

**KETTY W-2020 Digital**

# **Instruction Manual**



**IBASAN, S. A.**

*Technology + productivity = Saving*



## 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 outwith the company
- Use only for wheel washing
- Do not open the cover of the machine during the cycle
- Do not let the wheels 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**

### **Packaging 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 material used in the packaging is 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 combines.

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 manuals carefully, as these contain important information about the installation use and safety of the washing machine.

! Keep the manuals 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 or worn.** 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 or bypass the safety switches.** Never replace the fuses with others of a higher calibre

**Do not exceed the pressures or temperatures recommended** in the instruction manual

**Have your machine repaired by a specialist.** This machine is 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.

**The manufacturer assumes no responsibility for damage or injury to persons or objects produced by an inadequate use or maintenance of its products.**

## 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/ cm<sup>2</sup>. The maximum pressure should not exceed 10 Kg/ cm<sup>2</sup>. 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/cm<sup>2</sup> is required

### 4. - Drainage system.

Connect to the general drains with a flexible tube

**IMPORTANT:** The connection to the electrical circuit should be by means of a 40 Amp / 300 mA differential switch.

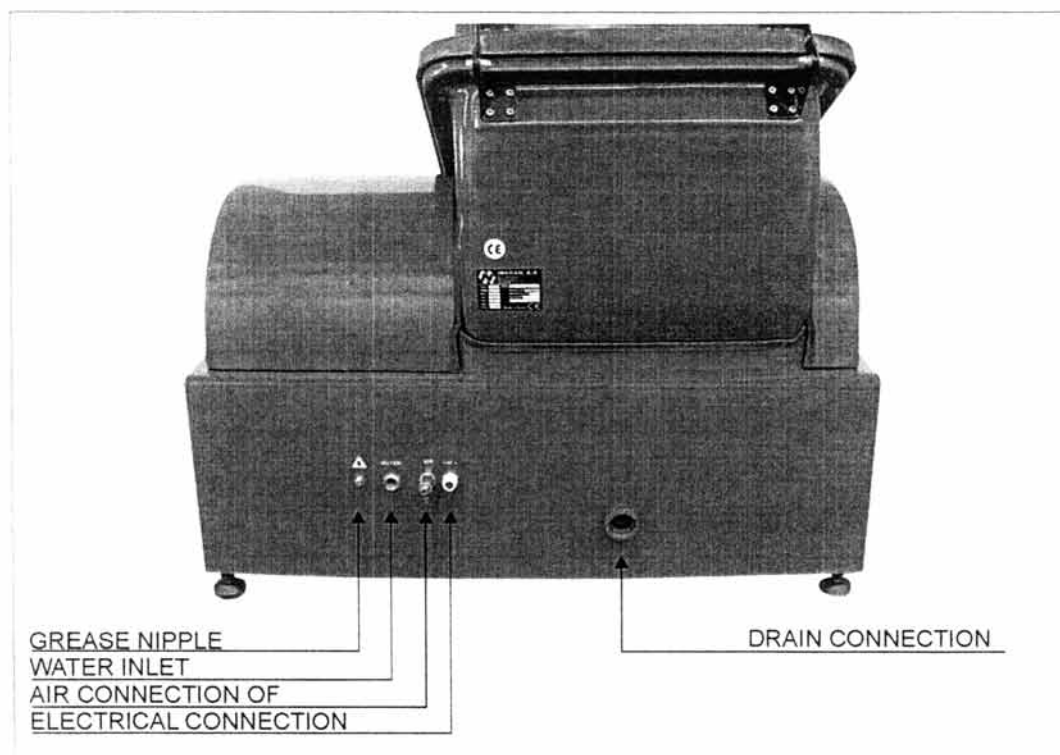


Figure A

## 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, is stored in an EPROM in fail-safe mode.

The new digital display guarantees an IP65 protection, is backlit, allowing easy reading, even under poor light conditions.

With the multifunction display you will have access to the washing and drying times and will be able to control and show these times.

It can also show the working hours and the number of washes that have been done.

**The system of nozzles has been perfected.** As well as the continuous high-pressure shower, now the wheel is also wet directly from the side with the system **3-D-Press** right after the programme begins. **The feeds of the wheel** are situated asymmetrically, which means that, by adapting to the movements, the wheel enters more smoothly.

## Start up

1. - With the lid closed press the start button (green) and check that the motor turns in the correct direction, by looking at the arrow on the indicator situated inside the washing chamber and bearing in mind that the arrow indicates the direction that the brushes turn in. If the turning direction is not correct, the connection of two phases of the input line must be changed. *(The machine will not start if the lid is open or if the emergency stop button is unplugged).*
2. - Place the wheel in the washing chamber, bearing in mind that the outer face must be placed to the left (See figure B).
3. - Close the lid, press the start button 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 cases, there are four elements whose adjustment can be modified:

- A. - Length of the wash cycle. This can be modified with the key on the display
- B. - Length of the drying cycle. This can be modified with the key on the display
- C. - Water pressure. This can be modified with the regulator installed in the pump motor. A pressure gauge indicates the value of this pressure.
- D. - The brush speed. This can be modified with the flow regulator "06" in the pneumatic circuit (See pneumatic scheme).  
This regulator only affects the pressure in the pneumatic cylinder for the brush movement.

