



HOPPER TORTILLA MACHINES

OPERATION'S MANUAL

ML-60 · ML-90 · ML-90 ECO · ML-180

MEXICANTORTILLAMACHINE.COM



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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.



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.

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GAS AND ELECTRICAL INSTALLATION

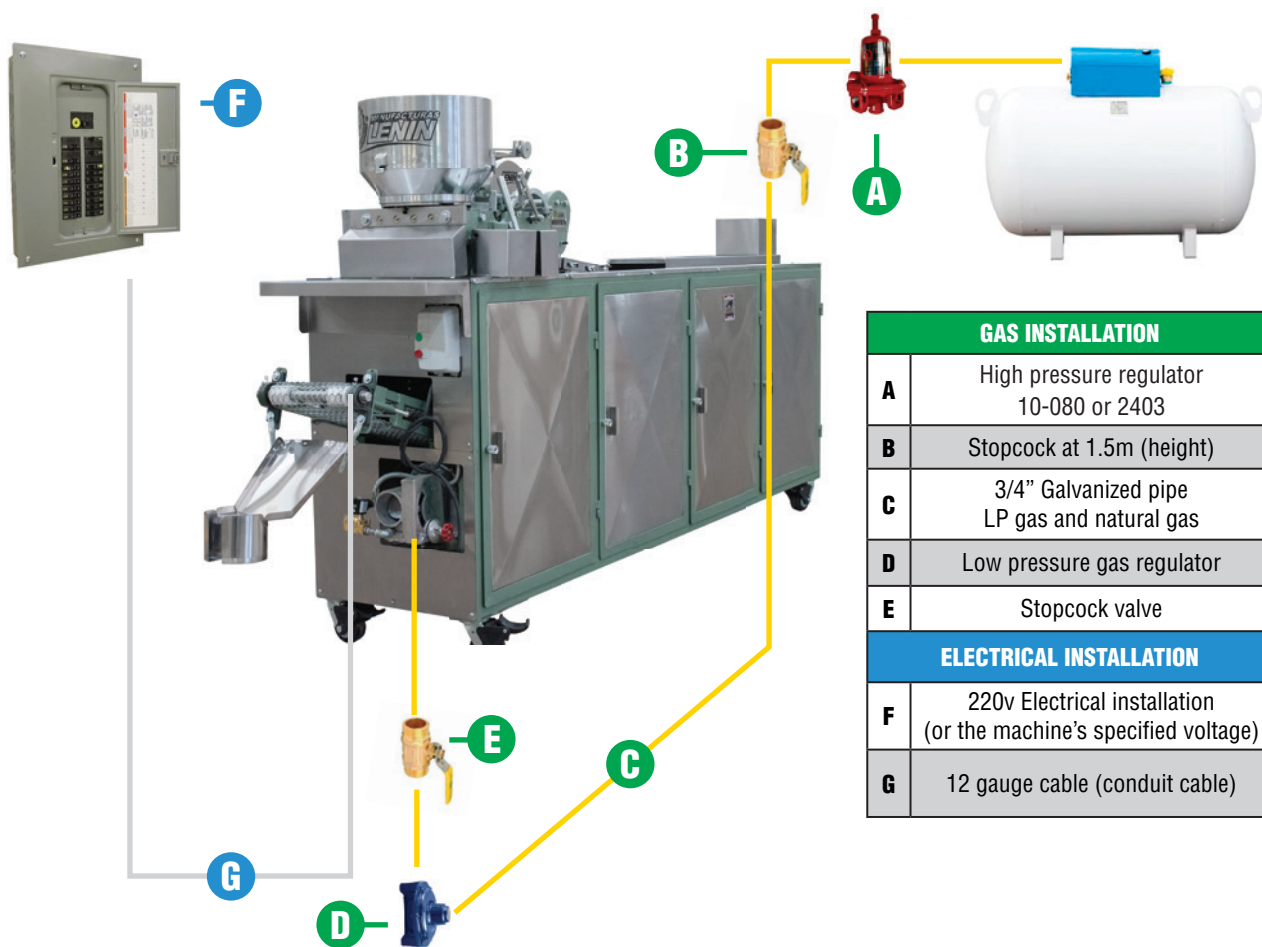
At the outlet of the gas tank, a model 10-080 high-pressure regulator must be installed, with a pressure gauge (0-7 Kg.), to verify the correct supply pressure. The pipe used for the connection is 3/4" in diameter, either L-type copper or 40-gauge black tubing.

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.

