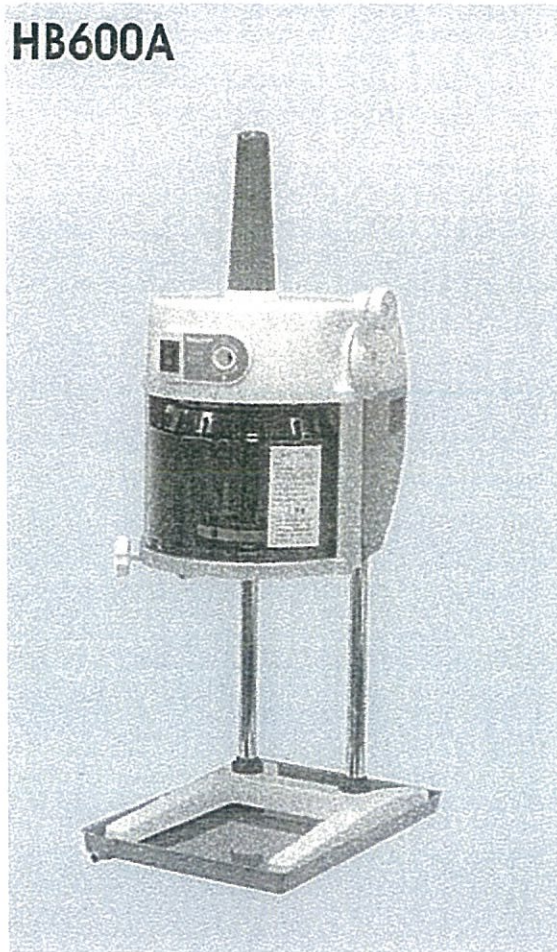


USER'S MANUAL

HB600A



Hatsuyuki Block Ice Shaver



TRANSFER (RE-SALE) OF MACHINE
Should you sell or give the machine to a 3rd party, make sure that this "OPERATION MANUAL" goes with it for safe and correct operation.

- * Before operating this machine, please read and understand the instructions specified in this manual for proper and safety use.
- * Retain this manual for your immediate and future references.
- * For maintenance and repairs, please contact the manufacturer (Chubu Corporation) or the local distributors from whom you purchased the products.

Chubu Corporation




FOR SAFETY

- 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.
- Attention marks and their meanings are as follows:

	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 buildings, furniture and effects, pets, etc.

Examples of Mark / Pictograph:

 Electric Shock	△ represents "CAUTION" (including danger and warning). The specific contents of caution are shown near the △ mark by pictograph or letters. The mark illustrated left represents "ELECTRIC SHOCK".
 Do Not Disassemble	⊘ represents "PROHIBITED OPERATION". The specific contents of "Prohibited" are shown within or near this ⊘ mark by pictograph or letters. The mark illustrated at left represents "DO NOT DISASSEMBLE".
 Unplug	● represents "ENFORCEMENT" (Things to do). The specific contents of "Enforcement" are shown within or near ● the mark by pictograph or letters. The mark illustrated at left represents "Unplug from outlet".

⚠ 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.



- 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 many plugs into the same outlet. It may cause power supply cord to overheat and melt/burn or electric shock or fire.



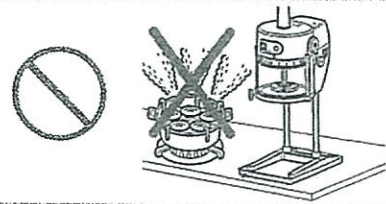
- Do not operate the machine outside.

Operating the machine outside or in the rain will cause electric bleeding or electric shock.

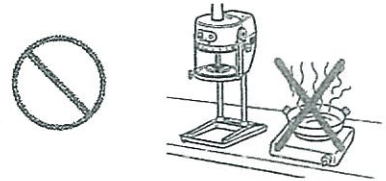


⚠ WARNING

- Do not install the machine in a damp or wet place.
It can cause electric bleeding or electric shock.



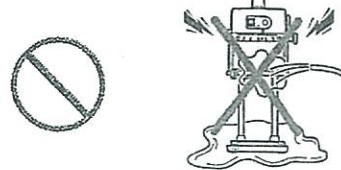
- Do not install/place the machine close to any heating appliance.
Never install/place the machine close to any heating appliance such as a gas burner. It can cause melting and/or burning of plastic cover.



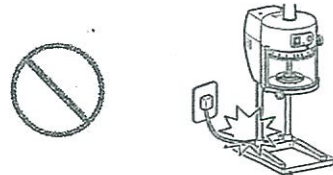
- This machine is for "COMMERCIAL USE".
Be sure to keep the machine away from children to avoid electric shock or injury.