## Regulating of washing and drying

- 1- Switch the machine on.
- 1.2- 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 values.

- 2.1- Press (◀ or ▶) until the **WASHING** screen appears.
- 2.2- Press (OK) once to show the **WASHING** time flashing.
- 2.3- Press (▲ or ▼) to increase or decrease the **WASHING** time as required
- 2.4- Press (OK) once to confirm the **WASHING** time
- 2.5- Press (◀ or ▶) until the **DRYING** screen appears
- 2.6- Press (OK) once to show the **DRYING** time flashing.
- 2.7- Press (▲ or ▼) to increase or decrease the **DRYING** time as required.
- 2.8- Press (OK) once to confirm the **DRYING** time
- 2.9- Press the key (◀ or ▶) until the initial screen appears.

3- Adjusting the display lighting.

- 3.1- Press the (+ or -\*) key to increase or decrease the display lighting as required.

4- Reading hours of service and number of washes.

- 4.1- Press once (▼) to show the **ENTER PASSWORD** screen.
- 4.2- Press (OK) once to show **00000** flashing.
- 4.3- Press (▲) once to adjust password in **00001**.
- 4.4- Press (OK) once to show hours of use and the number of washings.
- 4.5- Press (ESC) once to show the initial screen.

5- To set the timetable on the initial screen.

- 5.1- Follow points 4.1, 4.2, 4.3 and 4.4
- 5.2- Press (-\*) once and then press (OK) to show **PASSWORD** and **SET CLOCK**.
- 5.3- Place the flashing cursor on **SET CLOCK**. with the (▲ or ▼) key, and then press (OK) twice to show the hours, minutes, day, month and year.
- 5.4- Press (OK) once for the change of the hour with one of the (▲ ▼ or ◀ ▶) keys as necessary and press (OK) to confirm.
- 5.5- Press the (▲ or ▼) key to situate the cursor on the day, month or year and follow the steps in point 5.4.
- 5.6- Once these parameters are confirmed, press (ESC) three times, press (-\*) once and press (ESC) once to return to the initial screen.

**NOTE:** With the **green LED** lit (Working).

With a flashing red LED (emergency stop activated or door open).

**NOTE:** With the **red LED** flashing, you cannot enter any parameters (keyboard blocked Except for changes of backlighting).



Figure C



## Maintenance-Care-Cleaning

### Cleaning 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 cleaning 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. Never 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 after 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 the grease nipple shown in the figure A every 20 working hours.

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

### Lubricating the pump motor:

Change the oil after the first 50 working hours.

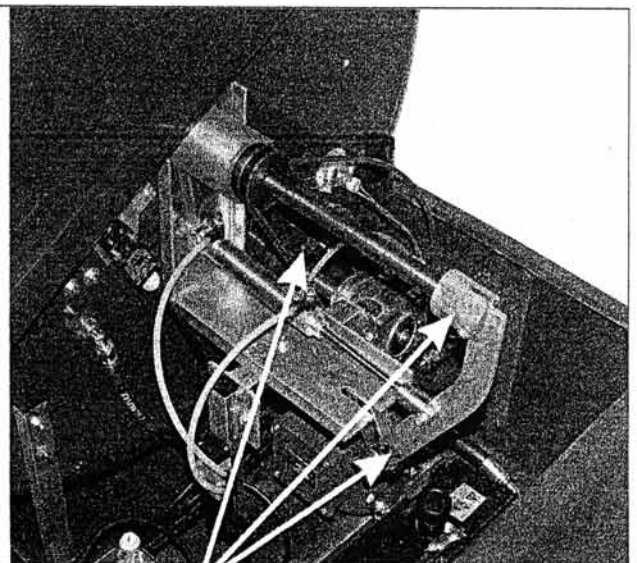
The following changes are every 500 working hours. The oil used should be S.A.E. 20/30.

The capacity is 0.33 l.