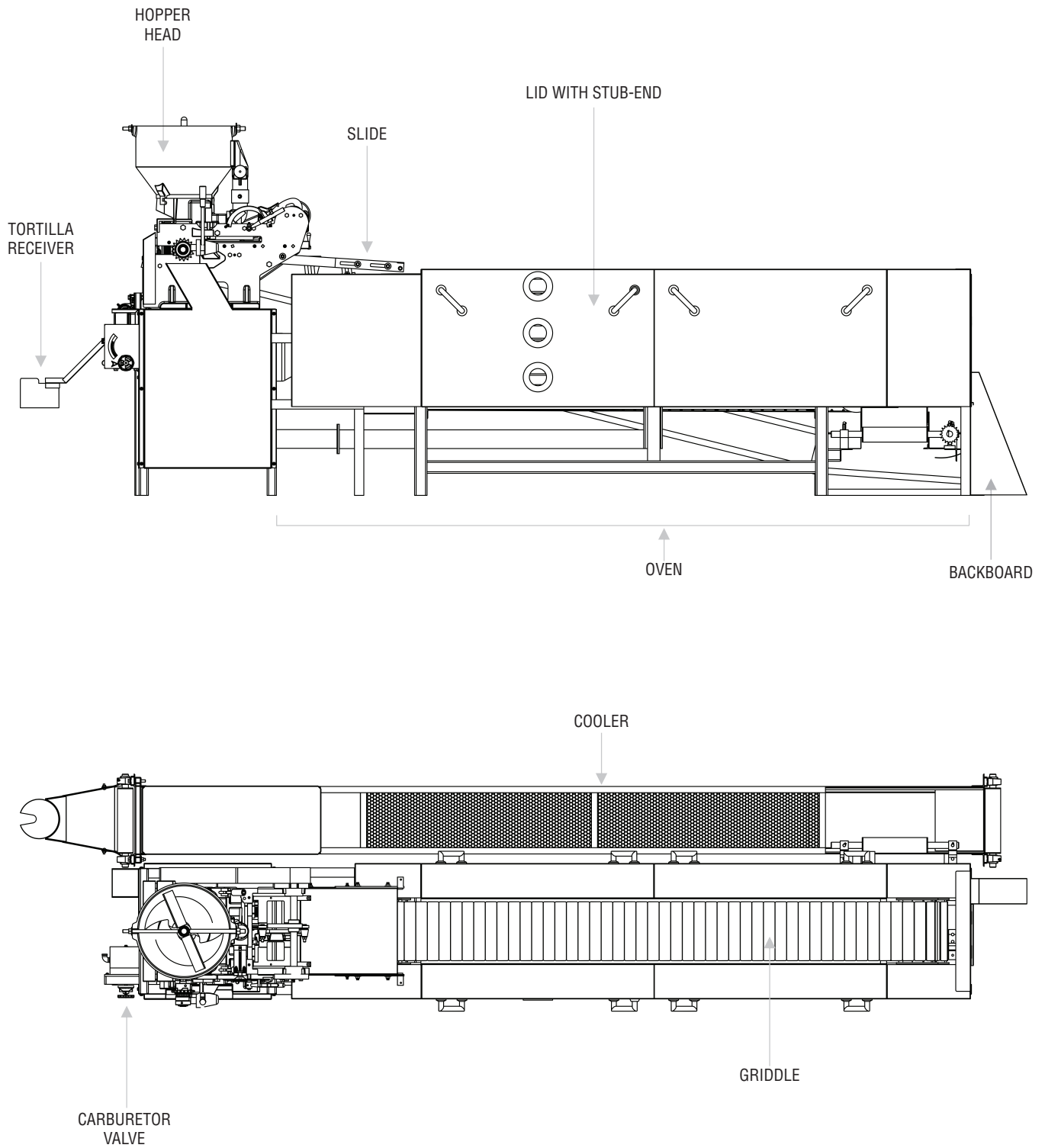
Verify that the electrical connection is 220v. No short circuits, no loose or bare wires.



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COMPONENTS



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1

Plug the machine to an electrical outlet



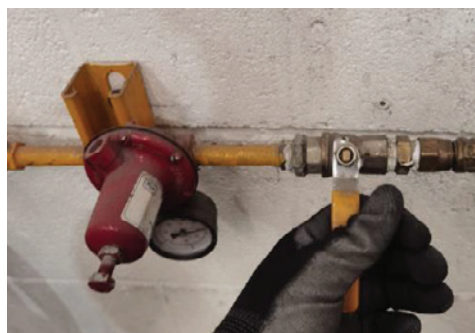
2

Connect the gas hose and stopcock at the inlet of the carburetor valve



3

Push the green starter button.



4

Open the stopcock of the gas outlet.



5

Open the stopcock to supply gas to the oven.



6

Light nozzles with a torch. and start carburizing.

