

# **INSTRUCTION MANUAL**

Installation | Maintenance | Use | Safety

# Coffee and Grains Grinder



Model

MCG.8



Image merely illustrates.

### CONGRATULATIONS,

You have just purchased a IMG-BRASIL equipment, product of the highest quality, safety and efficiency.

Founded in 1989, IMG-BRASIL is a respected company as one of the best and most complete companies in the field of gastronomy equipment manufacturing.

Constant innovation and improvement of its products, using top-of-line raw materials, ensure superior products consumed in Brazil and in more than 25 countries worldwide.

THE RELIABILITY AND CERTAINTY OF A GOOD PRODUCT ARE IN THE NAME



## **IMPORTANT:**

PRODUCT FOR PROFESSIONAL USE. DO NOT USE BEFORE READING THE MANUAL CAREFULLY. IN CASE OF QUESTIONS, PLEASE CONTACT US:

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The characteristics, pictures and figures presented in this manual should be considered for information. IMG BRASIL reserves the right to make such modifications as may be deemed necessary without prior notice.

#### 1. Safety Information

#### 1.1 General Warnings

- Cautions / precautions must be observed when installing, using, maintaining and discontinuing use of this equipment;
- Before carrying out any operation (assembly, use, maintenance and reuse after prolonged use of the equipment), read the manual carefully;
- The equipment must be used by trained personnel familiar with the use and safety regulations described in this manual;
- This equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capacities, or people with lack of experience and knowledge, unless they have received instructions regarding the use of the appliance or are under the supervision of a person responsible for their safety.
- It is recommended that children be supervised to ensure that they are not playing with the equipment;
- In case of rotation of the personnel that will work with the equipment, the new operator must be educated about the standards and the operation of the same one;
- The operator must use the **Adequate PPE** (Personal Protective Equipment). As for example: use a hair cap to prevent them from getting stuck in the moving parts of the equipment;
- The operator must always be aware of situations that can cause a risk of accidents and avoid them. For example: avoid working with loose uniform sleeves, where they can lock in moving parts, causing accidents;
- After reading and clarifying all doubts, this manual should be carefully stored in an easily accessible location, known to all persons who will operate the equipment and make it available to those who will carry out maintenance for any inquiries. Whenever any questions arise, be sure to check the manual. Do not operate the equipment in any way with doubts;
- In the installation, it is essential to make this manual available to the professionals who will do the same;
- Never put your hands, fingers or objects inside the head with the equipment on, as this may cause an accident. Do not start the grinder without the funnel attached to the head;
- Before starting cleaning and any type of maintenance, it is essential to disconnect the equipment from the power supply;
- Periodically check the condition of cables and electrical parts:
- Do not leave the equipment switched on unattended.
- This equipment is intended to be used for commercial applications, for example in restaurant kitchens, canteens, hospitals and in commercial enterprises such as bakeries, butchers, etc., but not for continuous mass production of food.



#### ATTENTION!

Do not perform repairs on your own. Refer servicing to qualified service personnel. Only use original parts in your equipment.

#### 2. Technical Characteristics

#### 2.1 Main Components

For the equipment described in this manual, safety in use, cleaning, maintenance and maximum hygiene are guaranteed by the design and special design of all parts, as well as the use of stainless steel and other materials suitable for contact with the foods.

The equipment was designed with the following characteristics:

- Structure made of stainless steel, which has superior corrosion resistance than other steels. It is a material resistant to the attack of several corrosive agents;
- Grinding head is made of tin-coated carbon steel, protecting the steel surface against corrosion. Non-toxic material and ideal for contact with food.
- Funnel made of aluminum. It is a lightweight material, durable and resistant to the attack of corrosive agents.

