ASTRA Inc.

Electric Peeler
KA-700H
Peel-a-ton

Fast, clean removal of peels

Operation Manual

Contents

Remarks

●Thank you very much for purchasing the KA-700H Fruit Peeler.
●To ensure safe and correct operation of this unit, please read and understand the contents of this manual before use.
●After reading this manual, keep it in a safe and accessible place for other users of the KA-700H.
●In order to improve the performance of this product, the specifications of the product or this manual may be modified without prior notification.

1. Introduction

- This appliance is specifically designed to peel round and oval fruits and vegetables.
- Improper use of the unit may result in a breakdown or an accident.
- Before using the unit, read this manual carefully, and pay careful attention to inspection and maintenance and also safety.

2. Safety Precautions

- Please read these instructions carefully before operating the peeler, and be sure to operate it correctly.
- Important safety items are set out on the following pages, so be sure and follow them.
- The following expressions are used in this manual:

⚠ Warning!	This expression indicates a situation in which death or injury may result from improper use of equipment.

⚠ Caution!	This expression indicates a situation in which injury and/or material damage* may occur due to improper use of the equipment.

  * Material damage may refer to any or all of the following: house and property, home furnishings, domestic animals and pets.

⚠ Warning!

1) **This unit may only be operated by someone who has read and understood this operating manual, and who can assume full responsibility for the safety of those nearby.**

    ⋮••▶ **Failure to do so may result in an accident or injury.**

2) **Use common sense. Do not operate the unit when fatigued, ill or physically impaired.**

    ⋮••▶ **Failure to do so may result in an accident or injury.**

3) **Do not operate the unit in a poorly lit (dark) or cluttered workspace.**

    ⋮••▶ **An injury may result.**

4) **Do not operate this unit while under the influence of alcohol, medication or any other substance that might impair judgment and motor skills.**

    ⋮••▶ **An injury may result.**

5) **Wear proper work clothes when operating this unit.**

    ⋮••▶ **Do not wear baggy or loose clothing, gloves, a necklace or other accessories because these items can become entangled in moving parts of the unit, resulting in possible injury.**

    ⋮••▶ **A person with long hair must wear a hat or hair net when operating this equipment.**

⚠ Warning!

6) Do not allow children near this unit. Do not allow children to operate this unit.

▶ An accident may result.

7) Do not disassemble or attempt to repair or modify this unit.

▶ An accident may result.

8) If you detect anything unusual in the operation of the unit, do not continue to use it.

▶ An accident may result. Immediately have the machine inspected and repaired.

9) Always operate the unit on a level, stable surface.

▶ Operating the unit on an unstable surface may result in a breakdown or injury.

10) Never move the unit while it is in operation.

▶ Always turn the power button "off" and unplug the power cord before relocating the unit. Failure to do this may result in a breakdown or injury.

11) Never allow water to contact the base of the unit.

▶ The base of the unit is NOT water resistant. Contact with water may result in an electric shock, fire or breakdown.

12) Use ample care when touching the base of the unit.

▶ Immediately after operation, the unit will be hot, and if touched may cause an injury.

▶ Do not touch parts of the unit where there are protruding screws. This may result in an injury.

13) Do not touch the stainless surfaces on the front of the unit.

▶ The unit will be hot, and may cause an injury.

14) Never touch any part (arm, holding prong) while the unit is in operation.

▶ Always confirm that the unit is completely powered off before touching any part of it. Failure to do so may result in injury.

15) Handle the holding prong with adequate care.

▶ Never touch the mounting prong while the peeler is in operation. Turn the main switch to "OFF" before touching the prong. Failure to do so may result in serious injury.

▶ The prong is very sharp. Use care when setting or replacing it.
Failure to exercise care may result in serious injury.

▶ When fixing the prong to the shaft, be sure to follow the instructions in this manual.
Failure to do so may result in injury and/or damage to the unit.

▶ Always inspect the mounting prong before, during, and after using the unit, and ensure that it is not broken or missing. If the prong or a part of it is found to be missing, all of the peeled fruit must be inspected, or thrown out. If the prong is damaged in any way, do not use it. Replace it.

⚠ Warning!

16) Use adequate caution when attaching and operating the peeler blade.

> Never touch the peeling blade while the unit is operating. Always turn the switch to "OFF" before handling the peeling blade. Failure to do so may result in serious injury.

> The peeling blade is extremely sharp. Use adequate care when replacing it. Failure to do so may result in injury.

> Always inspect the peeling blade before, during and after using the equipment to ensure that it is not broken. If the blade is found to be broken, all peeled fruit must be inspected, or thrown out. If the peeling blade is damaged in any way, do not use it. Replace it.

⚠ Caution!

1) Use the power supply within the range of specifications.

> Operating the unit from a power source of other than the intended voltage, or using it near a different voltage source or a source of electrical noise, may result in injury or damage to the unit.

2) Handle the power cord with care.

> Do not unplug the power cord using unreasonable force, damage it, shape it, bend it with unreasonable force, or bunch it. Keep the cord away from a source of heat or oil, and do not place anything heavy on it. Any of the above can result in an electrical shock, fire, or damage to the unit.

3) Take care when plugging or unplugging the power cord.

> Never plug or unplug the power cord with wet hands. Before plugging or unplugging the power cord, make sure that the power is switched "OFF." Always unplug the power cord by pulling the plug, not the cord. Failure to do so may result in an electrical shock, fire or damage to the equipment.

4) Do not place an object on the unit, or lean or stand on it.

> Injury or damage may result.

5) Upon taking delivery of the unit, check to see that no damage has occurred, and no parts (screws, nuts, etc.) have come loose or separated in transit.

> Failure to do so may result in injury or damage to the unit.

3

⚠ Caution!

6) When storing or operating the unit, observe the following precautions.

Failure to observe the below precautions may result in damage to the unit.

1. Temperature and humidity: Store at 0 – 30°C, and relative humidity below 85%.
2. Place the unit on a firm, level floor.
3. Keep away from salt air, flammable or corrosive gases, radiation, high heat or humidity, sulfur smoke, and other pollutants.
4. Keep away from oil and oil smoke.
5. Keep away from mist or moisture.
6. Keep away from direct sunlight.
7. Take steps to prevent the entry of insects, rodents, etc.
8. Install in a well-ventilated indoor location.

3. Specifications

Power	100 V~130 VAC/200 V~240 VAC (50Hz/60Hz)
Power consumption	150 W
External Dimensions	W270 mm D300 mm H127 mm
Total weight	6 kg
External case material	ABS plastic

●Confirm that the following standard attachments have been provided.

To obtain replacement parts, contact your retailer or ASTRA.

No.	Name	Check
1.	Holding prong x 3 (HP–M3, HP–MB, HP–MO)	
2.	Holding prong clips x 3 (CP–P)	
3.	Arm x 1	
4.	Peeler blades x 4 (F–3, S–1, S–2, S–3)	
5.	Spring x 1 (SP–S)	
6.	Spring holder x 1	
7.	Spring holder clip x 1 (CP–S)	

* The holding prongs (1) and peeler blades (4) are provided for different sizes and types of fruit skins.

# 4. Names and Functions of Parts

1) Control Panel
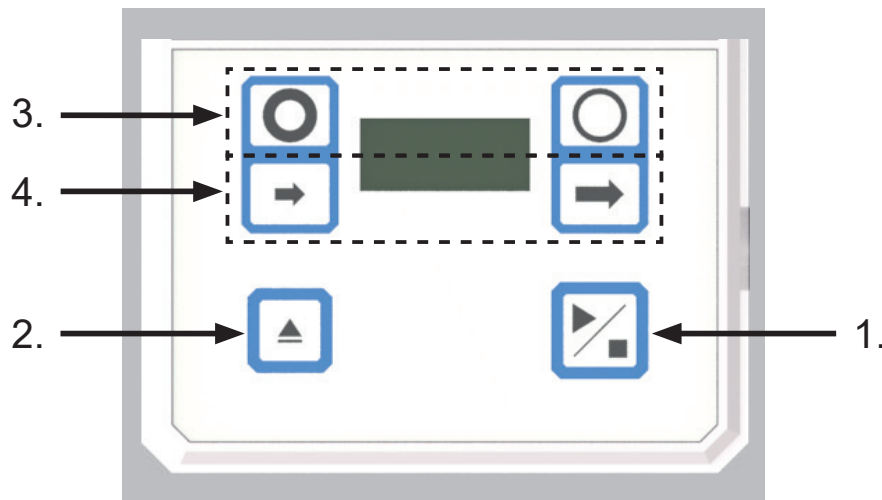
*** When a button is in the ready mode, the border around it will light up in blue.**

| No.	Name	Function	Reference page(s)
1.	Start/stop button	The operation of the start/stop button differs according to the following conditions. Pressing and holding down the button will power up the unit, and initiate the reset mode. Press and hold down the button (for more than 2 seconds) in the item selection mode to enter the specify setting mode. Press the start/stop button to select a preferred setting. Ready mode: Press the start/stop button to commence peeling. Note: operation changes depending on the peeling mode. During peeling: Press to stop peeling, and place in the "Ready" mode.	☞ Reference pages: 7~10, 20~22
2.	Menu button	Holding down the standby cancel button for more than two seconds will return the operating status to the item selection screen.	☞ Reference pages: 8, 20
3.	Peeling thickness adjustment buttons	These buttons adjust the peeling action according to the thickness of the peel. These buttons are used to perform adjustment in ten steps (0 to 9) which are displayed as bars on the screen. Press the " 〇 " button to reduce the number of passes and increase the peeling thickness. Press the " 〇 " button to increase the number of passes and reduce the peeling thickness.	☞ Reference pages: 20~22
4.	Spin speed adjust-ment buttons	These buttons adjust the speed of item rotation (holding prong spin speed.) Six available speeds are indicated by bars on the display. The small arrow " ➡ " reduces the spin speed; the large arrow " ➡ " increases the spin speed.	☞Reference pages: 20, 23~26