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- 7** Turn the lower knob of the carburetor valve to regulate the intensity of the flame.



- 8** Check flame intensity in nozzles, wait 3 minutes for the griddle to heat up.



- 9** Insert profiler in the head



- 10** Add dough to the hopper



- 11** Lift the clutch lever to start recirculating the dough



- 12** Regulate the thickness of the tortilla with the ratchet

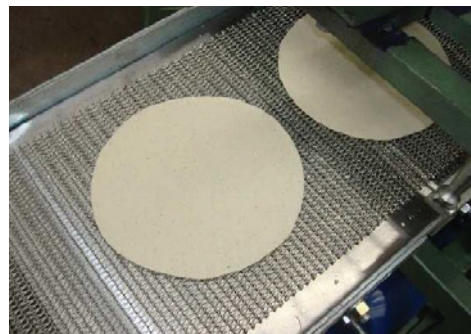
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13

Regulate the roundness of the tortilla



14

Check the shape and thickness of the tortilla



15

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



16

When you get the desired doneness, start production



17

Feed the hopper with the dough when needed

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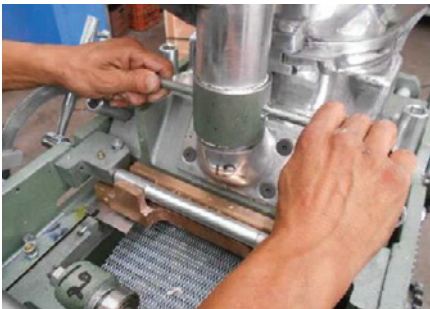
HOPPER DISASSEMBLY



- 18** Remove the shaft support and turn assembled auger counterclockwise



- 19** Remove hopper auger



- 20** Loosen pressure chamber screws with a T wrench and remove the coupling.



- 21** Remove pressure chamber



- 22** Loosen hopper base bolts



- 23** Remove hopper



- 24** Remove augers



- 25** Remove cutter

CLEANING PROCEDURE

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

HOPPER CLEANING

1. Remove by hand the dough residues in the hopper.
2. Disassemble the hopper (steps 18-25).
3. Remove dough from augers, pressure chamber, base, and profiler.
4. Wash components removing all dough residues.
5. Dry components and reinstall them in the head.

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

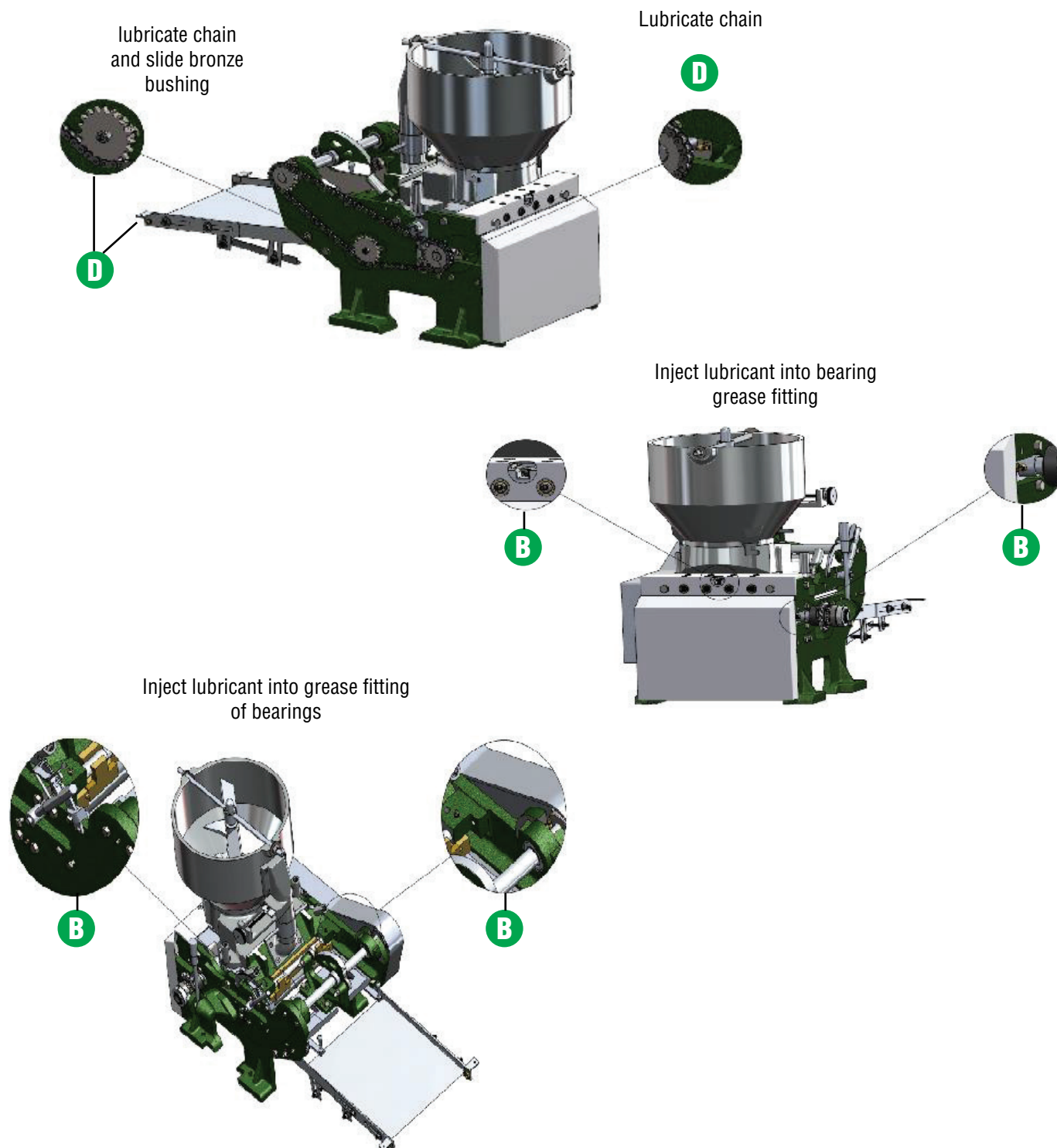
The following table shows the parts, the type of lubricant and the frequency with which the machines and their parts must be lubricated.

