying will determine the maximum lenght of hoseyou can use. If you are not achieving a satisfactory spray pattern or coverage, try using a shirter lenght of hose.

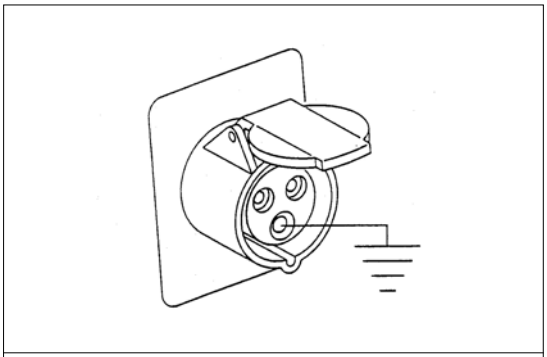
- It is recommended to use the hose provided with the standard kit. **NEVER** use a damaged or a repaired flexible hose.

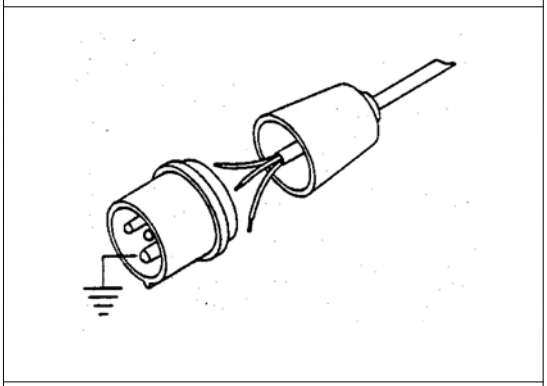


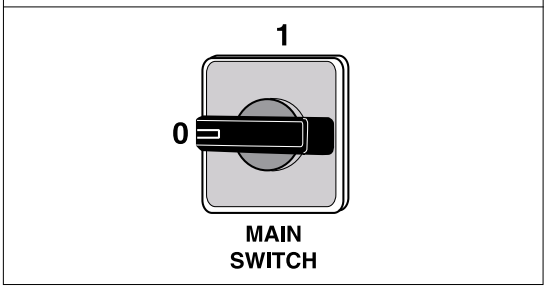
CHECK ON POWER SUPPLY

- Check the plant is earthed.
- Check the mains voltage corresponds to the equipment's rating.
- The supply cable is provided without plug. Use a plug which guarantees the plant earthing. Only a technician or a skilled person should perform the connection of the plug to the electric cable.

Should anyone use an extension cable between the tooling and the socket, it must have the same characteristics as the cable supplied (minimum diameter of the wire 2.5 mm^2) with a maximum length of 50 mt. Higher lengths and lower diameters can provoke excessive voltage falls and also an anomalous working of the equipment.



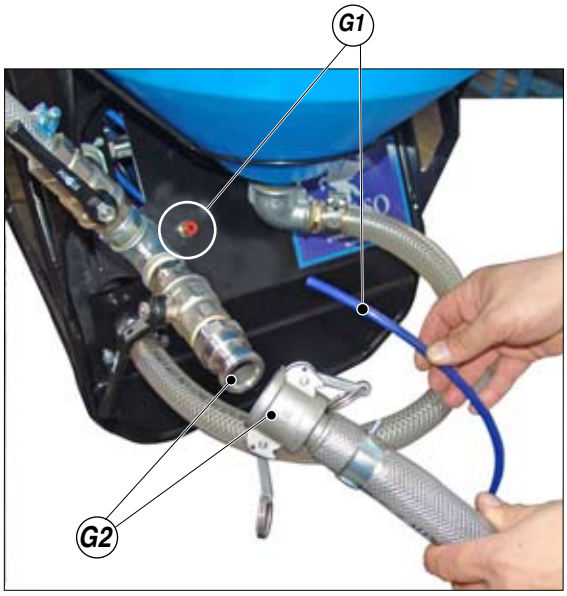




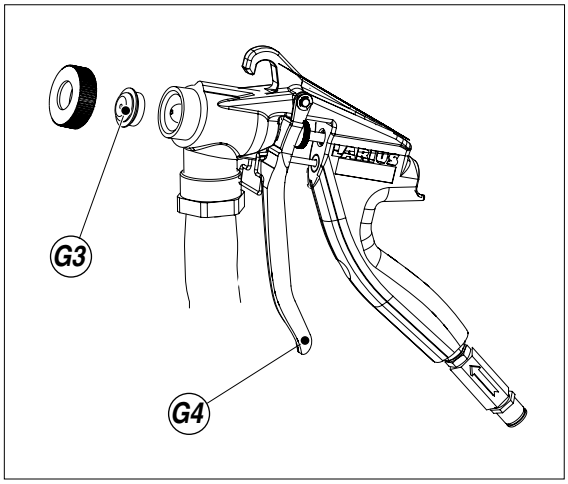
☞ **PLEASE NOTE** :
Check the ON/OFF switch is on the "OFF" position (0) before connecting the cable to the mains.

G SETUP

- Connect one end of air hose to sprayer air outlet quick connect and to gun air inlet quick connect (**G1**).

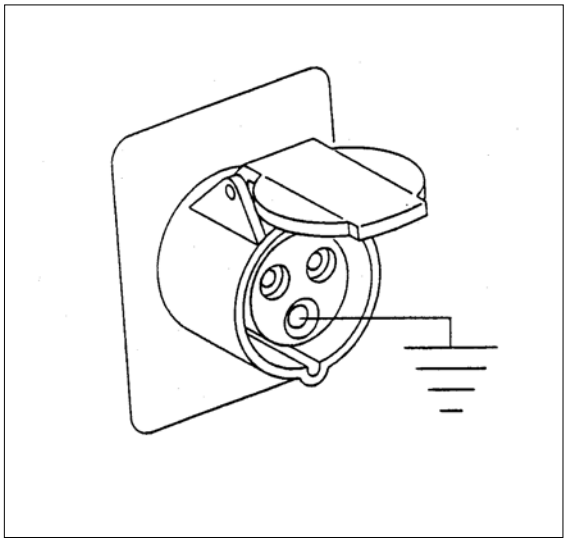


- Connect one end of material hose to material outlet and the other end to gun material inlet (**G2**). Firmly tighten the metal clamps.



- Install spray nozzle (**G3**). See selection chart page 12. Pulling trigger when installing nozzles, eases assembly (**G4**).

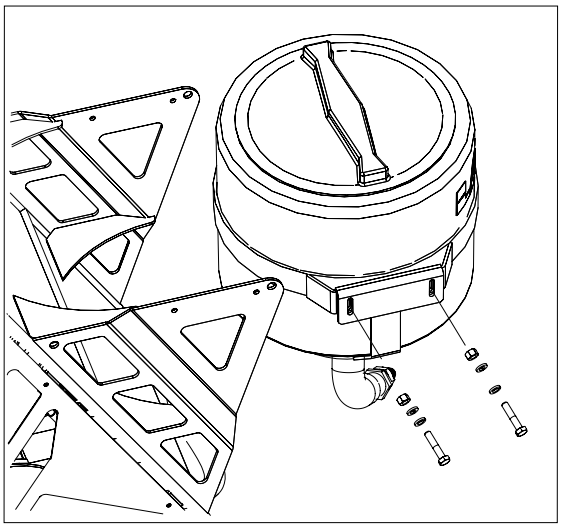
- Plug power cord in to properly grounded outlet.



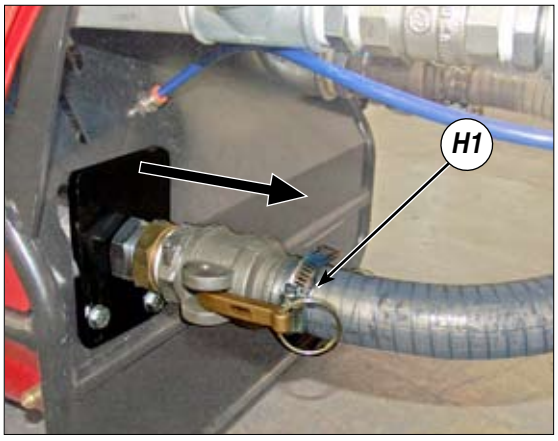
☞ **PLEASE NOTE :**
Check the ON/OFF switch is on the "OFF" position (0)before connecting the cable to the mains.

H POSITION AND INSTALLATION OF THE TANK

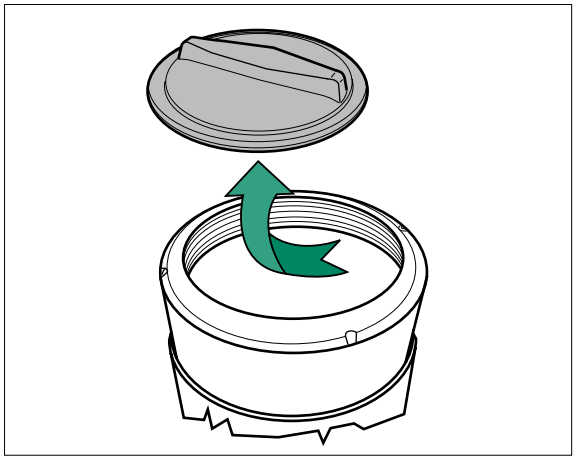
- The 50 litre tank can be disassembled and easily cleaned.
- Unscrew the bolts and insert/disengage the basket supporting the tank from the machine body, or lift the tank to remove it from its support.



- Connect / disconnect the suction hose by opening the rapid coupling (H1) that permits the operations of filling / emptying the tank.



- The tank is equipped with a cover that can easily be removed in order make inspection and cleaning operations easier.



I CONTROLS

1) Sprayer starter switch
- In the “0” position the machine is not powered
- In the “1” position the machine is powered

2) Emergency cut-out, making it possible to disconnect power from the machine. Press in case of emergency.

3) Pump starter switch.
- In the “OFF” position the pump is off
- In the “ON” position the pump is on

4) Compressor starter switch.
- In the “OFF” position the compressor is off
- In the “ON” position the compressor is on

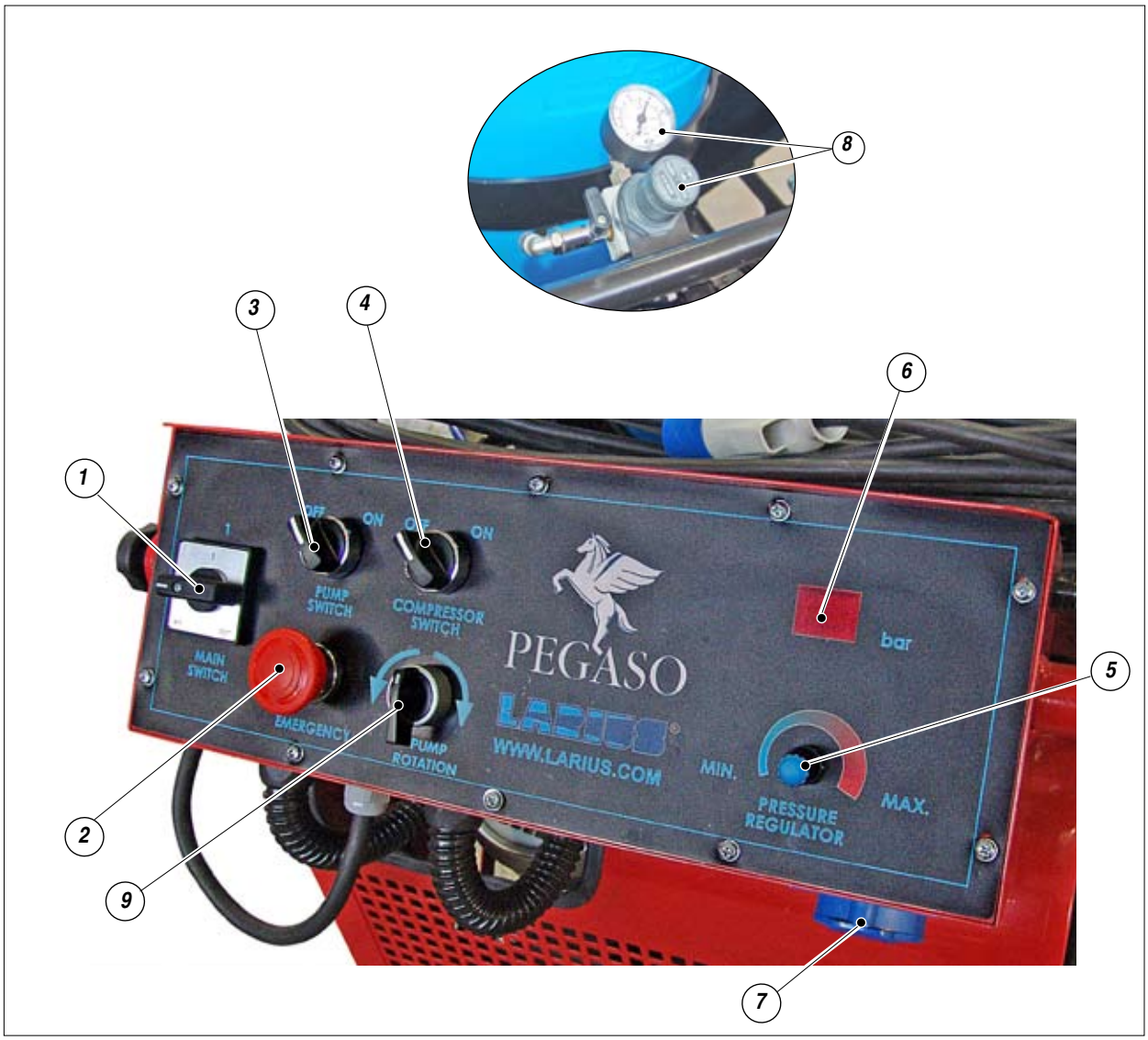
5) Potentiometer, rotate clockwise to increase the flow of product.

6) Display, pump pressure reading LED.

7) Power supply socket (220 V) for attaching supplementary apparatus (such as a drill).

8) Regulator with pressure gauge for adjusting the air flow.