2) Mechanical parts
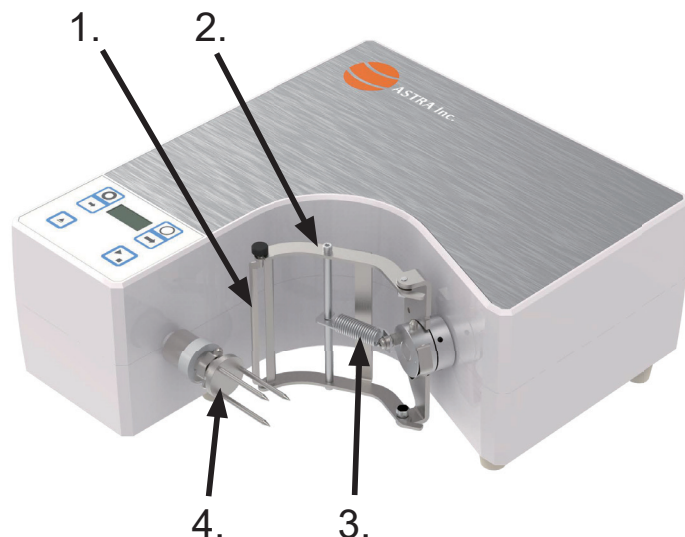
No.	Name of part	Function	Reference page
1.	Peeler blade	Replaceable parts Select according to the item to be peeled.	☞ Reference pages: 11, 18, 19, 27~35
2.	Arm	The arm is shown above in the "start" position. (A "Click" sound indicates that the arm has settled in the correct position.)	☞ Reference page: 10
3.	Spring	Replaceable part.	☞ Reference pages: 10, 11
4.	Holding prong	Replaceable part. Select the type according to the item to be peeled. Fixes and rotates the fruit or vegetable to be peeled.	☞ Reference pages: 12, 15~17, 21~35

3) Back of unit
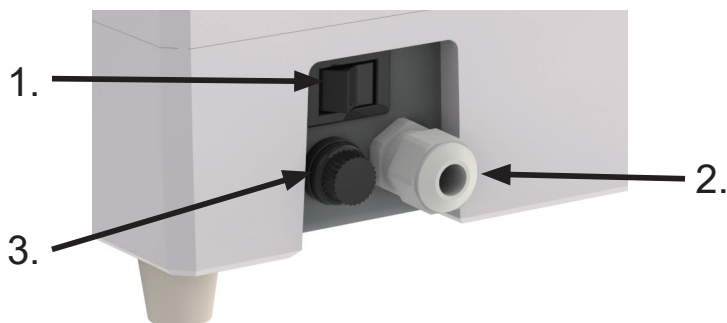
No.	Name of part	Function	Reference page
1.	Power switch	Powers the unit on or off.	
2.	Power connection	Built-in cord (2.5m)	
3.	Fuse	250 VAC, 3 A	

5. Correct Use of the KA-700H

1) Pre-operation preparation

- In order to prevent a possible electric shock please connect a ground fault interrupter to this unit.
- Install the unit in a well-lit area free of clutter or obstacles.
- When using an extension cord, confirm that the cord is undamaged. Use a 1500W rated extension cord. The cord should be as short as possible.
- Place the machine on a stable, level surface, with a container below to collect the peelings.

Rubber foot

Install the unit as far forward on the supporting surface as possible.
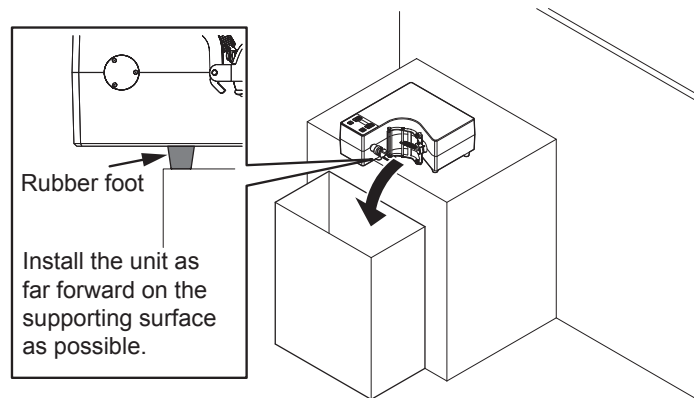
- After confirming that the power switch is "off", plug the power cord into a power outlet.

2) Pre-operation inspection

- Check to see that the holding prong is properly attached. (☞ See page 12)

⚠ **Caution!**	If the prong is not properly fitted to the unit, there is a danger that it will come into contact with the peeler blade, damaging both of these parts.

- Check that the holding prong is free of damage. If it is bent, or makes a rattling noise, it must be repaired or replaced.
- Check that the peeling blade is free of damage. If the blade is dented or bent, it must be replaced. (☞ See page 11)
- Check to see that the arm is correctly attached. If it is not, the peeler will not function properly. (☞ See page 10)

⚠ **Caution!**	If the arm is not attached correctly, it may contact the holding prong, causing damage to these parts.

- Be sure that the arm is in the correct starting position. If the arm is not in the correct starting position, the peeler will not start when the start button is pressed. Always start the peeler with the arm in the correct starting position. (☞ See page 10)

6. How to Operate the KA-700H

1) Turn the power switch "On." (☞See page 6)

- "Astra KA-700H" will be displayed on the operation screen, followed by the Settings Menu.
- Pressing and holding down the start/stop button while all buttons on the display are off will put the unit in the reset mode. (☞ See page 21)

2) Use the start/stop button to choose the settings for the type of item to be peeled. (☞See page 20)

- Pressing the button and holding it down changes the display screen to the detailed settings.
  (☞ See page 22)
- If "Arm position wrong – correct" is displayed, return the arm to the correct starting position, and press the start/stop button again.

3) Affix the item to be peeled (fruit or vegetable) to the holding prong.

- Affix the item so that the prong penetrates the center (core) of the fruit.
- Affix the item so that it touches the base of the prong.

⚠ **Caution!** | **If a peeling operation is started when no item is affixed to the holding prong, contact will occur between peeler blade and prong, damaging both of these parts.**

4) Press the start/stop button.

- Method of operation changes depending on the start mode. (☞ See page 9)
- Starts the peeling. Light of the menu button will turn off. During the peeling, start/stop button flashes.
- If the start/stop button is pressed during peeling, the peeling operation will stop.

5) Remove the item from the holding prong.

If you continue peeling with the same type of item, go back to 3) and repeat.

* If you wish to change the type of peeling item, press down the menu button two seconds to get back to the item selection screen.

Change of peeling operation

1) Safety Mode (Default)

Safety Mode avoids unexpected misoperation.
Start button will **flash** on the first push, then the peeling <u>starts on second push</u>.

Flash

Two push
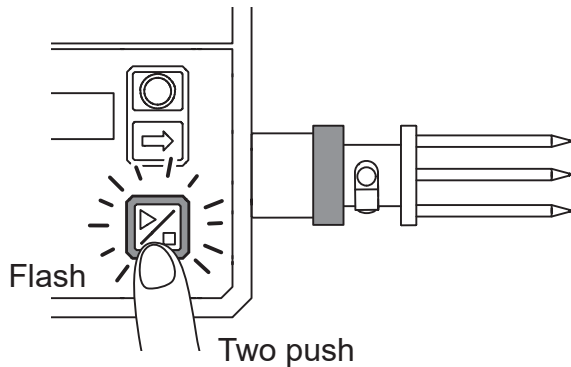
① Insert fruit
② Press Start **Two** times
(returns to standby mode when the second push is delayed)

2) One-Push Mode

<u>Immidiately</u> starts the peeling. Start button always lighting.

Light
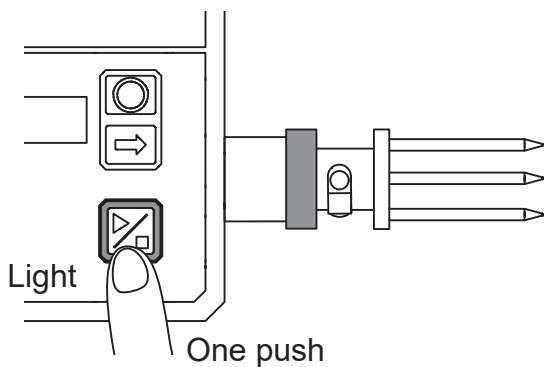
One push

① Insert fruit
② Press Start

⚠ Caution!	Please be careful of starting with nothing inserted.

3) Changing Mode

<u>**Press the start button for three seconds.**</u>The mode switches.
"**SAFETY MODE**" or "**ONE-PUSH MODE**" will be displayed.
Press start one more time to go back to standby.
(Peeling Mode will be shown after item choosing too.)

* "All Reset" in the reset settings makes the unit back to safety mode. (☞See page 21)

7. How to Remove and Attach Parts

1) The Arm

• The Arm holds the peeling blade. It can be removed and fully immersed for washing. When removing the arm it is recommended that the holding prong also be removed.

> ⚠ **Warning!** | **The peeler blades are extremely sharp.**
> **Take adequate precautions to avoid injuring your hands.**

(1)	(2)	(3)
Turn the arm clockwise 90° by hand.	Remove the spring hook at the upper end from the arm.	Lift the arm up to remove it.
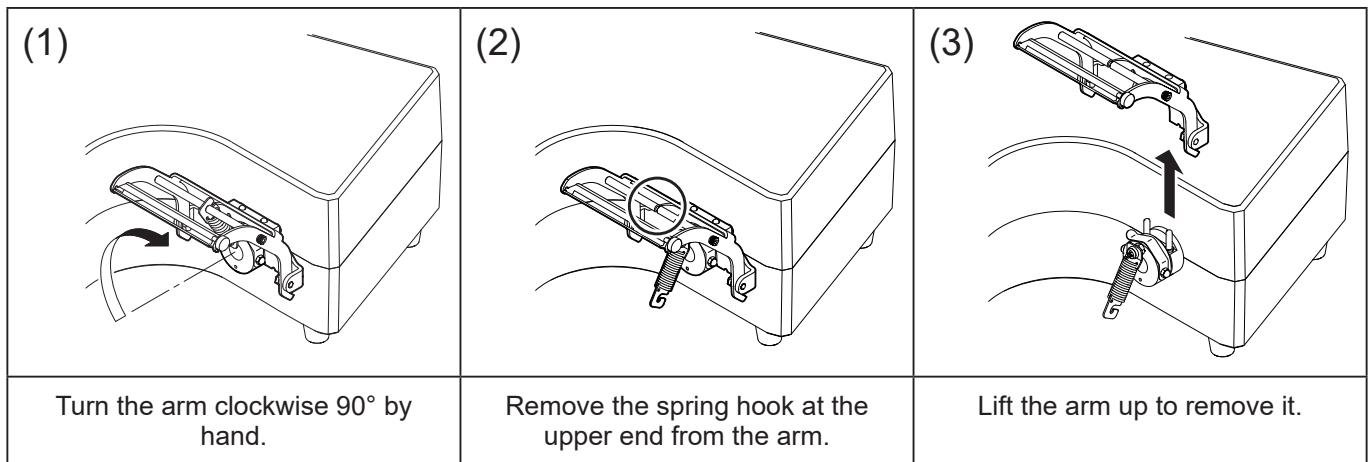
• To attach the arm, place the two holes at the base of the arm over the two pins on the arm holder, then attach the hooked end(s) of the spring(s) to the groove(s) on the arm shaft.
If the arm is not installed properly, peeling will not take place correctly.