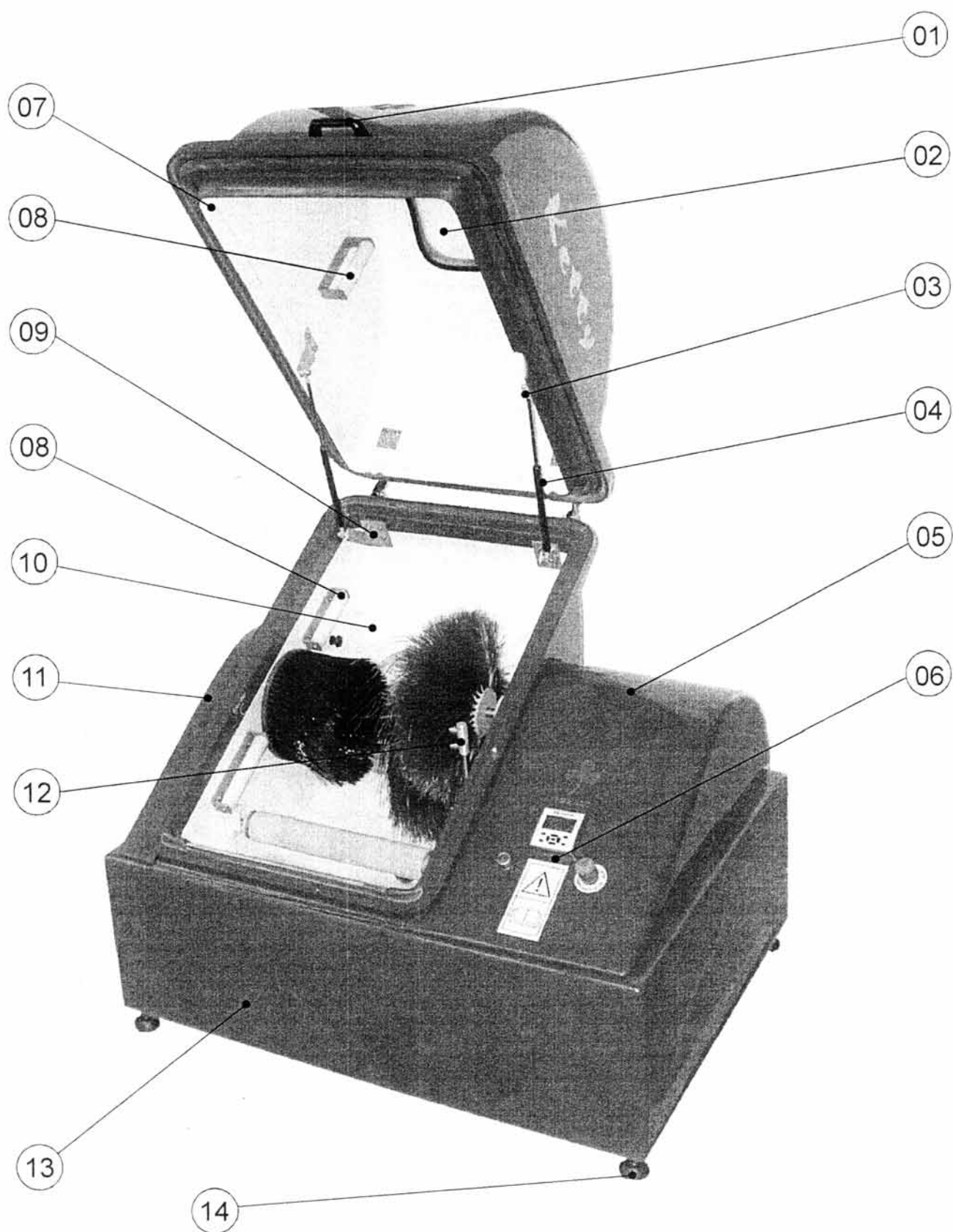
Figure D

LUBRICATION PIECES

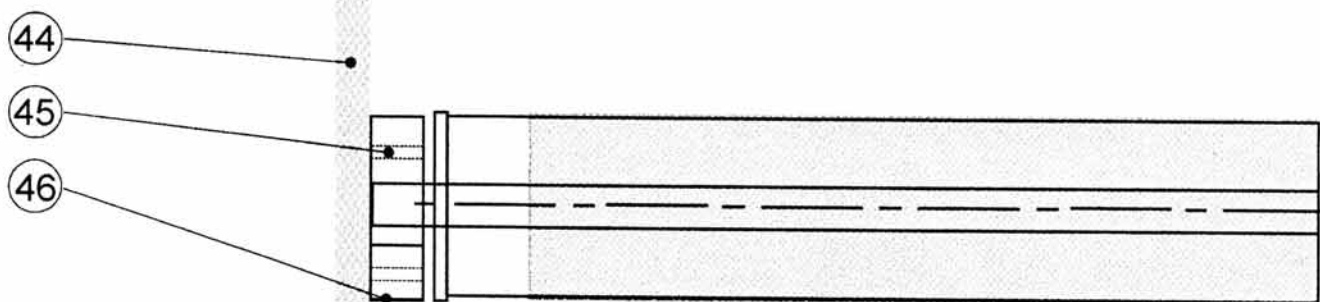
