

KETTY W-5000 Digital

Instruction Manual



IBASAN, S. A.



Technology + productivity = Saving

This Instruction manual has been written bearing in mind all the information needed for the correct and safe Start-up and use of the machine, including its maintenance.

Please, read this manual carefully and keep it throughout the useful life of the machine so that it is always easily available for any doubts or questions that may arise.

In you have any problems understanding any aspect of this manual or the machine, we recommend that you contact our technical department.

The firm, IBASAN,S.A. deny responsibility for any damage or injury caused to the machine itself, people, animals or objects, derived from an improper use of the machine or a lack of experience in the use of the same, as well as any failure to observe and apply the safety measures stipulated in this Instruction manual.

GENERAL INFORMATION

Instructions for transport and maintenance.

The machine shall be transported in accordance with the safety instructions indicated, together with standard belts or chains placed in a way that they cannot slip or cause accidents.

NOBODY shall place themselves in the **danger area (within a radius of 1 m from the machine or underneath the same)** during unloading.

Instructions for the reception of the machine

When the machine is received, bear in mind the following considerations:

- Check that the machine has suffered no damage during transport and/or that no pieces are missing. Claims will only be accepted immediately after delivery and only when confirmed by the carrier or transport agency.
- Check that the machine has all the safety protections in place. If not, contact with IBASAN,S.A. immediately and do not use the machine under these conditions.
- The placing of the machine shall be in mainly fixed installations and in buildings designed for its use.

GUARANTEE CONDITIONS

1. **IBASAN, S.A.** guarantee that all new products that they produce, are free from material or manufacturing defects that are checked and recognised by the company is technical services for a period of 1 year, counting from the date indicated on this certificate.
2. The guarantee does not cover articles such as electrical elements, transformers, etc or others manufactured by others manufactured by other companies, which shall only enjoy the guarantee that these give.
3. The responsibility of the manufacturer is limited to the replacement or repair of those parts recognised as defective, not including personal injury or damages that such a breakdown may cause.
4. The duration of the guarantee shall be for 1 year, from the delivery date of the machine, the transport and labour costs being assumed by the purchaser, but not the spares that shall be paid for and supplied by IBASAN, S.A. after prior recognition of the supposedly defective pieces.

ANNULMENT OF GUARANTEES

The guarantee shall be null and void in the following cases:

- When malfunction owing to human error or negligence by the machine's user is demonstrated.
- When the limits on conditions of use indicated in this manual are exceeded.
- When a lack of minimum maintenance is demonstrated.
- When repairs are carried out without using original IBASAN, S.A. spare parts nor when any maintenance operation or repairs is carried out by a technical service not authorized by our company.
- When a different degreaser provided by IBASAN, S.A. is using , since according with their composition can damage the components of the machine.
- When any of the sections of this instruction manual are ignored or are not followed.

IMPORTANT

**DO NOT USE THE MACHINE
WITHOUT HAVING READ THE
INSTRUCTIONS AND
RECOMMENDATIONS FROM
THE MANUFACTURER**

RISK ANALYSIS

- Connect to an automatic switch
- For use by trained personnel
- Do not manipulate with the water and air connected
- Must not be used by children or persons foreign to the company
- Use only for wheel washing
- Do not open the cover of the machine during the cycle
- Do not let the wheel fall into the washing machine
- In case of breakdown, do not disconnect the safety systems

***IBASAN, S.A.* is not responsible for damage or injury to people or objects as a result of incorrect use of the machine.**

Elimination of waste material

Packing of the new washing machine

- Eliminate the packaging materials of the new washing machine correctly. Remember that the packaging material is not a toy for children!
- All the materials used in the packaging are recyclable and non-contaminating.
- The cardboard of the packaging is made with 80% - 100% used paper. The wooden parts have not been treated chemically. The plastics are polyethylene (PE), the tapes are polypropylene (PP).
- All these materials are pure recyclable hydrocarbon combined.
- The preparation and recovery of the above-mentioned material represents a saving of raw materials and a reduction in the volume of rubbish.

Old washing machine

Put your old washing machine out of use:

- Extract the mains plug, cut the cable and remove it together with the plug.
- The old washing machine possesses valuable material that can be recovered. Be aware about what this means for the Environment and ensure that the remains of the washing machine are eliminated or recycled in a non-contaminating way.
- Ask for information from the local authorities to find out how best to eliminate the remains of the old machine.

Safety advice and warnings

ATTENTION. Simple safety precautions must be taken when using electrical machinery to reduce the risk of electrical shocks and physical injury.

Before using the machine:

- Read the contents of the manual carefully, as this contains important information about the installation, use and safety of the washing machine.
- Keep the manual and, if need be, hand them to any later owner of the machine.
- Install the washing machine following the instructions in the installation manual.
- Dismount the transport safety catches and keep them in a safe place.
- Never connect a machine that is visibly damaged. In case of doubt, consult your supplier or contact one of our technical help centres.

To transport the washing machine:

- Fit the transport safety catches.
- Be careful when transporting the washing machine, risk of injury!
- Do not lift the machine by the pieces that protrude!

Always connect it to a differential switch and automatic switch.

Keep your workstation tidy. Untidiness in the workstation increases the danger of accidents.

Ensure that the workstation is well lit. Do not use electrical machinery in a damp or wet environment. Do not use electrical machinery near inflammable liquids or gases.

Keep children away from the washing machine and do not allow them to play with it.
Keep pets and other animals away from the machine.

Wear the appropriate work clothes. Do not wear loose clothing or jewellery. They could be caught by moving parts. You are recommended to use rubber gloves and anti-slip soled shoes.
If you have long hair, keep it in a hair net.

Check whether your machine is damaged. Before using the machine again, carefully check that all of the safety devices or the slightly damaged pieces are working perfectly.
All safety devices and worn pieces should be repaired or changed appropriately.

Do not disconnect any couplings while the machine is under hydraulic or pneumatic pressure.

Do not manipulate the hydraulic or pneumatic safety valves.

Do not disconnect the safety switches. Never replace the fuses with others of a higher calibre

Do not exceed the pressure or temperatures recommended in the instruction manual.

Have your machine repaired by a specialist. This machine is of built in accordance with the current safety regulations. All repairs should be done by a specialist and only with original spares, if not, you may run serious risks for the safety of the user.

During washing: This washing machine can only be used for washing wheels with water.
Do not open the loading lid when the machine is washing.

After the programme has finished: Remove the wheel and close the lid of the washing machine when the programme has finished.

To protect the washing machine. Do not climb onto the machine. Do not lean on the lid or loading hatch.

Connections

1. Electrical system

The machine is prepared for a 3-phase 380 V connection. In the case that a connection to a 3-phase 220 V current is required, it will be necessary to change the input connections to the transformer (TR) and also that of the two motors (M1 and M2).

2. Pneumatic system

Connect directly to a pneumatic installation that supplies air at a minimum pressure of 6 Kg/cm². The maximum pressure should not exceed 10 Kg/cm².

For correct working of the machine, the input pipe should have a diameter of 10 mm.

3. Hydraulic system.

Connect directly to the water pipe bearing in mind that a minimum pressure of 2 Kg/cm².

4. Drainage system.

Connect to the general drains with a flexible pipe.

IMPORTANT:

The connection to the electrical circuit should be by means of a 40A/300mA differential switch.

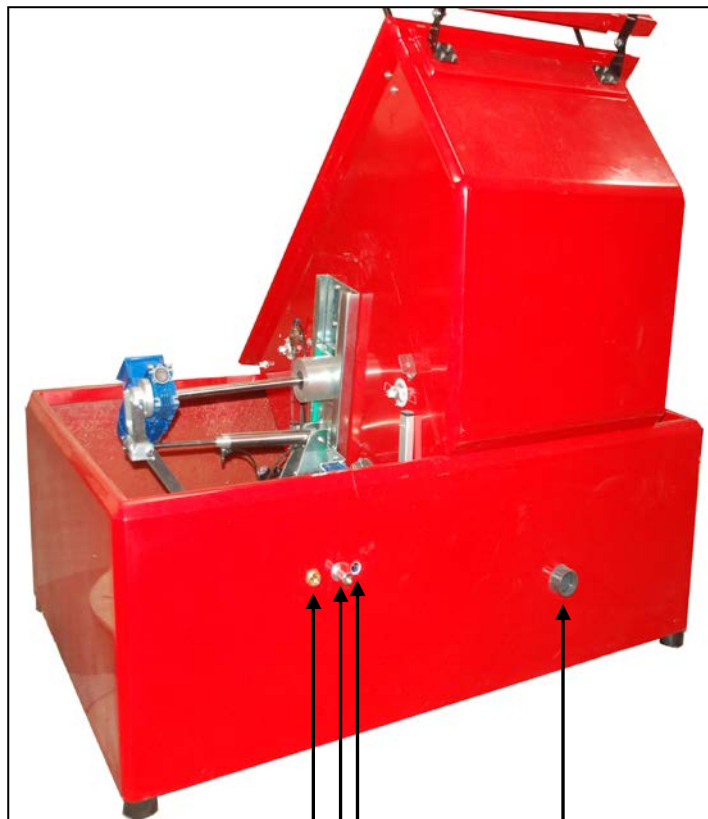


Figura A

WATER INLET

AIR CONNECTION

ELECTRICAL CONNECTION

DRAIN CONNECTION

Instructions for the filling of degreaser tank

- The degreaser is supplied with cans of 30 Liters, the tank capacity is 19'5 Liters.
- On the page 16, Figure 92, there is the detergent inlet bung.
- You must take some precautions when you fill the tank: You must avoid any contact with skin, it can be produce burns, IN CASE of contact, wash with plenty of water, avoid inhalations, in case of contact with eye, wash with water and go to doctor.

Using degreaser

- The degreaser is used in the rims that have some products adhered themselves, such oils, fats, linings or other elements and impurities.
- This degreaser has been developed mainly for cleaning aluminium alloy rims.
- The machine is ready to be able to vary the amount of degreaser, and the time of rest.
- The machine is delivered with the normal times of washing, drying, degreaser and rest, the user can change them depending on the working area (mountain, city etc).
- The degreaser is ready to use directly.