Arm base

Pins (two)

Arm holder

Arm shaft

Standard spring (SP-S)
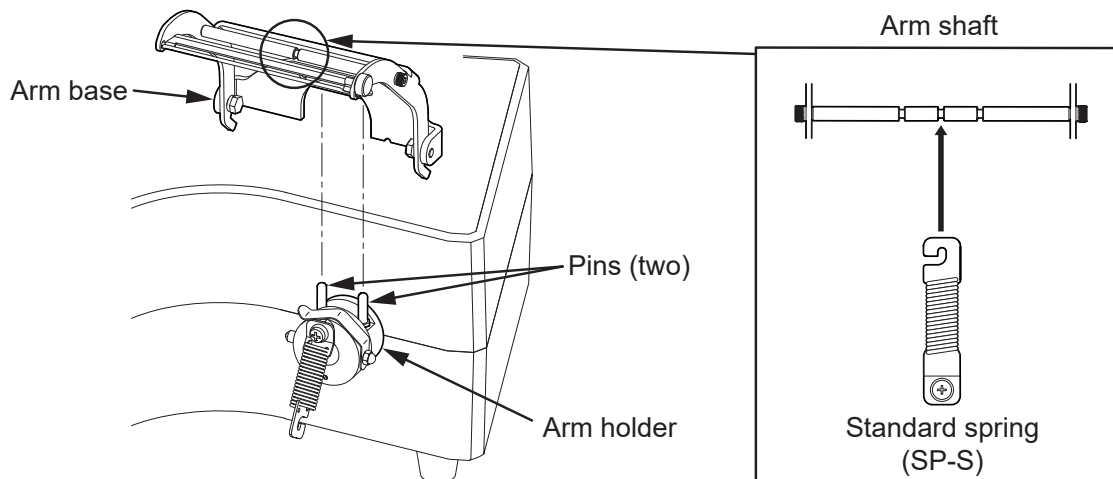
(4) Return the arm counterclockwise 90° to the original position by hand. Listen for the "click" to verify that the arm is in the correct position.

● If the arm does not return to the correct start position, peeling will not commence when the start/stop button is pressed. "Arm position wrong - correct" will be displayed on the display screen. Adjust the arm to the correct start position, and press the start/stop button.

2) The Spring

- To replace the spring, it is best to remove the arm first.
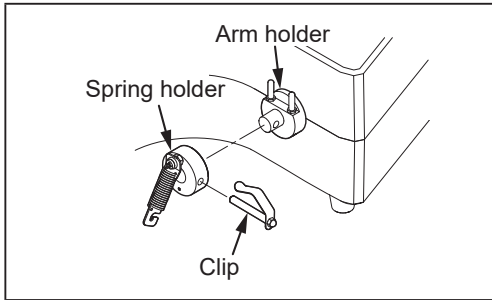
Remove the clip by pulling it away. The spring holder can now be removed.
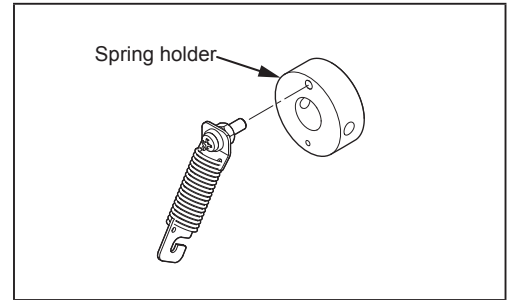
Use a Phillips screwdriver to remove the spring from the holder.

- Align the nipple on the inside of the spring holder with the corresponding concave part on the inside of the arm holder, and then install the arm holder. **Insert the clip in the correct direction as shown in the image below, deeply enough to prevent falling out.**
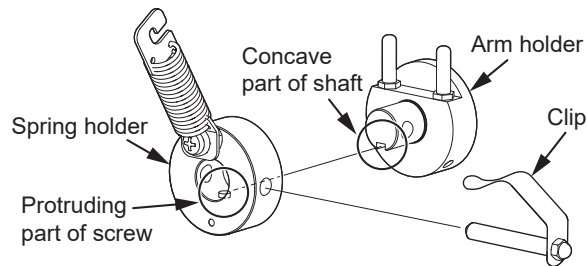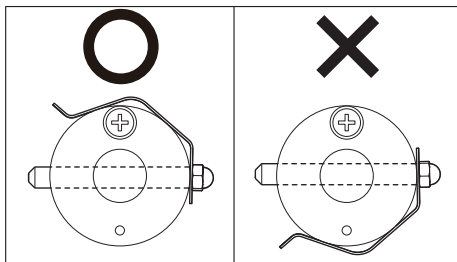
3) Peeler blade

- When replacing the peeler blade it is easiest to first remove the arm from the unit.

⚠ Warning!	The peeler blades are extremely sharp. Handle with care to avoid injuring your hands.

Peeler replacement procedure	
1. Loosen the roller screw.	2. Loosen the screw until the blade can be turned 360°.
3. Rotate the peeler to the shown direction.	4. Rotate the peeler so the hole cut of the arm matches the peeler, then remove it.

- **When replacing the blade, make sure that of the unit's orientation of the unit is the same, and then carry out the reverse the procedure.**
- **Please watch the instruction videos from our homepage.**

4) Holding prong

- You can remove the prong and immerse it for washing.
- The prong is fixed to the drive shaft axle with a clip. Remove the clip, then remove the prong.
- If the clip (with holding prong) is left attached for an extended period, it may become stuck due to fruit juice residue, etc.

Clip

Drive shaft
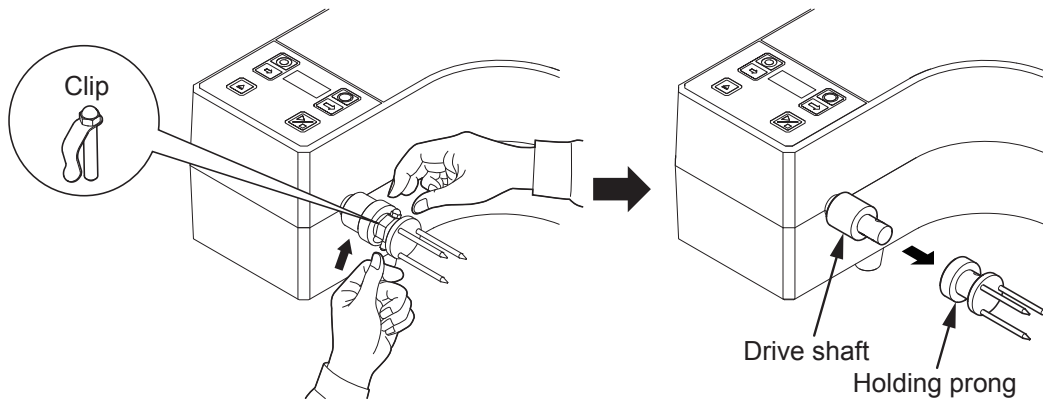
Holding prong

⚠ Warning!	**The holding prongs are extremely sharp. Take adequate precautions to avoid injuring your hands.**

- To affix the prong to the drive shaft axle, carry out the reverse the procedure.
  Line up the holes in the holding prong base and the drive shaft axle, and then insert the clip. Be sure that the clip is fully inserted, so that it does not fall out.

⚠ Warning!	**If the peeler blades are improperly installed, they are likely to fly off together with the item being peeled, or they may come into contact with the peeler (arm), resulting in injury or a breakdown.**

8. Cleaning and Maintenance

⚠ Warning!	When inspecting or cleaning the unit, always switch the power "Off" and unplug the power cord from the wall outlet. Failure to do this may result in injury.

1) When using the unit be sure to carry out the following on a daily basis.

    1. Check for unusual noise.

    2. Ensure that the unit does not become abnormally hot.

2) Keep the unit clean.

    • Rinse off dirt from the upper portion of the unit. Never spray the base. Wipe the unit with a cloth that has been immersed in water and then wrung hard. Never use thinners or petroleum-based cleaning fluids on the unit.

⚠ Warning!	The base of the unit is NOT water resistant. Do not pour water directly on the base, or immerse the unit. Failure to prevent water from coming into contact with the base may result in an electrical shock, fire, or other damage.