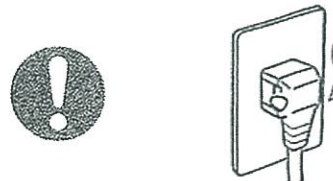
- Do not pour water over the machine or immerse machine in water.
It can cause a short circuit or electric shock, as well as rust and other water related problems.



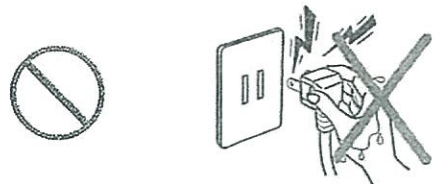
- Do not damage power supply cord.
Never work on power cord and never pull, twist or bundle it. Do not place a heavy things on it. It can damage the power cord and can cause electric shock or fire.



- 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.



- In the event of circuit breaker moving to "OFF" position, please contact the machine vendor. Switching breaker to "ON" position incorrectly or by force can cause electric shock or fire.



FOR SAFETY

⚠ WARNING

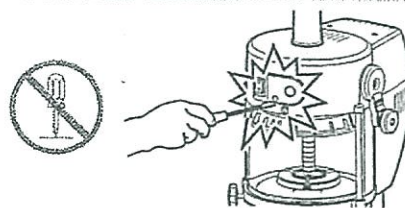
● Should accidents or irregular operation occur, TURN OFF the main switch and unplug from outlet. Immediately contact your machine vendor for a correct repairs. Continued operation of a faulty machine can/will cause electric shock or fire.



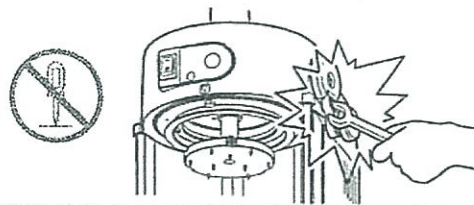
● For cleaning inside the ice hopper or changing blades, be sure to TUNE OFF the main switch and always put on gloves while cleaning/changing blade works. Never touch blades directly. They are very sharp and can cause injury.



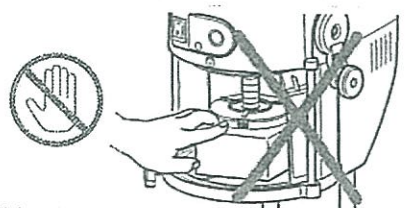
● Never try to disassemble or repair the machine by yourself. Always call a qualified technician. Incorrect repair will likely cause irregular operation or electric shock, fire or injury.



● Do not attempt to alter the machine in any way. It can cause electric shock or fire.

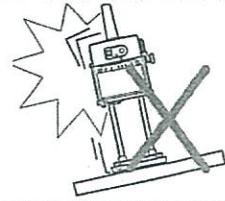


● Do not open the sliding door or put your hand into the chamber during operation. Lower the blade tip below the shaving table when cleaning the inside of the chamber. Wipe the shaving table counterclockwise to the blade direction. Otherwise, injuries could occur.



⚠ CAUTION

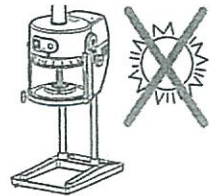
● Always install the machine on a stable and flat surface. Irregular or imperfect installation can cause the unit to tip or fall and is therefore dangerous.



● Install the machine in a location unaffected by occasional dripping of water. Melting ice will drip and can, therefore, drip onto things surrounding the machine.



● Keep the machine away from direct sunlight. It can cause a damage to plastic parts.



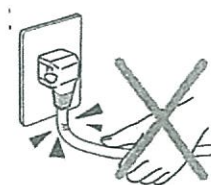
● When cleaning, be sure to switch OFF and unplug the unit before doing so. Cleaning with the power or switch on is very dangerous and can cause electric shock or injury.



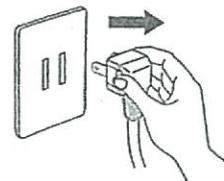
● Never use inflammable sprays near the machine and never place volatile or inflammable materials close to the machine. Sparks from the switch could possibly cause fire.



● 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 day's business is finished, be sure to switch OFF and unplug the unit for safety.



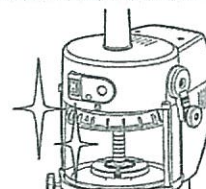
● For disposal of disused unit, please contact local disposal experts or the nearest vendor. Abandoned machines are dangerous. Treat blade on machine as a dangerous item when disposing machine.



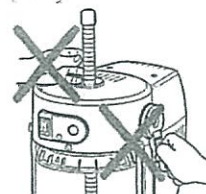
FOR SAFETY

⚠ CAUTION

- Clean the food zone area in the shaving chamber before use. Not cleaning it could increase the chance of contamination and could be the cause of illness.