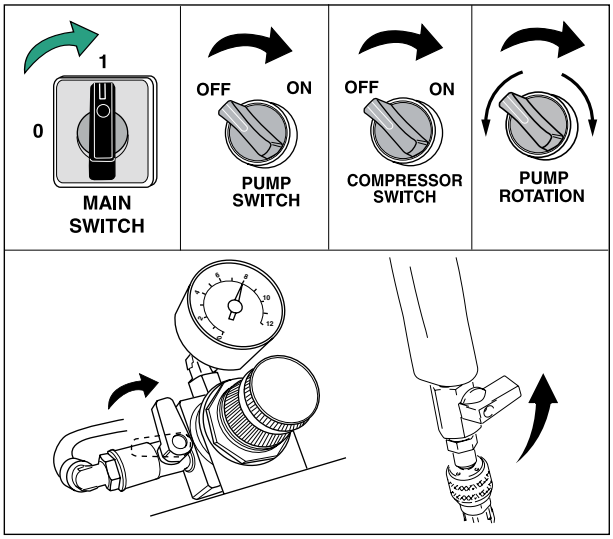
9) Rotation control selector switch for the peristaltic pump. Three-position selector with return to the centre from left and fixed to the right.
- Turn counter-clockwise and hold in position to invert pump function;
- Turn clockwise (fixed position) for normal functioning mode of the pump;
- In the central position, the pump remains inactive.



L STARTUP

STARTING THE SYSTEM MAIN METHOD WITH AIR FLOW

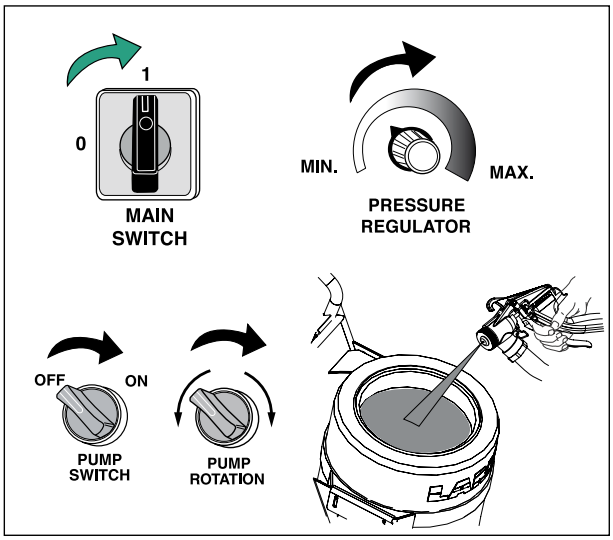
- Turn sprayer main power ON.
- Start the pump.
- Turn the “Pump Rotation” selector clockwise.
- Start the compressor.
- Close the recycle valve (L3).
- Open the air valve (**L1**) on the regulator and on the gun (**L2**).
- Aim gun hopper and slightly press gun riger. This automatically delivers material pressure and flow.



ALTERNATIVE METHOD WITHOUT AIR FLOW

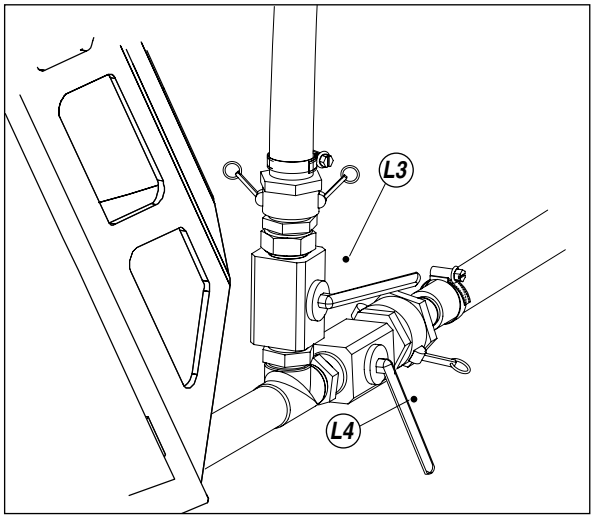
- Turn sprayer main power ON.
- Reduce fluid flow pressure to the minimum (turn counterclockwise the pressure control knob).
- Insert the pump switch.
- Turn the “Pump Rotation” selector clockwise.
- Close the recycle valve (L3).
  Aim gun into hopper and squeeze gun riger.

Excessive or prolonged use of Prime Switch can causa to back up into gun air passages, causing blockage and/or gun air valve failure.



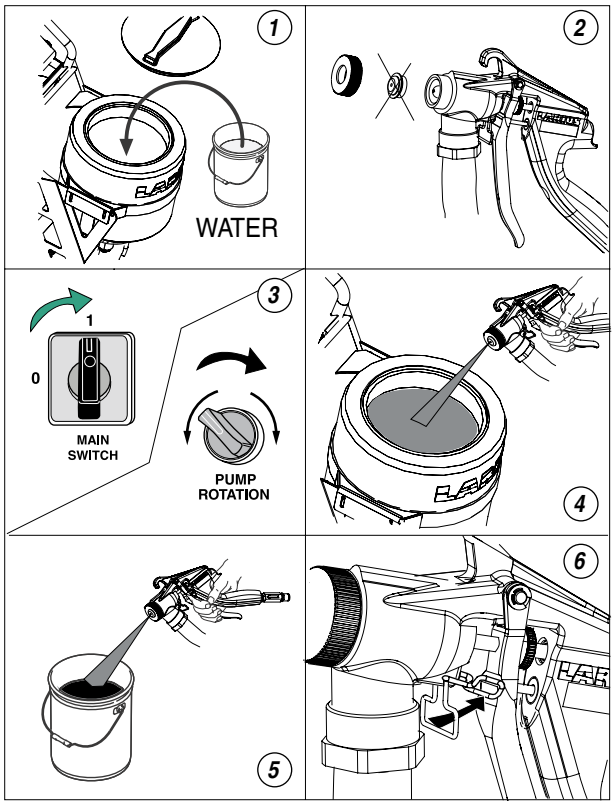
ALTERNATIVE METHOD WITH RE-CIRCULATION

- Turn sprayer main power ON.
- Turn fluid flow regulator up as necessary.
- Open the recirculating valve (**L3**).
- Close the material passage valve (**L4**) on the gun.
- Turn the pump starter switch to “ON”.
- Turn the “Pump Rotation” selector clockwise.
- Wait for the material to start coming out of the re-circulation pipe.
- Close the recirculating valve (turn anticlockwise the knob till the complete closing).
- Open the valve (**L4**).
- Aim gun into hopper and squeeze gun riger.



M WASHING OF THE NEW EQUIPMENT

- The equipment has already been adjusted at our factory with light mineral oil left inside the pumping group as protection. Therefore, wash with diluent before sucking the product.
- Pour 4 litres of clean water into hopper (**1**).
- Ensure the gun is without nozzle (**2**).
- Turn the sprayer on, adjust the air pressure (**3**).
- Turn the "Pump Rotation" selector clockwise.
- Point the gun into the tank keeping and keep pressed the trigger lever (*so as to drain the oil inside*) till a clean solvent comes out. Now, release the lever (**4**).
- Trigger gun into waste pail until hopper no longer contains water and all water is removed from hose and pump system (**5**).
- Insert the gun trigger lock and assemble the nozzle (**6**).

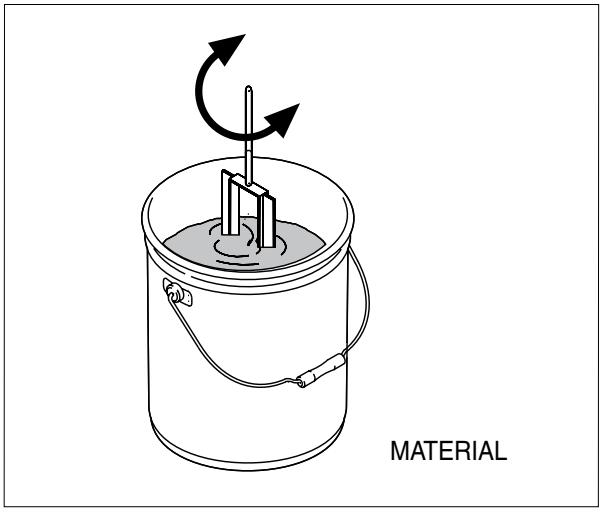


NOTE: for a faster washing cycle, connect a hose that is connected to the water mains to the hose adaptor. (as illustrated on p. 23). Turn the pump on and let it run first in one direction and then the other, then completely discharge the water using the spray gun or the recycle hose.

N MIXING MATERIAL

- Make sure the product is suitable to be used with a spray gun.
- Mix material in a separate container
- Agitate to smooth, lump-free consistency.

Make sure the product to be used is compatible with the materials employed for manufacturing the equipment. Because of that, please contact the supplier of the product.



O STARTING THE SPRAYING OPERATIONS

- Use the tooling after performing all the **SETTING UP** operations above described.
- Fill the tank with suitably prepared material.
- Install the nozzle depending on the material you wish to use. See the nozzle selection table.

If material gets in needle or gun air passages, flush with water immediately.

Inspect material hose for kinks which could restrict fluid flow.

- Start the system.
- Trigger gun into a pail. When material appears at nozzle, move gun to hopper and circulate until there is asolid stream of material.
- Carry out the adjustments described on page 13 in order to obtain the desired results.

NOZZLE SELECTION TABLE

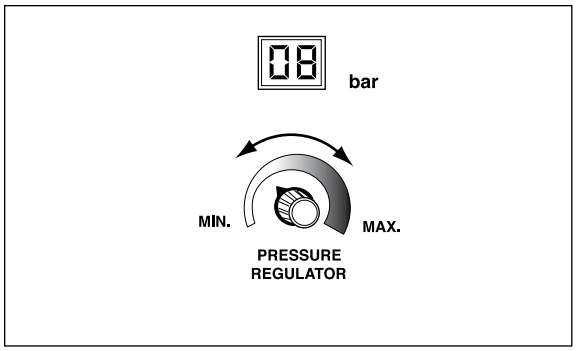
Application	Nozzle No.[2]	Air Volume[1]
• **Fog**	3-4 mm	high
• **Simulates Acoustic**	4 mm	medium to high
	6 mm	
	8-10 mm	
• **Orange Peel**	3-4 mm	medium to high
	4-8 mm	
• **Splatter Coat**	6-8 mm	low - medium
	6-10 mm	
• **Knock-down**	8-12 mm	low
• **Elastomers**	8-12 mm	high**
• **Plastics**	8-10 mm	high*
• **EIFS**	8-12 mm	high**
• **Stucco**	10-12 mm	high**

1 Control air volume with gun air flow valve.
2 For more material volume, try a larger-orifice tip.
* Some materiales may required the addition of external air to improve productione rate.

P REGOLATIONS

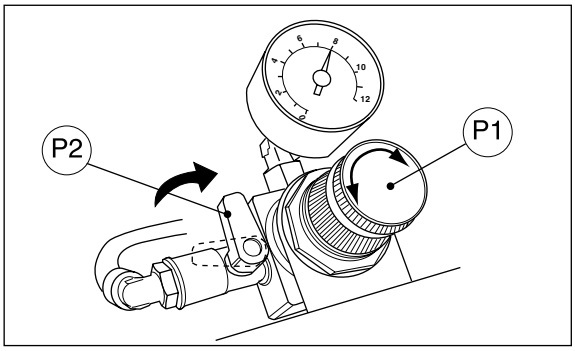
FLOW ADJUSTMENT

- The flow of material must be adjusted at the sprayer using the fluid flow regulator handle and the value is shown on the display.



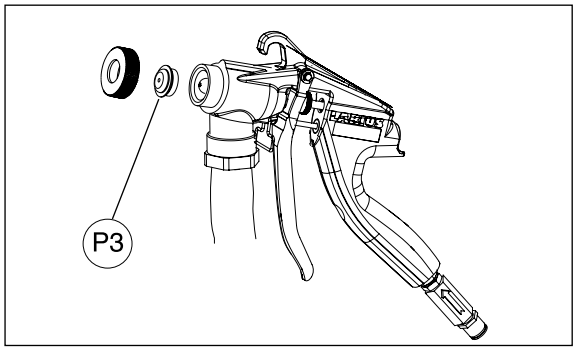
ADJUSTING THE AIR

- In order to decrease the air flow, turn the regulator anticlockwise (**P1**).
- In order to increase the air flow, turn the regulator clockwise (**P1**).
- Air passage opening and closing tap (**P2**).



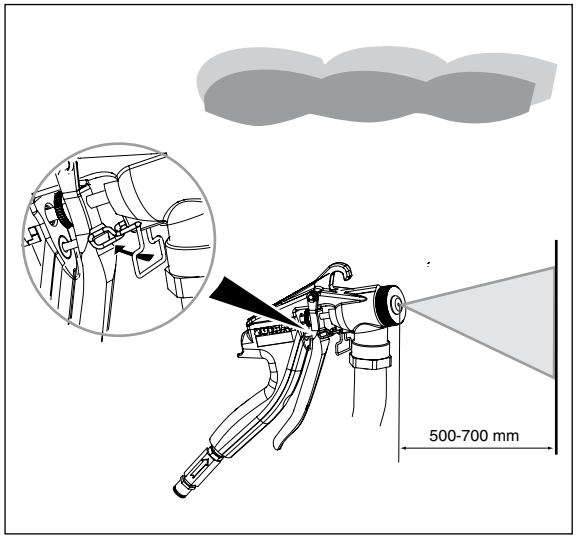
NOZZLE SELECTION

- To select correct nozzle for your applications, consider size of aggregate in material and coarseness of spray pattern. Remember the larger the nozzle, the larger the pattern (**P3**).



MATERIAL FLOW ADJUSTMENT

- Test spray pattern on card-board. Hold gun 18 to 30 in. (500 to 700 mm) from surface. Use this spray distance for most applications.
- Always proceed with regular strokes and circular movements, overlap the strokes by 50%.
- Check the evenness of the material often and dilute with water if necessary in order to maintain the suitable level of evenness.
- Material flow should be adjusted on the sprayer using the Fluid Flow Regulator knob.
- Engage trigger lock to hold trigger open and reduce fatigue.