Storing degreaser

Salve the degreaser in a cool and dry place.

Your new automatic washing machine

You have acquired a product with proven efficiency, equipped with the most modern functions and services required by the current development. The full programme with functional modules, parameters and data permanent.

The new machine has a touch screen of TFT LCD 7" of 800x480, which is the following step in technology and we are convinced to be able to satisfy this crescent demand with our solutions.

This screen, incorporates all the innovation with touch panel 4 wire resistive. Using the touch screen as input device, you can control the mouse slide or keyboard "on screen" that comes with your operating system.

The new multifunction touch screen guarantees an IP65 protection, is backlit, allowing easy reading, even under poor Light conditions.

With the new screen, you will have access to the washing and drying times and will be able to control and show these times. You can also show the working hours and the number of washes that have been done, and other services which we will describe later.

Your new machine also incorporates a PLC with a field bus modules for input and output devices, operating devices and also a connection COM (RS485) for the communication of touch screen. All datas and programmes are stored in flash EPROM and RAM memory.

Start up




1. Place the Wheel in the washing chamber, bearing in mind that the outer face must be placed to the left (See Figure B)
(The machine will not start if the lid is open or if the emergency stop button is unplugged)
2. Before to close the lid, check if the moveable brush (right) is in the correct height for the tyre model which has been introduced, if it's not so, the brush height will be modify with the button () of the screen, to place it correctly.
3. Close the lid, press the start button ( without detergent or with  detergent) of the screen and wait until the washing operation has finished (approximately a minute), In case of emergency, interrupt the washing cycle with the emergency stop button.



Figure B

Adjustment elements

The machine is delivered with all the timings and pressure regulators adjusted for optimum working under normal conditions of use.

In special case, there are three elements whose adjustment can be modified:

A.- Length of detergent cycle, rest, wash and drying. This can be modified with touch screen keyboard.

B.- Water pressure. This can be modified with the regulator installed in the puma motor. A pressure gauge indicates the value of this pressure.

C.- The brush speed. This can be modified with the flow regulator “06” of the pneumatic circuit (See pneumatic speed).

This regulator only affects the pressure in the pneumatic cylinder for the brush movement.


Touch screen user manual.

Regulating of detergent, washing and drying


1. SWITCH THE MACHINE ON


You should see the initial screen display (see figure C). If it does not appear, check that the washing lid is closed or the emergency stop is unplugged.

2. ADJUSTING TIMINGS


2.1. Press the button () to show the timings screen.

On this screen, you can change the time of detergent , rest, washing and Drying (See you Figure D)



2.2. On the timings screen, push on the numerical value (), if you want to change the time, to show the (Numeric Keypad), select the desired seconds and push **Enter** Key.

Once the timers introduced, push the return button () to return on the Main screen.

3. SCREEN CONFIGURATIONS

3.1. Press the button () to show the counters buttons, schedule change, Language on the screen and to personalize the name (See Figure E).

4. COUNTER SHOWINGS

4.1. Press the button () to show the service hours and the number of Washes, totals or partials that the machine has made. If you want to Delete the partials counters, push the button ( Reset), the total Counters can't be deleted (See you Figure F).


Press the return button () to go back to the configuration screen.
(Central Key only to technical service)



Figure C



Figure D





Figure E




Figure F

5. TO SET THE TIMETABLE OF THE SCREEN

5.1. Press the button () to show the present hour and minutes screen (See figure G).

5.2. On the hour screen, press on the numerical value of the left () to show the **Numeric Keypad**, select the present hour and press the Key (**Enter**).

5.3. On the hour screen, press on the numerical value of the right () to show the **Numeric Keypad**, select the present minutes and Press the Key (**Enter**).



Once the hour and minutes are introduced. Press the return button () to go back to configuration screen.



Figure G

6. TO CHANGE THE LANGUAGE IN THE SCREEN

6.1. Press the button () to show the languages screen y select the Desired language (See figure H).



Once the language is selected, press the return button () to go back To configuration screen.



Figure H

7. INSERT WORKSHOP NAME

7.1. Press the button () to show the screen of workshop name (See figure I).

7.2. Press on the white space to show the (Alphabetic Keypad),
Select the desired name (Maximum 15 characters) and push the key (**Enter**).

Other keys of Alphabetic Keypad:

Key (**Caps**): to select capitals, small letters and numbers or symbols.

Key (**Clear**): to delete all the display content.

Key (**Esc**): to exit from alphabetic Keypad without make changes.

Key (**BS**): to delete character by character.

Key (**Enter**): to save all the content and exit.




Once the name is selected, press the return button () to go back To configuration screen.



Figure I

8. OTHER MESSAGES ON THE SCREEN

8.1. If the graphic is showing , emergency stop unplugged in the display () the machine and touch screen are blocked (See figure J).

8.2. If the graphic is showing, open lid in the display () the machine will stop to wash till the lid is closed (See figure K).


8.3. If the graphic is showing, detergent level in the display () the Machine will cancel the dosage of detergent (See figure L).



Figure J

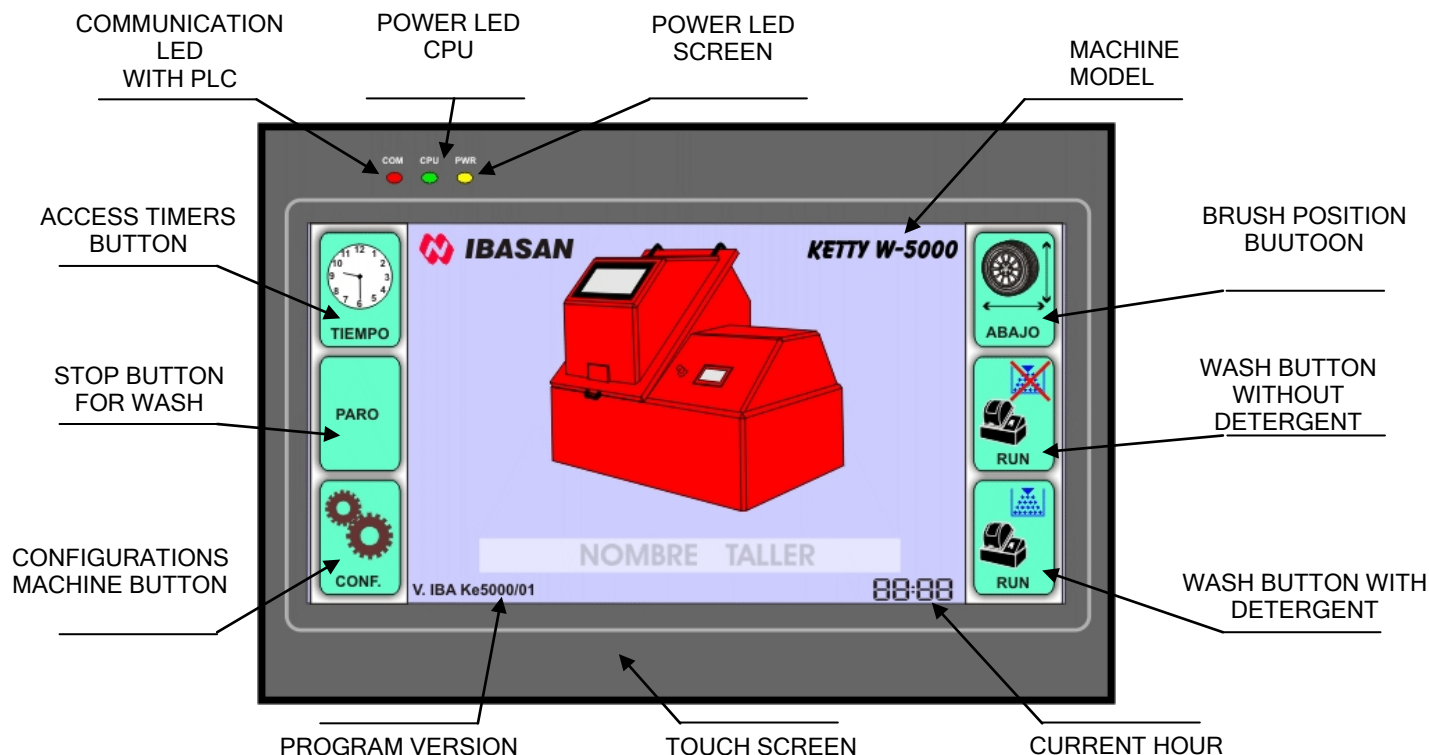


Figure K



Figure L

(In this case the machine can wash only with water)



9. POSSIBLE IRREGULARITIES

9.1. A graphic in the display is showed with the message " *PLC no response [Close]* ", and the red led Of communication is off

- Check the communication wire of the screen to PLC.
- Check that the PLC has electrical feed.

9.2. The screen doesn't save the times of the programmed timings

- Change the memory battery of PLC

9.3. The screen and PLC Works perfectly, but the machine doesn't wash.

- Check the input voltage, the principal fuses or the handling fuses.

9.4. We have the detergent tank full, but the screen shows is empty.

- Check wires and connectors.
- Check that the electronic buoy works correctly, is cleaned from chips and any object don't disturb.

9.5. We have the lid closed, and the screen shows is opened.

- Check wires and connectors
- Check that the electronic sensor works correctly, is cleaned from chips and any object don't disturb.
- Check that the sensors are aligned and they are in a correct distance.

9.6. We have the machine connected, and in the touch screen the upper leds work correctly, but the Screen is dark and without graphics.

- This is normal, touch the screen and it will work. If during six minutes, the machine doesn't work, it will activate the saver screen to save electrical energy.

Maintenance-Care-Cleaning

Clearing the washing machine

¡Do not use solvents! These products damage the pieces of the machine, form vapours harmful to health and provoke explosions!

¡Do not clean the machine with a jet of water!

Clean the outside of the machine and the control panel with soapy water or a normal clearing product that does not contain solvents nor scratches the surface.