PART	LUBRICANT	PERIOD
Chain and collars	Aceite SAE 40	3 times per week
Reducer	SAE 80/90 Mineral Oil	Every 3 months or 1000 working hours
Bearings	BAT 3 Grease	Every 3 days
Griddle hinges	Graphite	When the machine grinds
Gears	BAT 3 Grease	Every week

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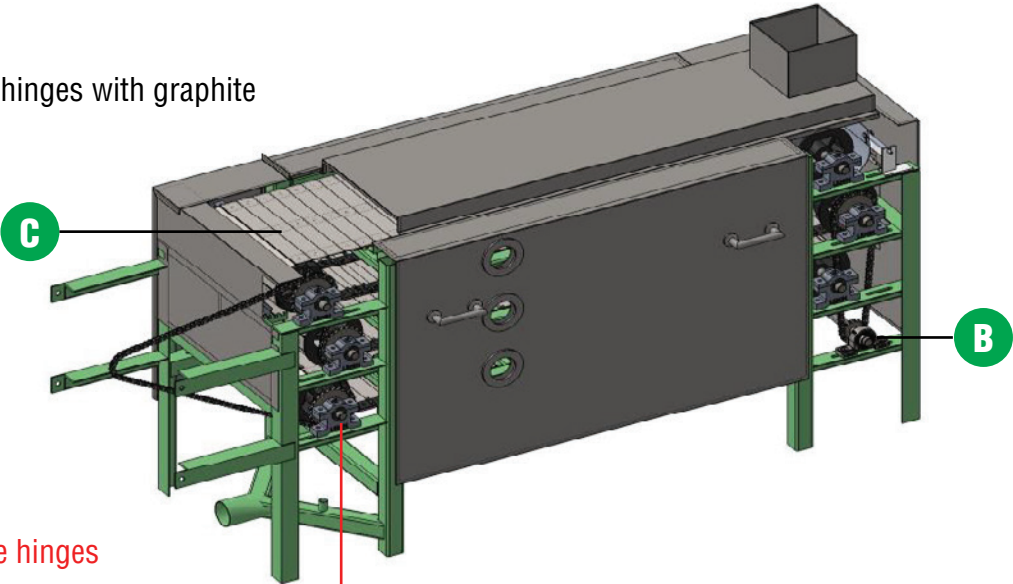
The following figures show the schematic location of the parts that require lubrication.



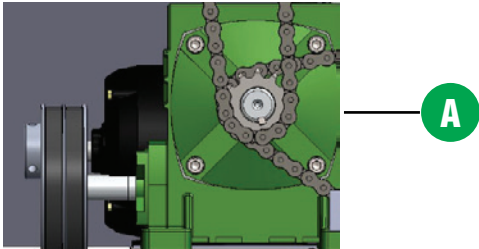
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Lubricate griddle hinges with graphite







Lubricate griddle hinges
with graphite



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.

The following table shows the type of lubricant to put in all parts of the machine.

   	LUBRICANT
	A) SAE 80/90 mineral oil
	B) BAT 3 Grase
	C) Graphite
	D) SAE Oil



HEADQUARTERS

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