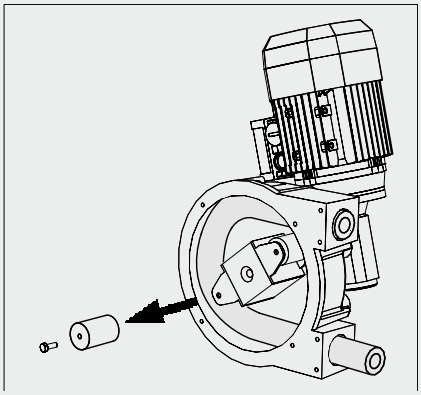
Q CLEANING UP AFTER WORK

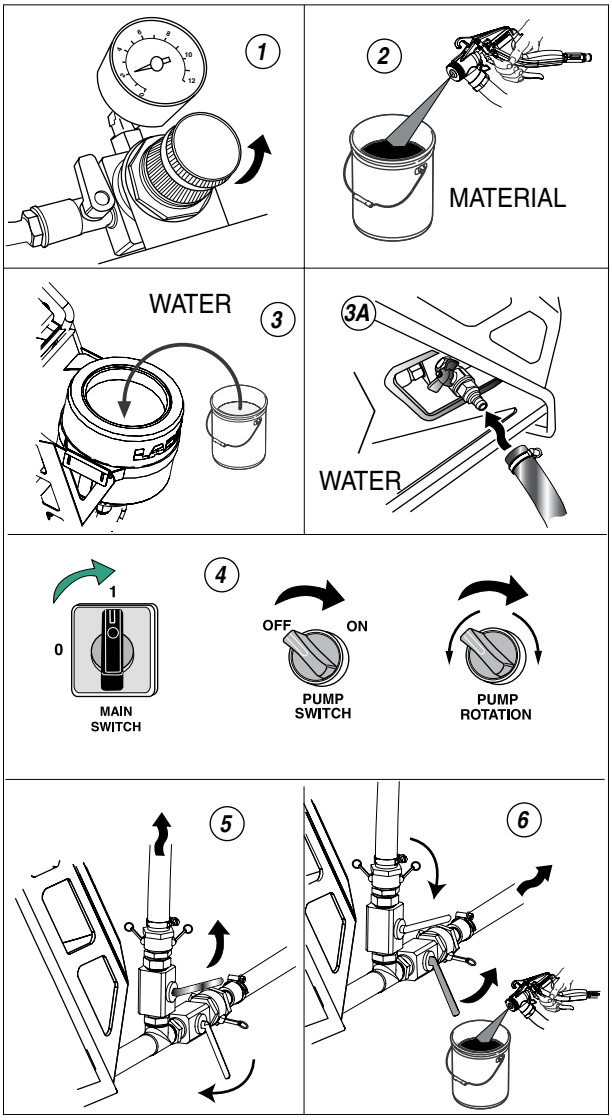
- Reduce pressure to the minimum (***turn counter-clockwise the pressure control knob***) (**1**).
- Empty remaining material into bucket until most of texture material is out of hopper (**2**).
- Fill the tank with clean water (3), or connect a flexible hose which is connected to the water mains onto the hose adaptor (3A).
- Turn on the pump (4), turn the "Pump Rotation" selector clockwise, open the tap of the recycle valve, close the product flow tap and make sure that the water is recycling completely from the return pipe (5).
- At this point, close the recycle valve (6) and open the product flow tap. Point the spray gun into the receptacle used to collect the product and hold the trigger down to expel any remaining product until clean water sprays out.

WARNING:
Carry out the re-circulation operation repeatedly until only clean water comes out of the gun.

- In case of long storage, we recommend you to suck and to leave light mineral oil inside the pumping group and the flexible hose.
- Remove the nozzle from the pistol and was it accurately.

PLEASE NOTE:
In the case of prolonged periods of disuse, it is best to remove a roller from the rotor group in the peristaltic pump and leave the other in a position that does not squash the hose. This operation serves the purpose of maintaining the characteristics of the hose unaltered.





Follow the washing procedure before using again the equipment.

If water freezes in sprayer, damage may occur. In cold weather store sprayer here it will not freeze.

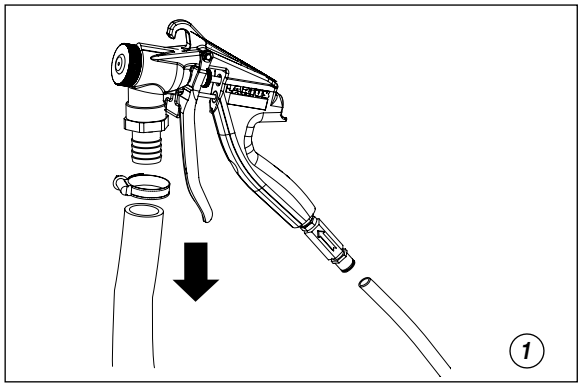
During the washing operations, leave the air tap slightly open in order to keep the air channel in the gun clean.

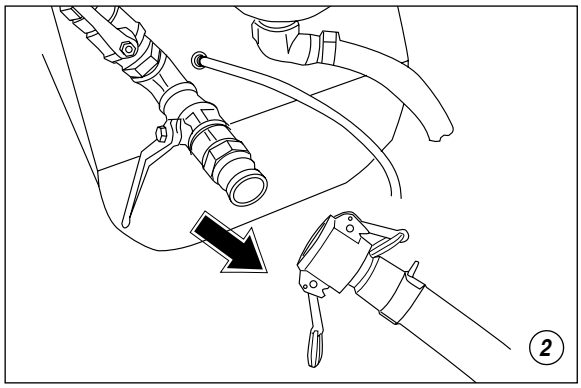
CLEANING THE MATERIAL PASSAGE HOSE

☞ **PLEASE NOTE :**
Suggested before storing the sprayer or when changing the material to be sprayed.

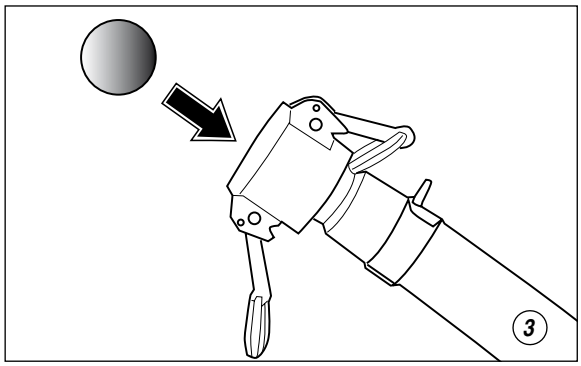
1) Disconnect the material feed hose and the air feed hose from the gun;

2) Disconnect the flexible material passage hose from the sprayer;



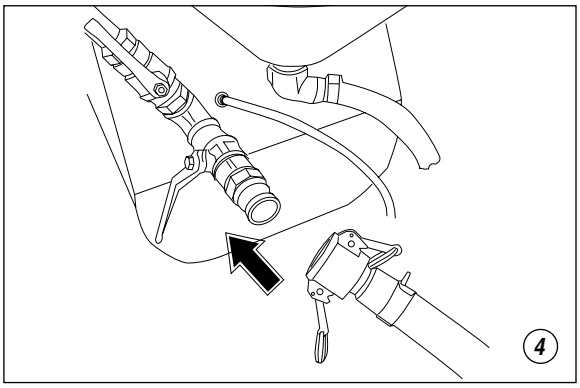


3) Insert the sponge sphere into the material hose;



4) Reconnect the hose to the sprayer;

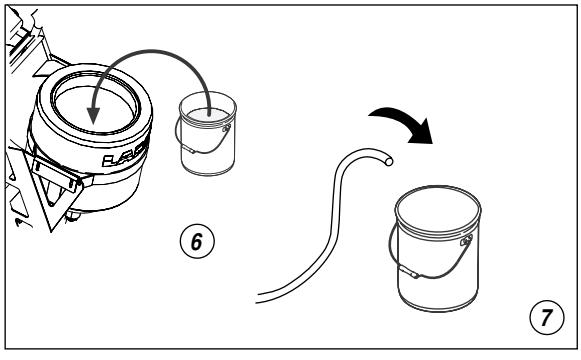
5) Close the re-circulation valve;



6) Pour clean water in the tank and position the end of the hose in a bucket;

7) Start the sprayer and turn the pump on, let the water circulate until the sphere comes out of the hose;

8) Retrieve the sponge sphere and wash it with clean water, then return it to the designated toolbox.



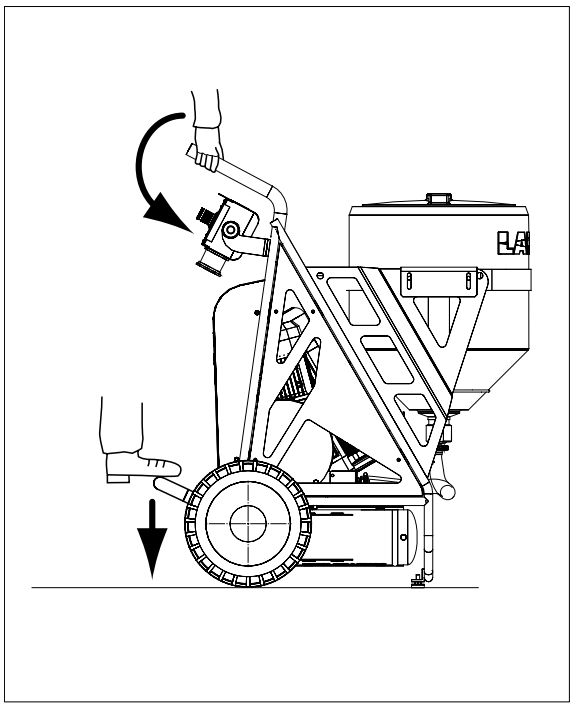
R PROCEDURE OF DECOMPRESSION

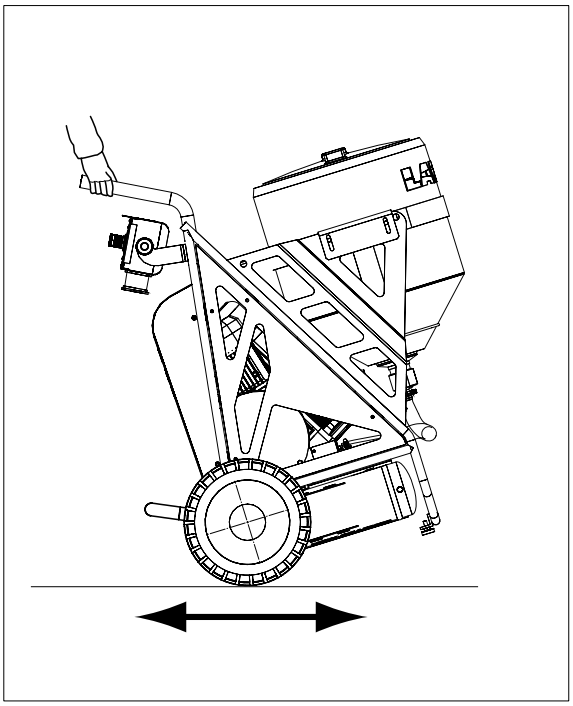
- After having carried out all the operations described in the chapter concerning cleaning up after work, make sure that the system is not pressurised.
- Squeeze the trigger and wait for all the material to have come out.

If you suspect that there may be residual pressure in the hoses due to material clogging, loosen the metal hose clamps very slowly until you feel a decrease in pressure owing to the expulsion of the material.

S MOVING THE SPRAYER

- To move the sprayer backwards or forwards it is necessary to tilt it slightly. This is done by lightly pushing on the handles with your hands and simultaneously pushing downwards with one of your feet on the footplate.





T ROUTINE MAINTENANCE

- To keep sprayer in good operating condition, always clean it thoroughly and prepare it properly for storage.

The air hose fitting on sprayer can get hot! Allow sprayer to cool down 5 minutes before removing air hose.

- Before removing the flexible material passage hose, release the pressure.

MAINTENANCE PROGRAMME

	Daily	After ever use
• **Flexible air and material hoses**	• Checking for wear or breaks	• Drain the water
• **Air and material hose connections**		• We suggest adding a few drops of light mineral oil • Inspect for signs of wear
• **Gun**	• Clean and wash internal parts	• Add drops of light oil underneath the trigger
• **Nozzle gun**	• Wash accurately	• We suggest adding a few drops of light mineral oil
• **Pump**	• Wash the internal hose	• Check the product passage hose to see if it is worn or damaged (to replace it, see next page).
• **Compressor**	• No maintenance required	• Clean
• **Support pressure**		• Clean the sensor pawl of any encrustations. Replace if worn or broken (to clean or replace see page 22).
• **Flexible product hose**		• Suggested after use and when changing material, make the sponge sphere pass through the hose (see procedure on page 17).

U PROCEDURE FOR REPLACING THE HOSE

WARNING
Before starting to replace the hose, accurately clean the machine.

REMOVAL

1) Remove the side casing (**photo 1**).

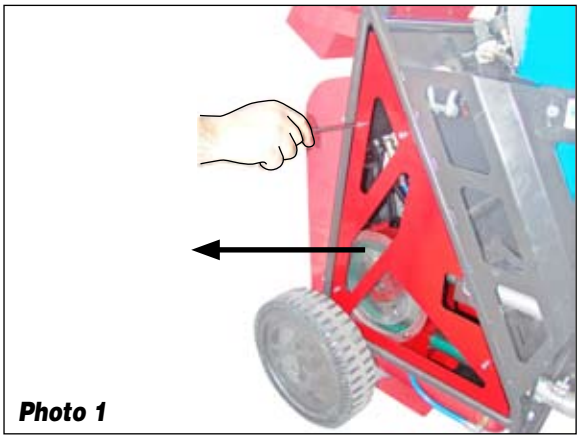


Photo 1

2) Loosen the upper metal clamp (**A**) and lean it on the connection nut, as shown in the photo (**photo 2**).

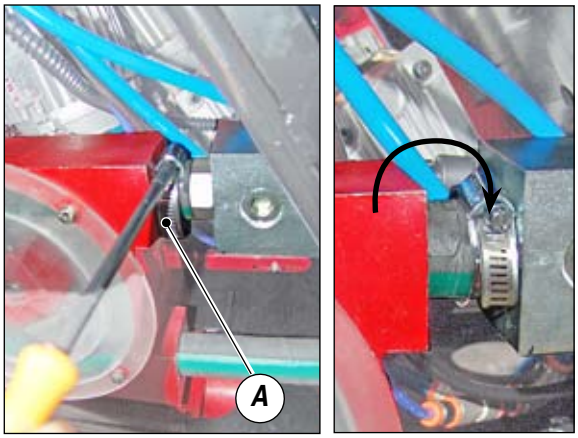


Photo 2

3) Loosen the lower metal clamp (**B**) (**photo 3**).