Do not stand it vertically.	Do not stand it diagonally.	Do not stand it upside down.
Keep it horizontally and use low pressured water.	Do not use high pressured water.	Do not dip it in water.
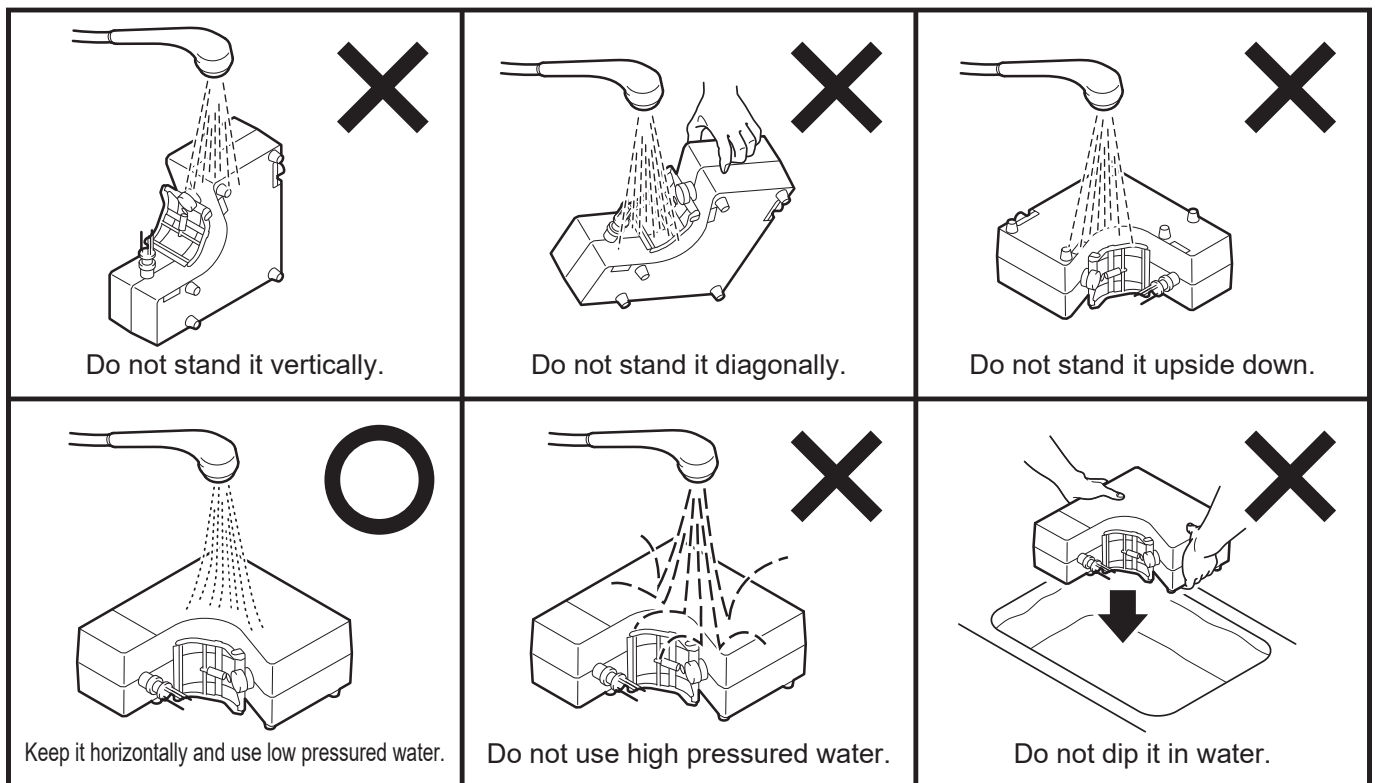
● The base of the unit has a hole to let the water escape (*①). Periodically clean the inside of the hole (Once or more each day.)

● The base of the unit also has a hole for the cooling fan (*②). Be careful not to let in water or an any object.
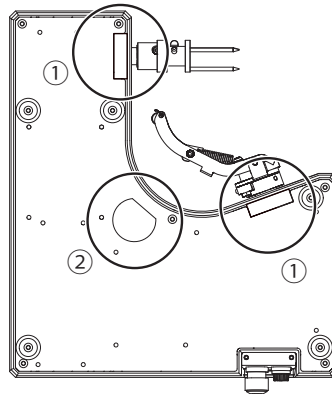
● Please clean the Holding prong(s), peeler arm, peeler blade(s) and spring frequently. All parts can be removed for immersive cleaning. Please clean the unit and all parts more than once a day when in regular use.

⚠ Warning!	**The holding prong(s) and peeler blade(s) are extremely sharp. Take adequate precautions to avoid injury to the hands, etc.**

3) Inspect regularly

• The unit should be inspected regularly to ensure that screws and other items have not loosened, and that no cracks or fractures are visible.

4) When storing the unit for long periods, clean the unit thoroughly and store it in a place with low humidity.
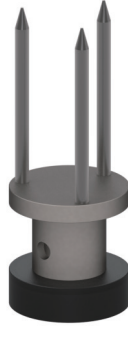
⚠ Caution!	● **Leave the power on for 2 hours after use, and keep the inside dry.** ● **While storing the unit, take steps to prevent rodents, insects, or other living organisms, from getting inside it, because this may cause damage to the unit.**
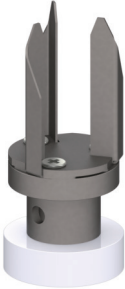
9. Holding Prongs
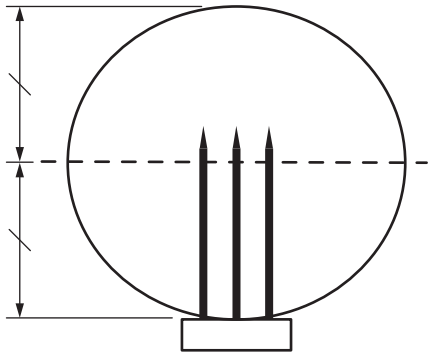
1) Types of holding prongs

- The prongs come in XS, S, M and L sizes, with different colored bases to distinguish them from each other.
- Prongs come in four different shapes.
- There are a total of twelve individual prongs available. Each is designed for specific varieties of fruits/vegetables, consistencies and sizes.

Base color

Shape of prong

White: Small (S) and Extra Small (XS)
Black: Medium (M)
Blue: Large (L)

Round prong   Flat prong   Citrus prong   Peach prong

Size (color coded)			S (White)	M (Black)	L (Blue)
Prong length			**30mm**	**40mm**	**50mm**
Roung prongs	Prong thickness	2 mm	Part Name	**Round Prong S2**	**Round Prong M2**	
			Part No.	**H P－S 2**	**H P－M 2**	
			Easy to insert and remove. Little damage to fruit. Best for small quantities and light use.	<Best for small quantities and light use> Small item	<Best for small quantities and light use> For use with harder items and lower volume production. Lemons, turnips, carrots, radishes, persimmons, potatoes, apples and Asian pears.	No specifications
		3 mm	Part Name	**Round Prong S3**	**Round Prong M3**	**Round prong L3**
			Part No.	**H P－S 3**	**H P－M 3**	**H P－L 3**
			Harder to insert Harder to remove. More damage to fruit. Better for continuous work, and heavy use.	<Better for continuous work, and heavy use> Small item	<Better for continuous work, and heavy use> For use with harder items and lower volume production. Turnips, carrots, radishes, persimmons, potatoes, apples, Asian pears and onions	<Better for continuous work, and heavy use> Large items

Size (color coded)	XS (White)	S (White)	M (Black)	L (Blue)
Prong length	25mm	30mm	40mm	50mm
Part Name	Flat Prong XS	Flat Prong S	Flat Prong M	Flat Prong L
Part No.	HP-XSB	HP-SB	HP-MB	HP-LB
Flat Prongs	For very small fruits	For soft kiwi fruit, lemons, and yuzu	For soft kiwi fruit, and lemons	For soft items, and those with no core

Size (color coded)	XS (White)	S (White)	M (Black)	L (Blue)
Prong length	25mm	30mm	40mm	50mm
Part Name				Peach Prong L
Part No.				HP－LP
Peach Prong	No specifications	No specifications	No specifications	For items with pits or stones; soft items

Size (color coded)		S (White)	M (Black)	
Prong length		30mm	40mm	
Part Name		Citrus Prong S	Citrus Prong M	
Part No.		HP-SO	HP-MO	
Citrus Prongs	No specifications	Yuzu, oranges	Oranges, grapefruit	No specifications

2) Selecting a Holding Prong

Length of the prong (size)	
	Select a prong that is over half the vertical height of the item to be peeled. However, if the item has a firm core, a shorter prong may be used, and will be easier to insert and remove. On the other hand, if the item is soft, and the volume of peeling is large, it is better to use a thicker prong.

• If a prong protrudes from the top of the item after it is affixed, use a shorter prong.

⚠ Caution!	**Avoid the peeling with the prong penetrating the item. Prong and peeler will hit and cause damage.**

● Round prong

• Round prongs come in 2 mm and 3 mm types.
• A 2 mm prong leaves very small holes, but is not durable enough for heavy production.
• A 3 mm prong leaves visible marks, but is durable enough for heavy production.

● Flat Prong

• Flat prongs use L-shaped pins which do not leave large marks, but are not durable enough for heavy production.

● Peach Prong

• The peach prong is designed to grip the sides of a peach stone.

● Citrus Prong

• Citrus prongs are specially designed for peeling fruit with no core, such as oranges, small pomelos, grapefruits, hassaku oranges, yuzu and other citrons.

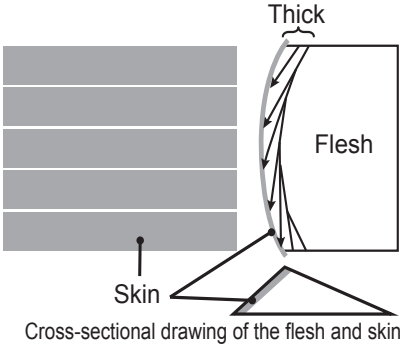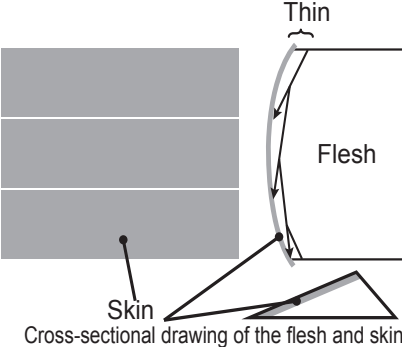| ⚠ Warning!	**The prongs are very sharp. Always exercise caution to avoid cutting or stabbing your hand when placing an item on the prong.**

10. Peeler Blade

1) Types of peeler blades

- The peeling thickness is divided into thin peel, normal peel, thick peel, and very thick peel. The yield is determined by adjusting the blade and the peeling thickness.
- Blade types are categorized as follows: flat and saw. The selection depends on the type of item to be peeled.
- There are a total of seven different blades. Select the blade based on the skin type of the item to be peeled, the condition of the item, and the desired peeling characteristics.
- The peeler blade part number is engraved on the front of the blade. Please quote this number when ordering a replacement.

Blade shape	Flat (F)	Saw (S)
Part Name	Peeler blade Flat Extra-Thick	Peeler blade Saw Extra-Thick
Part No.	F-1	S-1
Extra-Thick (1)		
Part Name		Peeler blade Saw Thick Peel
Part No.		S-2
Thick Peel (2)	No setting	
Part Name	Peeler blade Flat Medium	Peeler blade Saw Medium
Part No.	F-3	S-3
Medium (3)		
Part Name	Peeler blade Flat Thin Peel	Peeler blade Saw Thin Peel
Part No.	F-4	S-4
Thin Peel (4)		

2) Yield effects of different peeling blades vs. peel thickness adjustments.

Adjusting for thicker (deeper) peeling

Thick

Flesh

Skin

Cross-sectional drawing of the flesh and skin

Adjusting the unit to take a thicker peel increases the number of overlapping passes of the blade, thereby increasing the amount of peel removed. The peeler blade passes over the fruit more slowly, leaving less peel.

The result is a smoothly peeled surface, but less fruit yield.