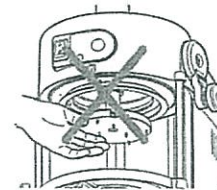
- Do not touch the rotary parts (main shaft and crank handle) during operation.



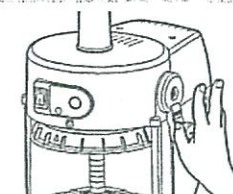
- Grip the ice block firmly. The ice could jump out if it is not positioned firmly.



- Do not touch the prongs with your fingers. Doing so could cause injury.

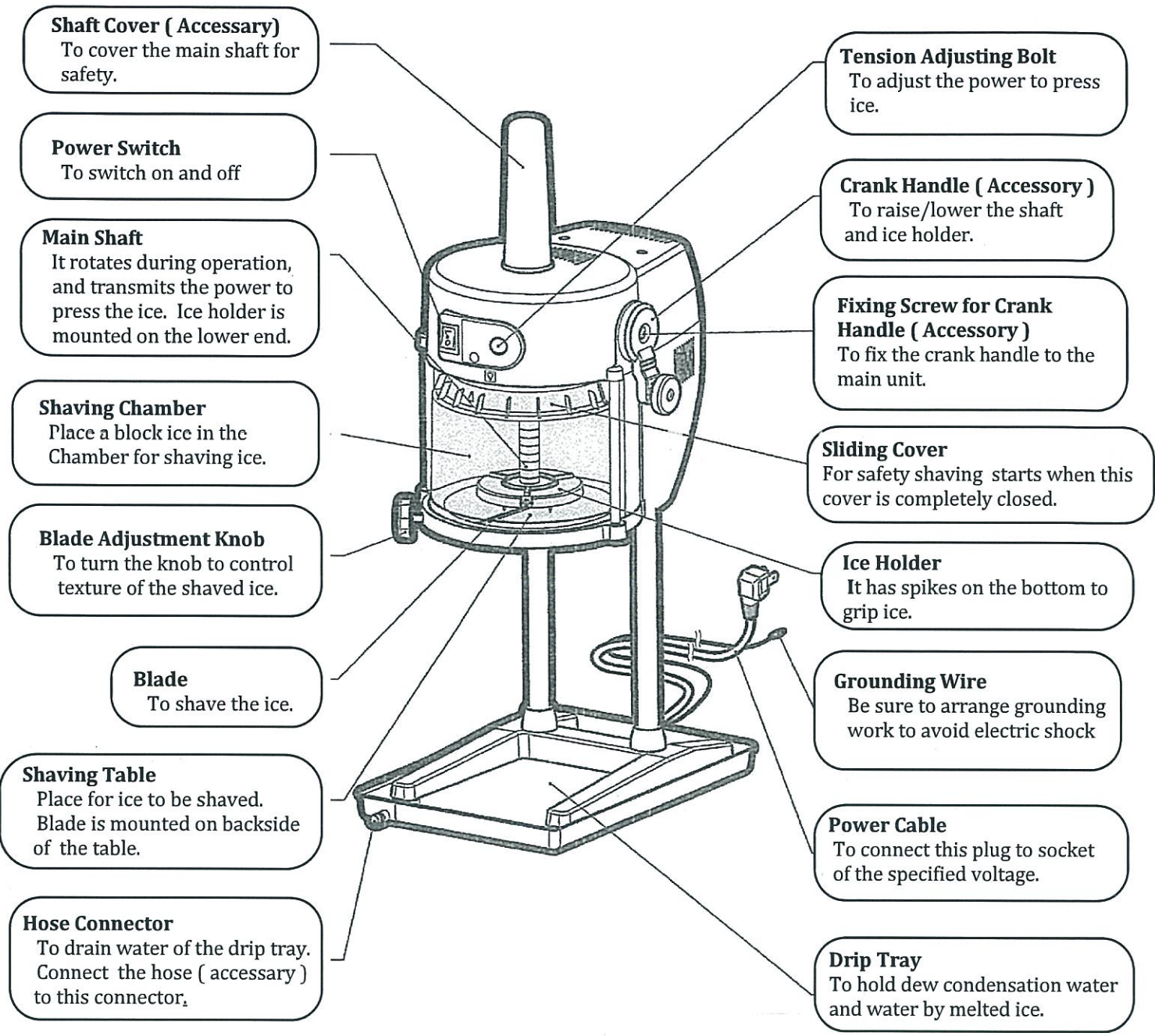


- Adjust the tension bolt properly so that when you do not support it with your hand, the ice holder does not descend.