See below the main components of the equipment:



#### 2.2 Technical Data

**Note**: For exploded drawing with spare parts list, see annexes.

Model	Nominal Measures LxHxW (mm)*	Net Weight (kg)	Voltage (V)	Rate (A)	Capacity (kg/h) **	Lubricant SAE140 (ml)
MCG8110M604	280x480x500	20.9	127	4.4	8	200
MCG8220M501	280x480x500	20.9	220	2.15	8	200
MCG8220M502	280x480x500	20.9	220	2.15	8	200
MCG8220M504	280x480x500	20.9	220	2.15	8	200
MCG8220M507	280x480x500	20.9	220	2.15	8	200
MCG8220M604	280x480x500	20.9	220	2.5	8	200

<sup>\*</sup> For all grinder models, the height measurement was considered with the funnel mounted.

Noise level: 75 dB.

<sup>\*\*</sup> It may vary due to the user's working speed and according to the thickness used and product processed.



Characteristics like: model, serial number and voltage of the equipment are provided on the label (figure below). Before installation, check that the power supply voltage of the equipment corresponds to that of the mains.



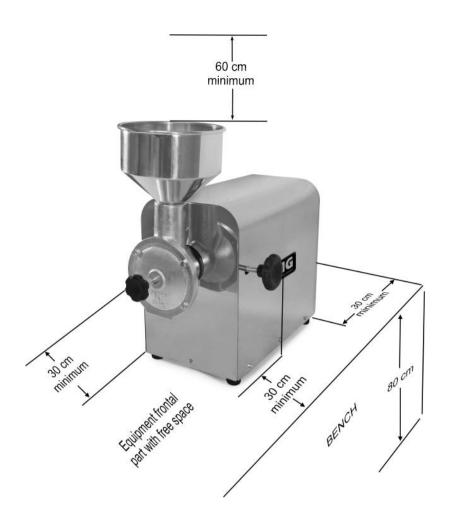
#### 3. Installation

#### 3.1 Equipment Layout

Connection to the electrical network and provision for operation must be carried out by a qualified professional. Check that the voltage of the equipment is in accordance with that of the electrical network.

When installing, it is essential to make this manual available to the professionals who will carry it out.

To ensure correct operation and safety, the appliance must be positioned in an airy environment and on a sufficiently wide, well-leveled, dry and stable bench, away from sources of heat and water taps, and at an average height of 80 m. cm. Install your equipment leaving a clear area at the front, a distance of at least 60 cm above the equipment and a distance of at least 30 cm around it, so that you have enough space for inspection, maintenance, cleaning and use.





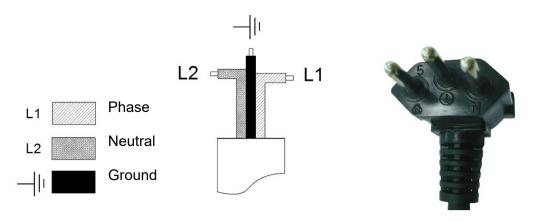
The installation and the place where the equipment will be placed must comply with the rules of risk prevention and safety at work (Regulatory Norm NR-12 for Brazil or according to the regulatory standard in force in your country).

The manufacturer is not responsible for possible direct or indirect damages caused by non-compliance with said standards and other instructions presented in this manual.

#### 3.2 Electrical Connection

The equipment is supplied with a power cord to be connected to an electrical network.

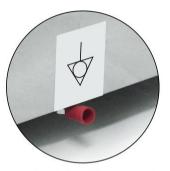
The grinders described in this manual are single-phase and supplied with power cables with stamped plugs of the 2P+T type (2 poles + ground), following current regulations. These plugs have 3 round pins, there being just below each pin, a corresponding marking for each one (phase, ground and neutral). It is mandatory to make a good ground connection, following current regulations.



The maintenance procedure on the power cord and/or the power plug of the appliance must be carried out by an authorized agent or qualified person.

The equipments are shipped with a single voltage, that is, 110 V or 220 V. If it is necessary to change the voltage, contact the manufacturer or an authorized dealer.

The equipments are supplied with an equipotential grounding terminal, located on the right side base.