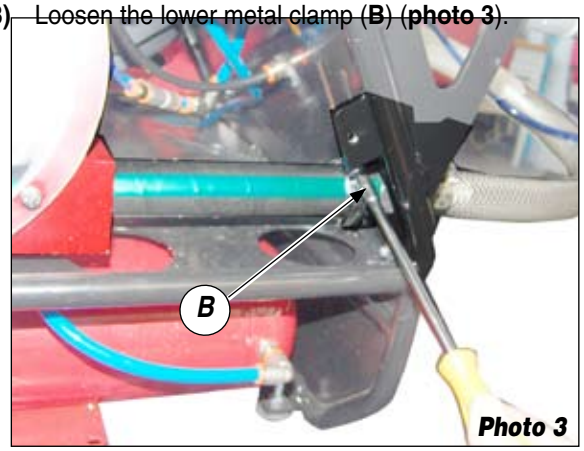


Photo 3

4) Remove the front plate (**C**), remove the two bolts (**D**) (**photo 4**).

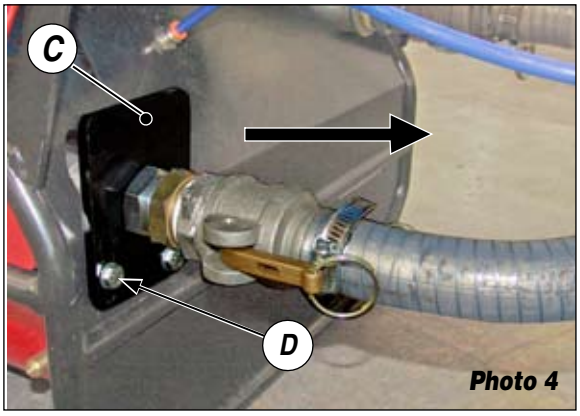


Photo 4

5) Extract the product passage hose (**E**), remove the lower clamp from the hose (**photo 5**).

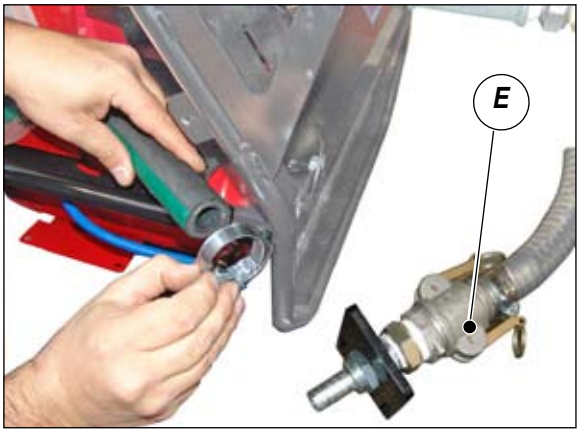


Photo 5

6) Start the machine, switch (**F**) on “1”; Start the pump, switch (**G**) on “ON”.

Slightly increase the pressure of the pump by rotating the potentiometer (**H**) clockwise, the reading of the value is shown on the upper display (**photo 6**).

Photo 6

7) With one hand, take the hose and with the pump rotating, pull to extract it (**photo 7**).

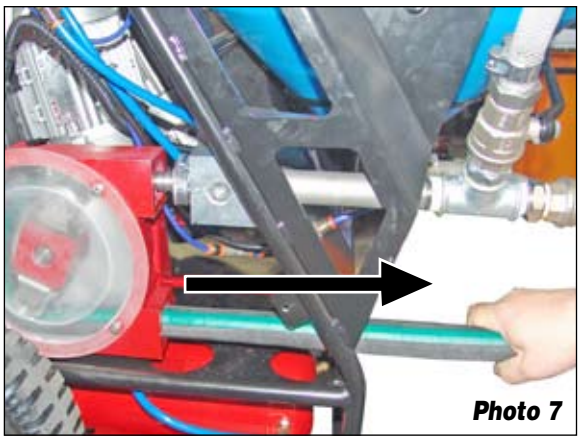


Photo 7

ASSEMBLY

1) Before inserting the hose, spread some silicon based grease on the surface (**photo 8**).

2) With the pump still rotating, insert the hose on the side from which it was removed (**photo 7**).
Push the hose until it is completely inserted, it must fit into the upper hose holdere.

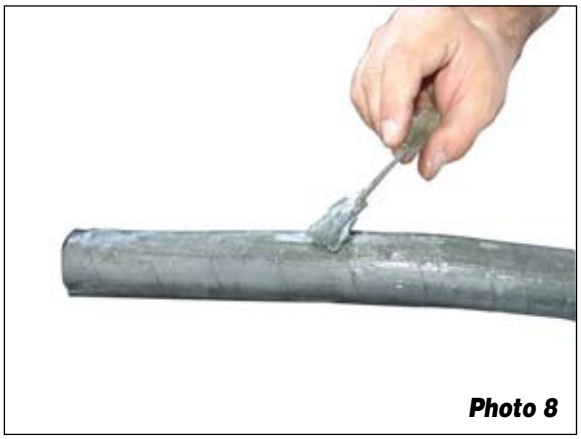


Photo 8

☞ **PLEASE NOTE: In order to facilitate the operation, push the mouth of the hose with the palm of your hand, so as to close it (photo 9).**

3) Turn the pump off and disconnect the power supply to the machine;

4) At this point:
- reassemble and lock the upper metal clamp;
- reinsert the lower metal clamp on the hose;
- insert the product passage hose, attach the plate to the structure with the same bolts that you previously removed;
- lock the lower metal clamp;
- reassemble the side casing.

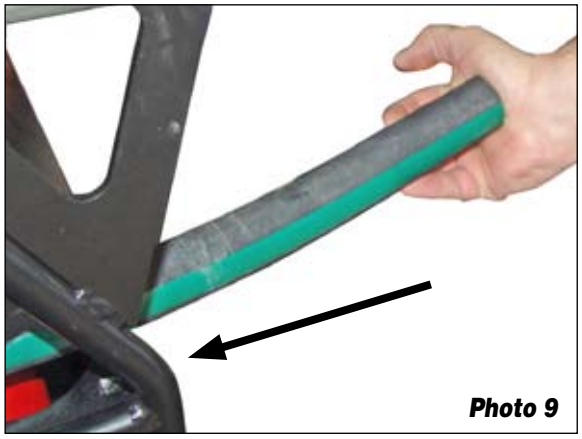
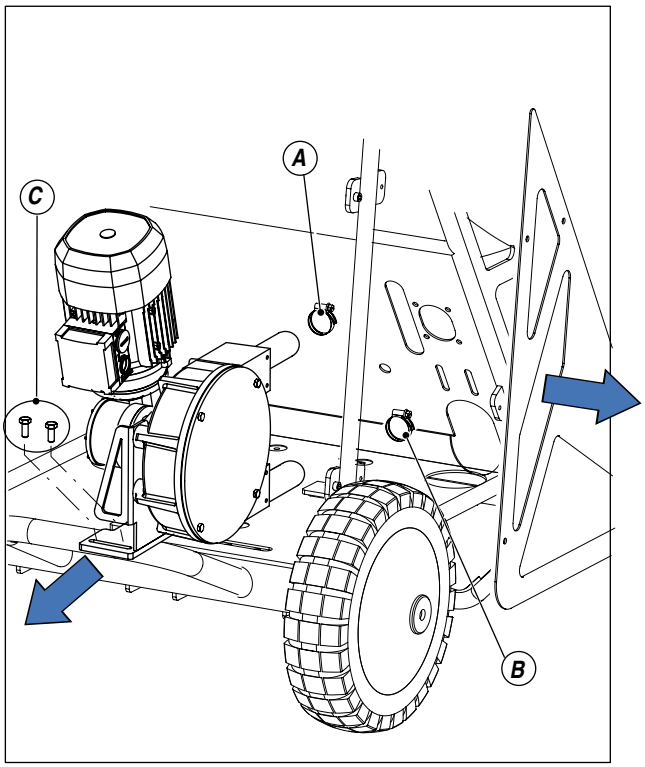
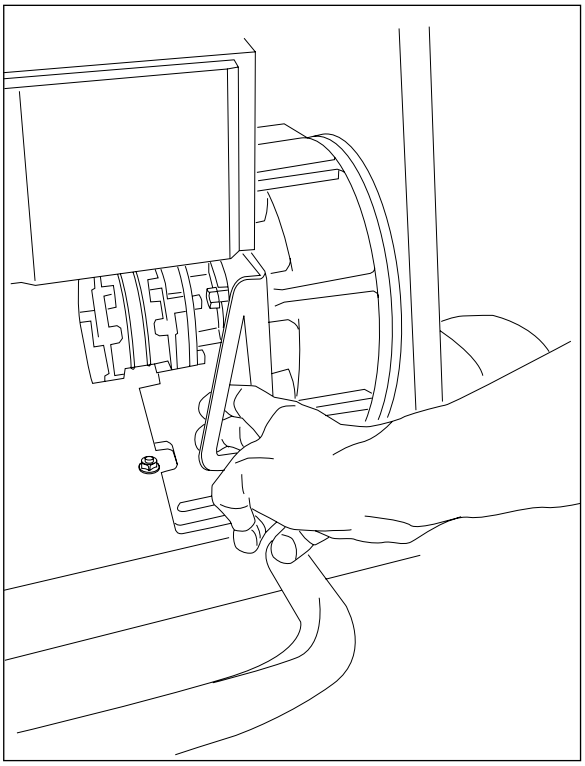


Photo 9

WARNING
If it is necessary to remove the pump from the machine, it is necessary to:

- **Remove the side casing (A).**
- **Loosen the metal clamps (B) (C).**
- **Remove the two attachment bolts (D).**
- **Pull the pump, holding it by the handle fashioned inside the support.**
- **To reposition it, insert the pump, pressing it against a positioning stop.**

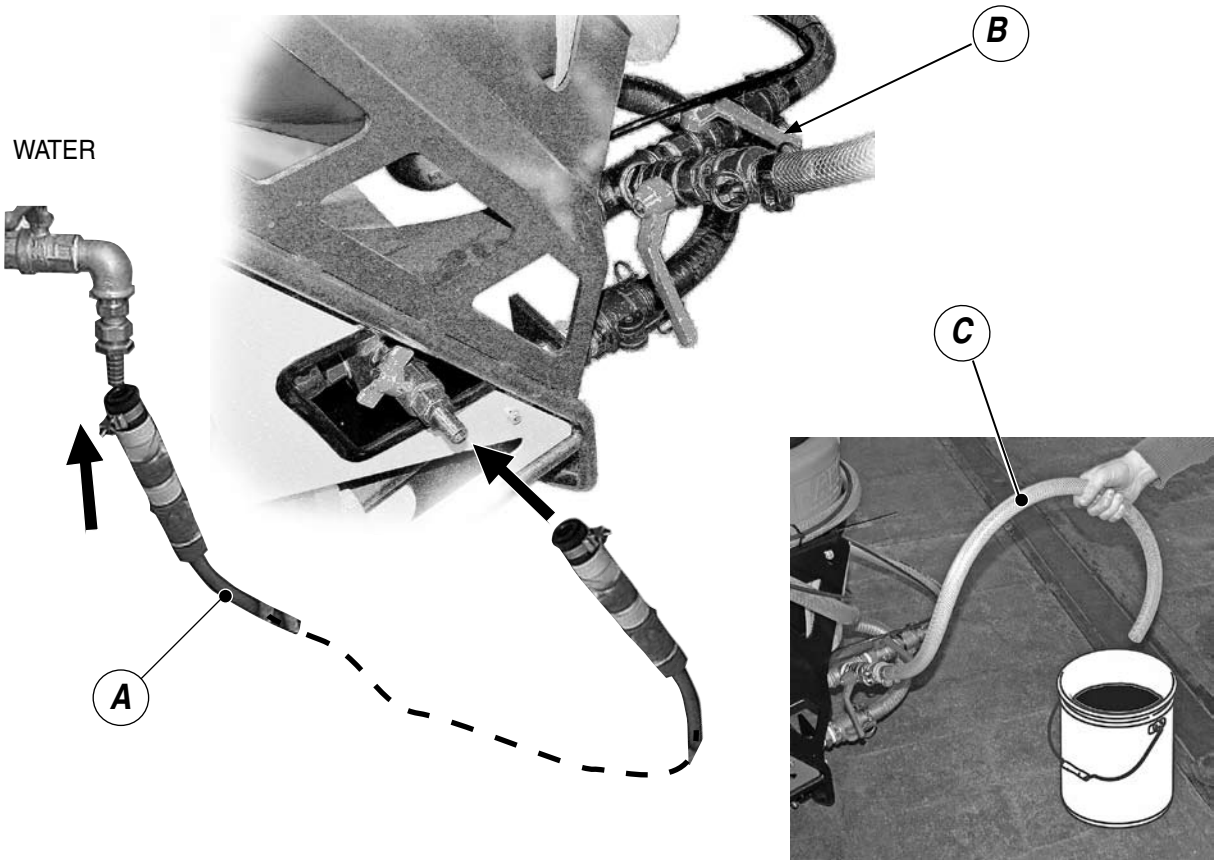




V CLEANING AND REPLACING THE SENSOR CLEANING

CLEANING

1) If present, insert a flexible hose (A), connected to the water mains, or fill the tank with clean water;
2) Close the tap on the valve regulating the flow of material from the pistol (B);
3) Turn on the spray gun and the pump, let the water circulate first in one direction and then the other, inverting the rotation of the pump ("PUMP ROTATION" selector).
4) Discharge the water into a recipient, from the spray gun or from the recycle hose (C).