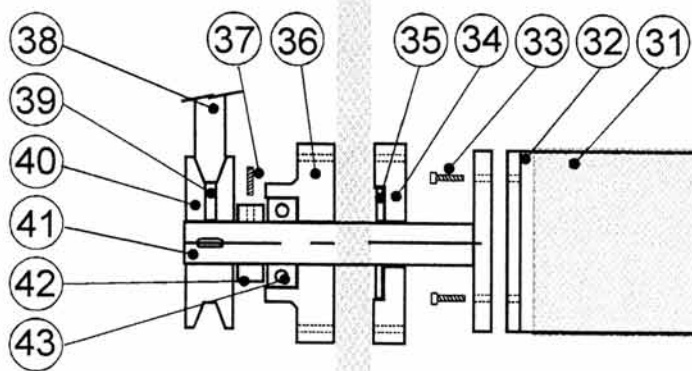
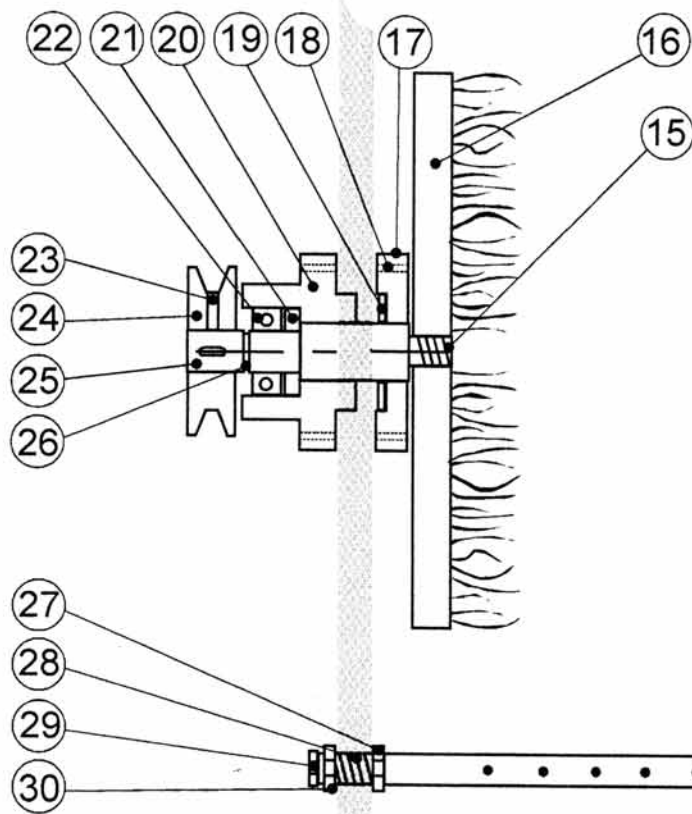