Equipotential Grounding Terminal



The terminal identified in the figure aside is an additional protection to the grounding that is provided for in the electrical network, it must be connected to a grounding terminals, regardless of the connection to the electrical network, and the other products that have accessible metallic parts, and that are stationary, must also be connected to this bus as well as the service bench itself, if it is made of metallic material. In this way, all these products will be under the same electrical potential, avoiding undesirable leakage currents.



#### **ATTENTION!**

Before turning on your equipment, always check that the mains supply voltage is the same as the equipment voltage. If it is not the same, contact the manufacturer or authorized dealer.

The supply voltage of this equipment is 110 V (60 Hz) or 220 V (50 or 60 Hz) single-phase, as can be verified on the voltage label affixed to the power cable or as indicated on the nameplate data label, which is located on the right side of the equipment (see the figure on this label in item 2.2 of this manual).

Make sure that the voltage of the electrical network where the equipment will be installed is compatible with the voltage indicated on these labels.

For more details on the rest of the electrical part of the equipment, refer to the electrical diagram in the annexes of the manual.

#### **IMPORTANT**

The manufacturer is not responsible for possible direct or indirect damages caused by non-compliance with said standards and other instructions presented in this manual.

#### 4. Equipment Use

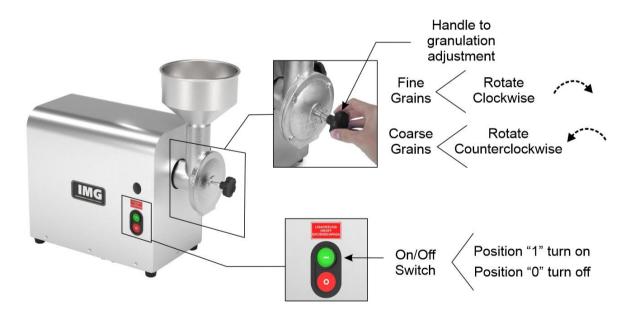
#### 4.1 Utility

This equipment is exclusively intended for grinding coffee and some types of dry grains, cereals and spices.

#### 4.2 Commands

The equipment has an on/off switch and a handle for granulation adjustment.

When positioning itself in front of the grinder head, the switch is located on the left side of the equipment and the granulation adjustment handle is located on the front of the grinder head.



See description of each command below:

• Handle for Granulation Adjustment – regulates the type of granulation of the grains to be ground. Before turning the handle, it is necessary to loosen the wing nut. To obtain a fine grain, rotate the handle clockwise. For coarse grain, rotate counterclockwise. Tighten the wing nut at each granulation setting.



Be careful when adjusting the granulation. The handle cannot be tightened excessively, it must simply be pressed against the end of the thread. Tightening it excessively will wear out and strain the engine, possibly burning it.

The handle cannot be loosened too much either, as in this case a ball located between the handle and the back of the head could come loose. Without the ball, the operator will have difficulties to regulate the granulation. Do not adjust the granulation without the handle ball.

• On/off Switch – used to turn the equipment on and off. In position "1" it switches on, in position "0" it switches off.

#### 4.3 Operating Procedures

Before operating your equipment, disassemble the components (instructions below) that will have contact with the grains (funnel and grinding head), and clean them. Carry out cleaning with the appliance disconnected from the mains. Follow the cleaning instructions in item 5 of this manual.

Check the disassembly and assembly processes described below.

#### · Disassembly:

1 Before starting the disassembly disconect your equipment from the network.



(2) Take out the funnel



3 Rotate the handle counterclockwise to loose the grinder head



4 Pull the grinder head to loose from the bearing

(5) To disassembly the grinder head, first disconect your equipment from the network and take out the parts according to the instructions below:

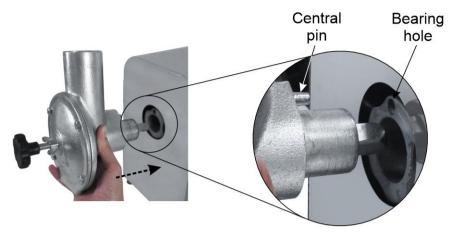


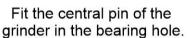
Remove the screws with an appropriated tool



Remove the grinder disc

• **Assembly:** The assembly procedure is the reverse of disassembly. With the grinder head mounted, fit it into the bearing according to the instructions below:







Rotate the handle clockwise to lock the grinder head

All parts must be fixed perfectly so that there is no jamming or wear, and so that the safety of the operator is guaranteed. If any part has not been fitted correctly, repeat the operation and without success, contact technical assistance.

