



# **DUPLEX MLDP**

OPERATION'S MANUAL



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### **GENERAL SAFETY INSTRUCTIONS**

WARNING: To reduce the risk of injury, read all instructions properly. Failure to follow the instructions listed below can cause electric shock, fire, serious injuries, mutilation and/or damage to the equipment.

#### A. SAFETY IN THE WORK AREA.

- \* Keep the work area clean and lit. Crowded or dark areas lead to accidents.
- \* Do not operate the equipment without first checking all gas connections with soapy water, to ensure that there are no leaks that could cause an explosion.
- \* Keep children, customers and non-company personnel away from the electrical and mechanical operation area of the equipment.
- \* It is recommended to have a minimum space of one meter or three feet around the machine for safety measure and to optimize work.

#### B. ELECTRICAL SAFETY.

- \* Machinery connections must be adapted to the power outlets.
- \* Do not use adapters for switches as there is a risk of receiving an electric shock.
- \* Do not expose the switches and / or electrical connections to rain or humidity. If water enters these elements, there is a risk that they will break down or suffer an electric shock.
- \* Use cable in a single piece, if there are joints in the connections these can produce a short circuit.
- \* Do not expose cables or electrical connections to heat, oil, sharp edges, or moving parts, as damaged cables can cause electric shock or short circuit.

#### C. PERSONAL SAFETY

- \* Do not operate the equipment if you are tired, under the influence of alcohol or drugs.
- \* Wear appropriate clothing, do not wear loose clothing, or necklaces, earrings, watches, if you have long hair wear a tie to keep it up.
- \* Do not climb on the structure of the machine for any reason, falls or injuries may occur.
- \* Avoid using headphones, cell phones or any other equipment that works as a distraction to the operator.
- \* Make correct use of personal protective equipment if any maintenance is to be carried out on the machine.
- \* If any change is made to the model or component of the equipment, be it electrical, mechanical or gas related, it must be de-energized, cut off the gas supply and stop the machine completely to avoid accidents.
- \* Keep limbs away from all moving parts.

### **CAUTION**

The following symbols indicate the safety measures that must be taken before and after starting up the equipment.



**HOT HAZARD** Some parts of the machine are hot while in operation.



TAKE CARE OF YOUR HANDS Hands should not be inserted while the machine is working.



**ELECTRICAL RISK** In which you can suffer electric shocks if you do not comply with the electrical safety provisions.



**GEAR RISK** Keep your hands away from the chains and gears of the machine.



**DO NOT COVER THE BARREL'S AIR INTAKE.** Keep your hands away from the air inlet of the barrel.



**CRUSHING HAZARD** Keep hands away from the cam press when be in operation.

**GAS AND ELECTRICAL INSTALLATION** 

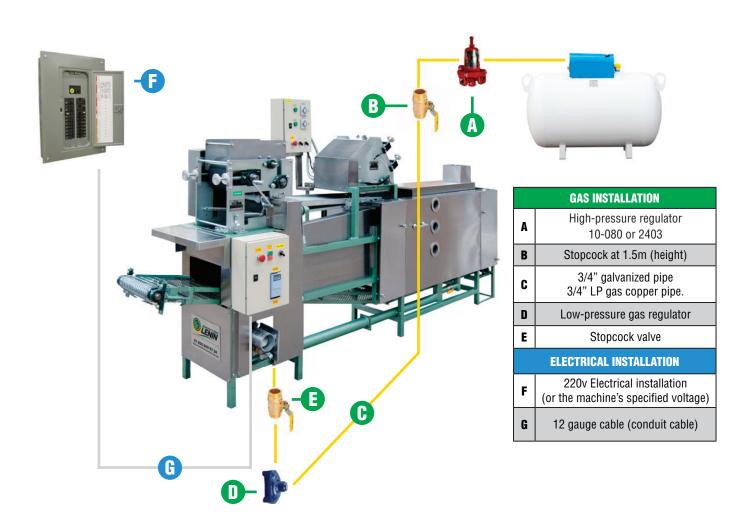
At the outlet of the gas tank, a model 10-080 high-pressure regulator must be installed, with a pressure gauge (0-7 Kg.) to verify the correct supply pressure. The pipe used for the connection is 3/4" of diameter, either L-type copper or 40-gauge black tubing.

