

User Manual

Sugarcane Juicer

CANE PRO



PLOT NO. 10, I.D.A. BALANAGAR , HYDERABAD, ANDHRAPRADESH, INDIA

DOCUMENT REVISION HISTORY

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USER MANUAL

1. GENERAL INFORMATION

Read operating manual carefully prior to performing any work on putting the SUGARCANE JUICER into operation. Strict compliance with the instructions in this operating manual is essential. SGK INDUSTRIES accepts no liability for damage to persons, materials or assets as a result of the non-observance of this operating errors or incorrect use.

If additional components are attached to or installed in the SUGARCANE JUICER (Eg. Motor, Gear box, Electrical components & Bearings, oil seals & O-Rings) are supplied with the order , the operating instructions for these components/parts must be observed

If you do not understand the contents of this operation manual or additional operating instructions, please contact SGK INDUSTRIES.

2. SAFETY INFORMATION & SYMBOLS

- Before operating the machine, please read the following Instructions for safety in the manual very carefully, and operate the machine correctly
- Each instruction specified in the manual is very important for safety, so be sure to follow each instruction as specified
- The regulations as per this handbook refer to operations allowed on machine. Instructions must be followed to avoid operator's injury and possible damages to the machine.



WARNING: incorrect operation of machine is dangerous and can cause serious injury or death



CAUTION: incorrect operation of machine is dangerous and can cause injury of person or material damages. (Note: Material damages means damages to furniture, machine.)

QUALIFIED PERSONNEL

Maintenance people are considered to be QUALIFIED PERSONNEL when they have been trained to achieve the necessary experience to use, maintain and repair the machine in whole safety, in respect of regulations.

SAFETY SIMBOLS



WARNING: If not considered serious damages up to death may occur to Personnel or tools.



WARNING: Danger of electric shock. If not considered, serious damage Up to death may occur to persons or tools.



Earth Sign

WARNING: Be sure to ground (Earth) the Machine. Never Connect a ground wire (earthing) to gas pipes, water pipes, lightning rods or telephone cord/grounding wires.
An incomplete grounding (earthing) is dangerous and can cause severe electric shock



No Loose Connection

WARNING: No Loose connection of wires should be there at all terminals.



Rotating Gears

WARNING: Moving gears, so If not taken care can cause serious damage and injury to personnel.



Rotating Rollers

WARNING: Rotating rollers can cause serious damage and severe injury to personnel.



Read

Operator Manual

CAUTION: Before operating the machine please go through the manual thoroughly.



Read

Service Manual

CAUTION: For any issues relating to service and troubleshooting of the machine please go through the service manual thoroughly.

INSTRUCTIONS FOR SAFETY

- **Dedicated (exclusive – use) outlet.**
Always use an outlet dedicated to each machine. Never use extension cords or connect the unit to other power supply cords. Never connect several or any plugs into the same outlet. It may cause power supply cord to overheat and melt/urn or electric shock or fire
- **Do Not operate the machine outside**
Operating the machine outside or in the rain will cause electric bleeding or electric shock.
- **Do not install the machine in a damp or wet place**
It can cause electric bleeding or electric shock
- **Do not install/ place the machine close to any heating appliances**
Never install/place the machine close to any heating appliance such as a gas burner. It can cause melting and /or burning of plastic cover
- **This machine is for “Commercial Use”**
Be sure to keep the machine away from children to avoid electric shock or injury.
- **Do Not pour water over the machine or immerse machine in water**
It can cause a short circuit or electric shock, as well as rust and other water related problems.
- **Do not damage power supply cord**
Never wok on power cord and never pull or twist it. Do not place heavy things on it. It can damage the power cord and can cause electric shock or fire.
- **Keep Plug clean and plug into outlet correctly**
Always keep plug clean and plug into outlet correctly. Dirty plugs or imperfectly connected plugs can cause electric shock or fire
- **Do not touch any electrical parts (such as plug or switch) with wet hands**
It can cause electric shock
- **Do not put your hand into the Cane Inlet**
Never put your hand into the cane inlet while the machine is in operation it is dangerous and can cause serious injury.

OPERATORS

Only one operator at a time is allowed to operate the machine. The operators must be instructed on respect of:

- ❖ SAFETY REQUIREMENTS AND RISKS CONNECTED TO NON-OBSERVANCE OF AS PER CURRENT HANDBOOK.
- ❖ FUNCTIONS AND CONTROLS OF THE MACHINE.
- ❖ ALARM AND SIGNALS OF THE MACHINE.



WARNING:

- In the event of circuit breaker operation , please contact the machine vendor or SGK Industries. Switching on the machine incorrectly or by force can cause electric shock or fire.
- Should accidents or irregular operation occur, TURN OFF the main switch and unplug from outlet. Immediately contact your machine vendor or SGK Industries for a correct fault diagnosis. Continued operation of a faulty machine can / will cause electric shock or fire.
- For cleaning the rollers, be sure to TURN OFF the main switch and always put gloves while cleaning. Never try to clean the rollers when the machine is running and main switch is on. It can cause serious injury.
- Never try to disassemble or repair the machine by yourself. Always call a qualified technician. Incorrect repair will likely cause irregular operation or electric shock, fire or injury.
- Do not attempt to alter the machine in any way. It can cause electric shock or fire.



CAUTION:

- Always install the machine on a stable and flat surface. Irregular or imperfect installation can cause the unit to tip or fall and is therefore dangerous.
- Install the machine in a location unaffected by occasional dripping of water.
- Do not introduce foreign substances into the unit such as spoons, blades bones, toothpicks etc. it may cause undue load on the motor, resulting in excessive motor heating or fire.

- Should the motor stop under operation, be sure to switch OFF and unplug the unit and contact the machine vendor or SGK industries.
- When cleaning, be sure to switch OFF and unplug the cord before doing so. Never pour or jet water onto the machine. For correct cleaning procedure go through the cleaning procedure mentioned in the operation manual thoroughly.
- Clean the Dome or the juice collector, cane inlet, outlet chute and rollers thoroughly. Otherwise it can cause growth of germs/bacteria and can cause health problems.
- Never use inflammable sprays near the machine and never place volatile or inflammable materials close to the machine. Sparks from the switch could possibly cause fire.
- When you unplug the unit, be sure to hold the plug while you pull it out of the outlet. Never pull the power cable. It may damage the plug/cable and can cause electric shock or fire.
- After the days business is finished, be sure to switch OFF and unplug the unit for safety and clean the machine thoroughly as mentioned in the cleaning procedure.
- When you sell or give the machine to a 3rd party, make sure that all the MANUALS go with the unit for safety and correct operation.
- For disposal of a disused unit, please contact the local disposal experts for correct procedures.
- Serious physical injury may result improper handling of machine while moving or transportation. SGK industries recommend using lifting equipment to load and unload the machine while transporting. And property damage may occur form inappropriate installation, non-designed use, incorrect operation, non-compliance with safety information, unauthorized removal of machine components or safety covers and structural modifications to the machine.