• **Operation**: Before turning on the equipment, make sure that the supply voltage of the equipment is in accordance with that of the electrical network. Also check that the funnel is fitted to the head and filled with grains.

After checking these items, follow the equipment operation processes below:

- Connect the power cord to the electrical network;
- Place a container to store the ground grains below the outlet head;
- With the funnel already filled with the roasted grains, activate the on/off switch in position "0" (off) and then "1" (on);



#### **ATTENTION!**

Always fill the funnel with roasted and low-moisture grains so that they do not adhere to the grinding disc, causing poor performance and engine stalling.

- Leave the equipment on for a few seconds to check the grain granulation;
- Adjust the grinding setting using the handle for granulation adjustment (adjustment instructions in item 4.2).

Type of the Granulation	Turkish	Express	Italian	Filtered	Pressed
Granulation	Very Fine	Fine	Medium	Medium to Coarse	Coarse

- With the setting defined, start grinding by pressing the on/off switch in position "1" (on);
- Leave the equipment working until the grinding is finished;
- After the end of the process, turn off the equipment by pressing the on/off switch in position "0" (off).



Do not start the appliance without grains, as this will damage the grinding disc and the motor.

After ground coffee, we do not recommend putting the powder back into the funnel for a smaller granulation, as the powder clogs the head causing damage to the appliance.

Only use the grinding disc supplied with this unit. Under no circumstances make use of discs with other formats or dimensions.

#### TIP

Buy grains in small quantities to reduce storage time, and only store for a maximum of one week at a time.

Do not store the grains in the grinder. After the process is complete, store them in an airtight container.

For optimal flavor, use the coffee grains between 5 and 20 days after the roast date.

Store ground coffee grains in a dark, cool, dry place. If possible, vacuum pack.

Once ground, coffee quickly loses its flavor and aroma.

Regularly clean the funnel and grinding disc.



#### **ATTENTION!**

If you notice that the equipment is unable to process the grains or that it is stopping processing, reduce the amount or check that the grains are toasted and free of moisture before inserting them into the funnel.

Also check if the granulation adjustment handle is too tight. Excessively tightened handle (setting for grinding too fine) can force and stop the motor causing damage.

Failure to observe this guideline will be considered an unsafe act and abusive use of the equipment.

In case of any irregularity, contact the nearest authorized technical assistance service.



Do not remove the funnel from the grinder head with the equipment on, nor should you put your fingers, hands or objects (such as spoons and knives) inside the feeding head, as this may cause accidents. In case of any irregularity, contact the nearest authorized technical assistance service.

#### **IMPORTANT**

The operator must use the appropriate PPE (personal protective equipment). For example: use a hair cap to prevent it from getting stuck in the moving parts of the equipment and appropriate gloves that, in addition to guaranteeing hygiene in grain handling, protect the operator during food processing.

#### 5. Cleaning and Maintenance

#### 5.1 Cleaning Procedures and Products Used

Your equipment was built with first-line materials, so use it properly and you will obtain great satisfaction. Always keep your equipment clean and well-cared for, which will make it much more durable.

Daily cleaning of the equipment must be carried out for good operation and durability. Preventing the accumulation of bacteria which can cause contamination in food.



#### ATTENTION!

Before carrying out maintenance or cleaning, make sure that the on/off switch is in the "0" (off) position, that the plug is disconnected from the mains.



#### **ATTENTION!**

Do not use a water jet or steam cleaner to clean the equipment.

#### **IMPORTANT**

This equipment is not intended to be immersed in water for cleaning. Follow the instructions below to learn the parts that can be immersed and what special care is taken with the other parts.