- When you sell or give the machine to a 3rd party, make sure that this "OPERATION MANUAL" goes with the unit for safety and correct operation.





Shaft Cover (Accessory)
To cover the main shaft for safety.

Power Switch
To switch on and off

Main Shaft
It rotates during operation, and transmits the power to press the ice. Ice holder is mounted on the lower end.

Shaving Chamber
Place a block ice in the Chamber for shaving ice.

Blade Adjustment Knob
To turn the knob to control texture of the shaved ice.

Blade
To shave the ice.

Shaving Table
Place for ice to be shaved. Blade is mounted on backside of the table.

Hose Connector
To drain water of the drip tray. Connect the hose (accessory) to this connector.

Tension Adjusting Bolt
To adjust the power to press ice.

Crank Handle (Accessory)
To raise/lower the shaft and ice holder.

Fixing Screw for Crank Handle (Accessory)
To fix the crank handle to the main unit.

Sliding Cover
For safety shaving starts when this cover is completely closed.

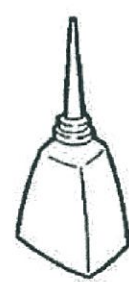
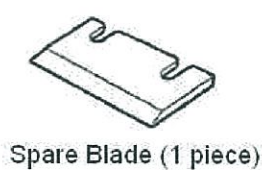
Ice Holder
It has spikes on the bottom to grip ice.

Grounding Wire
Be sure to arrange grounding work to avoid electric shock

Power Cable
To connect this plug to socket of the specified voltage.

Drip Tray
To hold dew condensation water and water by melted ice.

Accessory



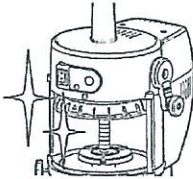
Cautions



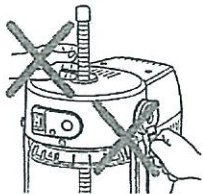
- Do not open the sliding door or put your hand into the chamber during operation.



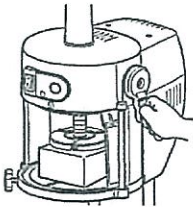
- Lower the blade edge below the shaving table when the chamber inside is cleaned. Wipe the shaving table counterclockwise against the blade direction. Otherwise it could injure.



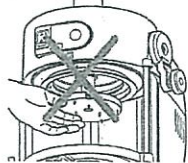
-Clean the food zone area in the shaving chamber before use. Without cleaning it could increase contamination and could be the cause of illness.



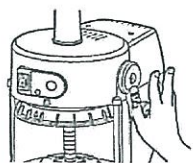
-Do not touch the rotary parts – main shaft and crank handle – during operation.



-Grip the block ice firmly.
The ice could jump out if it is not firmly preset.



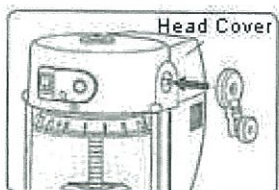
-Do not touch the prongs by hand. It could injure the fingers.



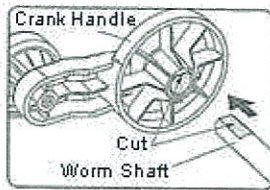
-Adjust the tension bolt properly so that the ice holder presses ice properly.

Check before Operation

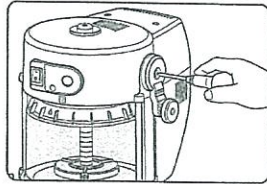
- Attach the enclosed crank handle in the following manner.



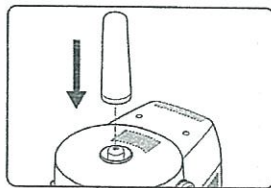
1) There is a opening on the right side of the head cover. Attach the crank handle to the body through the hole to connect the worm shaft inside.



2) In attaching the crank handle on paragraph 1, connect them aligning the cut of the worm shaft with the cut of the crank handle.



3) Put the crank handle to the body using Philips bolt and fasten it by screwdriver firmly. Check the handle if it raises the main shaft upwards and downwards smoothly.



Shaft Cover

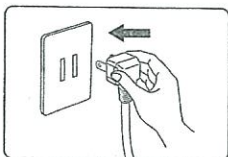
Insert the shaft cover to the hole in the top of the head cover to hide the main shaft.

- Connect the drain hose to the drip tray. And place a bucket as a receptacle of drip water through the drain hose.
- Connect the unit to the socket of the appropriate electricity specified on the machine plate. Refrain from using a generator. It is out of warranty.
- Clean the food zone such as the ice shaving area especially for the first operation after the purchase. There could be dust in the chamber.