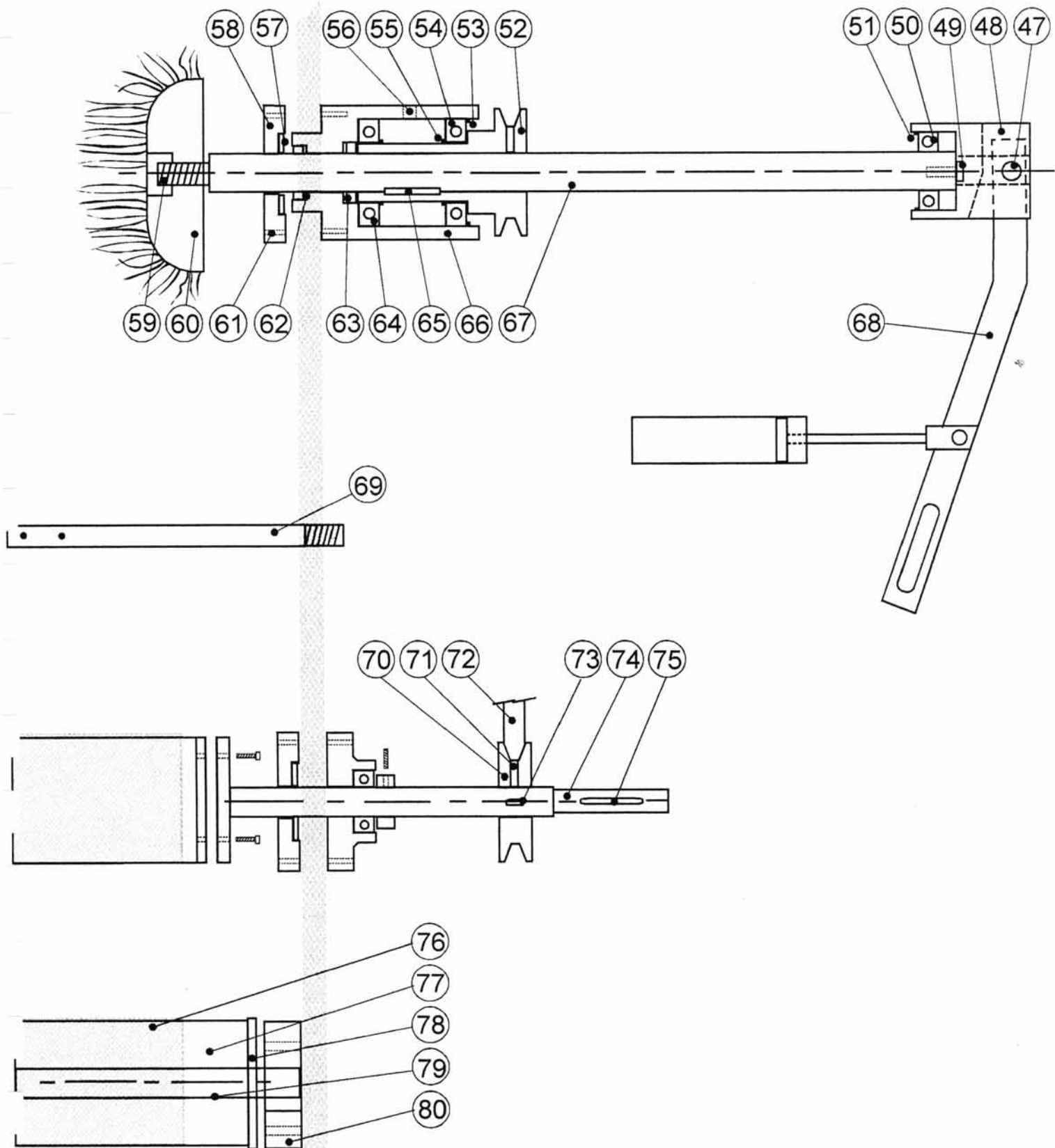
LUBRICATION PIECES

Figure E










CE


Designer	DATE: 24-05-2.005	NAME: IBASAN	SCALE: —	FIRM NAME :	 <b>IBASAN</b> Ctra. Tarrega, s/n 25310 AGRAMUNT (LLEIDA)
Verifying	27-05-2.005	IBASAN			
Norm		DIN-UNE-CE			
WHEEL WASHING MACHINE KETTY W-2020 Digital PIECES MECHANISMS				N° PLANE: 20	
				REF. P-001-002	