Removable parts (funnel and grinder head) must be removed from the equipment and washed with hot water and neutral soap. Clean the corners well, eliminating grain residues.

The rest of the equipment should be cleaned as often as possible to prevent food residues from drying out and sticking to the parts. For cleaning, dilute the soap or neutral detergent in warm water and apply with a soft, damp cloth. With a cloth dampened with water, rinse and then dry the parts with a soft, dry cloth.

Never use abrasive products or sponges and substances containing acids or chlorine to clean metal parts, as they can scratch or damage the surface of the parts causing corrosion points. Do not pour water over the motor and electrical parts for cleaning, otherwise, when turning it on, it may cause an electric shock or even burn the equipment.



#### ATTENTION!

It is extremely important that the products used for cleaning ensure maximum hygiene and that they are non-toxic.

#### 5.2 Breakdown Maintenance and Procedures

The operator must be instructed to carry out routine inspections, making small adjustments, cleaning and observing signs of breakdowns that may occur. Examples include: checking for strange noises; equipment power loss; the non-execution by the equipment to the service to which it is proposed; among others. Actions like these are indispensable to guarantee a longer equipment life.



#### **ATTENTION!**

When maintenance is carried out (even if minor adjustments are made), always check that the equipment is turned off and disconnected from the network.

It is recommended that each 6 months be made preventive maintenance, checking and adjusting the loose, cleaning the internal parts, and others. Detecting broke parts or without the correct functionality the worker needs to exchange the parts, always using original parts only.



#### **ATTENTION!**

Never let your equipment work without oil in the gearbox, as it will damage your equipment. Always check the oil level.

It is recommended to change the oil after 6 months of use.

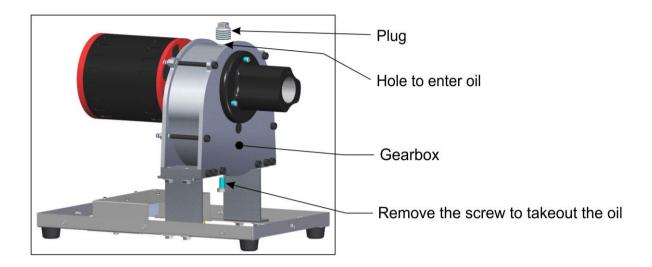
To find out about the quantity and type of oil used in each equipment model, consult the table in item 2.1 (Technical Data) of this manual.

When changing the oil, use Personal Protective Equipment (PPE) to avoid direct contact with the oil, such as waterproof PVC gloves.

Follow the instructions below to change the oil in your equipment:

- Disconnect the equipment from the mains;
- Remove the funnel and the grinder head (instructions in item 4.3). Remove the case by removing the fixing screws;
- Place a container under the gearbox to store the oil to be removed;
- Remove the screw located under the gearbox. Wait until all the oil comes out of the screw hole.

- After all the oil is removed, screw the screw with sealing tape again;
- To put in the new oil, remove the plug located on top of the gearbox;
- Using a funnel, add the oil. Check the amount of oil for each model of grinder in the table in item 2.2 (Technical Data);
- Screw the plug with thread sealing tape. Reassemble the case fixing it with the screws.



#### **IMPORTANT**

After changing the oil, the equipment must work level. Follow the instructions in item 3.1 (Equipment Layout) for optimal equipment positioning.

Oil is a recyclable product. Dispose of it at authorized service station facilities in accordance with local laws and regulations regarding the disposal of waste petroleum products. Do not pour into sewers, surface waters.

By carrying out preventive maintenance, the inconvenience of having the equipment stopped when it is most needed is eliminated, the cost of maintenance is reduced and the risk of accidents is reduced.



#### ATTENTION!

Preventive maintenance requires a trained professional.