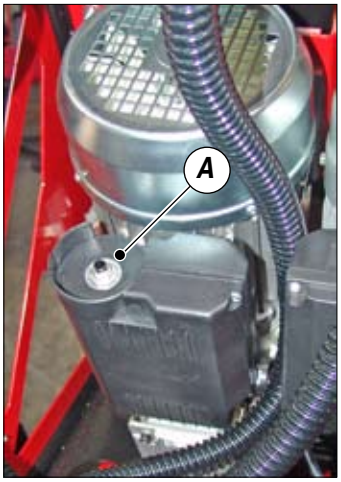


REPLACEMENT

- In the case of sensor failure or malfunction, use a size 30 hexagonal wrench for replacement operations.
  Insert the wrench through the slot as shown in the photo and remove the sensor from the rear.

W PROBLEMS AND SOLUTIONS

Problem	Cause	Solution
• **The apparatus doesn't start**	• Lack of power; • Strong drops in network voltage; • On/Off switch disconnected; • Pressure sensor failure; • Breakdown of pressure transmitter; • The product is solidified inside the pump;	• Make sure the power line is connected properly; • Check the extension cord; • Ensure the On/Off switch is on the "on" position and turn clockwise the pressure control knob; • Verify and replace it, if necessary; • Verify and replace it, if necessary; • Discharge the pressure in the circuit and turn the machine off. Dismantle the peristaltic pump hose, clean it, and if necessary replace it;
• **The equipment does not suck the product**	• Blocked compressed air; • The product is too dense; • Loose fittings; • Plugged gun; • Worn peristaltic pump hoses; • Solidified material in the gun; • Sensor is bad; • Check air system for leaks;	• Turn the compressor on; open the compressed air pressure regulator on the gun; • Add water to thin material. Use Material Thickness Gauge. • Check and retighten all fittings; • Relieve Pressure. Remove gun from hose. Clean gun; • Replace the hoses; • Disassemble the gun and clean through the hoses; • Replace; • Remove shroud and examine for air leaks;
• **No air from compressor**	• Compressor off; • Gun needle plugged; • Lines not connected; • Damaged hose; • Worn compressor;	• Turn the compressor on; • Clean needle and retry; • Check all quick disconnect connections to gun and hoses; • Replace hose; • Service compressor. Contact a qualified Graco Service Center;
• **When pressing the trigger, the pressure lowers considerably**	• The nozzle is too big or is worn; • The product is too dense; • Anomaly in the transducer.	• Replace it with a smaller one; • Dilute the product, if possible; • Replace it.

Problem	Cause	Solution
• **Speed of application too slow**	• Material too thick; • Nozzle too small; • Flow control set too low; • Plugged or dirty gun; • Kinked hose;	• Thin material; • Change nozzles to a larger size. See Operation Manual, Recommended Nozzle Selection Chart; • Increase flow control setting; • Relieve Pressure. Clean gun; • Disentangle the hoses.
• **Blocked compressor**	• Overload; • Magneto-thermal switch tripped.	• Remove the rear casing, press button (**A**) indicated in the photo to reset the compressor. 

Y SPARE PARTS

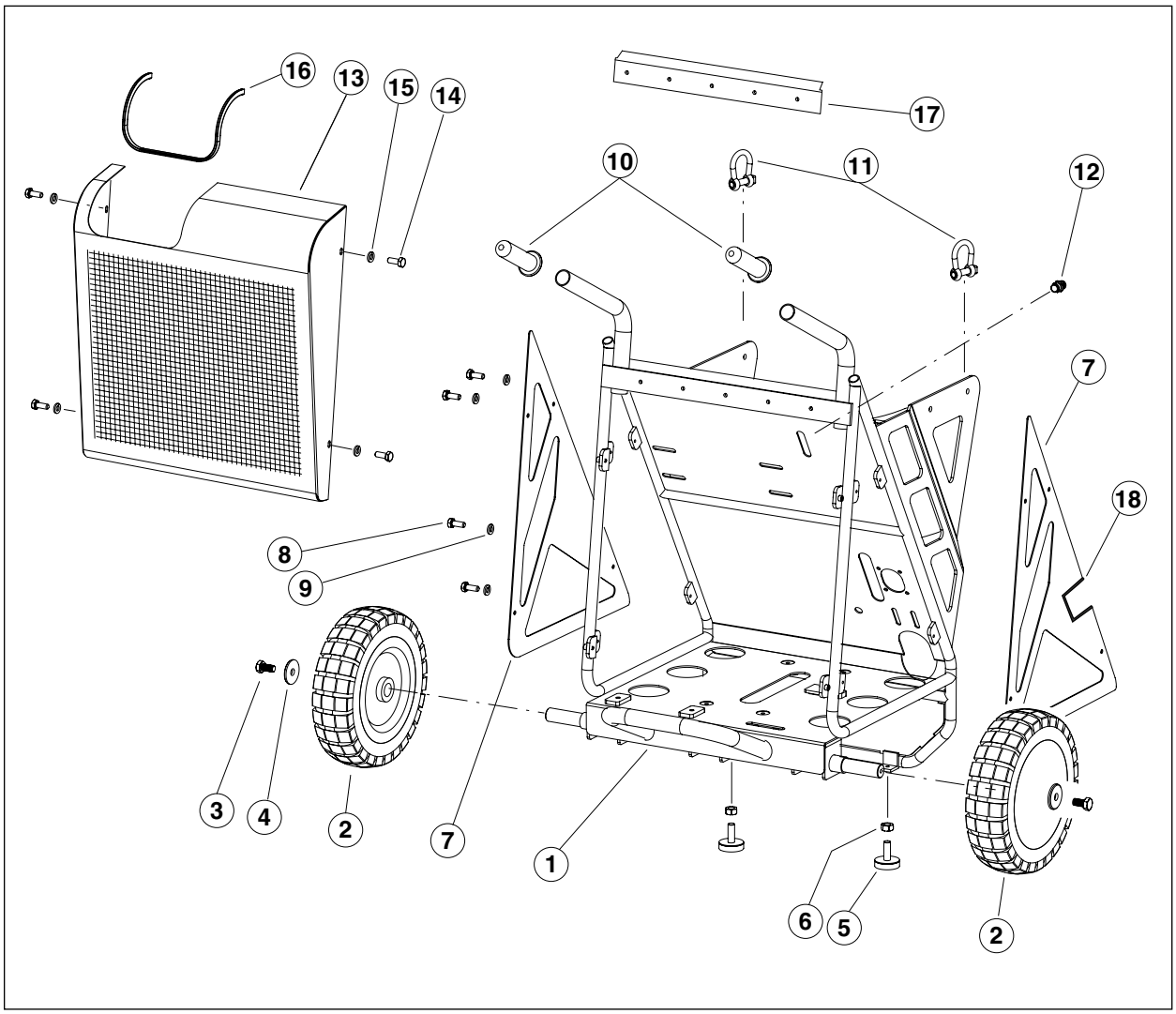
To be sure about the perfect working of all mechanical parts, use only original spare parts. In case of order of spare parts or for any information about orders it is always necessary to specify:

- Type of models
- Serial number
- Production year

☞ **NOTE :**

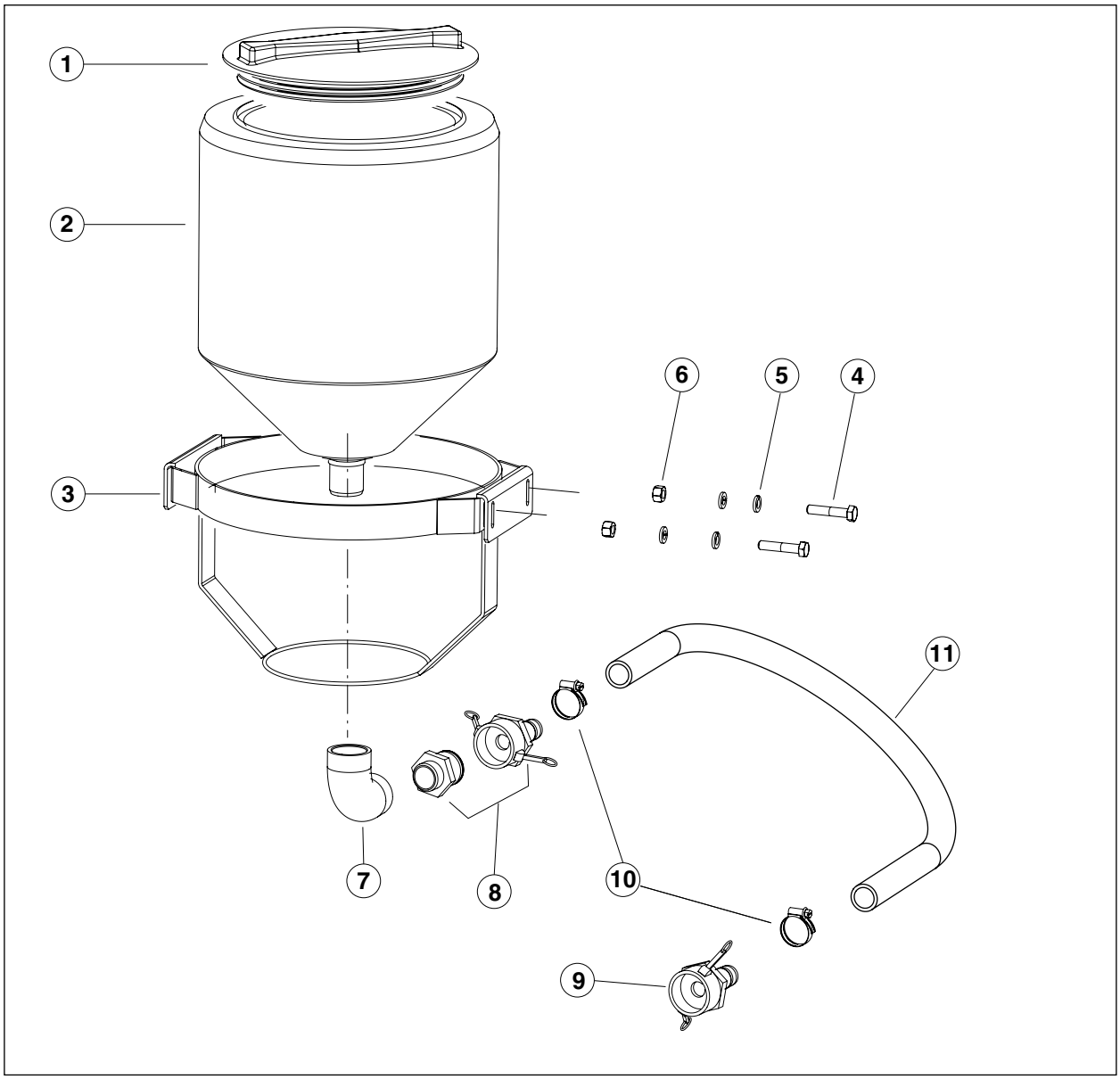
As regards spare parts, you must also add the reference code and the explanatory table.

TABLE 01 - GROUP STRUTURES RIF. 30566



Pos.	Code	Description	Pos.	Code	Description
1	30511	Frame	10	21654	Knob
2	20303	Vheel	11	20272	Eyebolts
3	8371	Screw	12	19176	Bulkhead connector
4	95153	Wascher	13	30515	Cover
5	12454	Rubber buffer	14	54004	Screw
6	52017	Nut	15	54003	Wascher
7	30516	Cover	16	30541	Gasket
8	54004	Screw	17	20585	Cover
9	54003	Wascher	18	30650	Gasket

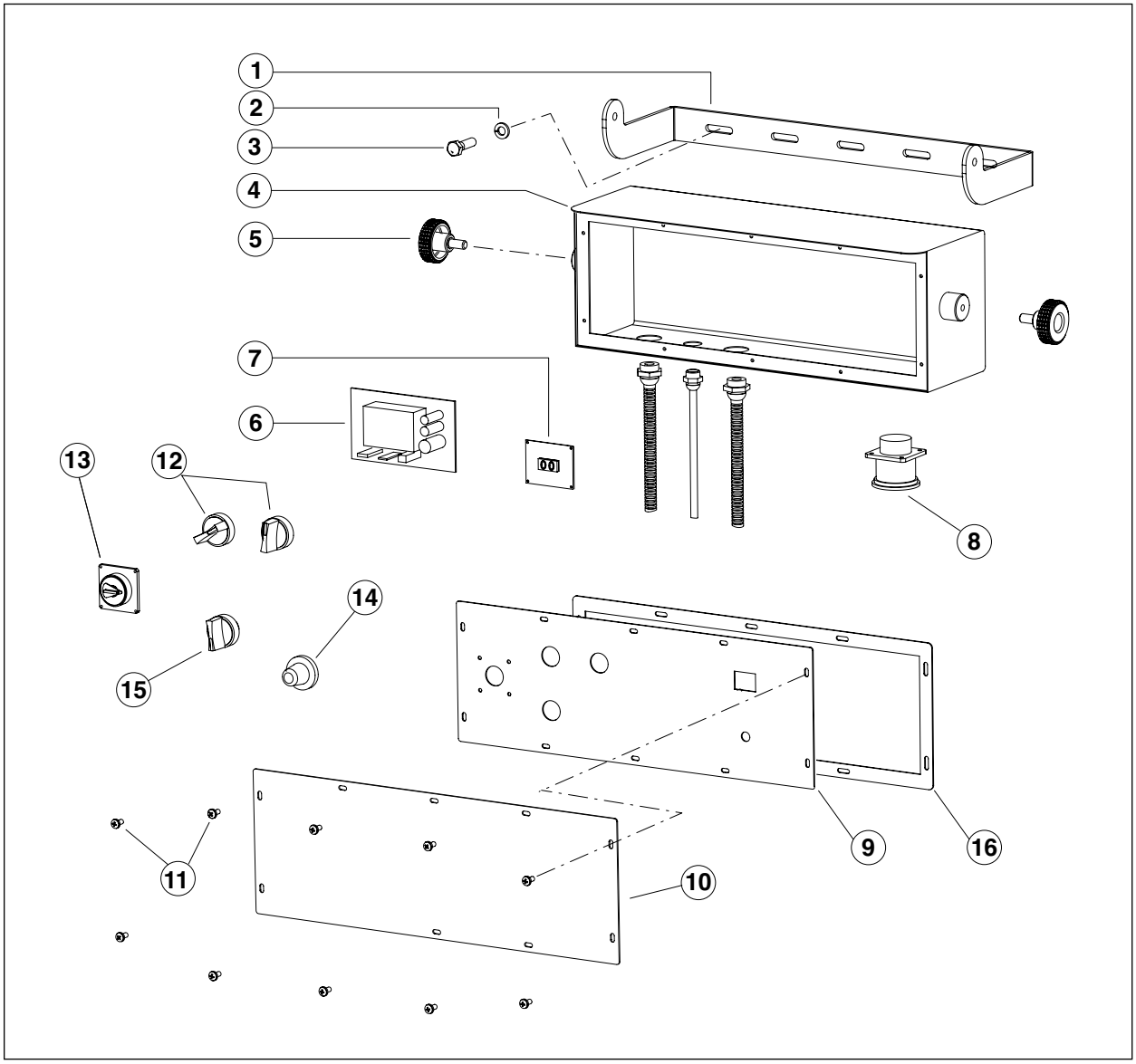
TABLE 02 - GROUP RESERVOIR RIF. 30560



Pos.	Code	Description	Pos.	Code	Description
1	18249/1	Cover tank	7	20833	Elbow
2	18249	Tank 50L	8	30503	Rapid attachment
3	18246	Tank Support	9	20842	Rapid attachment
4	901568	Screw	10	30552	Clamp
5	34009	Wascher	11	30576	Suction hose
6	52017	Nut			