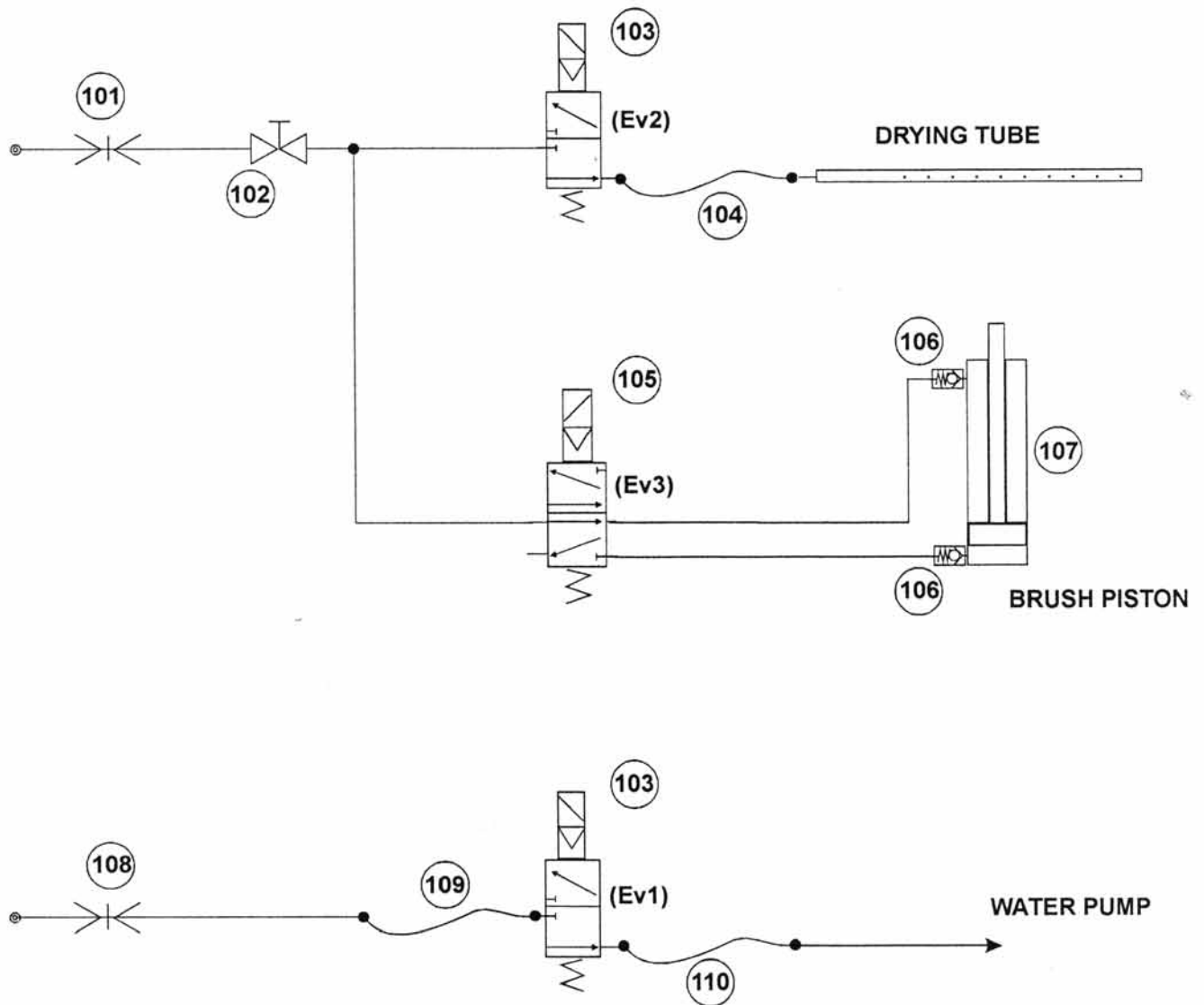
## LIST OF REPLACEMENT PARTS

POS.	DESCRIPTION
01	Door handle
02	Door spy-hole
03	Upper damper bracket
04	Damper
05	Mechanism cover (right)
06	Controls and screen
07	Washing door
08	Guide roller
09	Lower damper bracket
10	Washing tank
11	Mechanism cover (left)
12	Pressurised water injector
13	Mechanism and tank housing
14	Machine feet
15	Left brush nut
16	Left brush
17	Inside left brush bracket
18	Left brush bracket fixing screw
19	Upper left inside bracket seal
20	Outside left brush bracket
21	Outside bracket seal
22	Upper left bearing shaft
23	Upper left pulley fixing screw
24	Upper left pulley
25	Left brush shaft
26	Upper left shaft elastic ring
27	Drying tube fixing nut
28	Drying tube reduction
29	Drying tube bung
30	Reduction locking nut
31	Cover roller
32	Motor roller
33	Roller feed tube fixing screw
34	Inner left roller feed bracket
35	Inside bracket seal
36	Bearing set bracket
37	Left sleeve fixing screw
38	Left belt
39	Lower left pulley fixing screw
40	Left roller feed pulley

POS.	DESCRIPTION
41	Left roller feed shaft
42	Elastic ring
43	Bearing set
44	Tank side wall
45	Free roller bracket fixing screw
46	Left bracket
47	Ball joint fixing screw
48	Ball joint
49	Sliding ball joint fixing screw
50	Ball joint bearing
51	Ball joint elastic ring
52	Shaft-pulley
53	Pulley shaft elastic ring
54	Outside bushing bearing
55	Outside bushing elastic ring
56	Grease nipple bushing
57	Upper right inside bracket seal
58	Inside right bracket brush
59	Right brush nut
60	Right brush
61	Right brush bracket fixing screw
62	Seal frontal bushing
63	Inside Seal bushing
64	Inside Bearing bushing
65	Moveable cotter pin bushing
66	Bushing brush
67	Moveable shaft brush
68	Moveable shaft lever
69	Drying tube
70	Right motor roller pulley
71	Lower right pulley fixing screw
72	Right belt
73	Right pulley cotter pin
74	Right motor shaft roller
75	Motor reduction cotter pin
76	Cover roller
77	Free roller
78	Free roller bung
79	Free roller shaft
80	Right free roller bracket

CE


	DATE:	NAME::	SCALE:	FIRM NAME :	 <b>IBASAN</b>
Designer	24-05-2.005	IBASAN	_____		
Verifying	27-05-2.005	IBASAN			
Norm		DIN-UNE-CE			
WHEEL WASHING MACHINE KETTY W-2020 Digital LIST OF REPLACEMENT PARTS				N° PLANE: 21  REF. P-001-002	Ctra. Tarrega, s/n 25310 AGRAMUNT (LLEIDA)