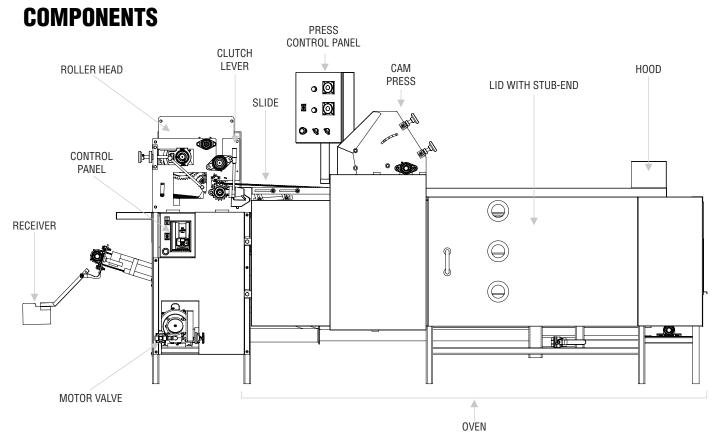
The length of the pipe should not exceed 10 meters, from the outlet of the gas tank.

A union nut must be installed between the stopcock and the low-pressure regulator.

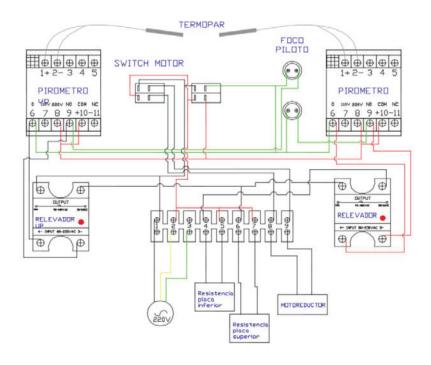
Before the machine's gas input, a low-pressure regulator must be installed.

Verify that the electrical connection is 220v. No short circuits, no loose or bare wires.





### **WIRING DIAGRAM CAM PRESS**





Connect to electrical outlet.



Connect stopcock to carburettor valve inlet.



3 Connect gas hose to stopcock.



Press the ON button (green) of the speed drive to turn on the main motor.



Modify working speed by pressing the button up (ascending) down (descending).



Close the third level stopcock when flour tortilla 6 is produced.

5

### **WHEAT FLOUR TORTILLA**



7

Press green button (ON) to activate the motor valve



8

Check that the carburettor tap is in the 0 position.



9

Open stopcock to dispense gas to the oven.



10

Turn on the nozzles and start carburetion.



11

Let the griddle heat up.



**12** 

Rotate temperature control knob.



**13** 

Verify that the pyrometers are in the 0°C position.



14

Turn upper pyrometer to 140°C and lower to 160°C.



**15** 

Turn the engine ignition knob.



**16** 

Take wheat flour dough ball.



Place dough in cam press.



18

Check the shape and thickness of the tortilla.



Check heating, shape, and roundness of the tortilla at the exit of the oven.



**20** 

Begin production of tortillas.



21

Tortilla thickness adjustment by turning the knobs:

Rotate counterclockwise to get thinner tortillas

Turn clockwise for thicker tortillas

### **CORN TORTILLA**



**23** 

Open oven's third level gas duct.



24

Check that the cutter is correctly assembled.



**25** 

Make sure that the wire is tight, not broken, and that the straps rotate freely.



**26** 

Add dough to rollers manually.



**27** 

Raise the clutch lever.



**28** 

Adhere curtain of dough to front roller.



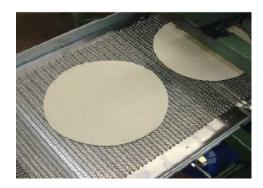
29

Regulate tortilla thickness by turning the adjustment knobs (clockwise thins the tortilla) lower the clutch lever when obtaining the desired thickness.



**30** 

Raise cutter lever.



31

Check the shape and thickness of the tortilla.



**32** 

Begin production of tortillas.



Check uniform heating, shape, and roundness of the tortilla at the exit of the oven.

### **CLEANING PROCEDURE**

WARNING: The cleaning of the base and the hopper must be carried out with the machine completely stopped to avoid accidents.

### **CLEANING OF THE PRESS**

- 1. Remove excess dough on both aluminum plates.
- 2. Clean the plates with water, moistening a cloth and gently wiping the aluminum plates.
- 3. Carry out this action until the plates are free of any residue of flour or dough.
- 4. Clean control panel, sides, sheets, motor and keypads.