TABLE 03 - GROUP OF CONTROL RIF. 30569

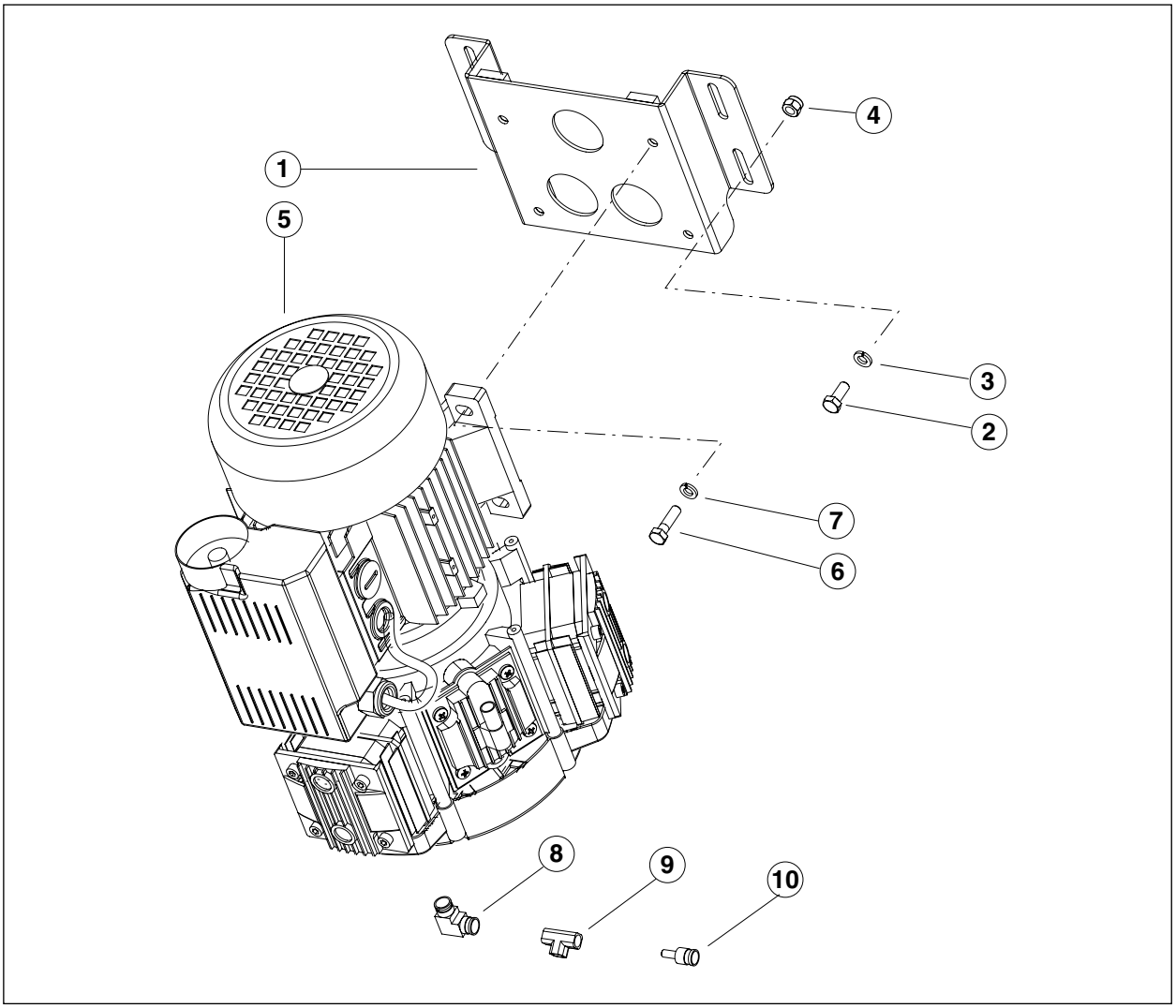
GROUP OF CONTROL RIF. 30569 / 110 V



Pos.	Code	Description	Pos.	Code	Description
1	30514	Support	9	30546	Panel of closing
2	34009	Wascher	10	30523	Adhesive panel
3	8371	Screw	11	96028	Screw
4	30545	Box	12	30547	ON/OFF switch
5	4255	Knob	13	30548	General interrupter
6	30570	Card 220 V	14	30549	Potentiometer
6A	30570/110	Card 110 V	15	30612	PUMP ROTATION switch
7	30544	Display	16	30358	Gasket panel
8	30543	Power plug 220 V / 110 V			

TABLE 04 - GROUP COMPRESSOR RIF. 30564

GROUP COMPRESSOR RIF. 36564 / 110 V

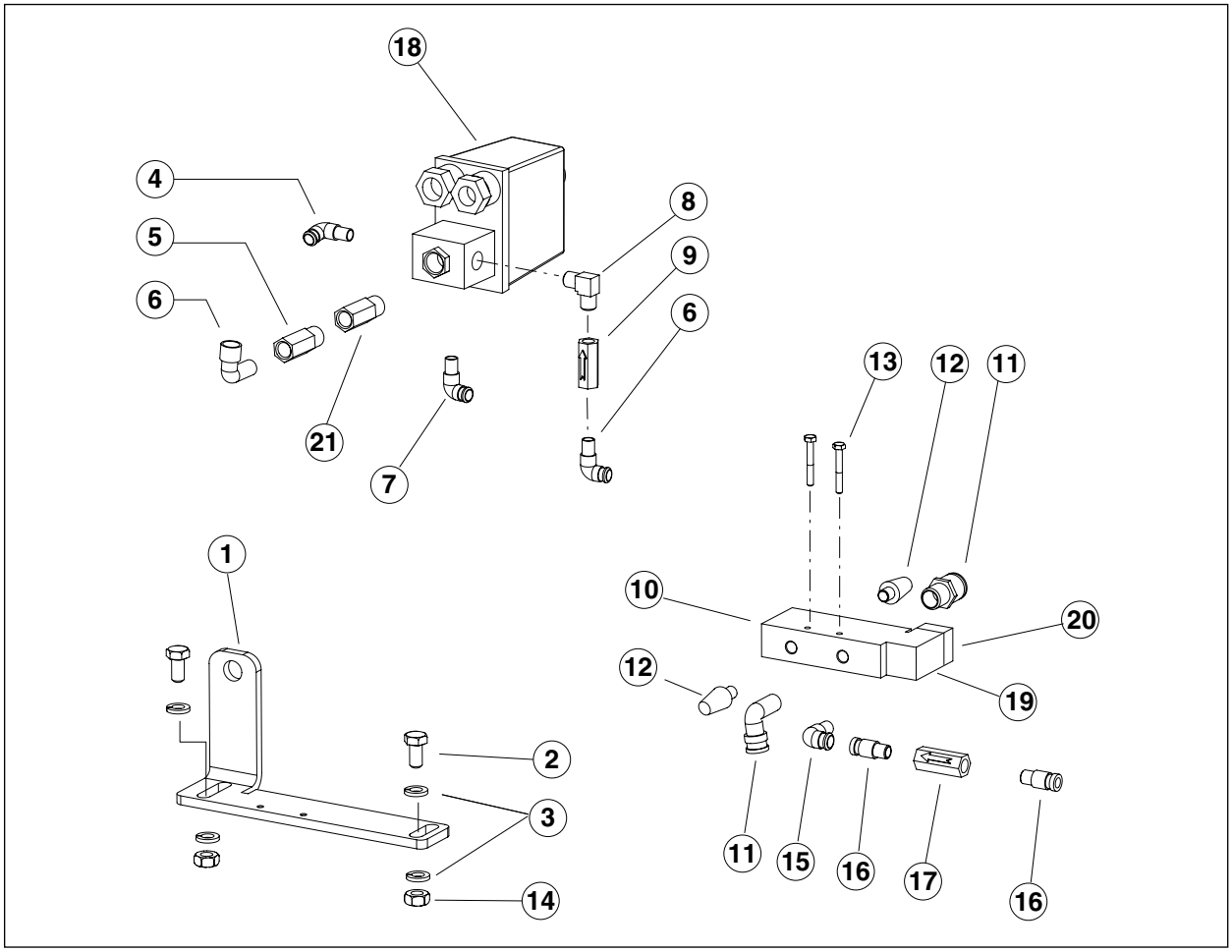


Pos.	Code	Description	Pos.	Code	Description
1	30517	Support	**6**	6130	Screw
2	8371	Screw	**7**	33005	Wascher
3	95153	Wascher	**8**	5359	Fitting
4	53002/4	Nut	**9**	510049	Fitting
5	30542	**Compressor 220 V***	**10**	30555	Reduction
5A	30542/110	**Compressor 110 V***			

*** ☞ NOTES: For further information on spare parts please see the included manual.**

TABLE 05 - GROUP VALVES RIF. 30562

GROUP VALVES RIF. 30562 / 110 V

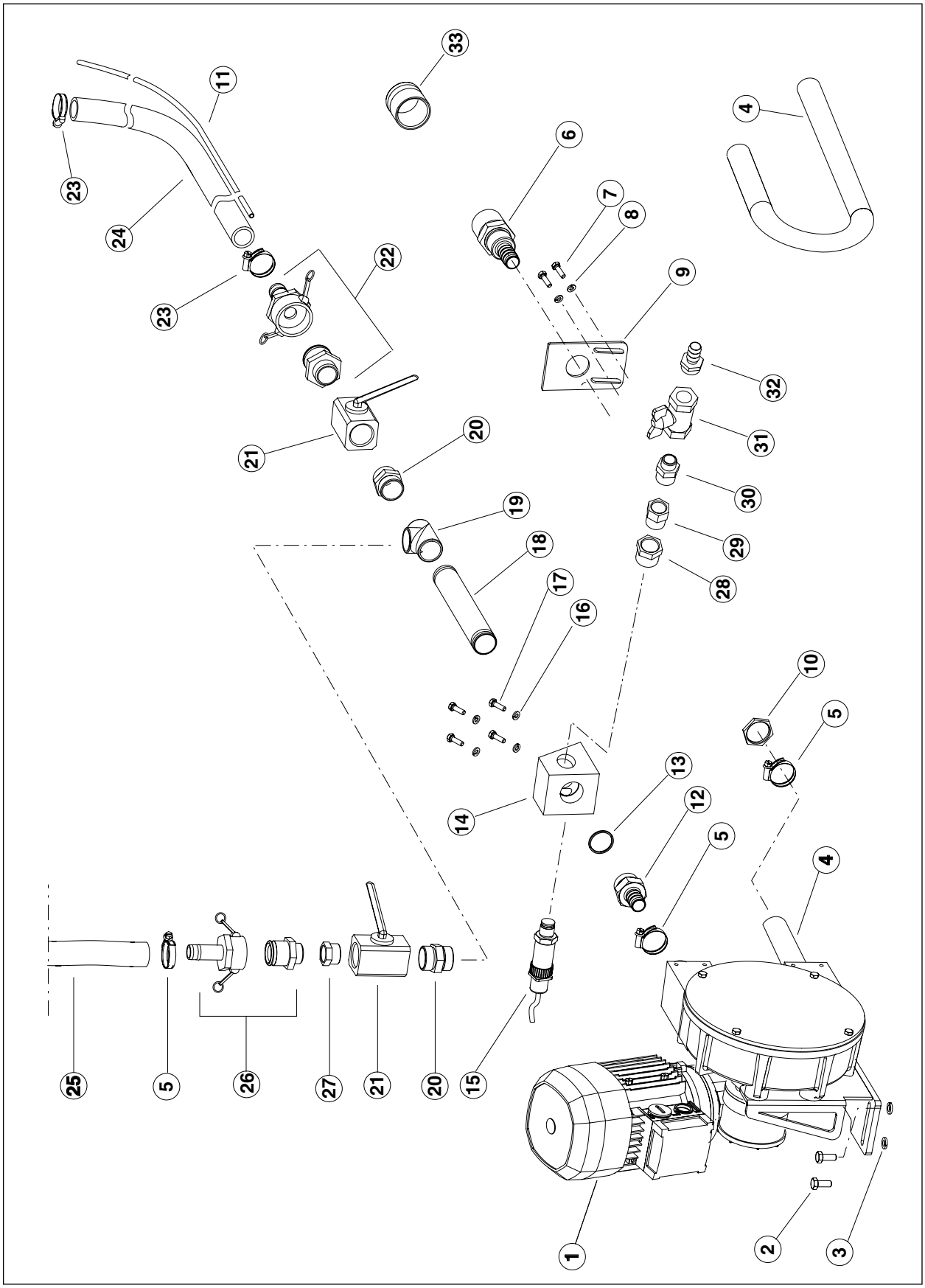


Pos.	Code	Description	Pos.	Code	Description
1	30519	Plate of support	12	510423	Silencer
2	8371	Screw	13	11765	Screw
3	34009	Wascher	14	53002/4	Nut
4	30556	Fitting	15	30557	Fitting
5	3378	Prolong	16	22012	Fitting
6	8123	Fitting	17	30558	Non-return valve
7	8063	Fitting	18	30536	Pressure switch
8	3365	Fitting	19	30537/1	Stator 220 V
9	9902	Non-return valve	19A	30589	Stator 110 V
10	30537	Solenoid valve	20	30537/2	Connector 220 V
11	11719	Fitting	20A	30590	Connector 110 V
			21	22027	Prolong