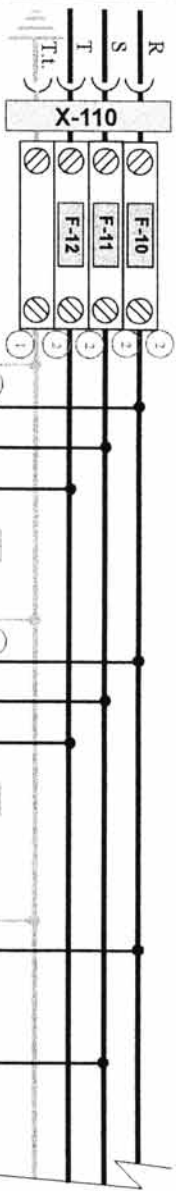


### LIST OF SPARES

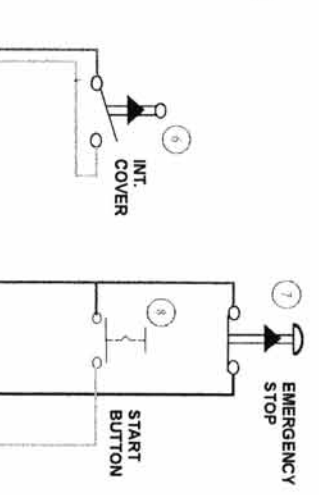
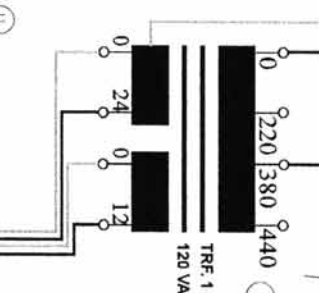
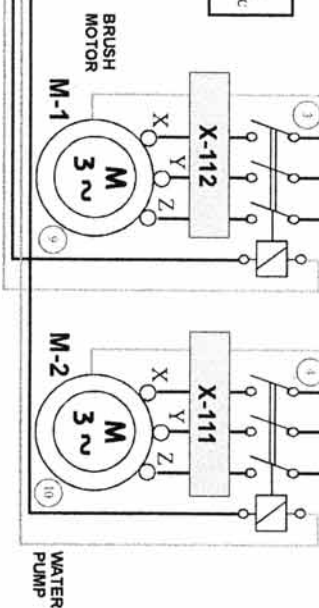
POS.	DECRPTION
101	Coupling
102	Flow regulating tap
103	Drying solenoid valve or electric pump
104	Flexible air pipe
105	Cylinder solenoid valve
106	Air cylinder regulator
107	Pneumatic cylinder
108	Coupling and filter
109	Water inlet solenoid valve flexible pipe
110	Water inlet pump flexible pipe
111	
112	

CE

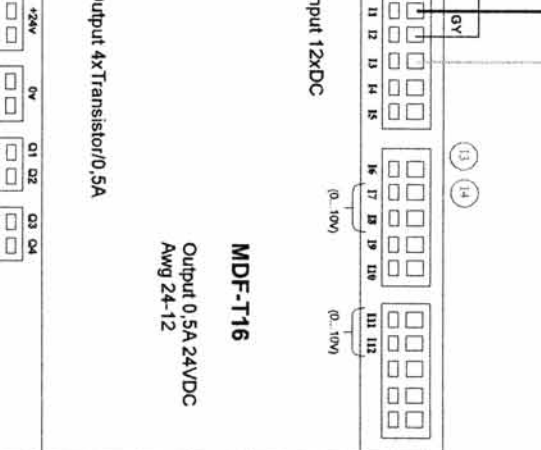
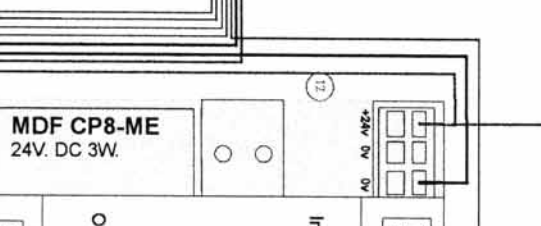
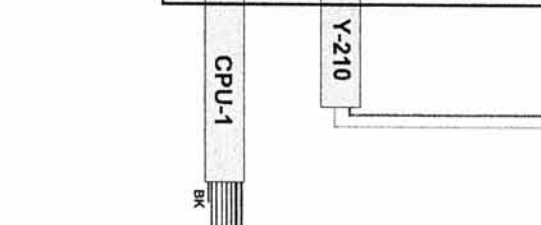
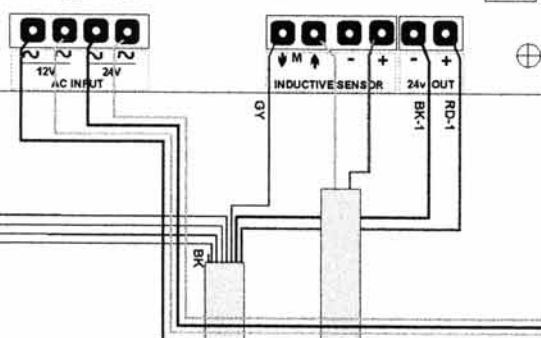
Designer	DATE: 24-05-2.005	NAME: IBASAN	SCALE:	FIRM NAME :	 <b>IBASAN</b> Ctra. Tarrega, s/n 25310 AGRAMUNT (LLEIDA)
Verifying	27-05-2.005	IBASAN	—		
Norm		DIN-UNE-CE			
WHEEL WASHING MACHINE KETTY W-2020 Digital HYDRAULIC AND PNEUMATIC SCHEME				Nº PLANE: 22	
				REF. P-001-002	