Clean the tank

The rust marks caused by metallic objects should be cleaned with a **chlorine-free** cleaning product.

¡ Do not use a steel brush!

Water inlet pipe

To avoid flooding it is essential to check the state of the water inlet pipe at least every 5 years.

Clean the water feed filters

The water feed filters should be cleaned periodically or when with the tap open, the flow into the machine is insufficient

The filters are in the screw panel at the back of the washing machine.

Cleaning

1. Close the water tap
2. Switch the machine on. Press start to wash and switch it off alter 5 seconds by pressing the “Emergency Stop” button (this way the water pressure in the feed pipe is eliminated).
3. Unscrew the tube from the tap and clean the filter with tap water.
4. Screw the tube back onto the tap.
5. Unscrew the tube in the back of the machine
6. Extract the filter with pliers, clean it and return it to its position.
7. Screw the tube back onto the machine.
8. Open the water tap and check that there are no leaks.

Lubrication:

Lubricate every 20 working hours.

Periodically lubricate the bearings and all the moving components (see figure D y E)

Lubricating the pump motor

Change the oil after the first 50 working hours.

The following changes are every 500 working hours. The oil used should be S.A.E 20/30.

The capacity is 0.33 l.

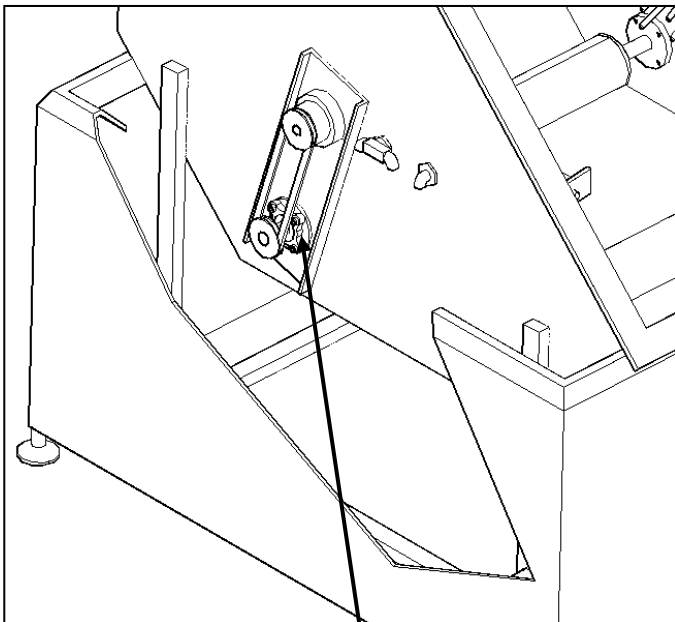
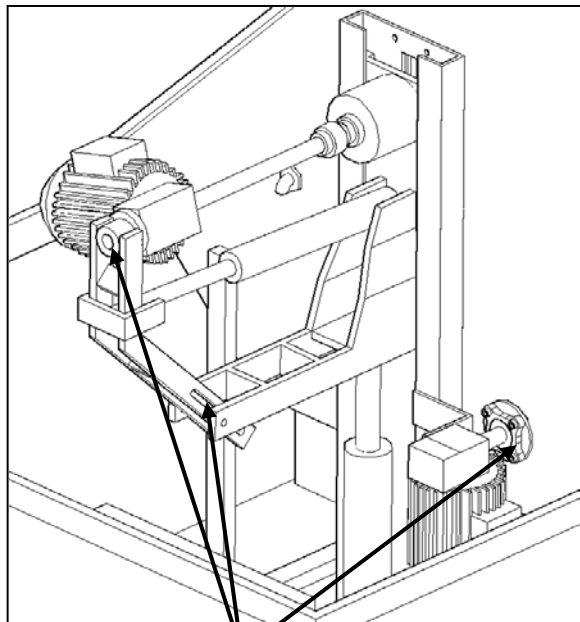