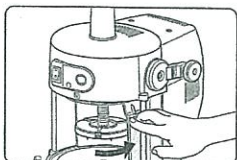
Remarks :

- 1) Very cold smoky color ice is not appropriate for shaving because it is too cold and hard. Use transparent ice at an appropriate temperature when it looks transparent. Smoky color ice will not produce soft and fluffy shaved ice. It could damage the blade tip and the blade will not shave ice soft. Use transparent ice to extend the life of blade.
- 2) Do not put things on the unit. It may falls down as the unit vibrates during the operation. It would be dangerous.

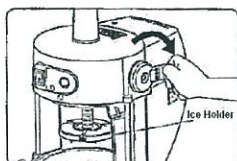
Operation



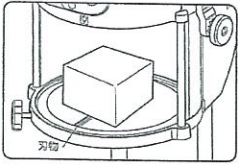
Plug in the shaver.
Make sure that power switch is turned to off position before plugging in the unit.



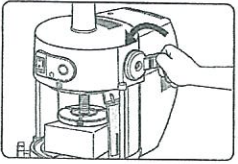
Slide the sliding cover to the right to open.



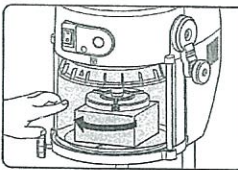
Turn the crank handle clockwise to raise the ice holder. Make sure that the ice holder does not descend when the crank handle is free from your hand. If it falls down, turn the tension bolt clockwise to hold the position so as to avoid accident.



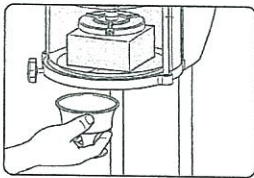
Place a block ice on the center of the shaving table. The ice should not exceed the area of the shaver blade. Otherwise ice cannot be shaved well, or shaved improperly and jumps out.



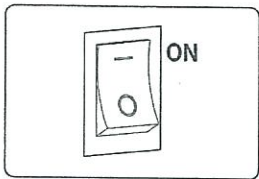
Turn the crank handle counterclockwise to lower the ice holder. Make sure that the ice is gripped by spikes of the holder firmly. Insufficient gripping could cause the ice to fly out of the chamber.



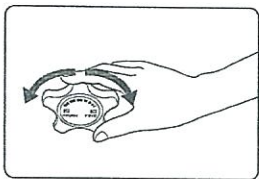
Turn the sliding cover to the left to close until the cover contacts the stopper. If it is not fully closed, the safety switch activates the unit not to work even when it is switched on.



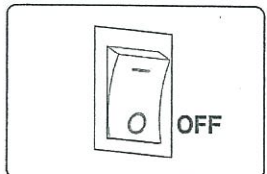
Prepare a cup under the shaving table to receive the shaved ice.



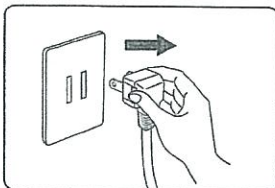
Switch ON. Shaving ice begins.



Adjust the texture of shave ice. Turn the blade adjustment knob for the desired texture. For finer texture, turn the knob clockwise., or turn it counterclockwise for coarser.



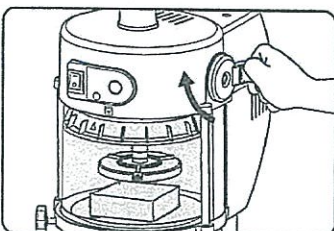
Switch OFF. (Stop working.)
Turn off the switch.



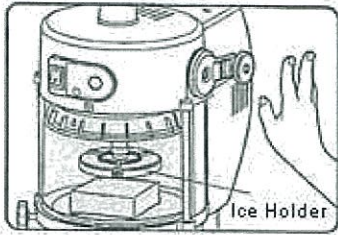
Unplug the unit.
Pull out the plug from the outlet when the job is finished for the day.

Taking the ice off the shaving table.

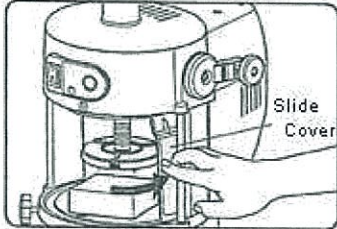
- Do not touch the blade tip in placing and taking out ice. It could cause injury.
- Do not touch the prongs of the ice holder. They could cause injury.



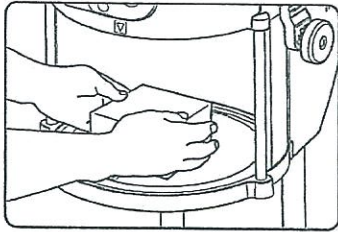
1) Switch the unit off.
And turn the crank handle clockwise to raise the ice holder.