A different use of the machine from those mentioned in the current handbook could cause serious damage to operators and/or to the machine.

RISKS



**STOP
MAINTENANCE**

**THE MACHINE AND UNPLUG BEFORE OPERATING
WORK**



**ALL MAINTENANCE WORK OF THE ELECTRIC CIRCUIT MUST BE
CARRIED OUT BY TRAINED PERSONNEL ONLY**

3. SAFETY

GUARDS OR COVER

The machine is covered on all sides with removable enclosures. This machine is not provided with light barrier.

Hand push buttons are provided on the top to ON / OFF the machine.

EMERGENCY

The machine has one fixed emergency STOP button (placed near the ON/OFF switch). The machine will STOP the operating while pressing the "EMERGENCY STOP BUTTON" to avoid the an expected injury or any type of accidents to the operator.

To restore, it is necessary to release the emergency buttons, press "START ON" button.

FAILURE OF POWER AND CONTROL CIRCUIT

Failures of power circuit will cause the immediate stop of machine running.

To restart the machine it is necessary to push the "START ON" button.

In case of failure of Electrical circuit the Circuit Breaker (or) Trip will always be active.

PERSONAL PROTECTIVE DEVICES

The following personal protective devices are mandatory while operating the machine. These are essential for the protection of the personnel and the components being assembled.



Safety Gloves

ELECTRICAL SAFETY

SHORT CIRCUIT:

Short circuit may cause due to un-expected interruption of electrical circuits by means of materials, improper insulation of wires.

The machine has been made in such away with the proper electrical protections. Circuit breaker will trip if more than 8A passes through the electrical circuit.

OVERLOAD AND PROTECTION FROM OVER VOLTAGE:

The machine has been made in such away with the proper electrical protections. Circuit breaker will trip if more than 8A passes through the electrical circuit.

The electrical circuit is incorporates circuit breaker to protect the machine from OVER VOLTAGES". The circuit breaker will trip if more than 8A will pass through the electrical circuit.

PROTECTION FROM DIRECT CONTACTS:

The Manufacturer has taken all the protections to avoid the risk against to direct contact of the machine.

Proper insulation was provided to electrical connections to avoid short circuit and risk against to direct contact of operator.

Proper enclosure was provided to moving parts of the machine and proper labeling was made at specified areas.

VOLTAGE DROP

The Electrical Circuit has been carefully designed to avoid "VOLTAGE DROP" with in the circuit. If Voltage Drop occur from the main supply the machine will not the start.

EMERGENCY STOP

This operation when made at the level of protection mentioned in the schemes allows a fast and safe interruption of electricity and of the mechanical movement of the parts which may be hazardous for people.

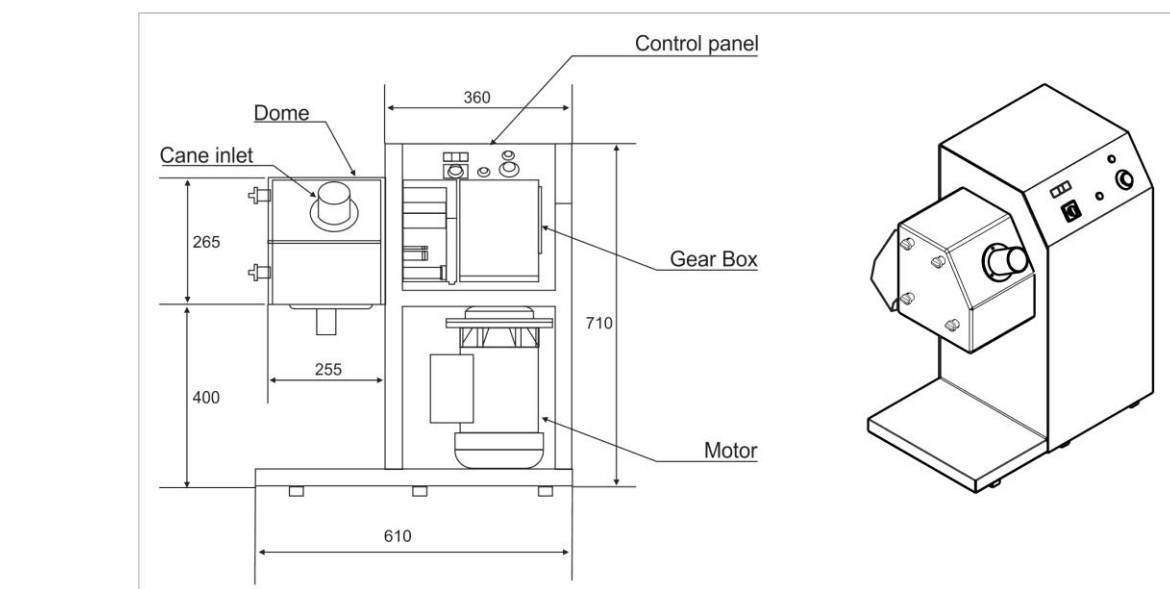
POWER SUPPLY

In the event of general interruption of the product by a *main switch*, the customer must have the upstream line has a switching system in co-ordination with the *main switch*.

4. PRODUCT DESCRIPTION:

Product Name: Sugarcane Juice Machine

Model No's: Cane pro star (0.5HP), Cane pro ace (1HP)



Technical Specifications of Sugarcane Juicer (Model: Cane pro star- 0.5HP)

Dimensions (mm)	Input	Phase	Motor	RPM	Power (watts)	Capacity
500*310*500	220 - 240 v AC 50 HZ	1Φ	0.5 HP	1440	370	520 – 550 ml

Technical Specifications of Sugarcane Juicer (Model: Cane pro ace- 1HP)

Dimensions (mm)	Input	Phase	Motor	RPM	Power (watts)	Capacity
700*380*700	220 - 240 v AC 50 HZ	1Φ	1HP	1440	750	620 – 650 ml

INTENDED USE:

The Sugarcane juice Machine is intended to produce hygienic sugarcane juice which can be consumed by human beings.

The Sugarcane juicer may only be operated according to the instructions mentioned in technical documentation in this manual

This equipment is for commercial use and should be operated only by trained professionals familiar with commercial juicing equipment. It is the responsibility of the users to wear suitable protective clothing and safety gear while operating the Juicer. Our Products are designed to be safe and reliable when properly cared for and used reasonably.

Caution: Improper installation, adjustment alteration, service or maintenance can lead to Injuries or/and property damage. Read the Owner's manual thoroughly before operating the juicer.

DISPOSAL:

Local & Regional regulations are recommended for the disposal of various parts of the sugarcane machine.

OTHER DOCUMENTS:

Information may be obtained from the following documents.

SGK Industries Sugarcane juicer product catalogues

Operating and maintenance instructions for the machine

User & Service manual of the machine.