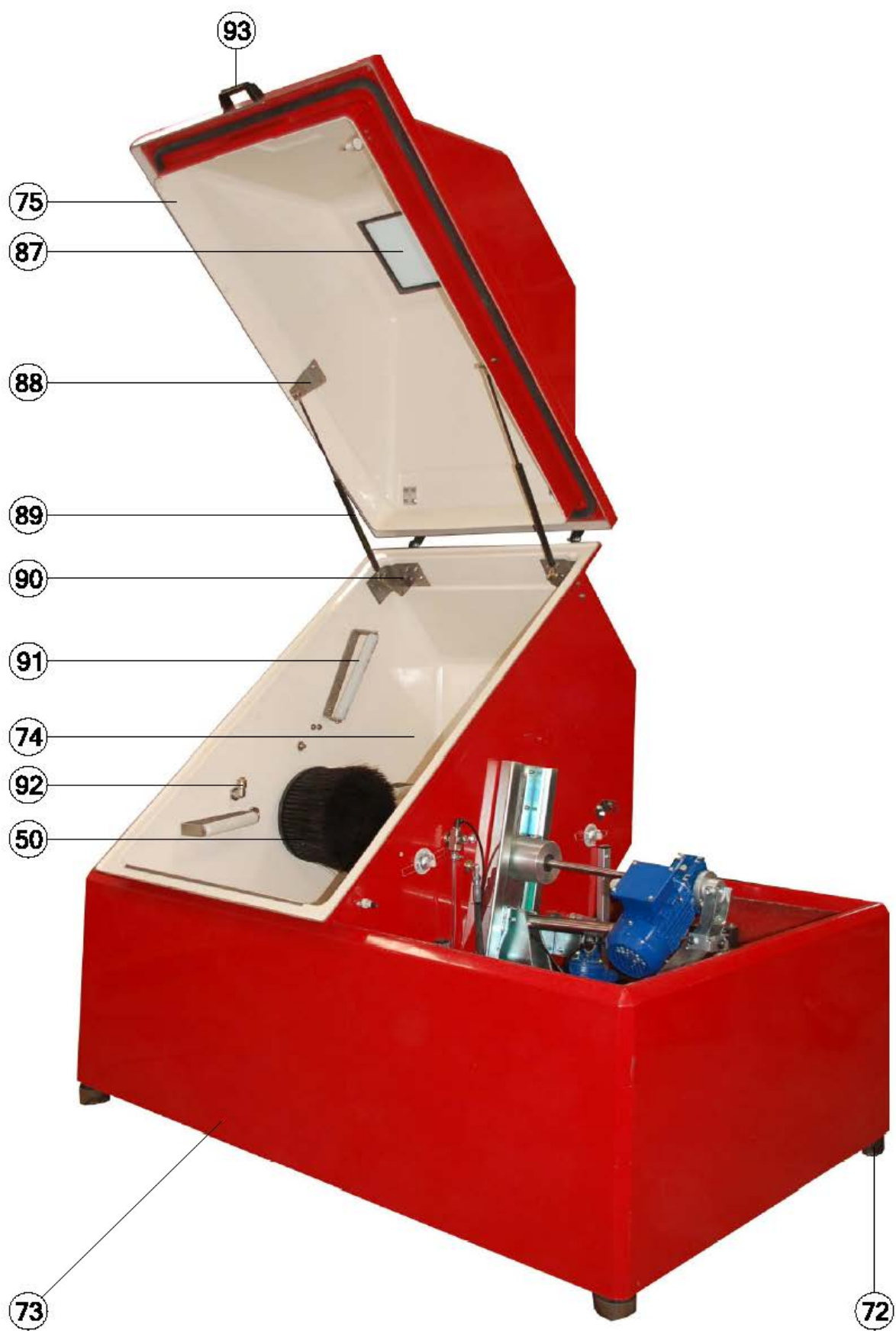
Figure D

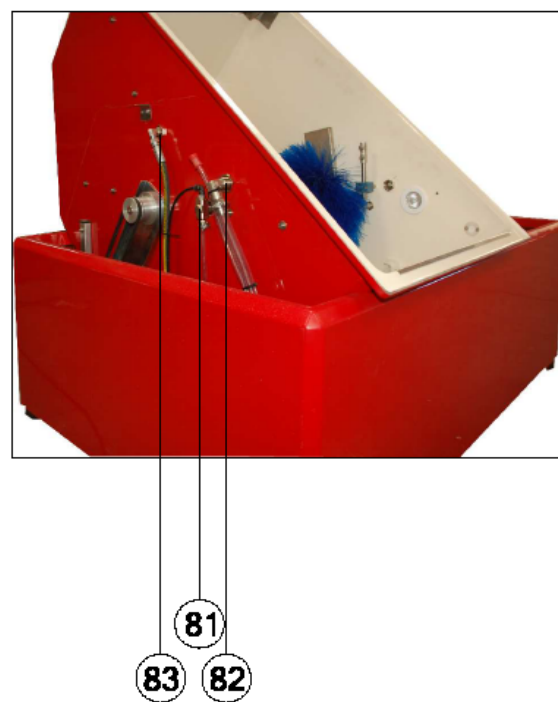
Lubrication pieces

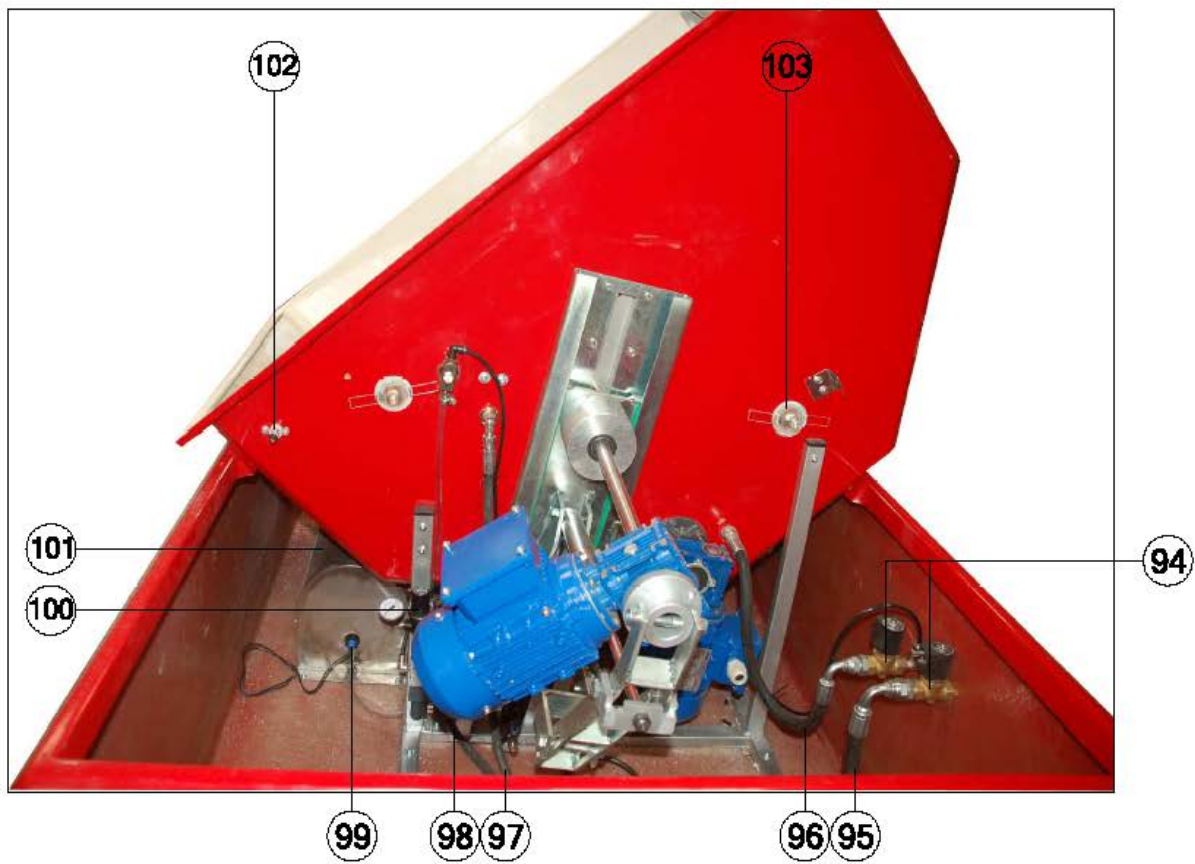


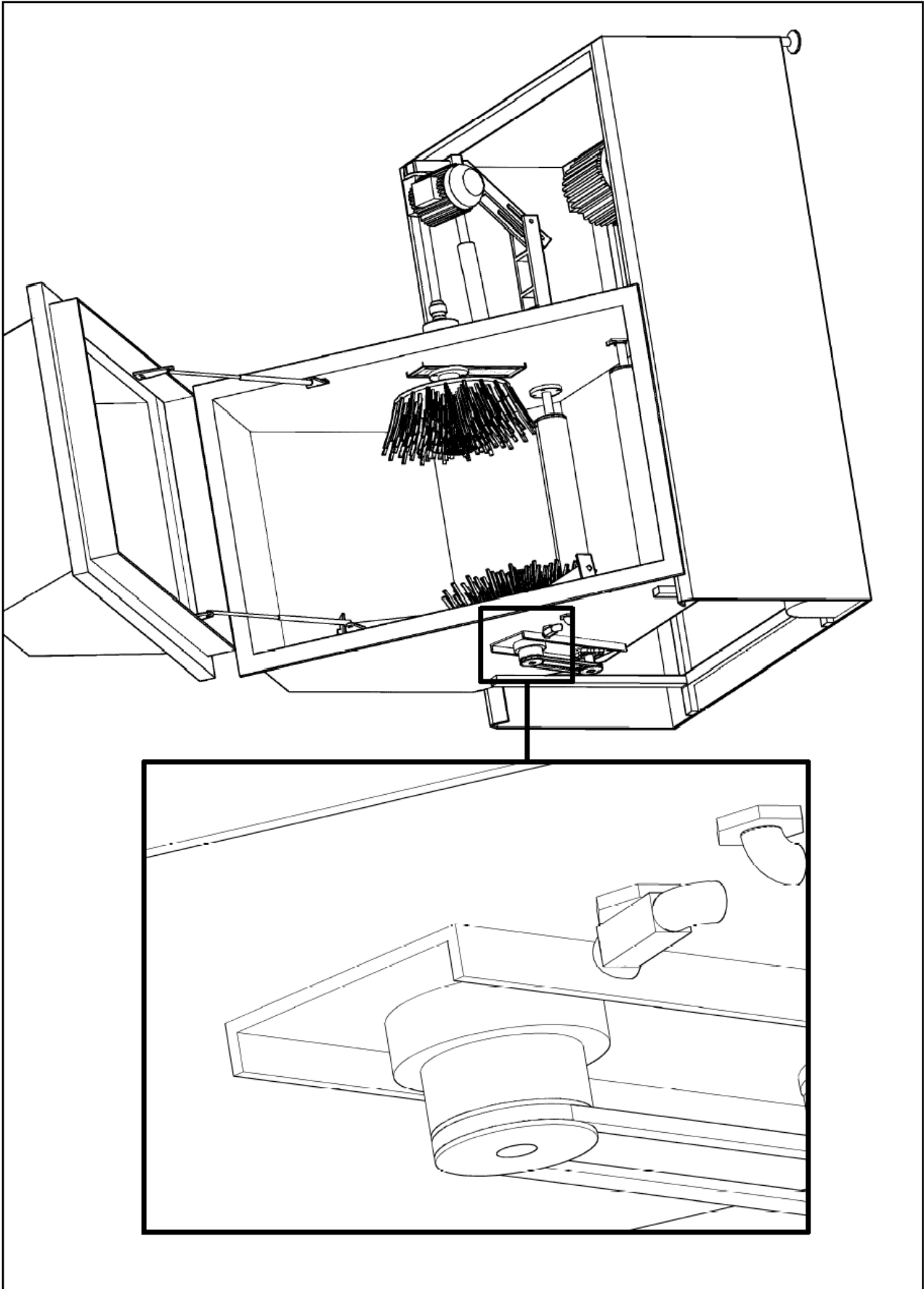
Lubrication pieces

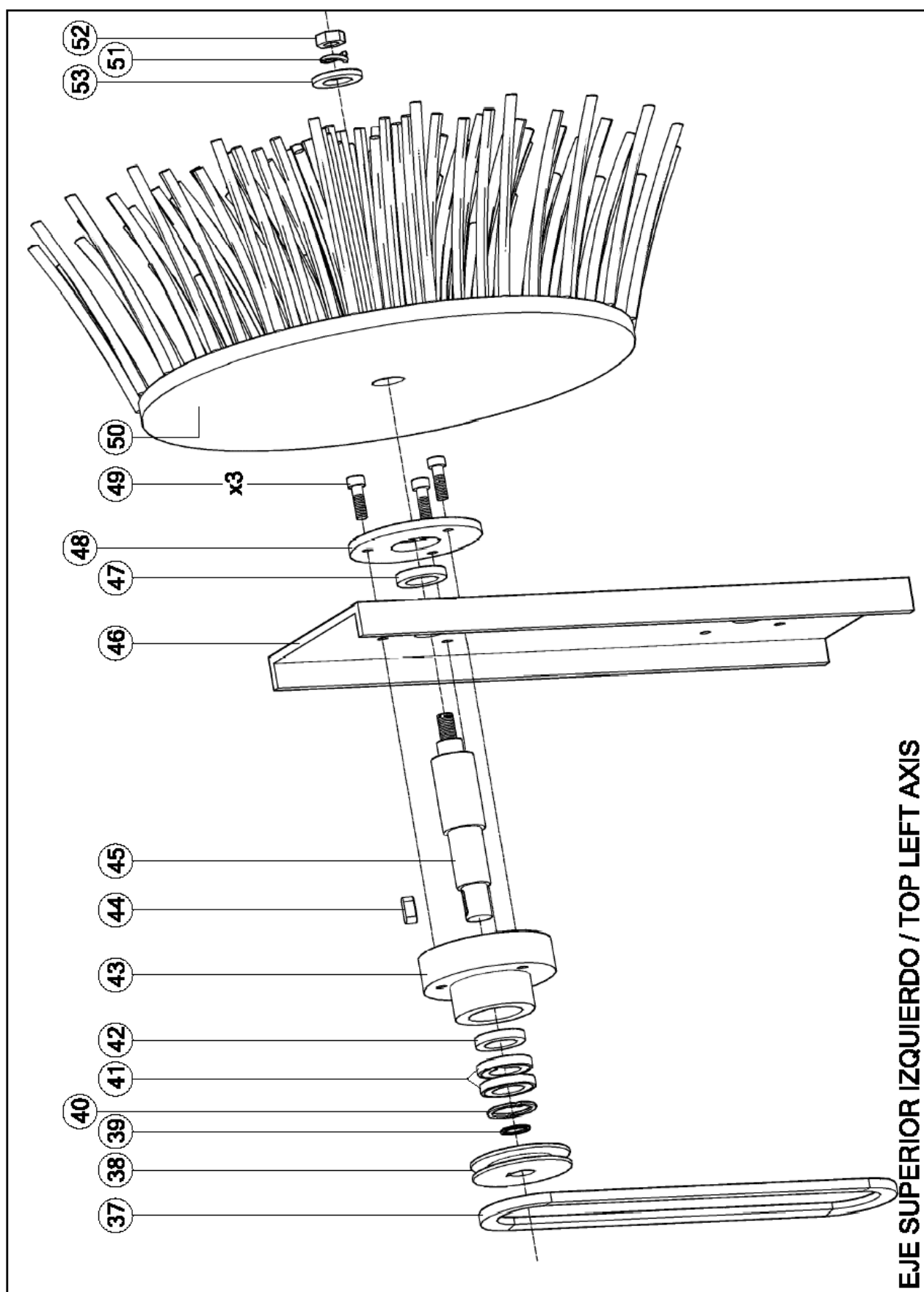
Figure E



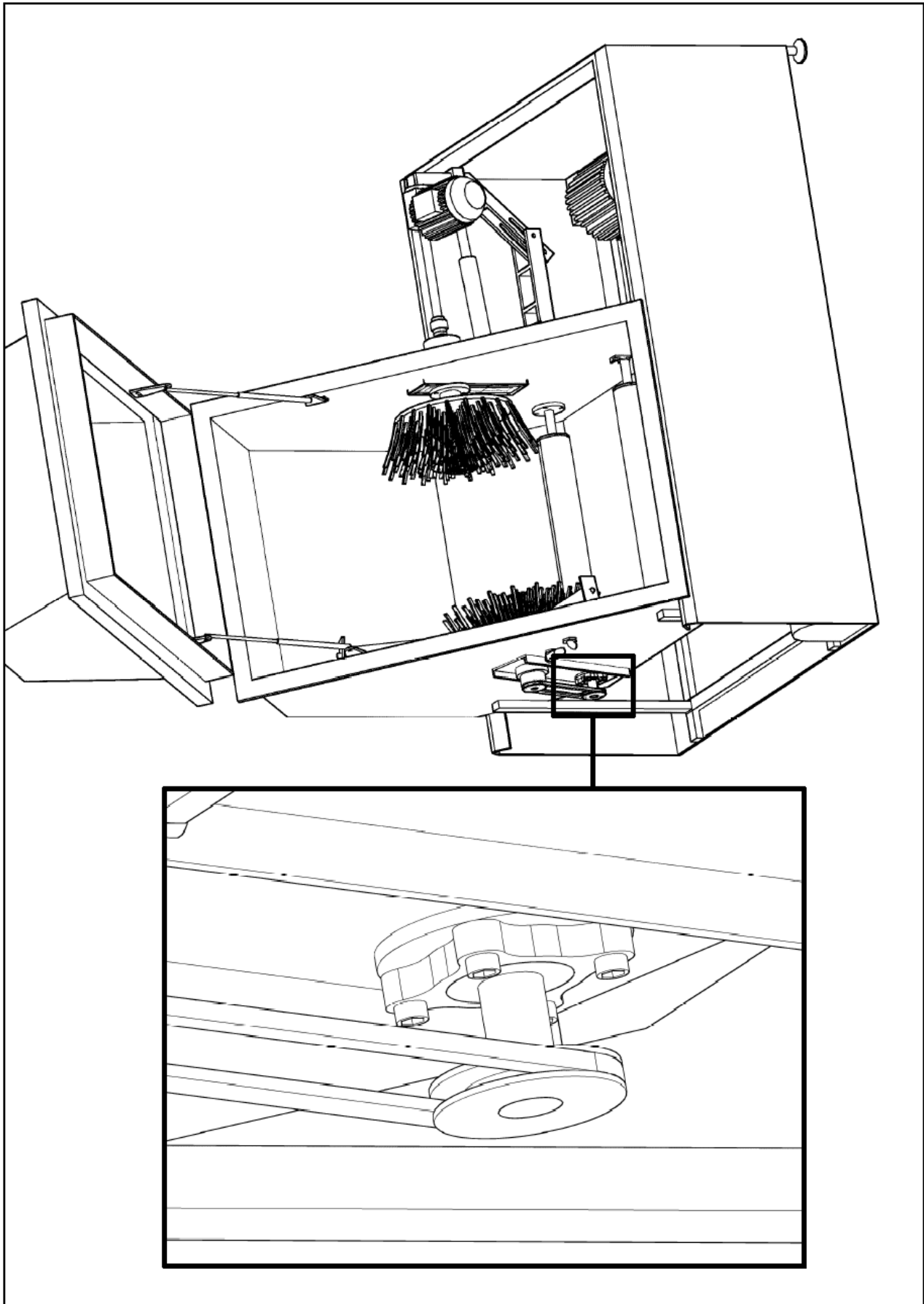


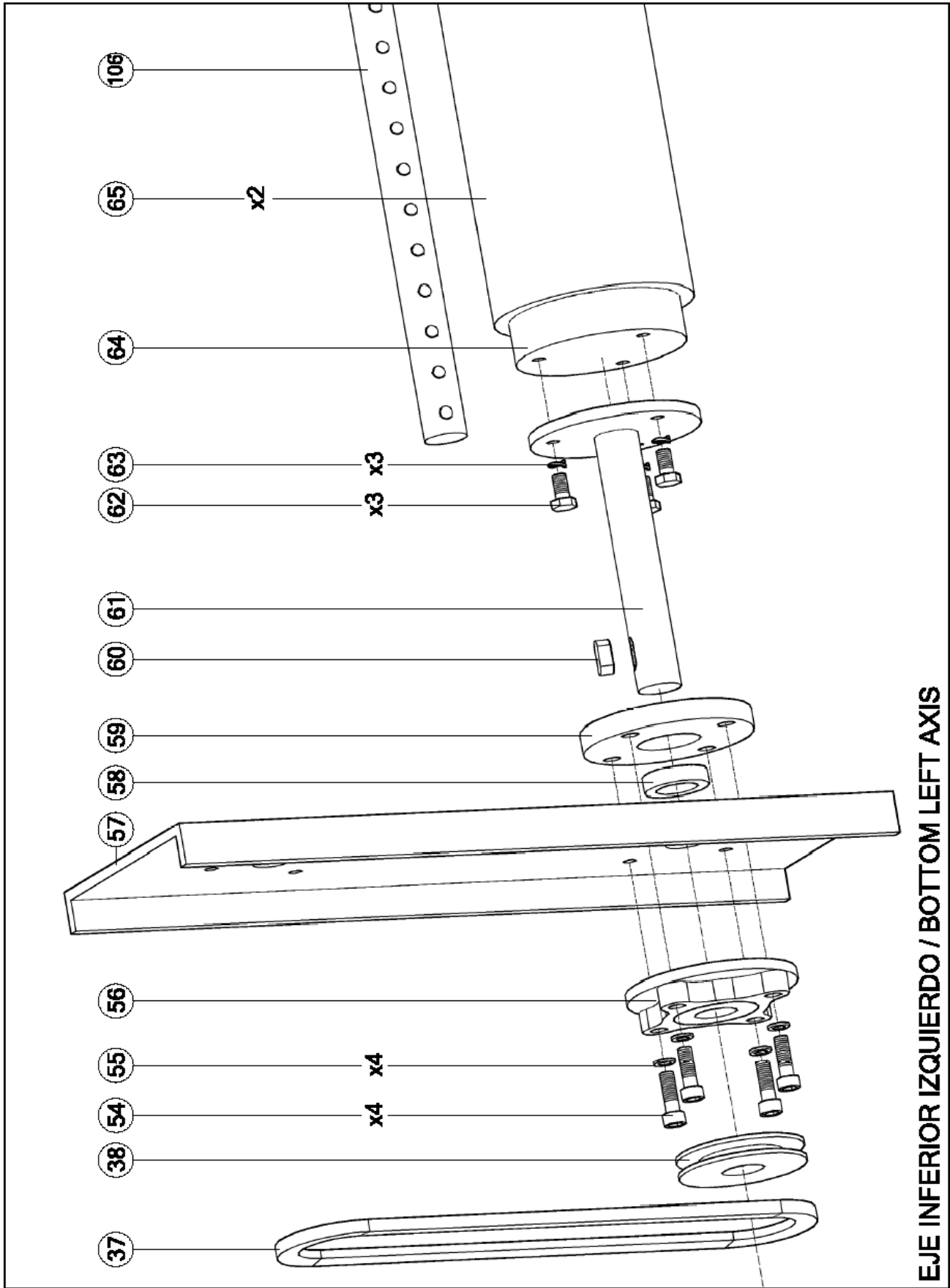




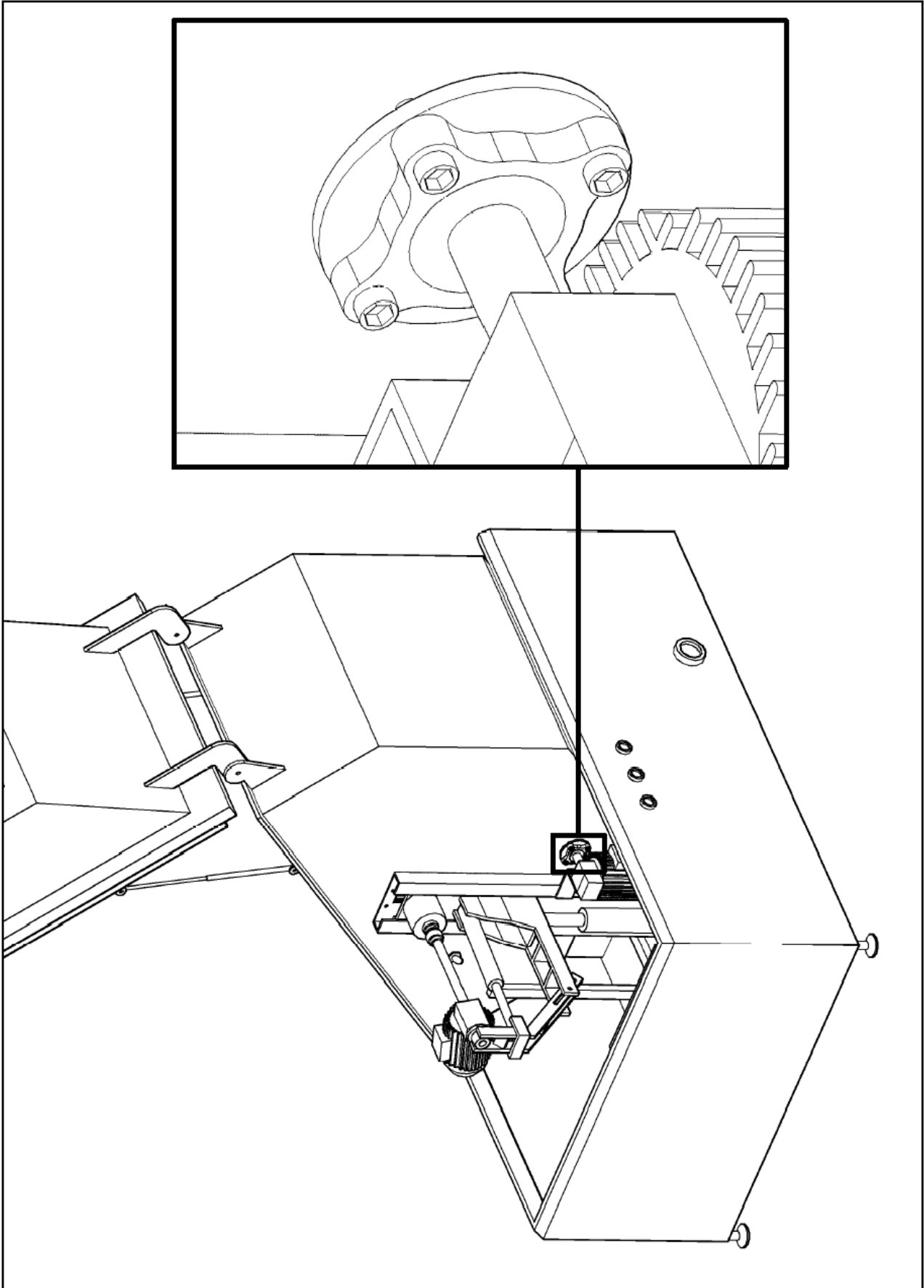


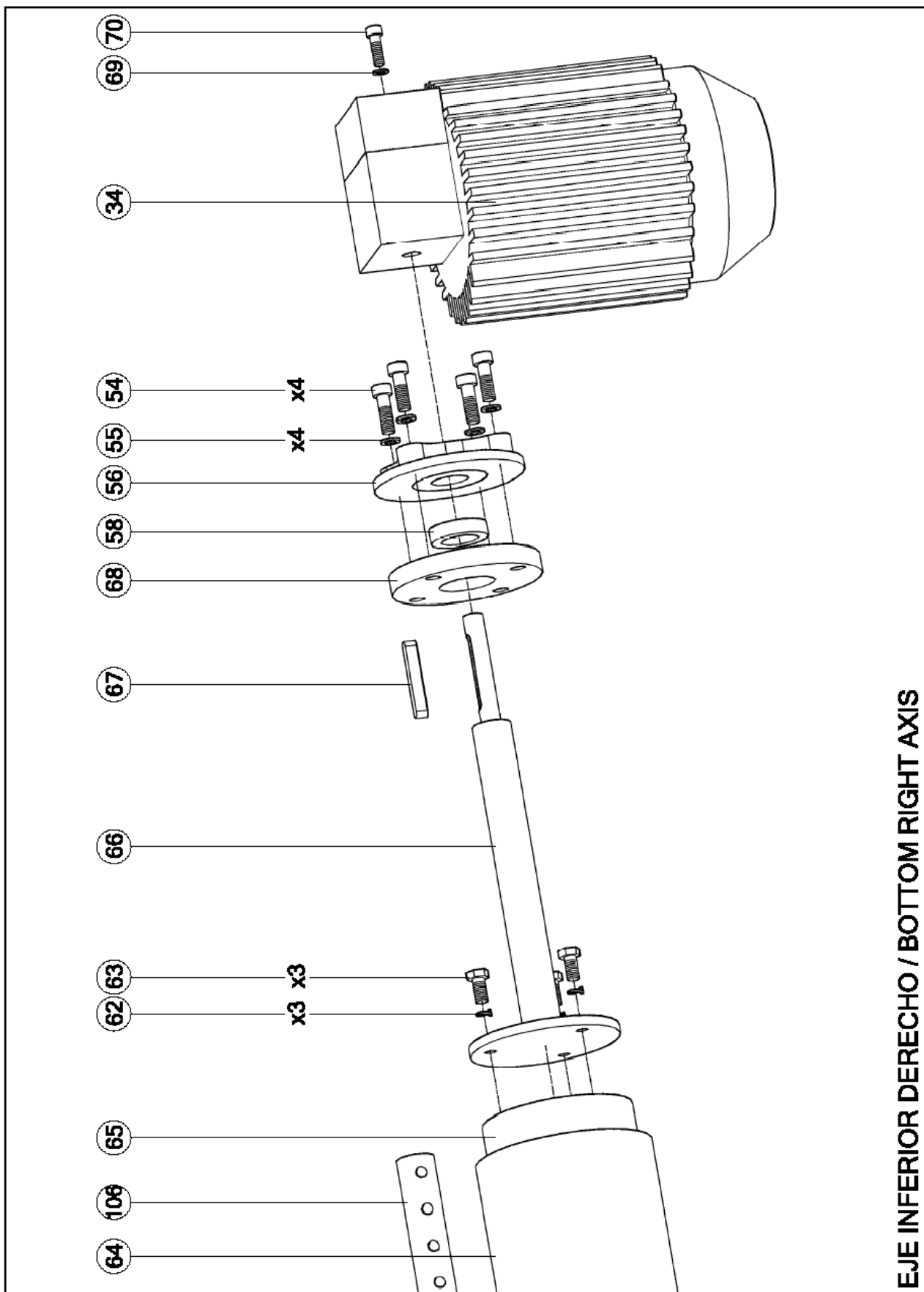
EJE SUPERIOR IZQUIERDO / TOP LEFT AXIS



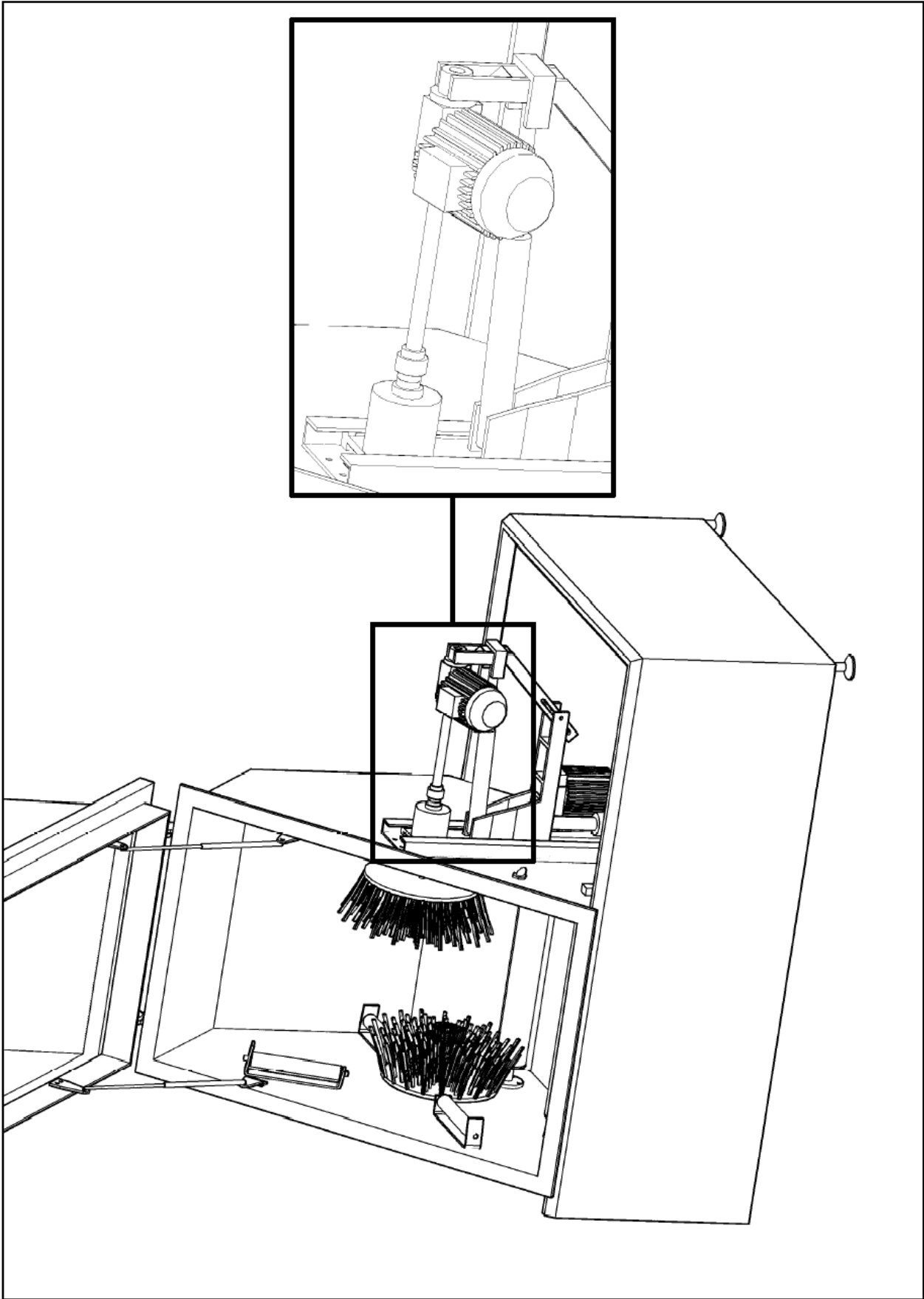


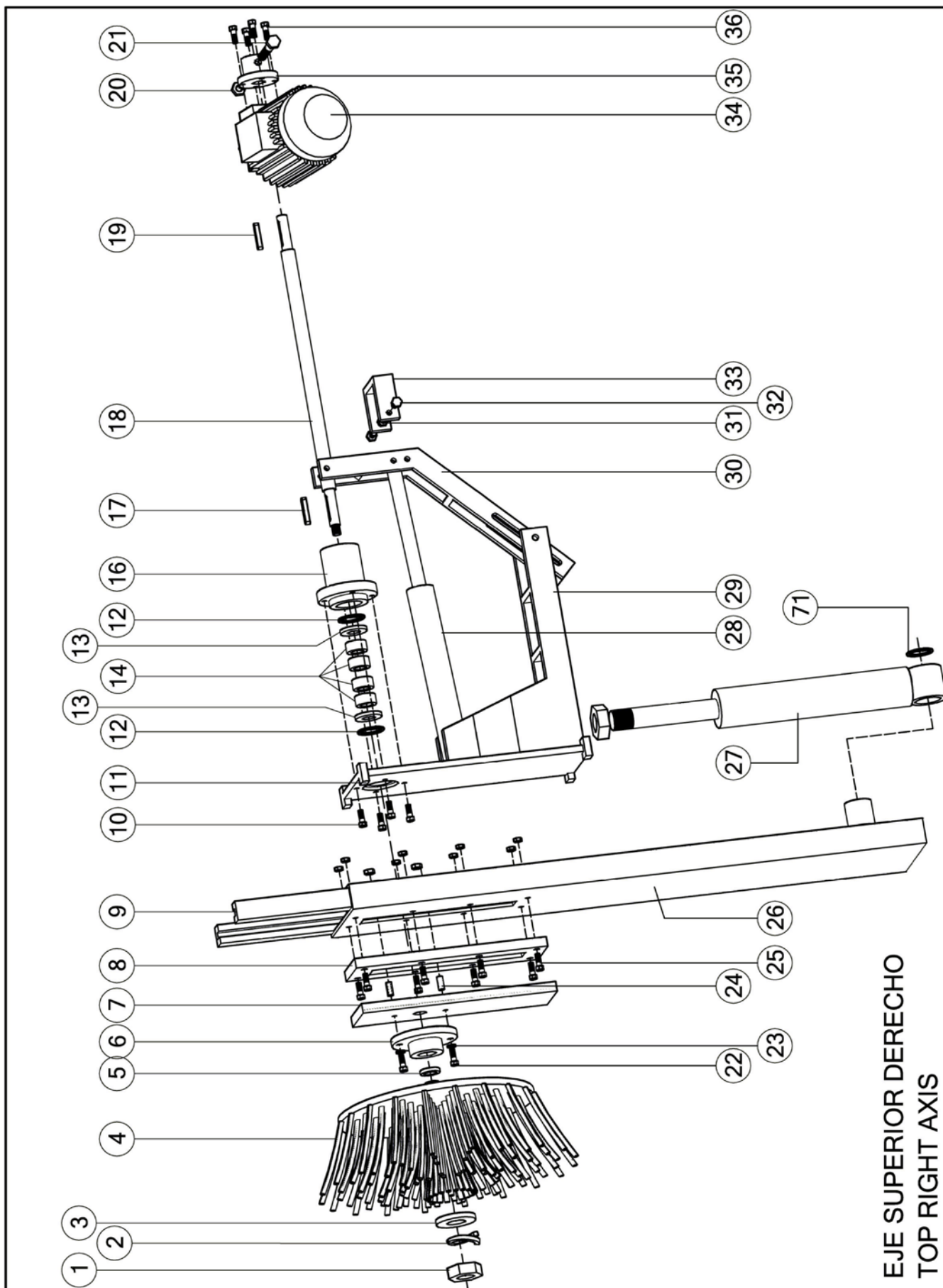
EJE INFERIOR IZQUIERDO / BOTTOM LEFT AXIS





EJE INFERIOR DERECHO / BOTTOM RIGHT AXIS






EJE SUPERIOR DERECHO
TOP RIGHT AXIS

SPARE PARTS LIST

POS.	DESCRIPTION
01	Nut M10
02	Grower M10
03	Ring M10
04	Right brush
05	Seal
06	Nylon seal kit
07	Inox protection
08	Nylon support
09	Leslidur guides