### FRONT ROLLER CLEANING

- 1. Remove the dough residues from the front roller at total stop with your hands.
- 2. Turn the machine on again to change the position of the roller, turn off the machine and proceed with cleaning. You must carry out this action as many times as necessary to complete the cleaning of the roller.
- 3. Clean the cable tie grooves with a plastic bristle brush to prevent the build-up of mass that may break the wire when it dries.
- 4. Wipe the remaining dough from the top of the roller with a damp cloth.
- 5. After removing the dough residues from the roller, there will be an excess.
- 6. Spread a little water after removing the remaining dough to complete the cleaning of the roller.
- 7. Clean the rollers with a dry cloth after spreading water over them to remove excess moisture.

### **CLEANING THE REAR ROLLER**

- 8. Clean the rear roller, pour in a little water, and wipe with a cloth to remove any dough residues. NOTICE: You will need to turn the machine on to change the position of the roller as many times as necessary to clean them completely.
- 9. After you have cleaned the roller from the front and back, you should wipe the upper part of the stainless steel roller with a damp cloth.
- 10. Use a damp cloth to clean the base of the bench and remove lumps from the slide with a wire brush.

### **MAINTENANCE**

Clean the machine before and after using it.

The duration of the spare parts will depend on the preventive maintenance and care taken to the machine.

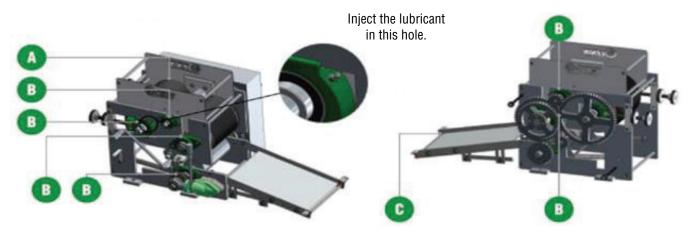
The more frequently this maintenance is done, the parts will have a longer life.

### **LUBRICATION**

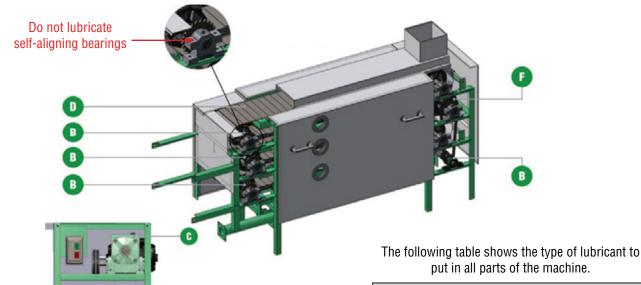
The following table shows the parts, the type of lubricant and the frequency with which the machines and their parts must be lubricated.

PART	LUBRICANT	PERIOD
Chain	SAE 40 Oil	3 times per week
Reducer	SAE 80/90 oil	Every 3 months or 1000 h/work
Packed bearings	BAT 3 Grease	Every 3 days
Griddle hinges	Graphite	Every week
Gears	BAT 3 Grease	Every week

The following figures show the schematic location of the parts that require lubrication.



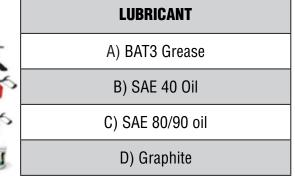
Lubricate gears with BAT3 grease (B) and chains with SAE40 oil



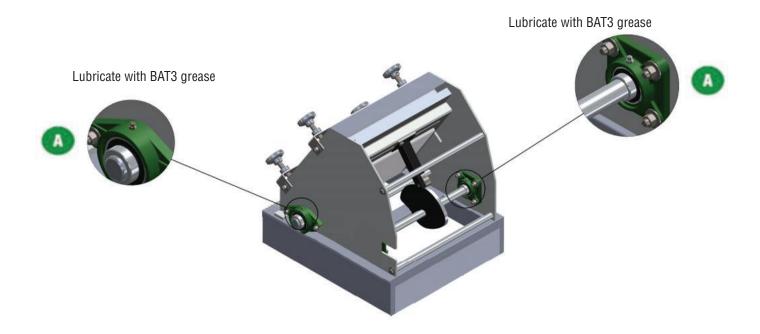
It is recommended to change oil according to its use:

- 0-4 hours daily change every 3 months
- 4-8 hours daily change every 2 months

The used oil must be drained and 400 ml of new SAE 80/90 mineral oil must be added.



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# **HEADQUARTERS**

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