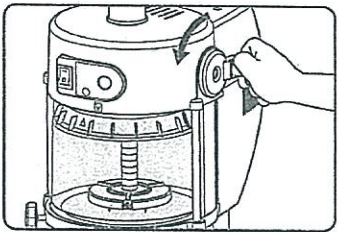
2) Confirm that the ice holder does not descend when a supporting hand is removed from the crank handle.



3) Move the sliding cover to the right to open.



4) Take out the ice from the shaving table.



5) Turn the crank handle counter-clockwise to keep the ice holder to the lowest level. Close the sliding cover (shaving shield). This is for safety reasons.

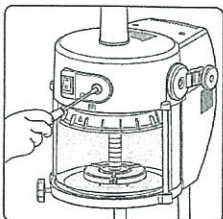
About Safety Switch

- When the sliding cover (shaving shield) is opened, the safety switch activates the unit to stop operation for safety.
- Do never use the safety switch for power switch purpose. The machine could break down.

About Tension Adjustment Bolt

Adjust the tension adjustment bolt not to descend when you remove supporting hand from the holder. Otherwise it could cause injury.

It adjusts the power to hold the ice.



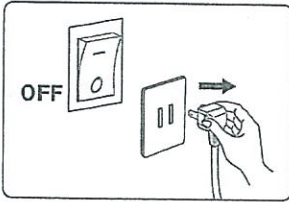
-Use a slotted screw driver.

-Turn the tension adjusting bolt clockwise for stronger tension of gripping ice or counterclockwise for weaker.

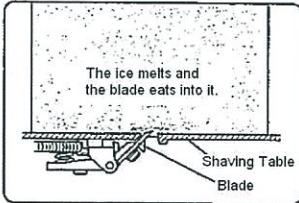
Confirm the adjustment by turning the crank handle. Recommended tension is such that the ice block holder does not descend when you remove a supporting hand from the crank handle, yet it does not feel heavy or tight when the handle is moved to raise the holder.

About Protector

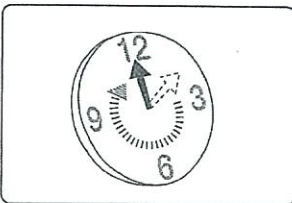
- When the motor is overloaded, the protector causes the shaver to stop automatically.
- When the motor is overheated under a certain period of continuous run, the protector reacts it to stop the operation. The protector also reacts to overload of the motor.
- The motor has a protector built in.
- Follow the instructions below when the protector works.



1. Turn off the power switch and unplug the unit.



2. Remove a cause of the overload
(e.g., When the blade catches the ice too deeply by raising the blade too high, it may obstruct rotation of the motor.).
Lower the blade and reposition the ice.

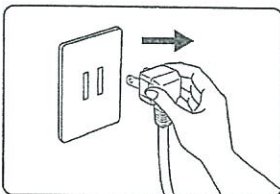


3. Leave the shaver switched off for an hour and then it restores itself.
The machine will automatically reactivate.
If the protector works often, please consult with the distributor.

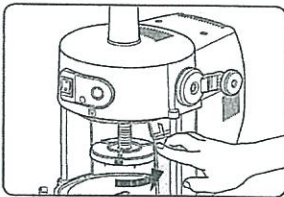
Changing Blades

Switch OFF and unplug the unit at the time of changing blades, cleaning, maintenance, etc.
Work with gloves on and do not touch the blade tip directly. Otherwise it could cause injury.

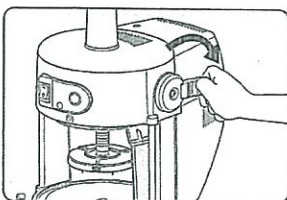
Removing Blade and Attaching Blade



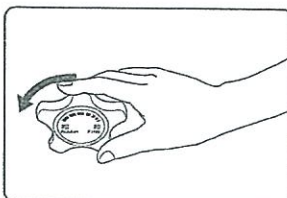
1) Switch off and unplug the unit.



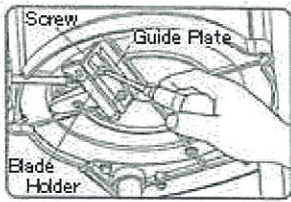
2) Move the sliding cover to the right to open.



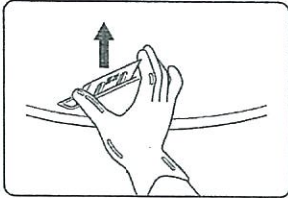
3) Turn the crank handle clockwise to raise the ice holder .



4) Turn the blade adjustment knob counterclockwise until the blade protrudes the surface of the shaving table slightly.