5. TYPE PLATE

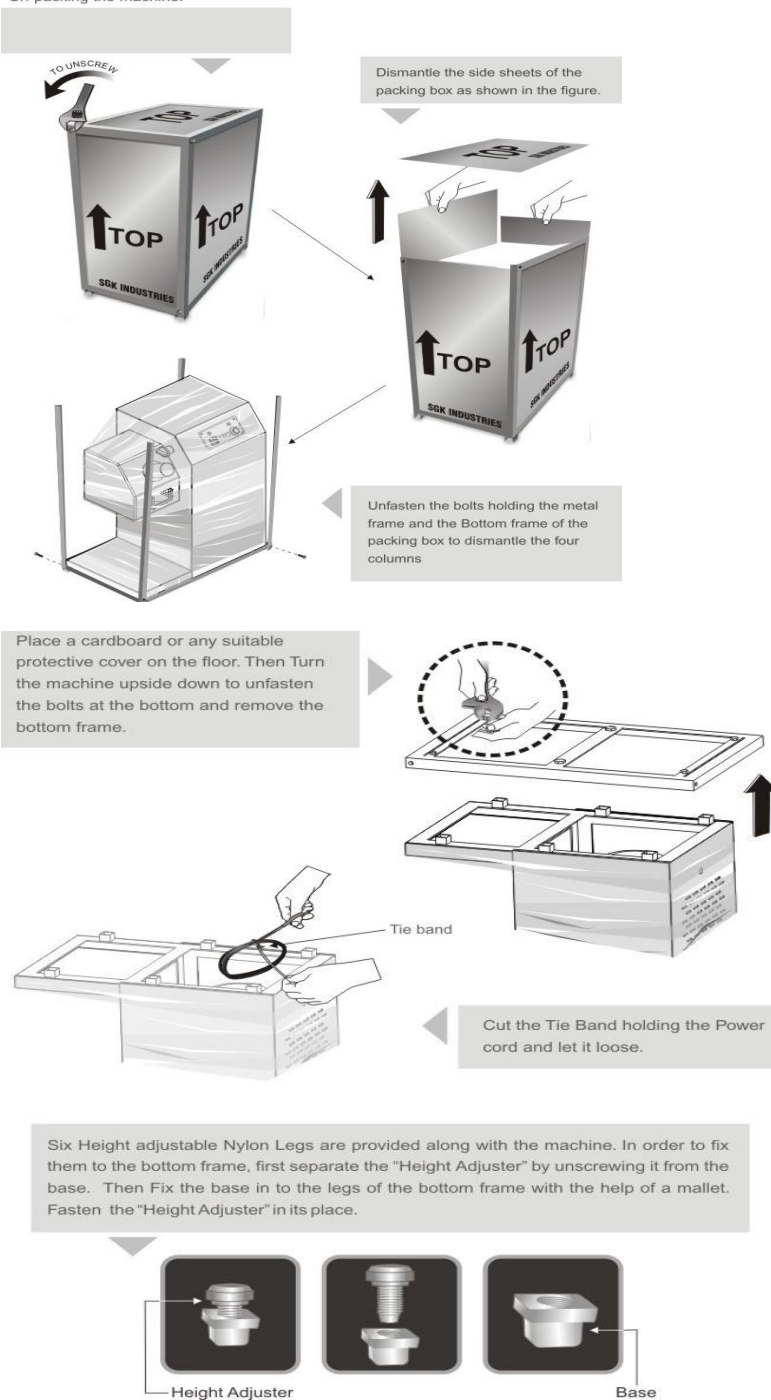
Manufactured By:	
SGK INDUSTRIES	
Plot no. 10, I.D.A. Balanagar, Hyderabad-500037, Andhra Pradesh, INDIA	
Email: sales@sgkindustries.com	Website: www.sgkindustries.com
Model	Canepro Ace
S.No.	NCI / TEST 1 / 22062013
Date of Mfg.	22-06-2013
Volts & Hz	220V AC, 50Hz
Amp	6.2A
Power	750W (1HP)
Phase	1 Ø
CE	MADE IN INDIA