10	Screw M10
11	Bascule support
12	Security ring
13	Needle bearing
14	Ball bearing
16	Bushing sliding
17	Cotter pin
18	Sliding shaft
19	Cotter pin
20	Nut
21	Screw
22	Screw
23	Grower
24	Separator
25	Screw
26	Moveable guide sheet
27	Lifting cylinder
28	Sliding cylinder
29	Bascule support
30	Sliding lever
31	Screw
32	Nut
33	Swing sliding lever
34	Sliding turn motor
35	Sliding engine support
36	Screw
37	Belt
38	Lower pulley
39	Security ring
40	Security ring


POS.	DESCRIPCION
41	Bearings
42	Seal
43	Bushing black brush
44	Cotter pin
45	Shaft black brush
46	Support sheet
47	Seal
48	Cover seal kit
49	Screw M6
50	Left brush
51	Grower
52	Nut
53	Ring
54	Screw M10
55	Grower
56	Bushing motor roller
57	Support sheet
58	Seal
59	Seal kit motor roller
60	Cotter pin
61	Left motor shaft roller
62	Screw
63	Grower
64	Motor roller
65	Cover roller
66	Right motor shaft roller
67	Cotter pin
68	Seal kit motor roller
69	Grower
70	Screw M6
71	Security ring
72	Plastic feet Ketty
73	Rectangular base Ketty
74	Lower polyester body
75	Polyester cover for washer
76	Polyester small cover
77	Lateral polyester large cover
78	Hinges cover
79	Emergency stop button
80	Touch screen



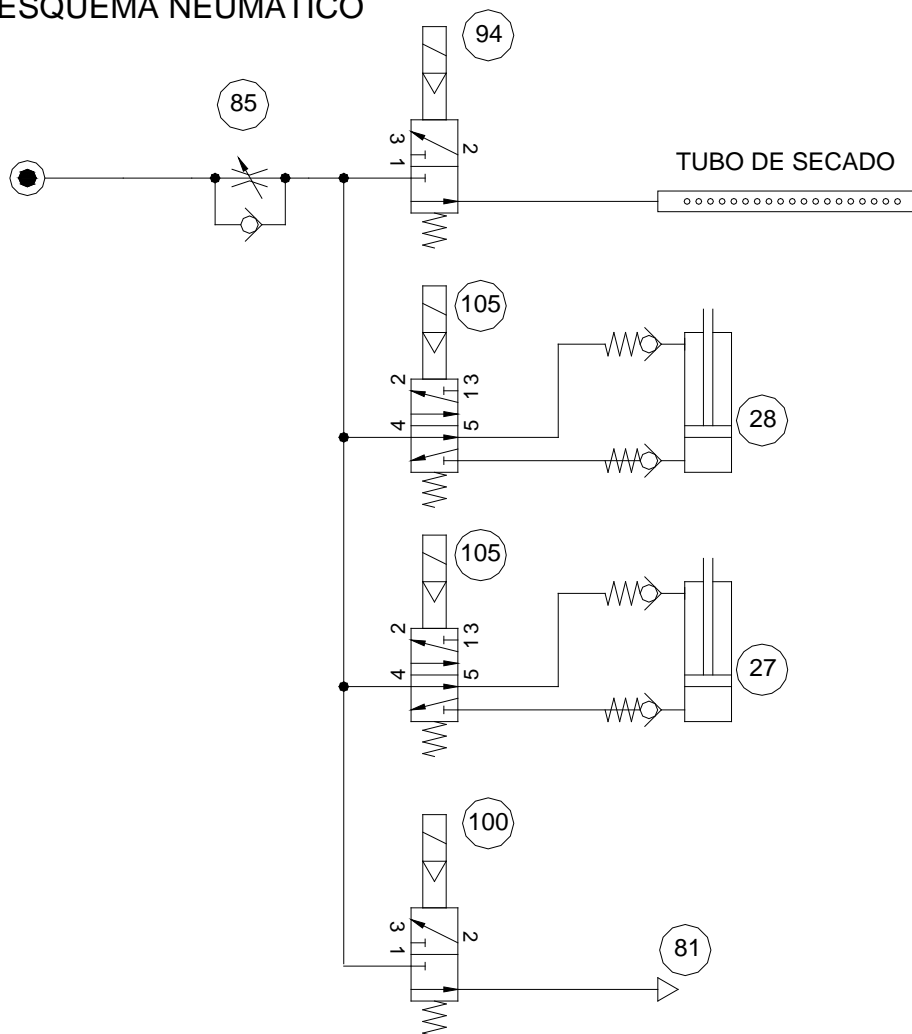
Designer:	DATE: 25-05-2009	NAME: IBASAN	SCALE: _____	NAME AND FIRM:	 IBASAN Polígono Industrial Avda. Generalitat, Parcela B-8 25310 AGRAMUNT (LLEIDA)
Verifying	25-05-2009	IBASAN			
Norm		DIN-UNE-CE			
WHEEL WASHING MACHINE KETTY W-5000 SPARE PART LIST				Nº PLANE: 21 REF. P-001-001	

POS.	DESCRIPTION
81	Detergent injector
82	Detergent inlet coupling
83	Water injector
84	Drain PVC nut
85	Air inlet tap
86	Water inlet coupling
87	Ketty glass door
88	Upper damper bracket
89	Shock / damper door
90	Lower damper bracket
91	Upper nylon guide roller