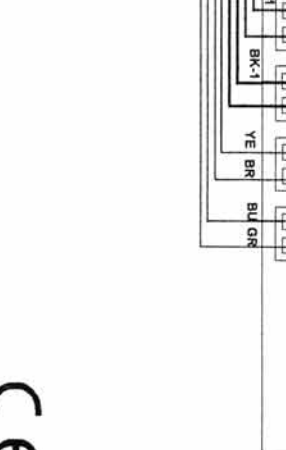
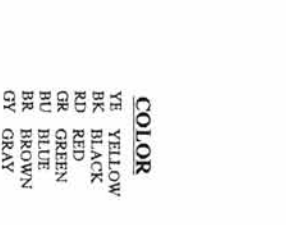
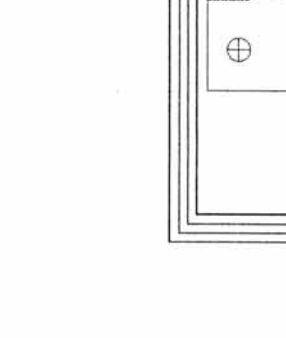
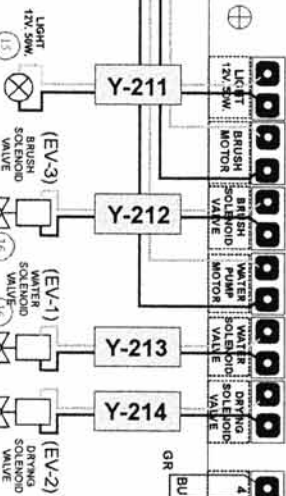
NOTE:  
THE WASHING MACHINE SHOULD BE  
PROTECTED BY A 30A MAIN/FULLY R.C.  
CIRCUIT C FUSE



### LIGHT CONTROL MODULE



- COLOR**
- YE YELLOW
  - BK BLACK
  - RD RED
  - GR GREEN
  - BU BLUE
  - BR BROWN
  - GY GRAY



12	DATE: 18-04-2005	NAME: IBASAN	SCALE:	WHEEL WASHING MACHINE	Nº PLANO: 01	FIRM NAME:
Designer	18-04-2005	IBASAN		KETTY W-2020 Digital		
Verifying	25-04-2005	IBASAN		ELECTRIC MACHINE 280V	REF P-001-002	
n		JNE				





## ELECTRICAL COMPONENTS

POS.	DESCRIPTION
01	Earth terminal
02	Fused terminal + fuse 15A.
03	Brush reducer motor switch
04	Pump motor switch
05	Transformer 220/380 a 12/24v. 120VA
06	End run cover
07	Emergency stop button
08	Start button
09	Reducer motor
10	Water pump motor
11	Source and manoeuvres printed circuit board
12	CPU of programme memory
13	Screen display keyboard
14	Module of transistor inlets and outlets
15	12v 50w halogen light.
16	Drying and water solenoid valve
17	Brush piston solenoid valve
18	3A printed circuit fuse.
19	5A printed circuit fuse.
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 of air, the inlet flow should be reduced with the bung "02", situated in the air inlet.

**IMPORTANT:** The printed circuit board should never be touched with the hands.

## TECHNICAL SPECIFICATIONS

Voltage	220 / 380 v. three phase 50 Hz.
Connection	380v.
Consumption	
Rotation motor	0,18 Kw.
Pump motor	2,80 Kw.
Total consumption	2.995 W.
Nominal power	4,55 A.
Water consumption	3 Litres / cycle
Air pressure	
Minimum	6Kg./cm <sup>2</sup>
Maximum	10Kg./cm <sup>2</sup>
Work pressure	--- Kg./cm <sup>2</sup>
Length of working cycle	60 sec.
Dimensions of the base	1110 X 810 mm

# CE CONFORMITY DECLARATION

## MACHINE IDENTIFICATION

**\* BUILDER:**

**IBASAN, S.A.**

V.A.T. ES-A25031378

Manufacturer Nr.: 25/24.550

Carretera de Tàrrega, s/n

25310 Agramunt (Lleida) Spain

Tel. 973 390734

Fax. 973 391285

Http: WWW.IBASAN.COM

E-mail: IBASAN@IBASAN.COM

We declare, that the product:

MARK:

IBASAN

MODEL:

KETTY W-2020 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.



IBASAN, S/A

Juan Ibarz Raluy  
Manager Director