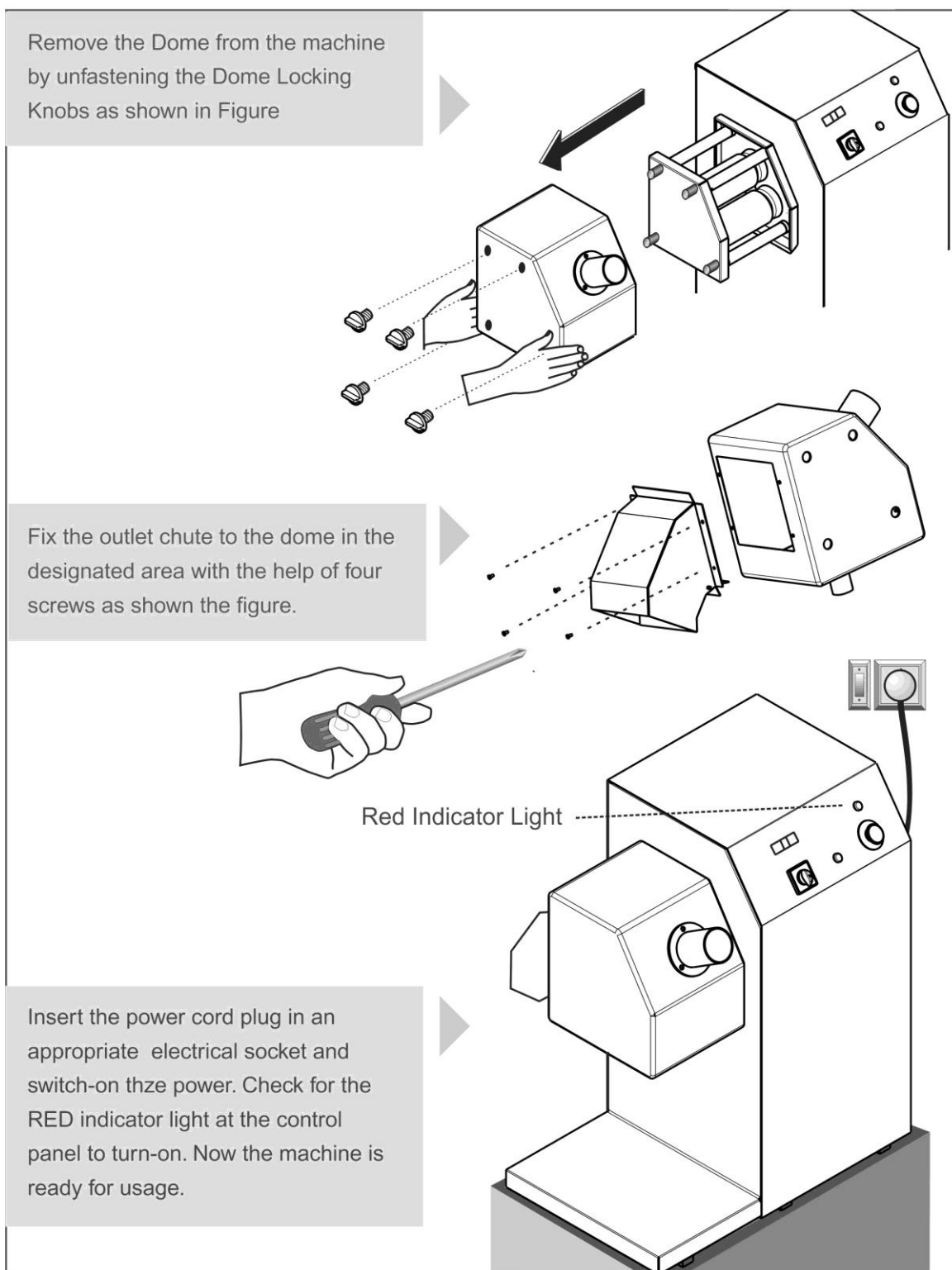
6. PREPARATION FOR INSTALLATION

For Un packing, assembly & Installation the following steps to be followed

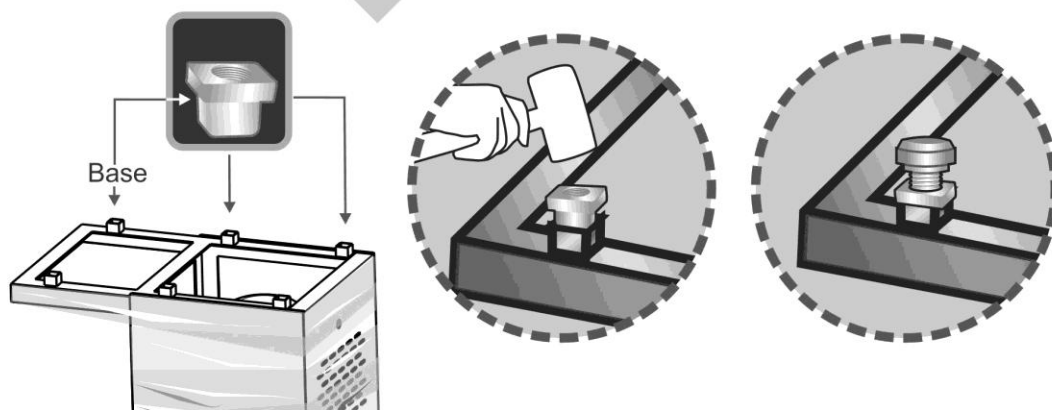
Installation:

Un-packing the machine:

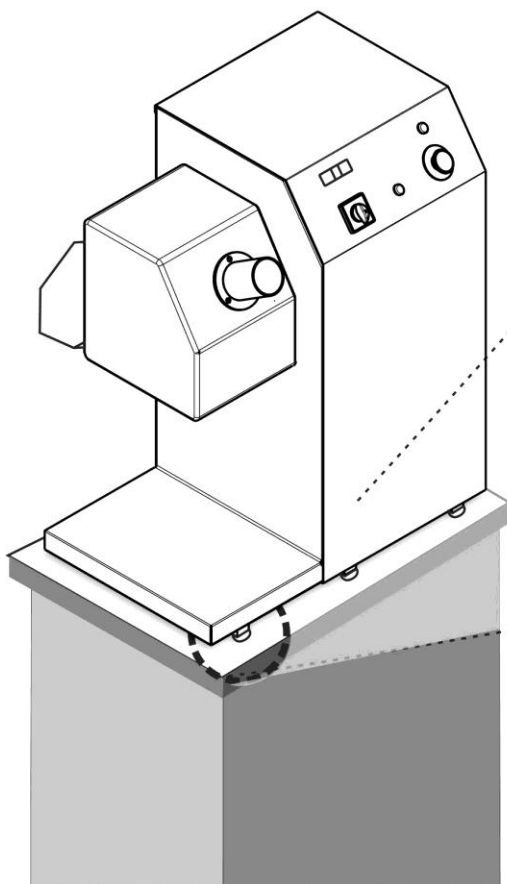




Fix the base in to the legs of the bottom frame with the help of a mallet. Fasten the "Height Adjuster" in its place.



After unpacking the bubble wrapper and polyethylene sheet which are wrapped around the machine, place it on top of a work table and adjust the legs at the bottom to ensure that the machine is standing up-right.



Note: Please maintain at least 24 Inches height for the work table for convenient operation.

7. COMISSIONING:

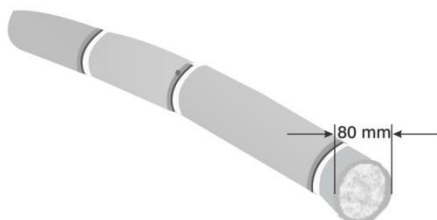
- Visual inspection need to be done to verify physical damages
- Check for irrelevant noise from machine by plug in the power cord
- Provision of ELCB and its rating(30mA) at the supply connection
- Verify the proper sanitization of juicing area of machine
- Check for on – off switch working
- Check for Safety Switch operation
- Check for emergency stop operation
- Check for forward & Reverse operation of machine
- Check for proper ventilation at machine operating area and make sure 24-Inches gap from the machine to the surrounding area.

8. OPERATING PROCEDURE:

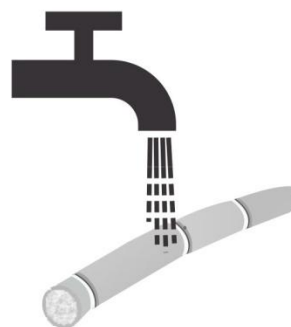
- Cut the sugarcane not less than 15 inches and maximum of 24 inches, make a cut angle of 45° at one side
- Clean the sugarcane pieces with plain water thoroughly to remove the dust on the cane and any other substances residing on the cane
- Make sure the Dome is fastened securely in place before the juicer is turned on. DO NOT unfasten the Dome while juicer is in operation
- Put-on the power & check Green indication light on the control panel of machine
- Turn the rotary switch to "Forward Mode"
- Put -on the switch on control panel
- Remove the Cover on the Cane Inlet so that sugarcane can be inserted.
- Insert the sugarcane piece in the cane inlet to the juicing area and press slightly towards the Rollers slowly and slightly.
- Collect the juice from the bottom of Dome or juicing area in to a Appropriate Juice Collector like Jug
- Filter the juice thoroughly with external filter
- Place back the cover on the cane inlet.
- Serve the sugarcane juice in hygienic condition in an appropriate glass.
- Note: DO NOT put your fingers or other objects into the Cane Feeder while the juicer is in operation. If Sugarcane becomes lodged in the rollers, run the motor in reverse mode by turning the switch to "Position 2" and try to retract the stuck cane from the rollers. If this method fails then turn off the juicer by placing the switch to "position 0" and disassemble the dome cover to remove the stuck cane.

ILLUSTRATION

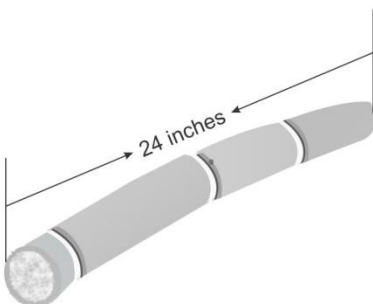
- ① Only use sugarcane with diameter of less than 80 mm / 3 inches.