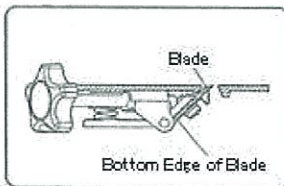
5) Slightly loose the two Phillips screws that fasten the blade. Do not take out the screws.



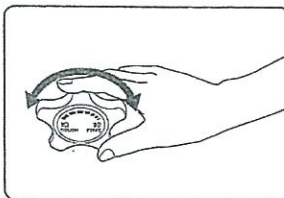
6) Pull the blade upward through the opening of the shaving table.



7) Position a new blade that the engraved mark "初雪 (Hatsuyuki in Japanese)" faces the ice holder. And insert it between the blade holder and the ice receiver from the opening of the shaving table.



8) Position the blade tip and the shaving table at the same height and level. Then fasten them firmly.



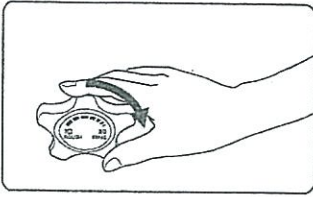
9) Turn the blade adjustment knob counter-clockwise for the desired shaved ice texture (turn it clockwise for a coarser texture).

Maintenance

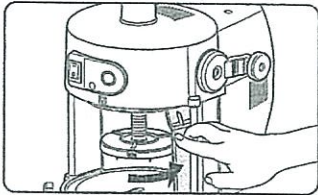
- Be sure the unit switched off and unplugged before cleaning. Wear protective gloves when cleaning the inside of the chamber and when changing blades. Do not touch the blade tip directly.
- Be sure to lower the blade below the surface of the shaving table when cleaning the inside of the shaving cabinet, and wipe the table counterclockwise (against the blade tip direction).
- Do not put immerse the unit in water or put water over the unit. It could cause an electric short circuit, rust, or permanent damage to the unit.
- Do not touch or operate the power switch, plug, and other electric parts by wet hand.
- Do not use a spray with inflammable gas or do not place volatile or combustibile material near the shaver.
- Do not wash the shaver with water in temperature more than 40°Celsius, with dish washer, dryer, sterilizing storage. These could deform the plastic parts.
- Do not use followings for plastic parts : benzine, alcohol, petroleum, powered soap, polishing powder, alkaline detergent, acid, hypochlorous acid, scrub brush, etc. For using chemical cloth, follow the instructions on manual.
- Do not brush the shaving table by a hard thing as it is treated with rust-resistant coating.

Daily Maintenance

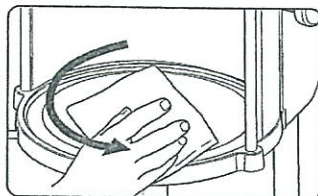
Inside Ice Shaving Chamber (Shaving Table, Sliding Cover etc)



1) Turn the blade adjustment knob clockwise to the end so that the blade tip is positioned below the surface of the shaving table. It could cause an injury during cleaning if the blade tip is extruded over the shaving table.

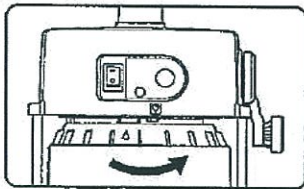


2) Move the sliding cover to the right to open.

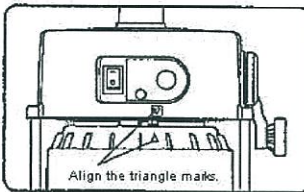


3) Clean the shaving table using a damp cloth counter-clockwise. Do not clean in a clockwise direction ; this could cause injury inflicted by the blade.

How to Detach/Attach the Sliding Cover



1) Move the sliding cover to the right until its triangle mark meets the triangle mark on the head cover.



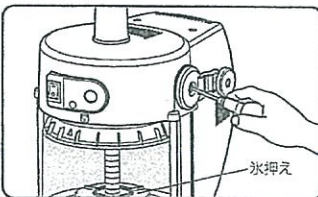
2) In the position that both triangle marks meet, pull out the sliding cover to the front to remove it.

Cleaning the heavy dirt on covers

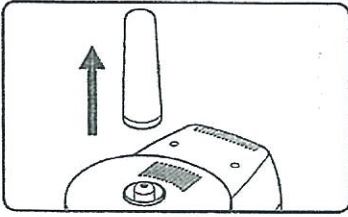
- Wipe covers by a dry soft cloth.
- Clean the hardened dirt using a damp cloth and warm water. A gentle dish detergent can be used. Be sure to completely remove any traces of detergent with a damp cloth.

Monthly Maintenance

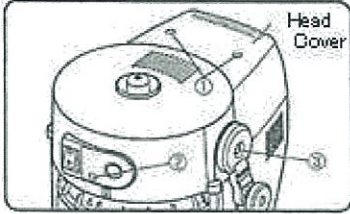
- Lubrication - Use the gear oil included as a standard accessory.