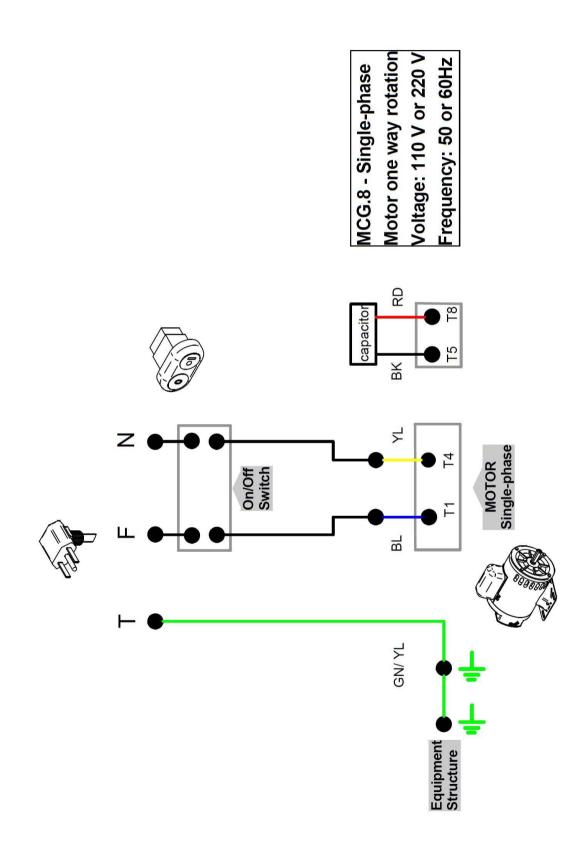
Always check if the equipment is disconnected from the network.

Whenever an item related to the safety of the equipment is removed (such as when performing maintenance), put it back in its proper place and confirm that they are performing their function correctly.

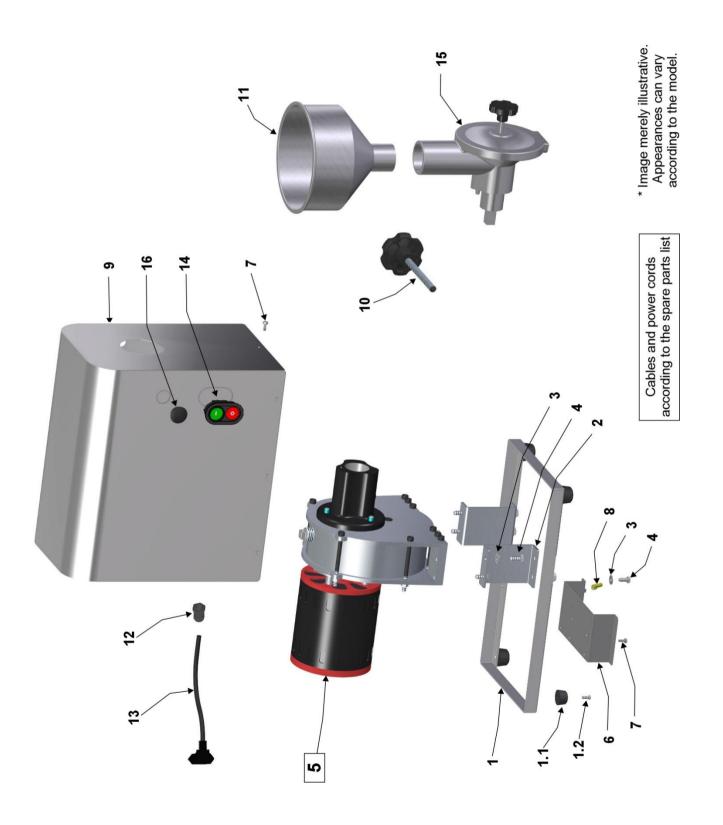
Detecting broke parts or without the correct functionality, please contact the nearest authorized service center.