- ② Wash sugarcane thoroughly.



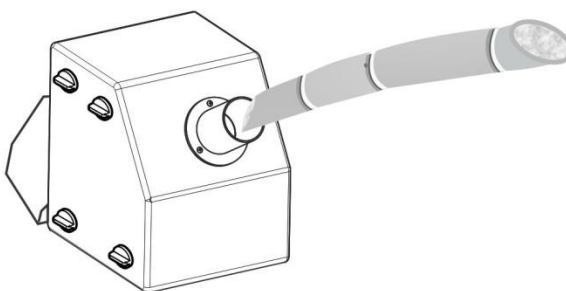
- ③ Cut the sugarcane into equal pieces measuring 24 inches each in length.



- ④ Bevel at least one end of each piece at 45 degrees angle. This will make it easy to feed the sugarcane into the rollers.



- ⑤ Feed only the beveled side of the sugarcane to the rollers.



Juicing the sugarcane:

Insert the beveled end of the sugarcane into the feeder and gently push it into the rollers. Once the rollers start to squeeze the sugarcane, allow the sugarcane to travel through the rollers by itself. Never apply excessive pressure to push the sugarcane through the rollers. Collect the freshly squeezed juice in a clean container and serve.

9. CLEANING PROCEDURE:

Proper operation of juicer requires constant and conscientious cleaning of it, not only for the longevity of the machines but also for the sake of the quality of the beverages. This section focuses on the things you need to know and do to keep your juicer operating at its best so that it can consistently produce excellent quality juice and service.

Specifications of Cleaning Solutions to be used

item	Purpose	Preparation Method
Dish Washing Solution (D.W Soln)	For Dome and Rollers Cleaning	20 ml of Dishwashing concentrate to 1 liter of water or as specified by the product manufacturer
Sanitizing solution	For Sanitizing of dome and Rollers	Add ONE tablet of Food Grade sanitizer for appropriate quantity of water as specified by the product manufacturer

Cleaning Schedule for sugarcane Juicer Parts

Parts	Tool	Frequency
Dome, Cane Inlet (or) Hopper, Juicing Nozzle, outlet Chute	D.W Soln and sponge for surface Cleaning	Allow every few Juicing cycles or whenever appropriate
Rollers	D.W Soln and Hand Brush	After every few juicing cycles or whenever appropriate
Juicer Body , Dome Locking knobs	D.W Soln and Damp cloth	End of day or whenever appropriate
Electric cords	Damp Cloth	End of day or whenever appropriate
Air Ventilation Holes	Dusting Brush	weekly

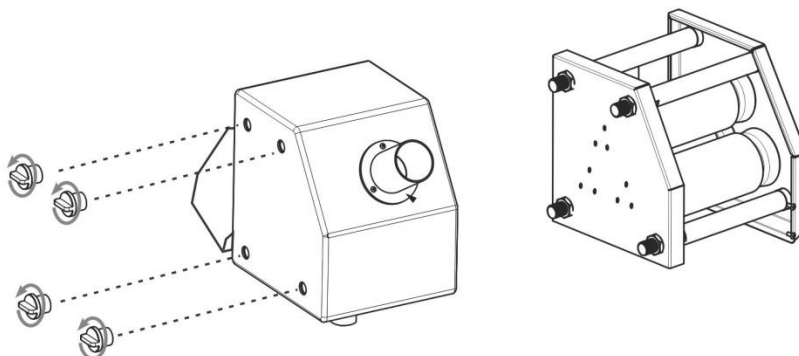
The Sugarcane Juicer should always be maintained and operated under careful working conditions in order to obtain the best results if Fruit residues are allowed to build up, it will allow bacteria to develop and mix with fresh juice and intoxicate the consumer. Therefore cleaning and maintenance is essential for keeping the juicer in perfect working condition.

A	During the operation Hours
	1. Run appropriate amount of water through the cane Inlet after every few juicing cycles
	2. If you notice that too much pulp or juice residue is collected in the Dome, then remove the dome by unscrewing the knobs and clean it with D.W soln and Sponge thoroughly.
	3. Whenever required, wipe the juicer body thoroughly with a damp cloth.
B	At the end of the Day
	1. Remove the dome by unscrewing the knobs and clean it with D.W Soln and sponge thoroughly.
	2. Clean the rollers using a hand brush while pouring D.W Soln directly on top of them. Clean each individual rollers thoroughly.
	3. Rinse with clear water until all soap is rinsed from rollers and Dome.
	4. Wipe the rollers and Dome with a clean towel
	5. Clean the juicer body by spraying the D.W Soln on the surface and cleaning with a damp cloth. After cleaning wipe the surface with a clean Cloth.
C	Sanitizing at the end of the day
	1. Immerse the dome and knobs in sanitizing solution for 5 to 10 minutes
	2. Remove all the parts from sanitizing solution and drain
	3. Dip a cloth in sanitization solution and hang it over the rollers, so that the most of the rollers surface is in contact with the sanitization solution
	4. Clean with normal drinking water and place the parts on a clean surface to dry.

ILLUSTRATION

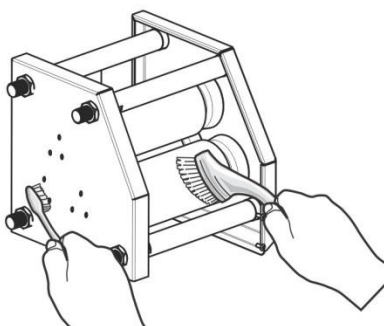
①

Unfasten the Dome locking knobs and remove the Dome.



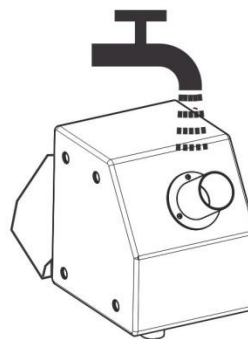
②

Scrub the rollers gently using a brush in the direction of indentation.



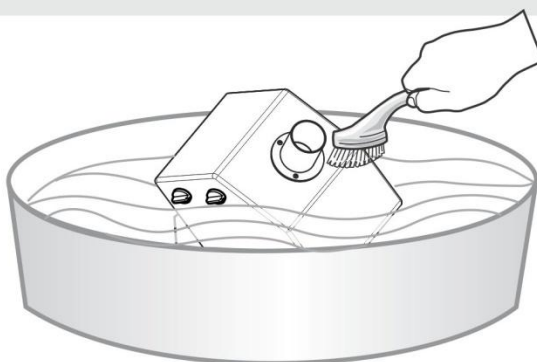
③

Wash the dome using soap solution or suitable sanitizing solution and then rinse the dome well under running water.



Wipe off the excess water from the Dome and the Rollers with a clean cloth and let them dry before re-assembling.

To clean the juicer body, simply wipe with a damp cloth and dry. Never pour water on the motor housing or immerse the body in water.