Adjusting the unit to take a thinner (less) peeling

Thin

Flesh

Skin

Cross-sectional drawing of the flesh and skin

Adjusting the peeler to take a thinner peel decreases the number of overlapping passes of the blade, thus taking off less skin. Because there is greater resistance against the skin on each pass, the blade leaves more skin on the surface of the fruit.

The surface of the fruit will therefore have more residual skin and angles, but the yield of fruit will be greater.

* **To avoid reducing the fruit yield while achieving the best possible surface finish, choose a thinner peeling blade, and adjust the unit for thicker peeling.**
* **To improve the peeling finish (leave less skin on the item), select a thicker peeling blade, and adjust the unit for thinner peeling.**

11. Item Selection

1) [Item?] (Item selection)

- After powering up the unit, the first task is to select the item to be peeled. The available items are displayed in sequence on the Menu using the [➡] and [➡] buttons.
  When the desired item is displayed, select it with the start/stop button.
- Specific settings of peeling thickness and spin speed for each item are saved.

Button   Button

Item display	Peeling thickness	Spin speed	Peeling range Left side angle	Peeling range Right side angle	Peeling direction	Peeling throw	Peeling Finish
Item? 1 Apple	5	6	10°	150°	L > R	None	Fast
Item? 2 Kiwi	6	6	10°	150°	L < R	None	Fast
Item? 3 Orange	4	6	20°	160°	L < R	None/half	Normal
Item? 4 Grapefruit	4	5	30°	150°	L < R	None/half	Normal
Item? 5 Yuzu/Citron	7	5	30°	170°	L < R	None	Normal
Item? 6 Persimmon/turnip	5	6	20°	180°	L > R	None	Normal
Item? 7 Peach	5	5	40°	180°	L < R	None	Normal
Item? 8 Onion	5	5	10°	170°	L < R	None	Normal
Item? 9 Potato	4	5	30°	180°	L > R	None	Fast
Item? 10 User 1	3	3	0°	180°	L < R	None	Normal
Item? 11 User 2	3	3	0°	180°	L < R	None	Normal
Item? 12 Pear	4	5	0°	170°	L < R	None	Fast

The "Specific Settings" header spans: Peeling range (Left side angle, Right side angle), Peeling direction, Peeling throw, Peeling Finish.
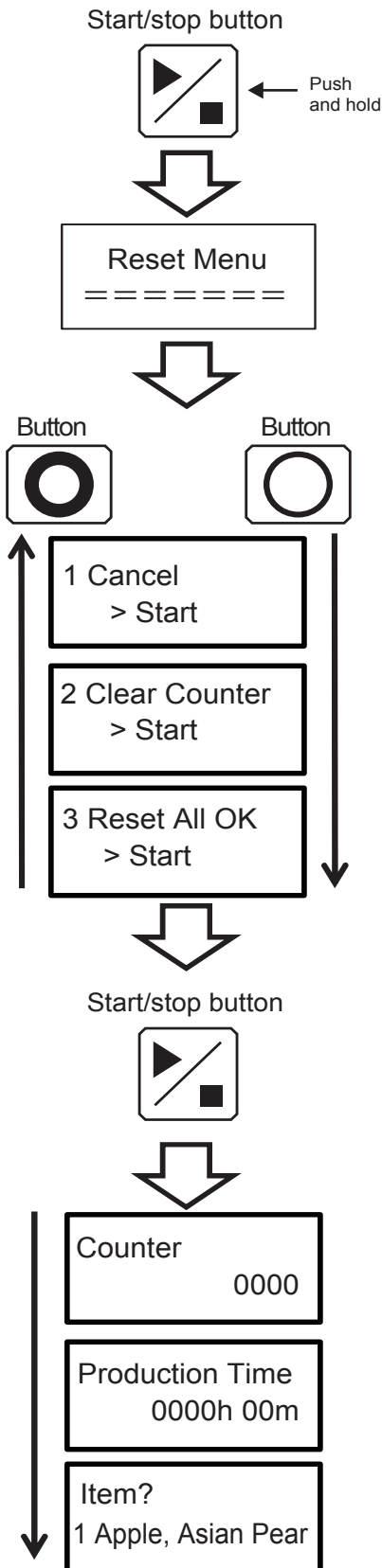
* Scroll-thru menu.

Start/stop button

- When the name of the item to be peeled is displayed, select it with the start/stop button.
- To adjust settings for a specific item, press and hold down the start/stop button for more than two seconds. (☞ See pages 22~26)

2) Resetting the Menu

• The counter displayed during peeling operations can be reset. In addition, the specific settings in each menu and the standby adjustments can be reset to the original defaults. The available items are displayed in sequence on the menu using the [◉] and [◯] buttons.

Start/stop button

▶/■ ← Push and hold

⬇

Reset Menu
=======

⬇

Button ◉   Button ◯

1 Cancel
> Start

● Select this item when not resetting the menus.

2 Clear Counter
> Start

● Resets the counter during peeling operation

3 Reset All OK
> Start

● In addition to resetting the counter, all specific adjustments will return to default settings by selecting this item.
(☞ See page 20.)

⬇

Start/stop button

▶/■

⬇

Counter
0000

Production Time
0000h 00m

Item?
1 Apple, Asian Pear

1. Power the unit by pressing "On".

2. While the operation status display is flashing, press and hold down the start/stop button.

3. When the unit makes a beep-beep sound, and the display shows [Reset Menu], release the start/stop button.

4. Select three items shown above, then use the start/stop button to confirm the selection.
• Selecting [1 Cancel] will move the menu to position 7. below.
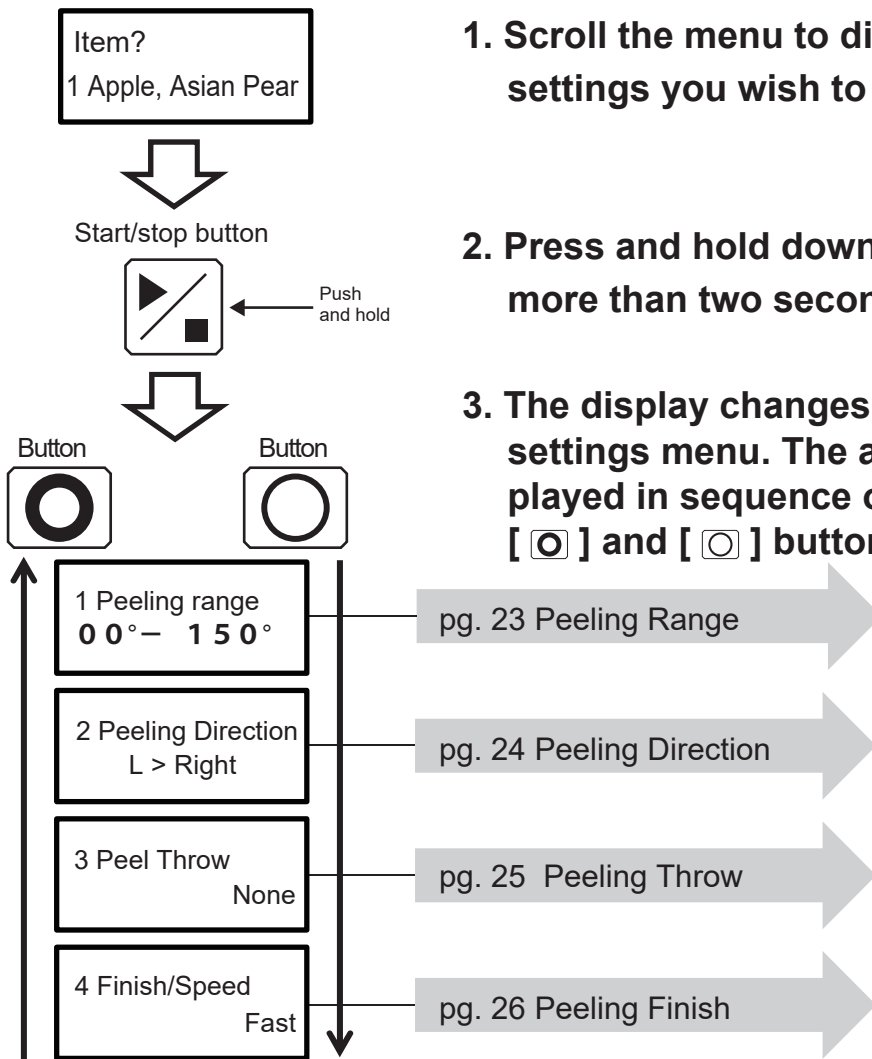
5. The counter is reset to 0.
• After the counter reaches the maximum value of 65535, it reverts to 0.

6. After the counter is displayed, the elapsed production time is displayed.

7. The item selection menu is displayed.

3) Using Specific Settings

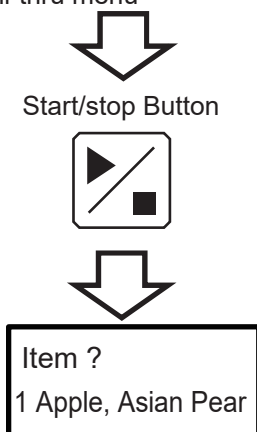- The standard item peeling range, direction, throw and finish settings can be modified manually, as needed.

```
┌─────────────────────┐
│ Item?               │
│ 1 Apple, Asian Pear │
└─────────────────────┘
```

1. Scroll the menu to display the item whose settings you wish to modify. (☞ **See page 20**)

Start/stop button

Push and hold

2. Press and hold down the start/stop button for more than two seconds.

Button   Button

3. The display changes over to the specific settings menu. The available items are displayed in sequence on the menu using the [◉] and [◯] buttons.

```
┌─────────────────────┐
│ 1 Peeling range     │
│ 0 0 ° −   1 5 0 °   │
└─────────────────────┘
```
pg. 23 Peeling Range

```
┌─────────────────────┐
│ 2 Peeling Direction │
│ L > Right           │
└─────────────────────┘
```
pg. 24 Peeling Direction

```
┌─────────────────────┐
│ 3 Peel Throw        │
│               None  │
└─────────────────────┘
```
pg. 25 Peeling Throw

```
┌─────────────────────┐
│ 4 Finish/Speed      │
│               Fast  │
└─────────────────────┘
```
pg. 26 Peeling Finish

* Scroll-thru menu

Start/stop Button

```
┌─────────────────────┐
│ Item ?              │
│ 1 Apple, Asian Pear │
└─────────────────────┘
```

4. When all settings are completed, press the start/stop button on each menu screen.
The specific settings menu will then revert to the item selection menu.