## 6. ANEXXES

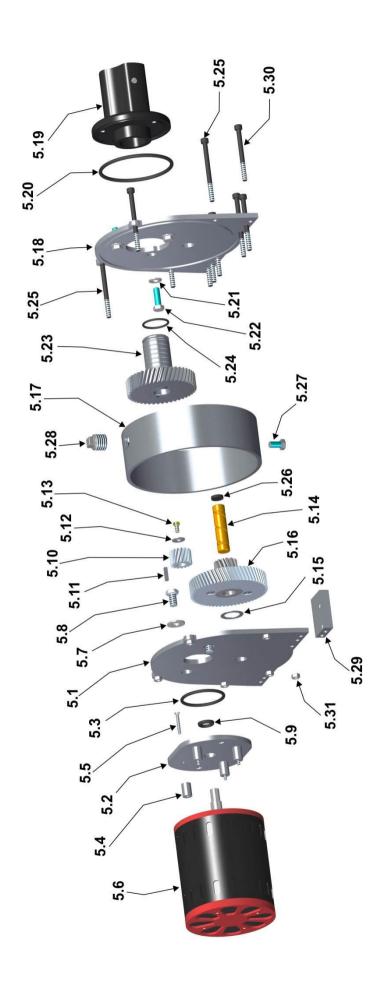
## Electrical Schematic Single-phase – Voltage 110 V or 220 V



## **Exploded View Drawing**



## **Exploded View Drawing**



## **Spare Parts List**

Position	Code	Description	Quantity
1	BAS138	Base	01
1.1	PEP004	Rubber Foot Hole	04
1.2	PRR015	Round Machine Screw	04
2	SBT518	Gearbox Support	02
3	ARL004	Flat washer	08
4	PRS010	Hex Screw	08
5	CAIXA	Full Transmission	01
5.1	CRC1387	Transmission Box Bottom Plate	01
5.2	CRC1304	Flange Coupling	01
5.3	ORG027	O-ring	01
5.4	BGT100	Motor Spacer	04
5.5	PRC042	Stainless Steel Machine Screw	04
	MTE294	Electric Motor 1/3 HP 4P 220 V 50 Hz	01
5.6	MTE295	Electric Motor 1/3 HP 4P 110 V 60 Hz	01
	MTE296	Electric Motor 1/3 HP 4P 220 V 60 Hz	01
5.7	ARL002	Flat washer	02
5.8	PRS027	Hex Screw	02
5.9	RET011	Retentor	01
5.10	EGG052	Motor Helical Gear	01
5.11	CHV014	Square Key	01
5.12	ARL004	Flat washer	01
5.13	PCC003	Machine Screw Cylindrical	01
5.14	EIX124	Intermediate Axis	01
5.15	ARE003	Flat washer	01
5.16	EGG054	Fiber Helical Gear	01
5.17	PCT078	Transmission Box Body	01
5.18	CRC1388	Transmission Box Cover Plate	01
5.19	MAC079	Head Bearing	01
5.20	ORG011	O-ring	01
5.21	ARL007	Flat washer	03
5.22	PRS007	Hex Screw	03
5.23	EGG055	Helical Gear	01
5.24	ORG002	O-ring	01
5.25	PRT055	Allen Screw with Head	06
5.26	BCH069	Oil Seal Rubber	01
5.27	PRS008	Hex Screw	01
5.28	BUJ005	Plug	01
5.29	CRC1389	Fixing Plate Foot Transmission Box	02
5.30	PRT056	Allen Screw with Head	04
5.31	POS018	Hex Nut	06
6	SBT122	Electronic Board Fixation Support	01
7	PRA008	Drilling Hex Screw	10
8	TCE013	Female Terminal	02
9	GAB218	Structure	01
10	MNL047	Stainless Steel Handle	01
11	FNL005	Aluminum Funnel	01
12	TCE073	Cable Gland	01
. <u> </u>	CBE023	Electric Cable Plug Type 1	01
13	CBE029	Electric Cable Plug Type 2	01
	CBE030	Electric Cable Plug Type 4	01
14	CHE166	On/Off Switch	01
15	BCA024	Complete Grinder Head	01
16	BCH036	Round Black Cap	01
17	CBE104	Electric Cable 460 mm Terra	01
18	CBE078	Electric Cable 400 mm	02
19	TCE004	Fit Terminal	02





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