10. STORAGE OF SUGARCANE JUICER:

SHORT TIME STORAGE

- 1) Keep the machine in installation position
- 2) Keep away from the Vibrating & Oscillation atmosphere
- 3) Clean the rollers with sanitization solution
- 4) The machine needs to be Store in dry room
- 5) Wrap the machine with polyethylene sheet
- 6) Temperature must not fluctuate beyond the range of 0°c TO +40°c

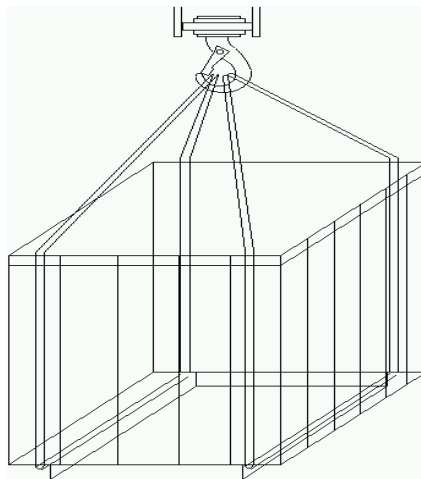
LONG TIME STORAGE

- 1) Store in the fitting position and secure the machine against falling
- 2) Transportation damage to the external paint must be repaired. If required apply suitable rust inhibitor to the surface.
- 3) Store in a dry place
- 4) In tropical regions the machine must be protected against damage by insects.
- 5) Temperature must not fluctuate beyond the range of 0°c to +40°c
- 6) Relative humidity less than 60%
- 7) No aggressive, corrosive substances (contaminated air, ozone, gases, solvents, acids etc.) In the immediate vicinity.

MEARURES BEFORE RE -COMMISSIONING

If the storage period exceeds 2years or the temperature during short-term storage greatly deviates from the standard range the lubricant must be changed before commissioning.

11. TRANSPORTATION:



- 1) Keep the machine in installation position while transportation
- 2) Do not to be tilt the machine while transportation
- 3) Use the lifting equipment for loading & unloading of machine
- 4) Use adequately dimensioned and suitable means of transportation.

12. SERVICE & MAINTENANCE:

SERVICE & MAINTENANCE INTERVALS:

Daily cleaning is recommended for adequate operation

DAILY MAINTENANCE SCEDULE:

- 1) Cleaning of juicing area with suitable food grade sanitizer
- 2) Check for connections of all electrical installations
- 3) Check for ergonomic conditions of machine
- 4) Check for loose fittings of screws
- 5) Check for running noise

YEARLY SERVICE SCEDULE:

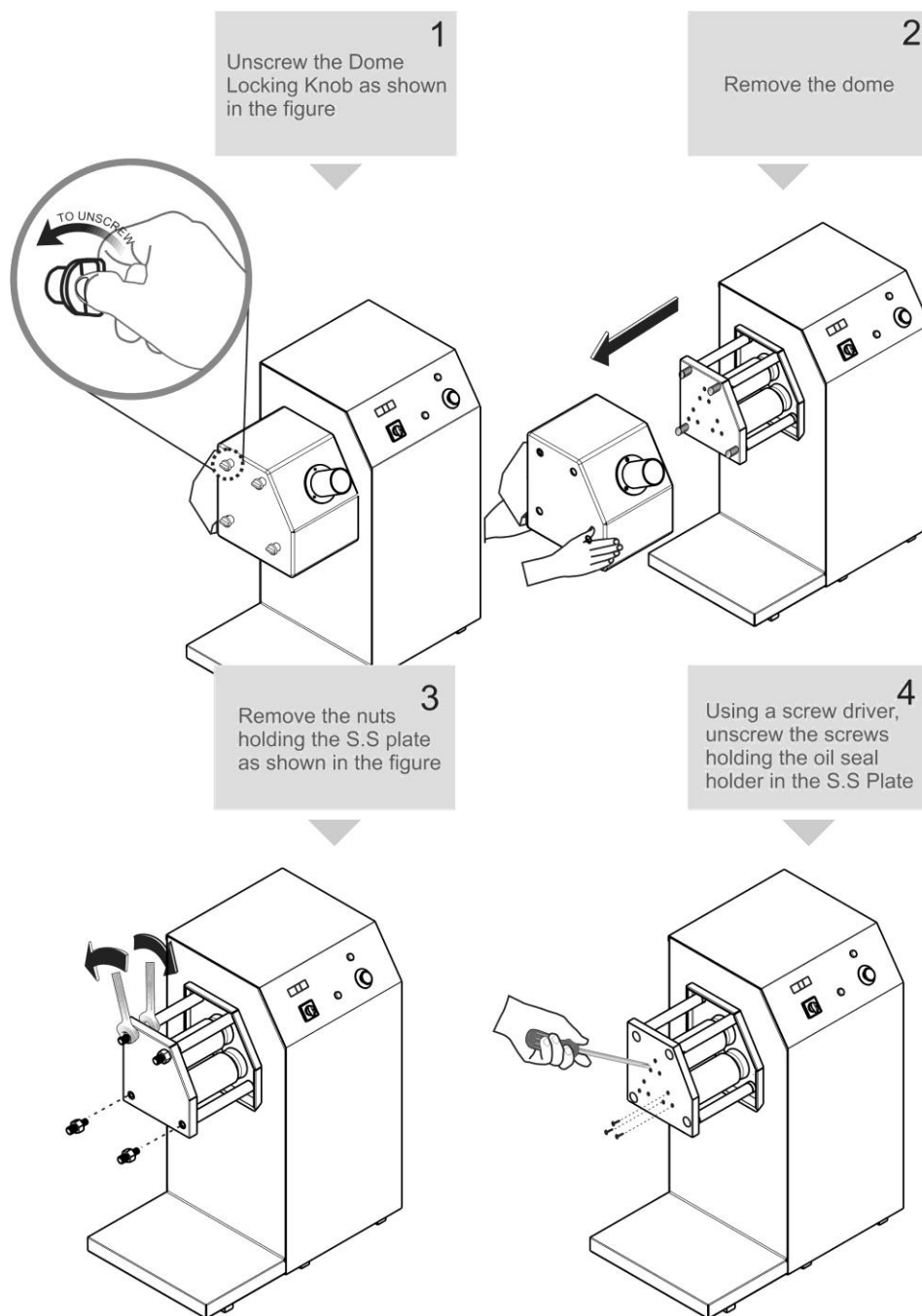
- 1) Re-greasing the gears (applicable only to free gears)
- 2) Replace the Motor Capacitor