4) [Peeling Range]

- The peeling range can be set manually.
- The starting point is 0°, and the top point is 180°.
    1. Left side (■ grey highlight): 0°~ 80°
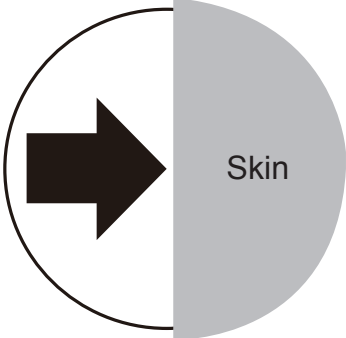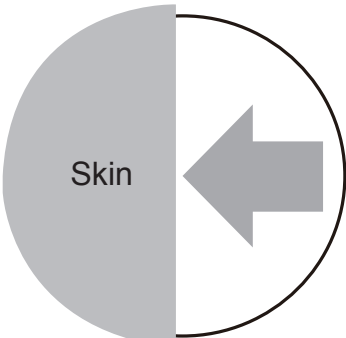   2. Right side (■ light grey highlight): 100°~180°
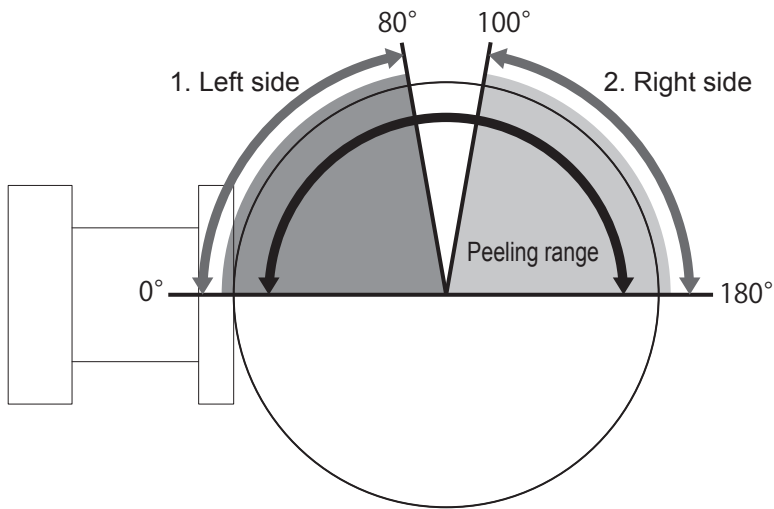
- To adjust the coverage angle on the operation display
    1. Use the small arrow [→] to adjust the left side angle from 0° in increments of 10°.
       After reaching 80°, the angle reverts to 0°.
    2. Use the large arrow [→] to adjust the right side angle from 100° in increments of 10°.
   After reaching 180°, the angle reverts to 100°.
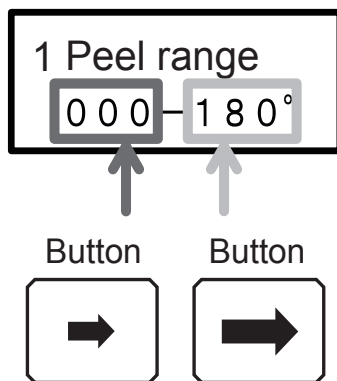
5) [Peeling Direction]

    • Set the direction of movement of the peeler blade arm to suit the type and ripeness of the item to be peeled.

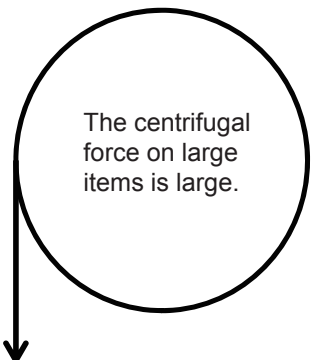| Peeling Direction	
	1. Peeling left to right This is the default setting for hard items. When an item is soft, there is a chance that it will slip off the holding prongs. 2 Peeling Direction L＞R
	2. Peeling right to left. This is the correct peeling direction for soft items. 2 Peeling Direction L＜R

● For setting the peeling direction, use the operation panel arrow [→] [➡] buttons to scroll through the menu.

● When changing the Peeling Direction, you must also reverse the peeling ramge angles.

Button   Button

2 Peeling Direction
L＞R

2 Peeling Direction
L＜R
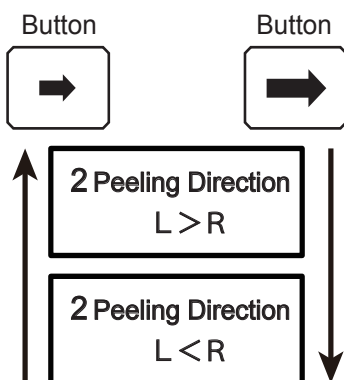
* Scroll-thru menu.

6) [3 Peel Throw]

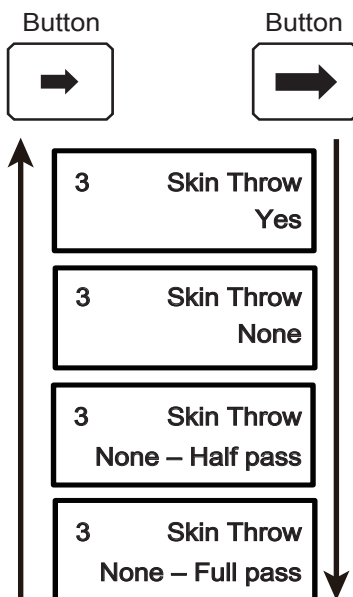- Make the desired setting based on the type, size and skin thickness of the item to be peeled.

Peel Throw	
The centrifugal force on small items is small.	**1. Peeling small items** On small items there is less force to "throw" (eject) the peeling, so set the Peel Throw setting to "Yes." If you set the Peel Throw to "None", there is the chance that the peeled skin will foul the peeling operation. Because the initial peeling speed is always the fastest, the peeler sometimes does not work well with soft items, or those without a core. 3　　　Peel throw 　　　　　Yes
The centrifugal force on large items is large.	**2. Peeling large items** Since larger items have more outside inertia, the Peel Throw can be set to "None." If the spin speed is too low, the peeled skin may foul the peeling operation. 3　　　Peel Throw 　　　　　None

3. Peeling citrons

- When peeling fruit with an inner skin (albedo), set the option to "None – half pass" or "None – 1 pass".
- The peeler can be set up with the menu and blade to remove deeper layers of skin (albedo).
  For these items choose "None – half pass" or, if necessary, "None – 1 pass."

3　　Skin Throw　　　　　　　<　　　　3　　Skin Throw
None – half pass　　　　　　　　　　　None – 1 pass

- The Peel Throw settings are made by scrolling and selecting with [→] and [➡] buttons.

Button　　　　　Button

[➡]　　　　[➡]

3　　Skin Throw
　　　　　Yes

3　　Skin Throw
　　　　　None

3　　Skin Throw
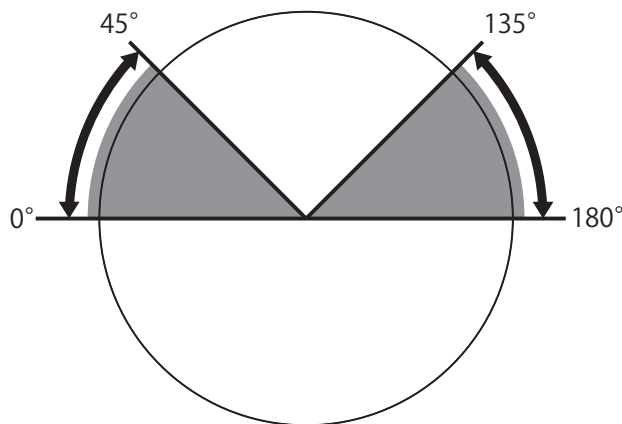None – Half pass

3　　Skin Throw
None – Full pass

* Scroll-thru menu.

7) [4 Peeling Finish]

• Choose a setting based on the type and size of the item to be peeled.
  Peeling Finish is a function of the Peeling Range and Peeling Direction. It can be set to change the arm speed (from the default in Standby mode.)

Peeling range

• Select this setting depending on the direction of the arm.
  1. In the case of L > R peeling, the angle which determines the range of peeling can be adjusted from 135° to 180°.

  2. In the case of R > L peeling the angle for range of peeling can be adjusted from 0° to 45°.

1. [High Speed] mode

• By setting the peeling speed to 'High' the arm travels faster at the finish, and the yield of fruit (at the top) is increased.
• This mode is best used with such items as apples, Asian pears and potatoes.
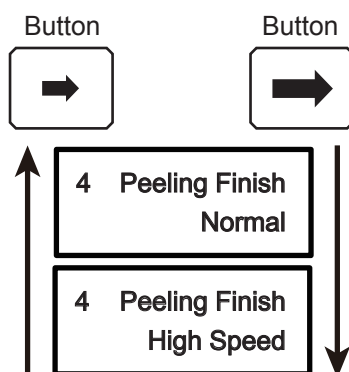
```
4   Peeling Finish
        High Speed
```

2. [Normal] (no change) mode

• In this mode the arm travels at one speed from start to finish, resulting in an even peel throughout.

```
4   Peeling Finish
        Normal
```

• To select the desired, use the [→] and [➡] buttons on the menu.

Button   Button


```
4   Peeling Finish
        Normal
```

```
4   Peeling Finish
        High Speed
```

* Scroll-thru

26

12. Settings for Various Fruits and Vegetables

- The settings below are only suggested guidelines. Settings may require adjustment based on the variety of item, place of origin, harvest time and ripeness. An item may sometimes fail to be peeled properly depending upon its condition.

1) Apples

Article		Recommended Settings & Procedures	Explanation
Holding prong		HP-M2, HP-M3	The firm, dense texture permits a short prong to be used.
Peeler blade		F-4, F-3	Best for these fruits
Settings	Skin Thickness	4~6	Use lower values for larger items.
	Spin Speed	4~6	
Specific settings	Peeling range, angle L to R	10°– 160°	You may set the right side angle to 160°or above if skin remains after core removal.
	Peeling Direction	➡ L > R	In the case of a soft item, set this items to [L < R].
	Peeling Throw	None	If peelings are likely to foul the peeler, set this item to "Yes."
	Peeling Finish	High Speed	Optimal
Preparation		Remove long stems	Stems can foul the peeler blade.
Fixing Direction		Insert prongs thru the upper axis of the fruit.	Optimal

2) Kiwi fruit

* If the item is too soft, hold the item with your hand gently after pressing the start button.(☞ See page 35) This is to prevent the machine damage caused by the item falling off.