92	Detergent inlet bung
93	Door handle Ketty
94	Air / water solenoid valve
95	Water inlet pump flexible pipe
96	Air inlet flexible pipe to drying tube
97	Water injector flexible pipe(short)
98	Water injector flexible pipe(long)
99	Detergent level buoy
100	Regulator and detergent solenoid valve
101	Detergent deposit
102	Lower security detector
103	Halogen lamp
104	Water pressure puma
105	Regulator and cylinder sliding solenoid valve
106	Drying tube
107	Front roller
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120	

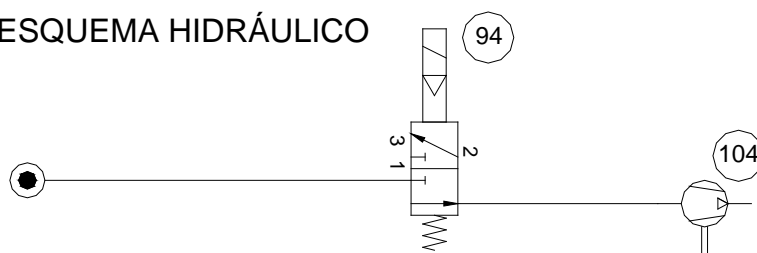


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Designer:	25-05-2009	IBASAN			
Verifying:	25-05-2009	IBASAN			
Norm		DIN-UNE-CE			
WHEEL WASHING MACHINE KETTY W-5000 SPARE PARTS LIST				Nº PLANO: 21	Polígono Industrial Avda. Generalitat, Parcela B-8 25310 AGRAMUNT (LLEIDA)
				REF. P-001-001	