English

TABLE 06 - GROUP PUMPS RIF. 30561

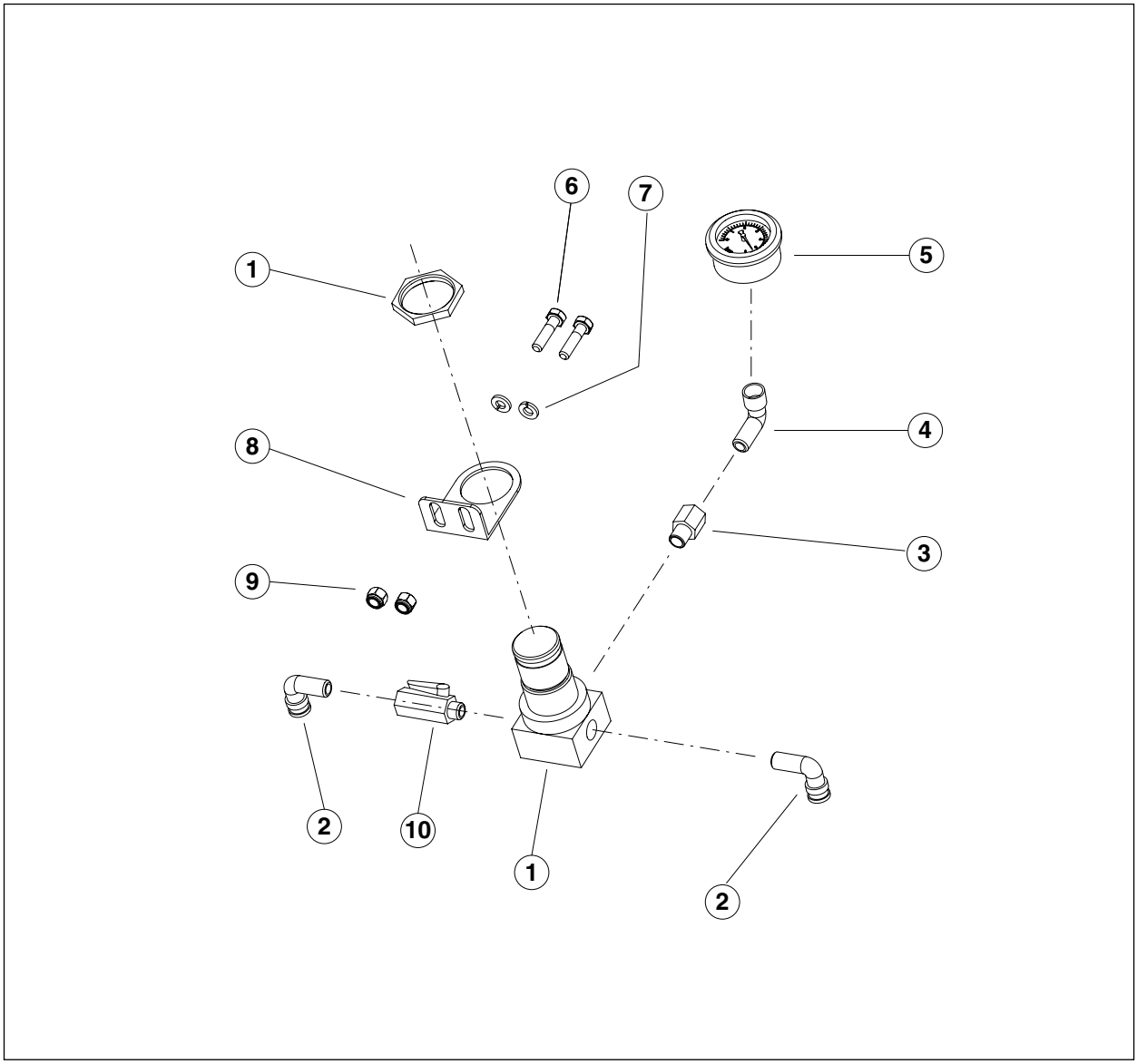
GROUP PUMPS 110 V RIF. 30561 / 110



Pos.	Code	Description	Pos.	Code	Description
1	30538	**Peristaltic pump 220 V***	17	54004	Screw
1A	30538/110	**Peristaltic pump 110 V***	18	30524	Hose coupled
2	8371	Screw	19	30534	Fitting
3	34009	Wascher	20	8373	Fitting
4	30535	Hose	21	30532	Ball valve
5	30553	Clamp	22	30533	Rapid attachment
6	30522	Fitting	23	30552	Clamp
7	8371	Screw	24	30575	Rapid attachment
8	34009	Wascher	25	30528	Hose pump
9	30520	Plate of support	26	30578	Pipe of recycle
10	96842	Nut	27	30507	Reduction
11	18153	Hose	28	30597	Reduction
12	30521	Hands rubber	29	20837	Prolong
13	8406	Wascher	30	96252	Nipple
14	30513	Support	31	96253	Ball valve
15	30539	Pressure sensor	32	30598	Hands rubber
16	54003	Wascher	33	20843	Rapid attachment

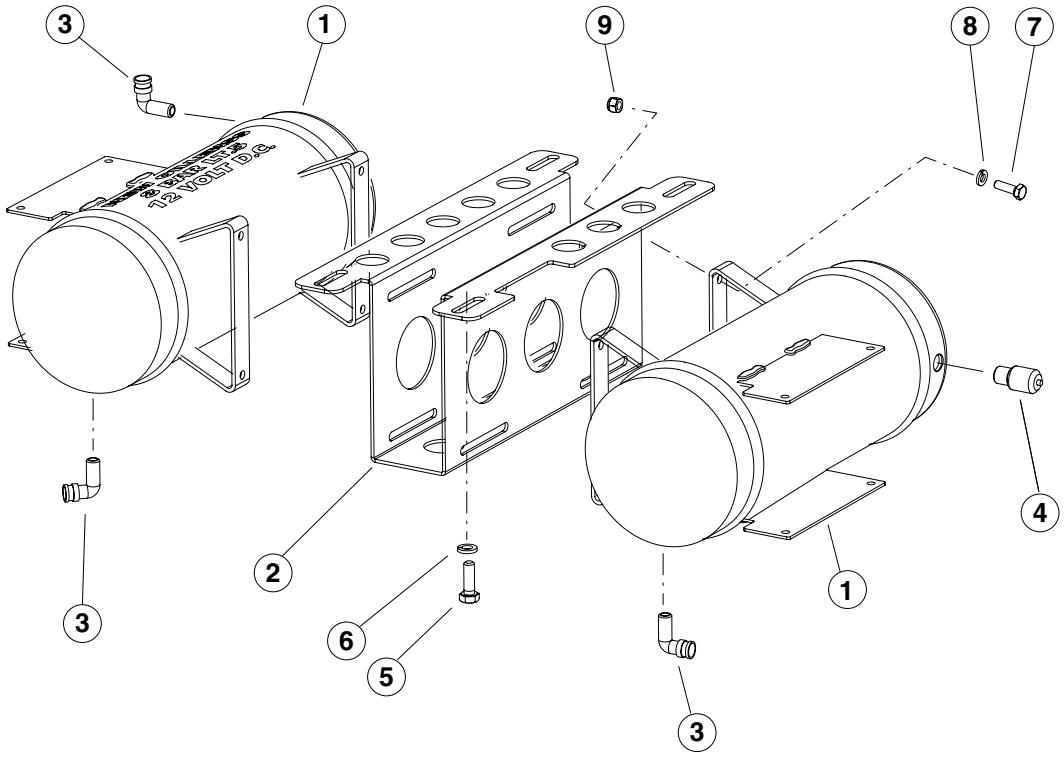
*** ☞ NOTES: For further information on spare parts please see the included manual.**

TABLE 07 - GROUP OF CONTROL AIR RIF. 30565



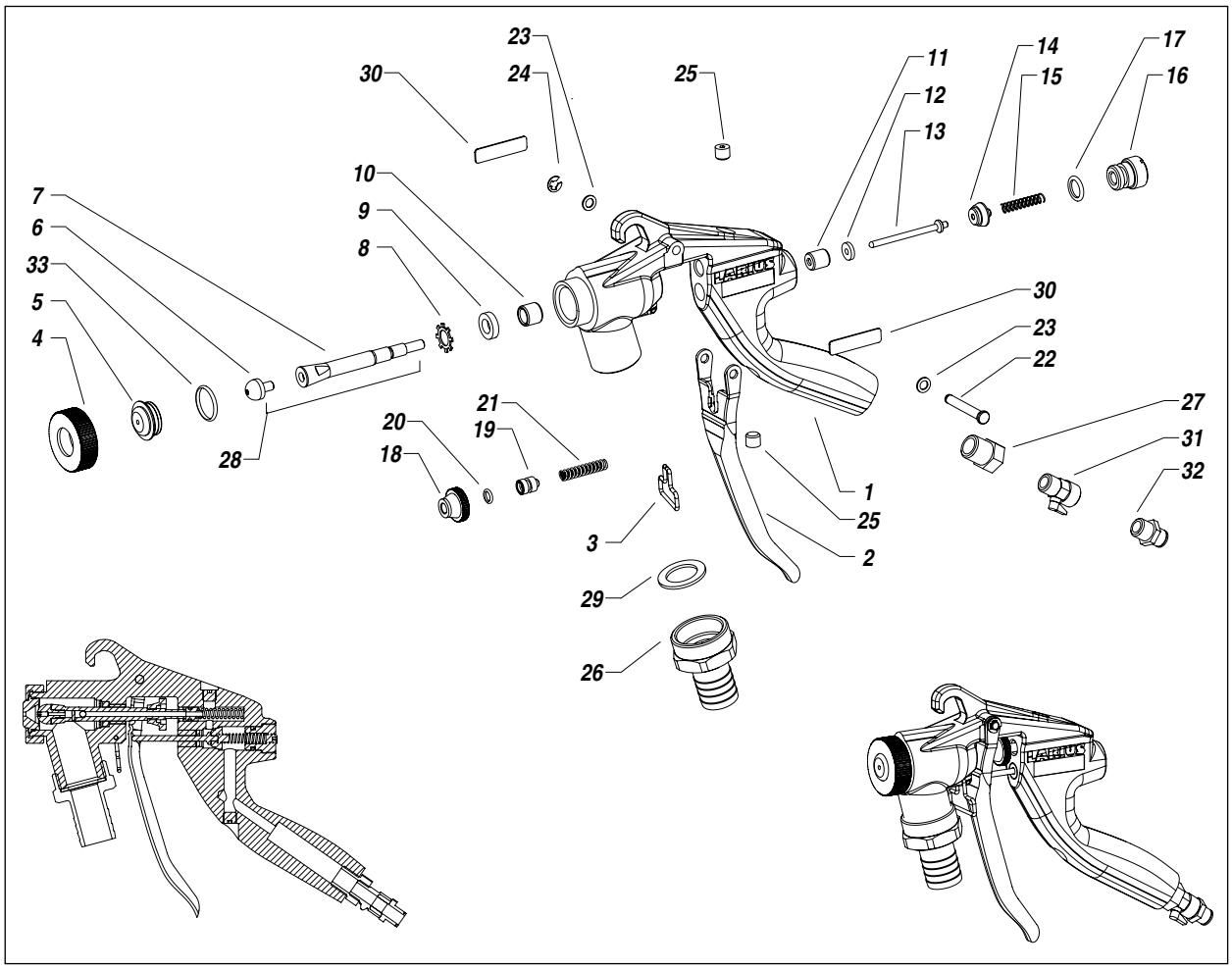
Pos.	Code	Description	Pos.	Code	Description
1	3344	Regulator air	6	54004	Screw
2	510019	Fitting	7	54003	Wascher
3	3343	Prolong	8	510510	Plate of support
4	3341	Elbow	9	8042	Nut
5	8167	Gauge pressure	10	4004	Ball valve