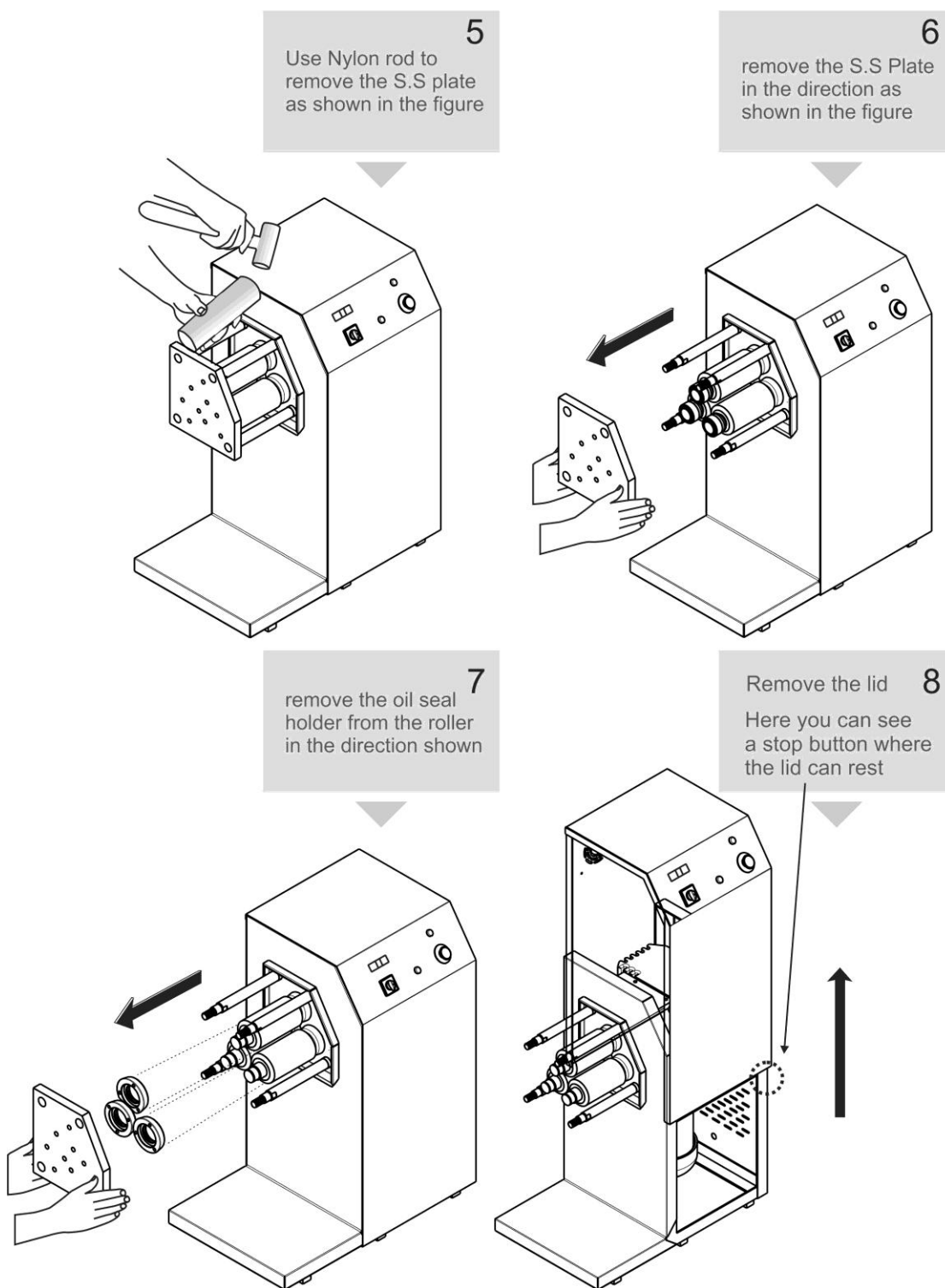
Note: for maintenance & service of gear box please refer the manual of Gearbox (Appendix-1)

13. TROUBLE SHOOTING:

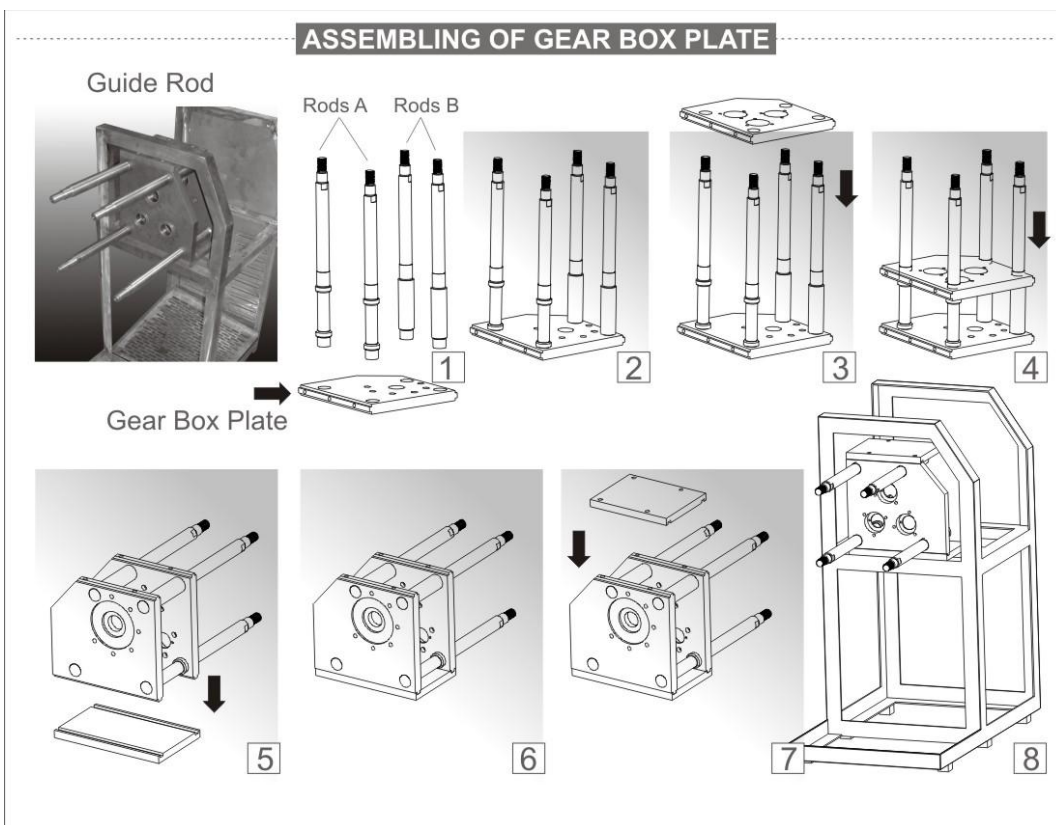
FAULT	POSSIBLE CAUSE	REMEDY
Power supply indicator not glowing	Loose electrical connections, Non functioning of limit switch	Check loose Electrical connections, check limit switch operation and fit as per requirement
Non functioning of Rollers while power indicator is glowing when machine started	Loose connection or failure of motor capacitor	Check for connections and functioning of capacitor and change it if required
Oil escape from pressure vent	Incorrect oil level or using of contaminated oil or unfavorable operating conditions	Refer to gear box manual of assistance
Unusual noise form machine	Failure of motor capacitor	Replace the motor capacitor
Unusual vibration from machine	Loose fittings of machine components	Check loose fittings of machine components and tighten as required
Unusual nasty/burning smell from machine	Burning of motor winding	Check for motor and rewind
Drive shaft of gear box does not rotate although motor is running	Fracture in gear unit or defective motor coupling or shrink disk slippage	Refer to gear box manual of assistance
ON-OFF Switch not working	Contactors malfunctioning	Check of contactor connections and replace if required
Unusual function of rollers	Failure of oil seal & Bearings	Check for oil seal worn and replace the bearings if required