ESQUEMA NEUMÁTICO




ESQUEMA HIDRÁULICO

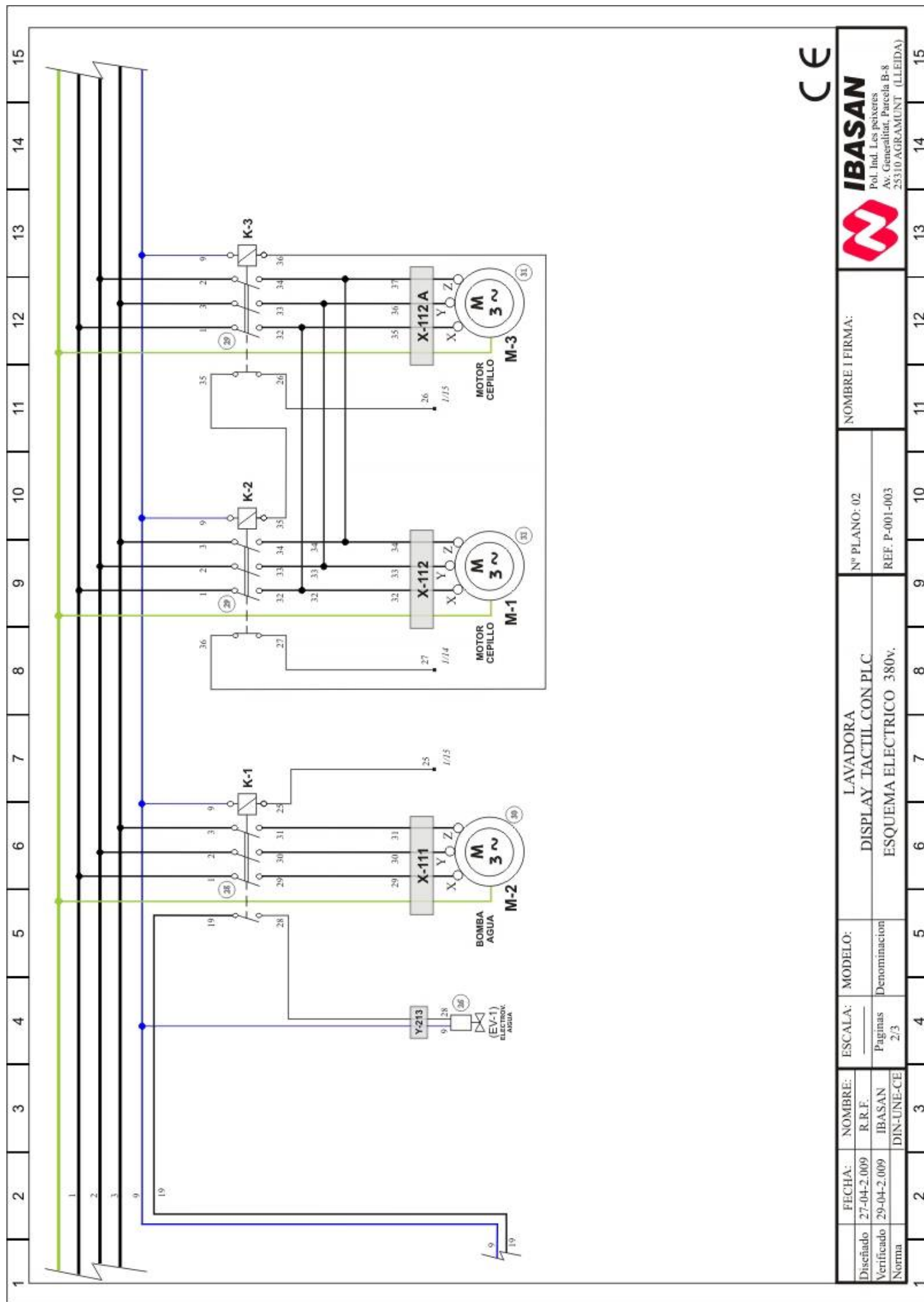


SPARE PARTS LIST

POS.	DESCRIPTION	POS.	DESCRIPTION
27	Lifting cylinder	94	Air / water solenoid valve
28	Sliding cylinder	100	Detergent solenoid valve
81	Detergent injector	104	Water pump
85	Air inlet tap	105	Sliding solenoid valve

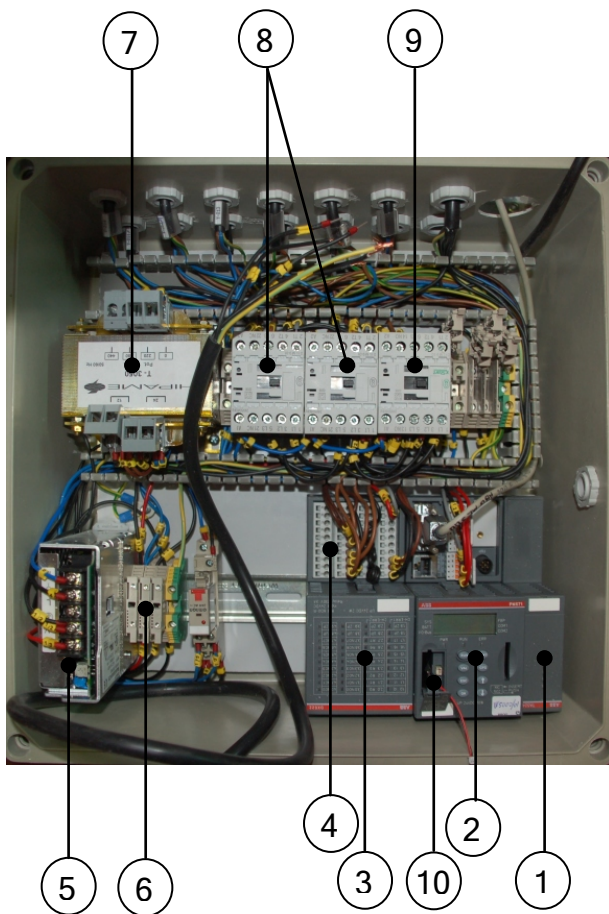


Designer	DATE: 27-04-2009	NAME: IBASAN	SCALE: —	NAME AND FIRM:	 Polígono Industrial Avda. Generalitat, Parcela B-8 25310 AGRAMUNT (LLEIDA)
Verifying	29-04-2009	IBASAN			
Norm		DIN-UNE-CE			
WHEEL WASHING MACHINE KETTY W-5000 HYDRAULIC AND PNEUMATIC SCHEME				Nº PLANO: 22 REF. P-001-002	



CE

FECHA:			NOMBRE:		ESCALA:		MODELO:		LAVADORA DISPLAY TACTIL CON PLC		Nº PLANO: 02		NOMBRE Y FIRMA:		IBASAN		Pol. Ind. Les peixeres Av. Generalitat, Parcel·la B-8 25310 AGRAMUNT (LLEIDA)		15	
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Norma			DIN-UNE-CE																15	



ELECTRICAL COMPONENTS

POS.	DESCRIPTION
01	Communications module
02	CPU (Central processing unit)
03	Digital module I/O
04	Base of connections
05	Transformer 230V/24V
06	Relé
07	Transformer 230V/24V - 230V/12V
08	Motor switches 0.18kW
09	Puma switch
10	Battery
11	Finished base C.P.U
12	Wire screen PLC
13	Relé base
14	Complete electric box
15	
16	
17	
18	
19	
20	

POSSIBLE IRREGULARITIES

1. If a variation in the sound of the electric pump is noted, the following checks should be carried out:
 - That the inlet water flow is higher than 15 L/min
 - That the inlet filter is not excessively dirty.
 - That the pressurised water outlets are not blocked
2. If the right-hand brush does not turn correctly the pressure in the pneumatic circuit should be regulated with the control "06"
3. In the case of power drop check the input voltage, the main fuses or the manoeuvre fuses.
4. If vibrations are observed on the lid of the washing chamber, or an excessive noise or fair, the inlet flow should be reducer with the bung "02", situated in the air inlet.

TECHNICAL SPECIFICATIONS

Voltage	220V / 380V three phase + Neuter 50Hz	
Connection	380V	
Consumption		
Rotation motor	0,18 kW	
Pump motor	2,80 kW	
Brush motor	0,18 kW	
Total consumption	3.150 W	
Nominal power	220V	11,4A
	380V	6,44A
Water consumption	3 Lit. / cycle	
Air pressure		
Minimum	6 Kg / cm ²	
Maximum	10 Kg / cm ²	
Length of working cycle	60 sec. approximately	
Machine dimensions	1550 x 1060 x 1500 mm	
Weight dimensions	200 Kg	

EC CONFORMITY DECLARATION

MACHINE IDENTIFICATION

*** BUILDER:** IBASAN, S.A.
V.A.T. ES- A25031378
Builder Nr.: 25/24.550
Pol. Industrial – Av. Generalitat, 8
25310 Agramunt (Lleida) España
Tel. 34-973 390816
Fax. 34-973 391193

We declare, that de product:

MARK:	IBASAN
MODEL:	KETTY W-5000 digital
TYPE:	WASHING MACHINE
SERIAL Nr.:	
DATE OF MANUFACTURE:	

conforms to the essential requirements of the Directives of the machines:

- **Directive 89/382/CEE**

and is conforming to the modifications and increments of the Directives:

- **Directive 91/368/CEE**
- **Directive 93/44/CEE**

With no liability for the parts or components added or assembled by the customer.



Juan Ibarz
Manager director