TABLE 08 - GROUP RESERVOIR AIR RIF. 30563



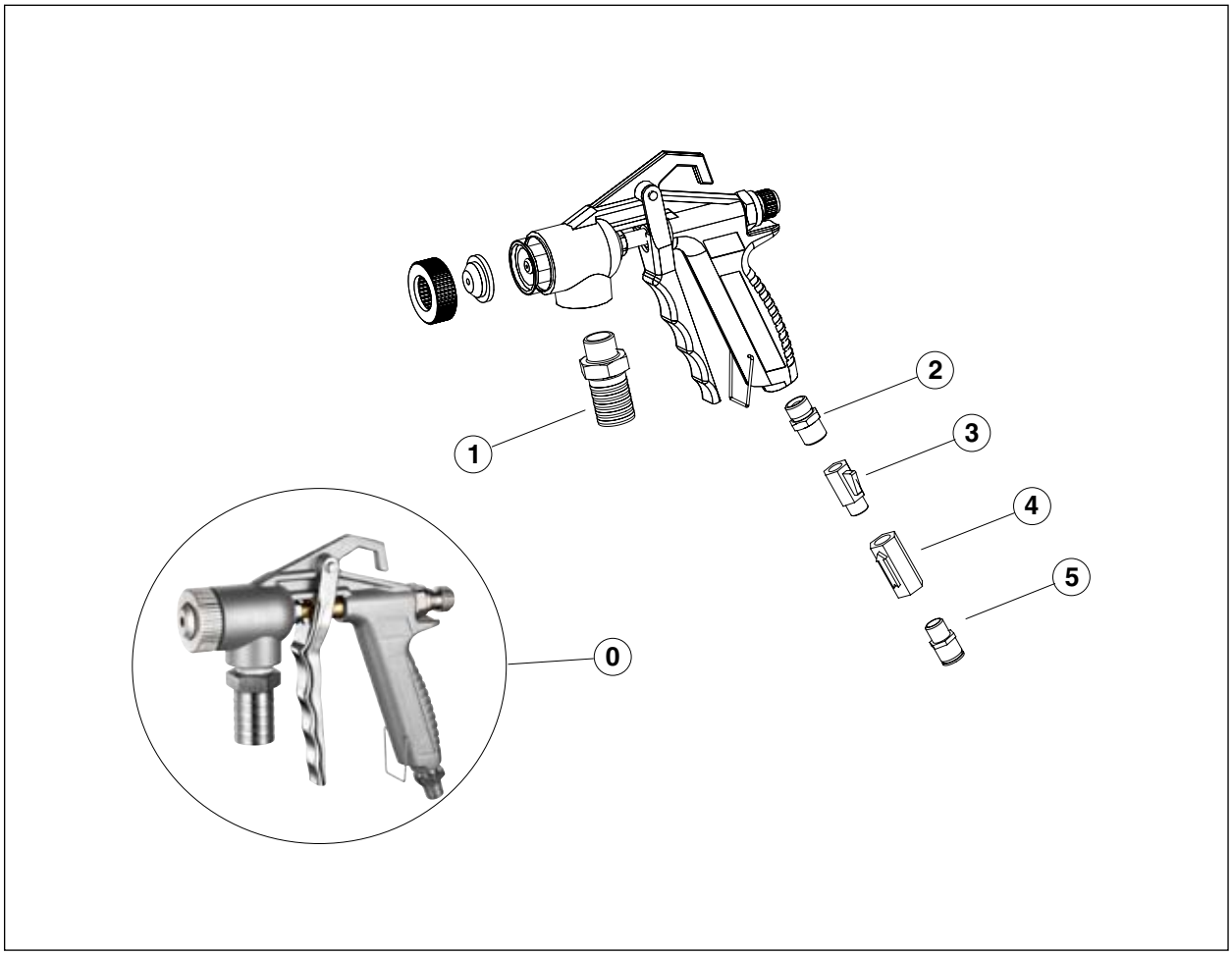
Pos.	Code	Description	Pos.	Code	Description
1	30540	Reservoir air	6	34009	Wascher
2	30518	Support	7	91062	Screw
3	91557	Fitting	8	54003	Wascher
4	30559	Valve, security	9	8042	Nut
5	8371	Screw			

TABLE 09 - GROUP GUN TURBO GUN RIF. 30568



Pos.	Code	Description	Pos.	Code	Description
-	**21050**	**Complete gun without tip**	**17**	96729	OR
1	21051	Housing	**18**	21066	Air opening bush
2	21052	Trigger	**19**	21067	Air spring guide
3	21053	Arrest for trigger	**20**	18755	OR
4	21054	Locking nut	**21**	21084	Spring
5	-	Tip (see list)	**22**	21068	Pin
6	21056	Material road Head	**23**	21069	Wascher
7	21057/1	Material road body	**24**	21070	Elastic ring
8	21058	Circlip Seegering	**25**	52019	Conic plug
9	21059	Gasket	**26**	21072	Attack for material pipe
10	21060	Rod support	**27**	21098	Fitting
11	21061	Rod support	**28**	**21079**	**Complete material road**
12	21062	Gasket	**29**	21081	Gasket
13	21063	Air rod	**30**	21082	Working pressure plate
14	21064	Air valve	**31**	4004	Ball valve
15	21083	Spring	**32**	5313	Air attack
16	21065	Plug	**33**	82009	OR

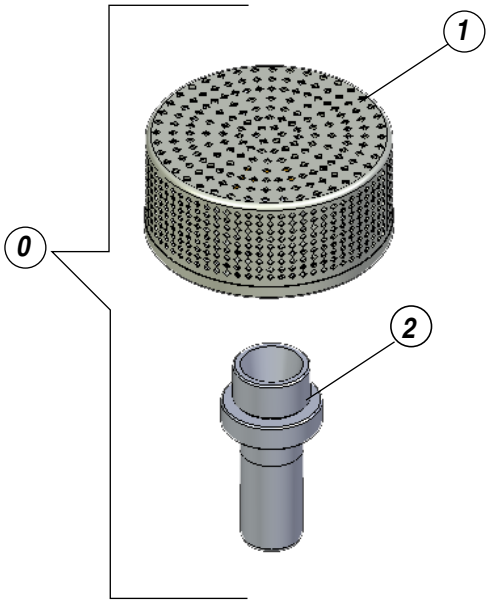
TABLE 10 - GROUP GUN TEX GUN RIF. 30567



Pos.	Code	Description	Pos.	Code	Description
0	30540	**Complete gun without tip**	3	3563	Ball valve
1	30525	Attack for material pipe	4	9902	Check-valve
2	19165	Nipple	5	5313	Fitting

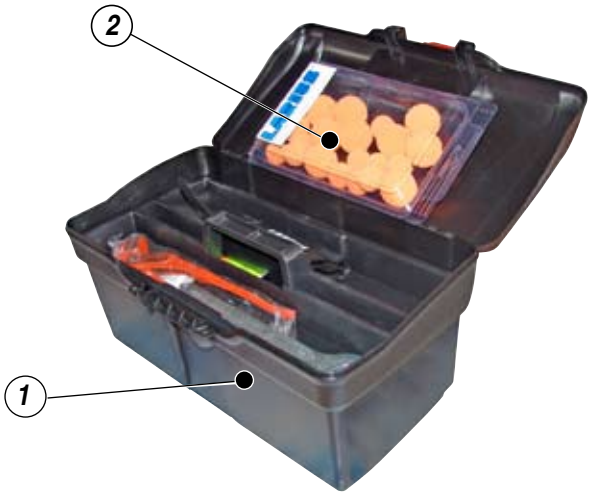
X ACCESSORIES

Pos.	Code	Description
1	21073	Tip Ø 3
2	21074	Tip Ø 4
3	21075	Tip Ø 6
4	21076	Tip Ø 8
5	21077	Tip Ø 10
6	21078	Tip Ø 12



Pos.	Code	Description
0	30356	Filtering kit
1	20101	Filter
2	30355	Filter joint

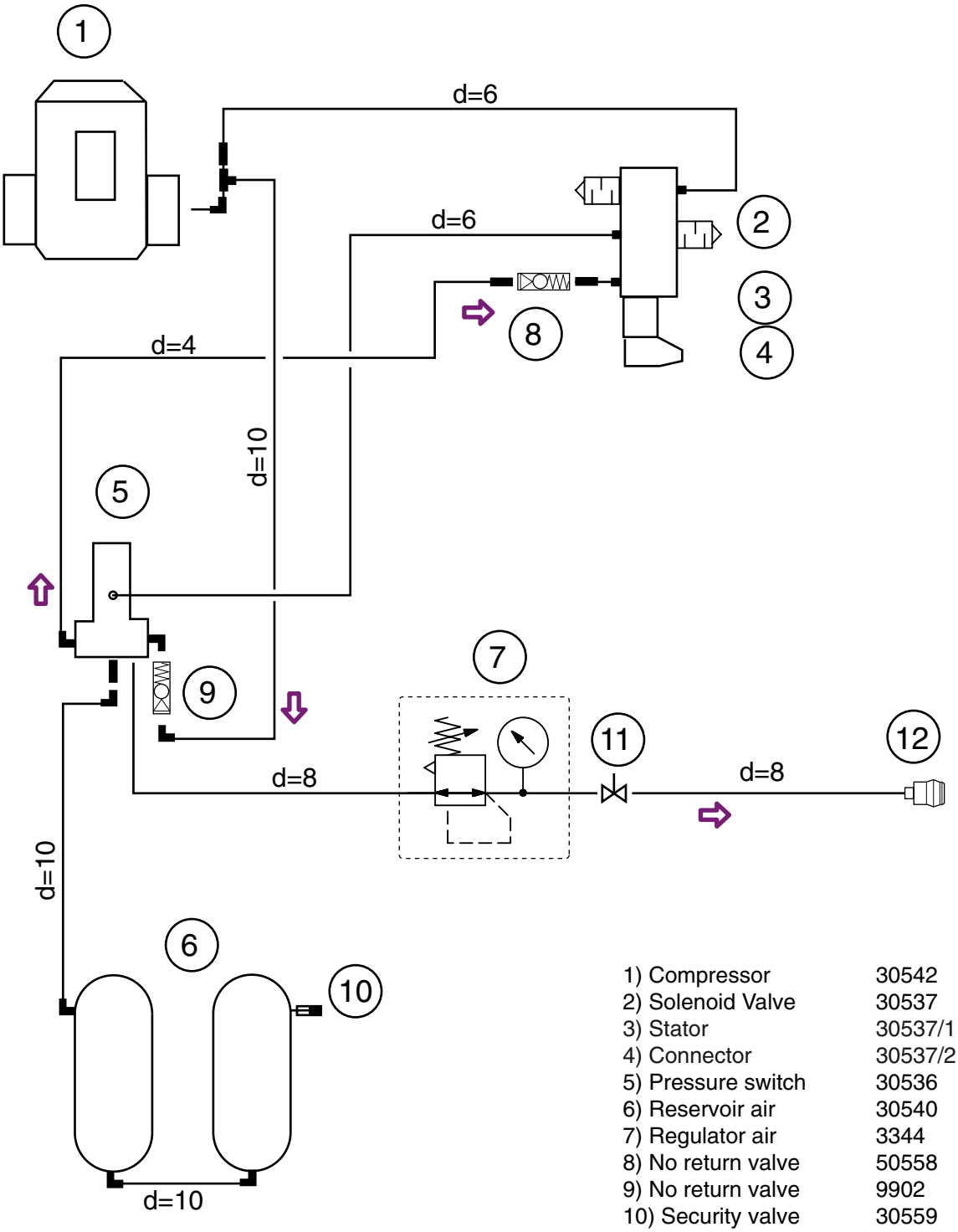
Pos.	Code	Description
1	7200	Toolbox
2	30588	Box with sponge balls



Pos.	Code	Description
1	18243	Tank 100 lt
2	18244	Bag squeezing kit

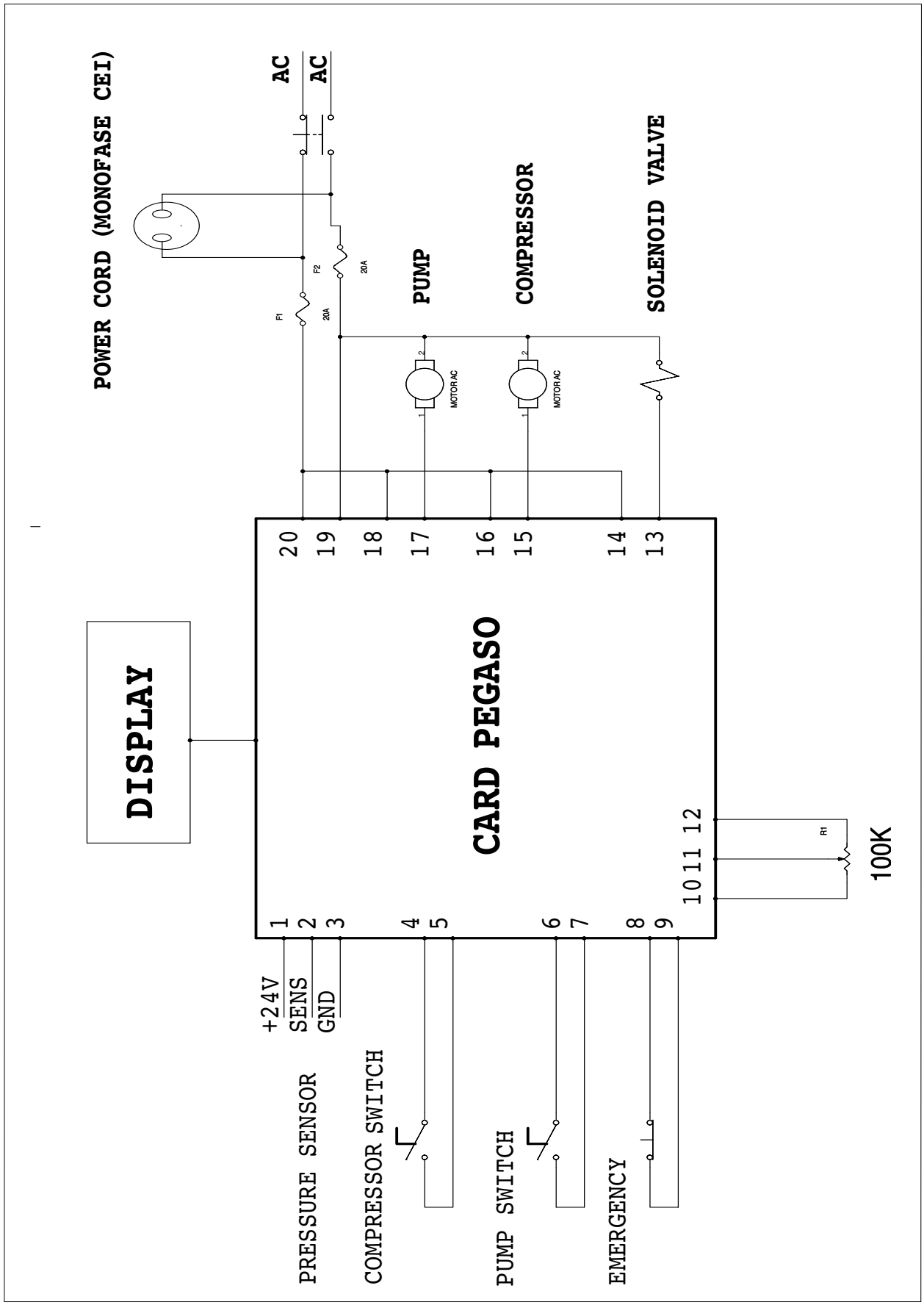
Pos.	Code	Description
1	217570	Mod. TIX 100 ER portable electric mixer

Z AIR DIAGRAM



1) Compressor	30542
2) Solenoid Valve	30537
3) Stator	30537/1
4) Connector	30537/2
5) Pressure switch	30536
6) Reservoir air	30540
7) Regulator air	3344
8) No return valve	50558
9) No return valve	9902
10) Security valve	30559
11) Ball valve	4004
12) Bulkhead connector	19176

Z WIRING DIAGRAM



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