14. DRAWINGS AND ASSEMBLY OF PARTS

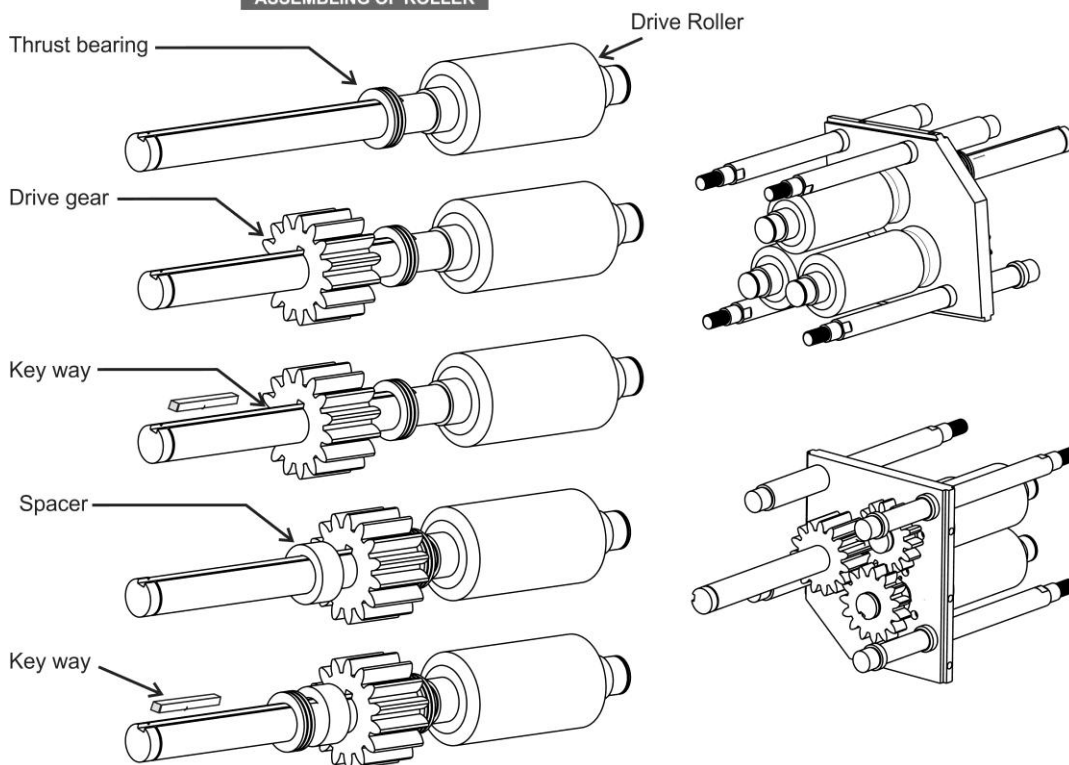


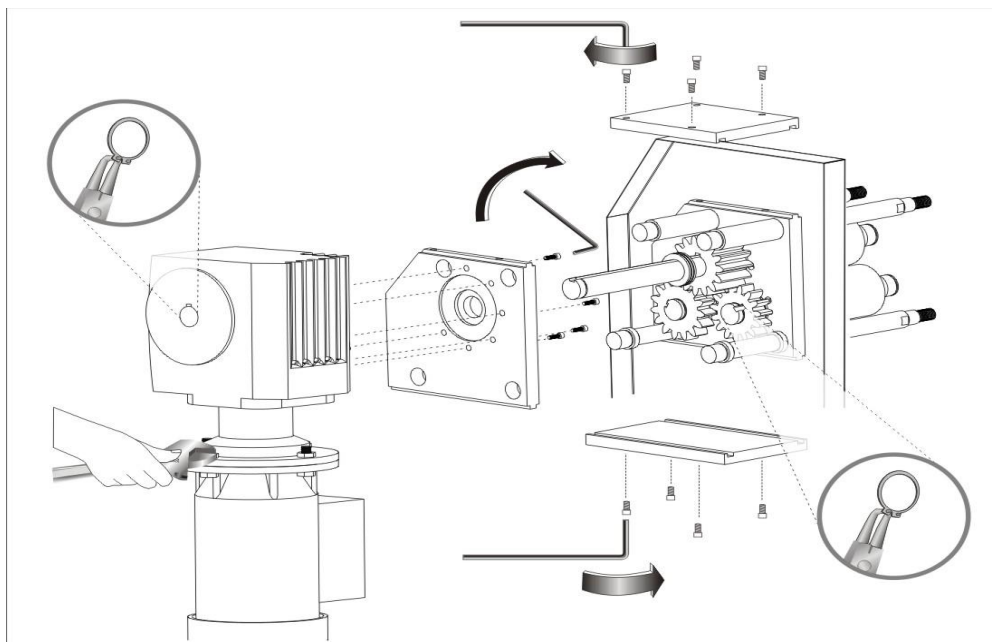


ASSEMBLING OF GEAR BOX PLATE

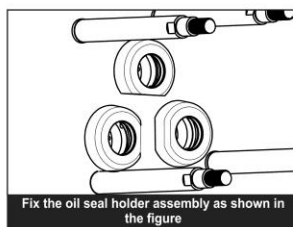
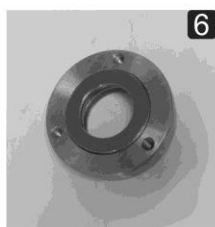
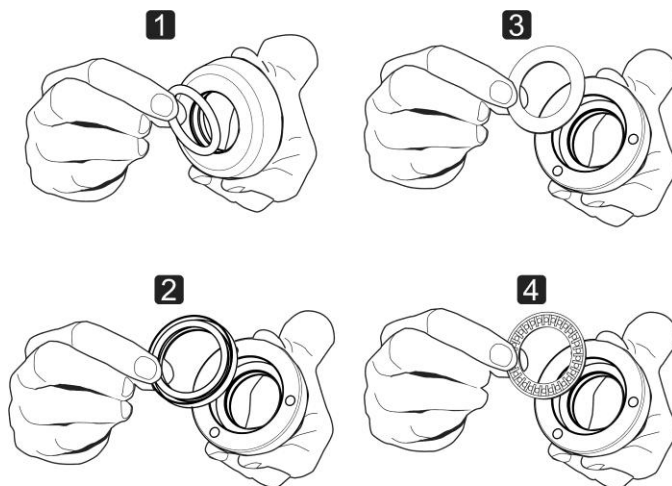


ASSEMBLING OF ROLLER





ASSEMBLING OIL SEAL HOLDER



Expandable View of Sugarcane Juicer