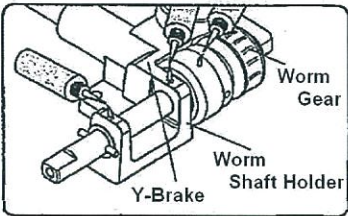
1) Turn the ice holder clockwise completely to the bottom. And remove the Phillips screw fastening the crank handle.



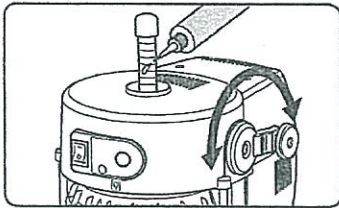
2) Turn the shaft cover counterclockwise until it stops. Then lift up the cover to remove it.



3) Remove the two screws Nos. 1 and 2 fastening the head cover by Phillips screw driver.
To find the screw No. 2, peel off a circle shaped label. And remove it.
Remove the screw No. 3 to take out the crank handle.
Remove the head cover .



4) Temporarily insert the crank handle through the worm gear shaft. (Refer to page 7-8 about detaching/attaching the crank handle.)
Lubricate the following parts rotating the crank handle ;
A) 2 holes of the worm gear shaft holder upper part
B) Contact of Y-brake and the worm gear.



5) Mount the head cover and assemble the crank handle into the crank handle shaft. Put the gear oil to lubricate bearing and the main shaft while moving the main shaft up and down.
After lubrication, mount the shaft cover. (Refer to the explanation of the shaft cover on page 8.)

Yearly Maintenance

- Periodically confirm there is no dust on the plug prongs and blade attachments. And plug in the unit to the socket to check it works.
Improper connection could cause a fire or electric shock.
- Do not scratch the power cord. Keep it clean.
If it is stretched, folded, placed under a heavy thing, pinched, stained, or processed, the power cord could be damaged. It could cause a fire or electric shock.

Maintenance of Grounding the Machine

- Check if the earth wire is not cut or disconnected from the terminal.
Should there be any defects, contact the distributor or an authorized mechanic.

Check of Plug

- Use an exclusive socket.
- Confirm there is no dust on the plug prongs or the socket.
- Do not use the power cord which is scratched, folded, placed under a heavy thing, pinched or stained. Should there be anything irregular, contact the distributor or an authorized mechanic.

Preservation

To keep the machine for more than one week, dry it completely and keep the machine in a place free from moisture.

Trouble Shooting

- The machine should be serviced and repaired by authorized mechanic or the distributor.

A) The machine does not start.

Is the plug connected to the socket?	Connect to the socket.
Is the protector working?	See page 12 – About Protector.
Is the belt mounted properly?	Contact the distributor.
Is the slide cover (shaving shield) open?	Close the slide cover(shaving shield) firmly.
Is the motor loaded heavily?	Switch OFF. Remove the cause of heavy load.

B) The machine works but it does not shave ice well.

Isn't the blade dull?	Replace the blades. (See Page 13)
Is the blade adjusted properly?	Turn the blade adjustment knob clockwise to raise the blade.
Isn't the tension bolt loose?	Turn the bolt clockwise for heavier tension.

C) Ice moves away from the ice holder during shaving.

Isn't the tension adjustment loose?	Turn the tension adjustment bolt clockwise.
Does the prongs of the ice holder catch ice?	Drop ice holder a bit stronger so the prongs grip the ice firmly.

Transfer and Disposal

- When selling or transferring this product to a third person, tape this instruction manual on the noticeable area of the product. This is to ensure that the new owner reads and understand all instructions.

- Refer to a qualified service or your local dealer when discarding the product.

Abandoned products are dangerous and can result in a risk of injury. Blades are dangerous and require proper disposal.

Specifications

Model	HB-600A Block Ice Shaver
Rated Power Consumption	230 W (50 Hz) / 205 W (60 Hz)
Shaving Capacity (kg/minute)	1.8 kgs (50Hz) / 2.2 kgs (60Hz)
Effective Diameter for Shaving	213 mm dia.
Unit Dimensions (W×D×H)	(W) 348 mm × (D) 477 mm × (H) 896 mm (710mm upto the head cover)
Net Weight (kg)	19.0 kgs.
Electrical	Check the machine plate. (230V,1Ph,50/60Hz)
Rated Time	20 minutes
Standard Accessories	Spare Blade 1 Screw (M6 x 16 with Anti-loosening mechanism)··· 1 Draing Hose 1 Ice Flag 1 Gear Oil 1 User's Manual 1 Crank Handle 1 Shaft Cover 1