Article		Recommended Settings & Procedures		Explanation
Holding Prong		HP-SB		For small item
		HP-MB		For large item
Peeler blade		S-3		Optimal
Settings	Skin Thickness	4~6		Adjust based on the softness and size of fruit
	Spin Speed	4~6		
Specific settings	Peeling range, angle L to R	10°– 150°		When the fruit is firm
		10°– 150°		When the fruit is soft.
	Peeling Direction	⬅ L < R		To prevent the fruit from slipping off the prong.
	Peeling Throw	None		Set to "Yes" if the peeling fouls blade.
	Peeling Finish	High Speed		Optimal
Preparation		Wash off excess skin hair		Loose kiwi fruit "hair" will shorten the life of the blade, and may remain on the fruit after peeling.
			Cut off the top of the fruit.	Do this if the fruit is soft.
Fixing Direction		Insert prongs thru the upper axis of the fruit.		Optimal

● If the fruit size is small (short), use the HP-SB holding prong.
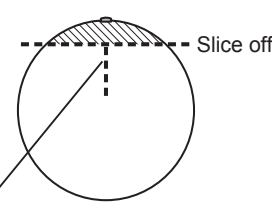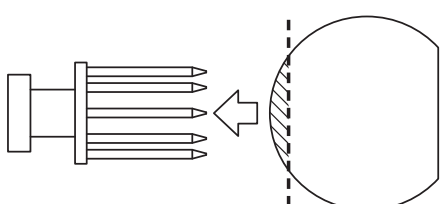
3) Oranges, small pomelos

* If the item is too soft, hold the item with your hand gently after pressing the start button.(☞ See page 35) This is to prevent the machine damage caused by the item falling off.
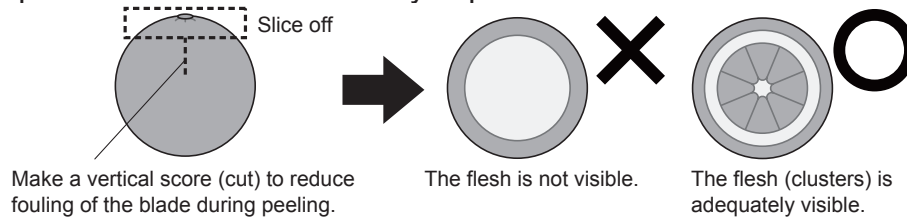
Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-MO	Optimal
Peeler blade		F-3, F-4	To remove only flavedo (outer skin)
		S-1, S-2	To remove albedo (inner peel)
Settings	Skin Thickness	4~6	Adjust to the thickness of flavedo.
		0~5	Adjust to the thickness of albedo.
	Spin Speed	4~6	Adjust this setting to according to the firmness of fruit.
Specific settings	Peeling range, angle L to R	10°– 160°	To remove outer (flavedo) skin only
		20° 140° ∫ — ∫ 30° 170°	To remove the inner (albedo) skin
	Peeling Direction	L < R	To prevent the fruit from slipping off the prong
	Peeling Throw	Yes	When peeling the outer skin only
		None – half	When removing the inner (albedo) skin
	Peeling Finish	Normal	Optimal
Preparation		None	When removing flavedo only.
		Lop off the top skin of the fruit until the meat can be seen. Make a vertical score (cut) to reduce fouling of the blade during peeling.	Remove the inner skin (albedo) The thickness of the inner (albedo) skin can vary. Adjust the peeling depth as needed.
Fixing Direction		Insert the prong through the top of the fruit. Removing a small part of the fruit apex, such as that on a navel orange, will facilitate mounting of the fruit on the prong.	Optimal

- The most efficient method of peeling the albedo is to remove the top of the orange and separate the fruit based on the thickness of the albedo (which differs from fruit to fruit.)
- It is recommended that the procedure of ☞ page 29 "How to skillfully peel citrus" be used to skillfully peel oranges and small pomelos.
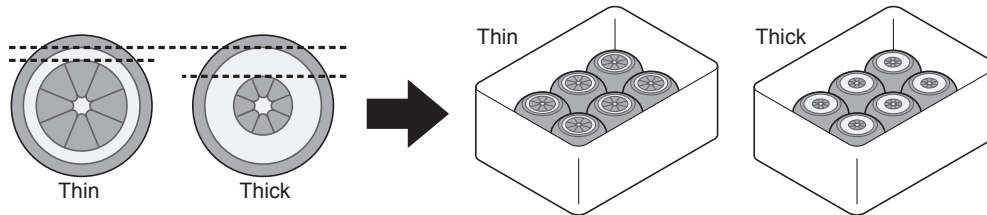
How to skillfully peel citrus

● Preparation

1) Cut off the top of the fruits so as to clearly expose the flesh.

Slice off

Make a vertical score (cut) to reduce fouling of the blade during peeling.

The flesh is not visible. ✕

The flesh (clusters) is adequately visible. ◯

2) Select for each skin thickness.

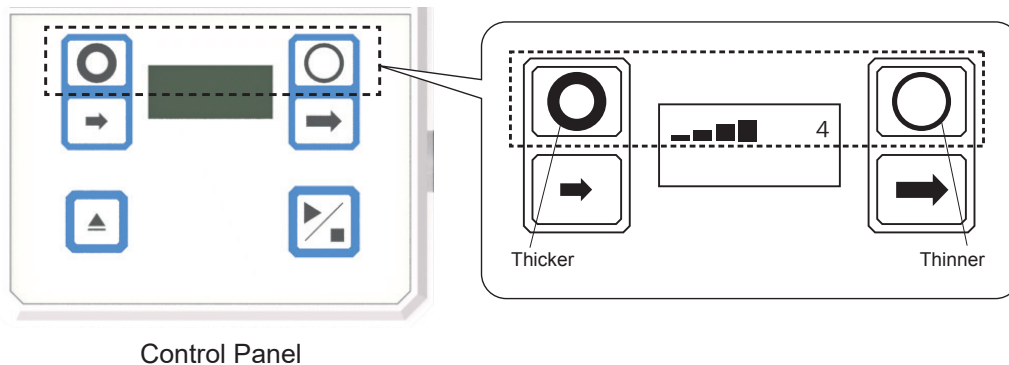Thin   Thick

Thin

Thick

● Adjusting the peeling blade thickness

1) Adjust the peeling blade thickness on the control panel to match the selected skin thickness.

- ● The basic adjustment value for a skin thickness of 1 cm is "4."
- * Note that the adjustment value differs according to the kind of item, production region, harvesting season, and degree of ripeness.

2) Carry out a test peeling operation, and adjust the skin thickness according to the finished condition.

- ● When peeling is not enough and skin remains, press " 🔘 " button and make the number smaller.
- ● When peeling is too much, press " ◯ " button and make the number bigger.

4

Thicker   Thinner

Control Panel
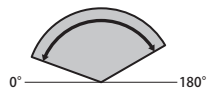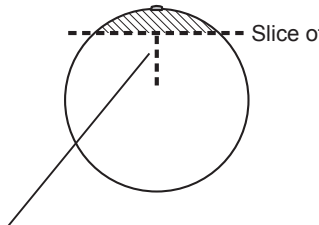
3) If the thickness of the skin of citrus is 5 mm or less, or if fine peeling is to be carried out, change over the peeler from S-1 [Saw Extra-thick] to S-2 [Saw Thick peel.]

- ● The higher the adjustment value of the skin thickness, the thinner the item is peeled. However, the surface of the item becomes polyangular, and the finish is poor, resulting in a tendency for more peel to be left.
- ● Even if the the adjustment value of the skin thickness is the same, the thickness of the skin to be peeled will be reduced by changing the peeling thickness of the peeler itself.

S-1 [Saw Extra-Thick]

S-2 [Saw Thick Peel]
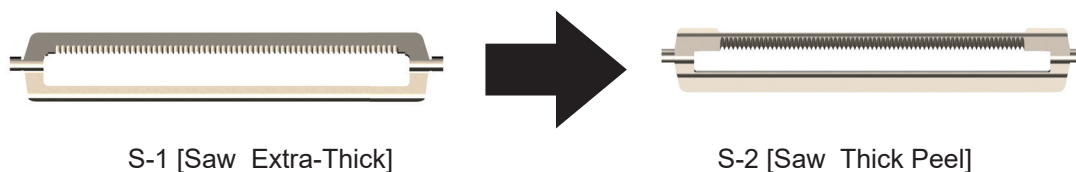
4) Grapefruit, hassaku oranges

* If the item is too soft, hold the item with your hand gently after pressing the start button.(☞ See page 35) This is to prevent the machine damage caused by the item falling off.

Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-MO	Optimal
Peeler blade		S-1	To remove albedo (inner skin.)
Settings	Skin Thickness	0~5	Adjust to the thickness of the albedo (inner skin.)
Settings	Spin Speed	4~6	Adjust to the softness of the fruit.
Specific settings	Peeling range, angle L to R	20° 140° ⌇ — ⌇ 30° 170°	To remove the albedo (inner skin.)
Specific settings	Peeling Direction	L < R	To prevent the fruit from slipping off the prong.
Specific settings	Peeling Throw	None, half pass	To remove the albedo
Specific settings	Peeling Finish	Normal	Optimal
Preparation		Lop off the top skin of the fruit until the flesh can be seen. Slice off Make a vertical score (cut) to reduce fouling of the blade during peeling.	Remove inner skin (albedo) The thickness of the inner (albedo) skin varies, so adjust the peeling depth as needed.
Fixing Direction		Insert the prong through the top of the fruit.	Optimal

- Peeling will not take place if the flesh has no density (if the item feels light when held in the hand).
- The most efficient method of peeling the albedo is to remove the top of the orange and separate the fruit based on the thickness of the albedo (which differs from fruit to fruit).
- It is recommended that the procedure of ☞ page 29 "How to skillfully peel citrus" be used to skillfully peel grapefruits and hassaku oranges.

5) Yuzu

* If the item is too soft, hold the item with your hand gently after pressing the start button.(☞ See page 35) This is to prevent the machine damage caused by the item falling off.

Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-SO	Optimal
Peeler blade		F-3, F-4	To remove the albedo (inner skin.)
Settings	Skin Thickness	4~8	Adjust to the thickness of the skin
Settings	Spin Speed	4~6	Adjust to the firmness of the fruit.
Specific settings	Peeling range, angle L to R	30° ~ 170°	To remove the flavedo (outer skin.)
Specific settings	Peeling Direction	L < R	To prevent the fruit from slipping off the prong.
Specific settings	Peeling Throw	None	Use "Yes" if peelings foul the blade.
Specific settings	Peeling Finish	Normal	Optimal
Preparation		None	When peeling the outer skin (flavedo.)
Fixing Direction		Insert prongs thru the upper axis of the fruit.	Optimal

6) Persimmons and turnips

Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-M3	Optimal
Peeler blade		F-3	Optimal
Settings	Skin Thickness	4~6	For larger items use lower values
	Spin Speed	4~6	
Specific settings	Peeling range, angle L to R	20° ~ 180°	Optimal
	Peeling Direction	L > R	When the item is soft, reverse direction (L< R).
	Peeling Throw	None	Use "Yes" if peelings foul the blade.
	Peeling Finish	Normal	Optimal
Preparation		Remove the stem and top.	Allows easy insertion of the prong.
Fixing Direction		Insert the prong thru the upper axis of the fruit.	Optimal

7) Peaches

* If the item is too soft, hold the item with your hand gently after pressing the start button.(☞ See page 35) This is to prevent the machine damage caused by the item falling off.
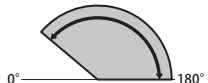
Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-LP	Special prong for stone fruit
Peeler blade		S-3	Optimal
Settings	Skin Thickness	4~6	Optimal
	Spin Speed	4~6	Adjust to the firmness of fruit.
Specific settings	Peeling range, angle L to R	40° ~ 180°	Optimal
	Peeling Direction	L < R	To prevent the fruit from slipping off the prong.
	Peeling Throw	None	Use "Yes" if peelings foul the blade.
	Peeling Finish	Normal	Optimal
Preparation		None	-
Fixing Direction		Insert the prong thru the upper axis of the fruit.	By sliding the prong shafts on either side of the vertical groove on the peach you can hold the peach firmly while avoiding the pit/stone.

8) Onion

Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-M3	Optimal
Peeler blade		S-2, S-3	Optimal
Settings	Skin Thickness	4~6	Adjust to suit the softness of the item.
	Spin Speed	4~6	
Specific settings	Peeling range, angle L to R	10° ~ 170°	Optimal
	Peeling Direction	← L < R	To prevent the fruit from slipping off the prong.
	Peeling Throw	None	Use "Yes" if peelings foul the blade.
	Peeling Finish	Normal	Optimal
Preparation		Cut off both the top skin and the top of the fruit.	Optimal
Fixing Direction		Insert the prong thru the upper axis of the fruit.	Optimal
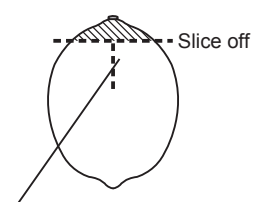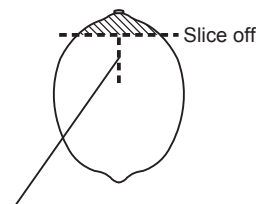
9) Potatoes, taro

Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-S2, HP-S3	Optimal
Peeler blade		F-3	May Queens
		F-1	Barons
		S-3	Taros
Settings	Skin Thickness	3~5	Adjust for irregularities, and concavities
	Spin Speed	4~6	
Specific settings	Peeling range, angle L to R	30° ~ 180°	Optimal
	Peeling Direction	➡ L > R	When the item is soft, reverse direction (L < R).
	Peeling Throw	None	Use "Yes" if peelings foul the blade.
	Peeling Finish	High Speed	Optimal
Preparation		Cut the potato in half	Optimal
Fixing Direction		Thrust the prong against the cross-sectional face of the fruit.	If the item is short, ensure that the prong does not extend outside the skin. Keep the tip well below the surface.

10) Lemons and limes

- There is no preset for the items from 10) to 12), so adjust settings manually for them.
- *** If the item is too soft, hold the item with your hand gently after pressing the start button.(☞ See page 35) This is to prevent the machine damage caused by the item falling off.**

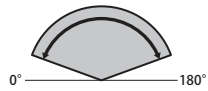| Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-SB, HP-MB	When the fruit is soft.
		HP-M2, HP-M3	When the fruit is firm
Peeler blade		F-3, F-4	For removing the outer skin (flavedo)
		S-3	For removing the inner skin (albedo)
Settings	Skin Thickness	4~6	For removing the inner skin (albedo)
		0~5	Adjust according to the thickness of the inner skin (albedo)
	Spin Speed	4~6	Adjust this setting according to the softness of the fruit.
Specific settings	Peeling range, angle L to R	10° - 170°	To remove the outer skin (flavedo)
		20° - 160°	To remove the inner skin (albedo)
	Peeling Direction	← L < R	To prevent the fruit from slipping off the prong.
	Peeling Throw	None	Set to "Yes" if the peel fouls the arm blade.
		None – half	When removing the inner (albedo) skin
	Peeling Finish	Normal	Optimal
Preparation	Lemon	Cut off both ends of the lemon	To peel the outer skin (flavedo)
		Cut off the top of the lemon so as to clearly expose the flesh. Slice off. Make a vertical score (cut) to reduce fouling of the blade during peeling.	To remove the inner skin (albedo). Even fruit of the same size can have albedos of different thickness. Adjust the settings accordingly.
	Lime	None	To peel the outer skin (flavedo)
		Cut off the top of the lime so as to clearly expose the flesh. Slice off. Make a vertical score (cut) to reduce fouling of the blade during peeling.	To remove the inner skin (albedo). Even fruit of the same size can have albedos of different thickness. Adjust the settings accordingly.
Fixing Direction	Lemon	None	-
	Lime	Insert the prong through the top of the lime	Optimal

- The best way to peel the above fruit is to cut off the top, and separate the fruit into groups depending on the thickness of the albedo, which will differ from item to item.
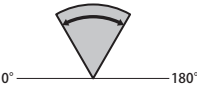
11) Tomatoes

● There is no preset for the items from 10) to 12), so adjust settings manually for them.

* If the item is too soft, hold the item with your hand gently after pressing the start button.(☞ See page 35)
This is to prevent the machine damage caused by the item falling off.

Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-SB, HP-MB	Flat prongs are recommended to protect soft flesh.
Peeler blade		S-3, S-4	Optimal
Settings	Skin Thickness	7~9	Adjust according to the softness of the fruit.
Settings	Spin Speed	4~6	
Specific settings	Peeling range, angle L to R	20° − 180°	Optimal
Specific settings	Peeling Direction	L < R	To prevent the fruit from slipping off the prong.
Specific settings	Peeling Throw	None	Use "Yes" if peelings foul the blade.
Specific settings	Peeling Finish	Normal	Optimal
Preparation		None	-
Fixing Direction		Insert the prong into the upper axis of the fruit.	Optimal

Japanese radishes, carrots, Chinese yams

● There is no preset for the items from 10) to 12), so adjust settings manually for them.

Article		Recommended Settings & Procedures	Explanation
Holding Prong		HP-S2, HP-S3	Optimal
Peeler blade		F-3	Optimal
Settings	Skin Thickness	3~5	For larger items use lower values
Settings	Spin Speed	4~6	
Specific settings	Peeling range, angle L to R	60° − 120°	Optimal
Specific settings	Peeling Direction	L > R	Reverse direction (L < R) if the item is soft.
Specific settings	Peeling Throw	None	"Yes" if the diameter is under 70 mm
Specific settings	Peeling Finish	Normal	Optimal
Preparation		Cut items into approx. 50 mm pieces	If an item is over 80 mm in length, both ends of the peeler arm will contact the item, preventing peeling from taking place.
Fixing Direction		Insert the prong into the cut face.	Optimal

12) Pears (including western pears)

If the item is too soft, hold the item with your hand gently after pressing the start button.(refer to the image below) This is to prevent the machine damage caused by the item falling off.

Article		Recommended Settings & Procedures	Explanation
Holding prong		HP-MB	When the fruit is soft.
		HP-M2, HP-M3	When the fruit is firm
Peeler blade		S-3	When the fruit is soft.
		F-4, F-3	When the fruit is firm
Settings	Skin Thickness	3~5	Adjust based on the softness and size of fruit
	Spin Speed	4~6	
Specific settings	Peeling range, angle L to R	10°– 170°	You may set the right side angle to 180°or above if skin remains after core removal.
	Peeling Direction	➡ L < R	To prevent the fruit from slipping off the prong.
	Peeling Throw	None	Set to "Yes" if the peeling fouls blade.
	Peeling Finish	High Speed	Optimal
Preparation		Remove long stems	Stems can foul the peeler blade.
Fixing Direction		Insert prongs thru the upper axis of the fruit.	Optimal

For Western pears

* A western pear is softer than Japanese pear, so it maybe unstable with the settings above. In that case, please change the prong to HP-MB or HP-L3 (sold separately) and slow down the rotation speed. Also, please note that the skin inside the hollow of the bell-shaped fruit might remain without peeled.

  In that case, cut the item in half from the center part of the belly, and insert the item to the prong from the cut surface. (shown in the right image)

* It is possible to peel the cut off part of the fruit, only if it is longer than the prong.

Slice off
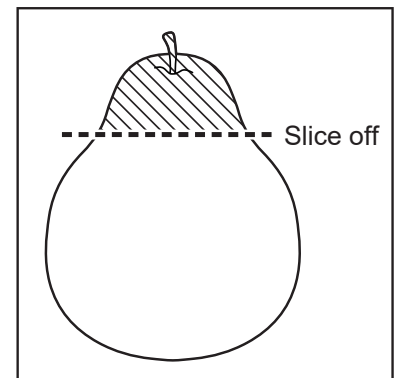
If the item is too soft
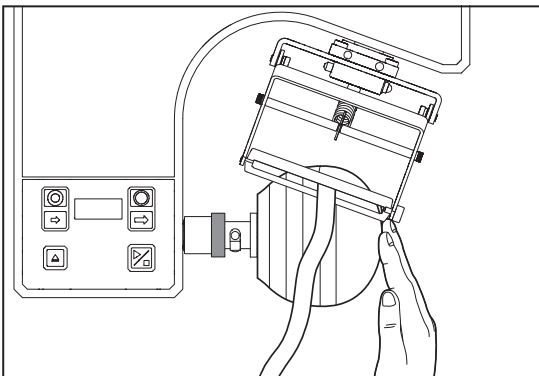
During the process of peeling the left side of the fruit, fruit may come off from the peeler. In that case, put your hand gently on the head of the fruit to prevent dropping off.

(shown in the left image)

⚠ Warning!	**When touching the item during the peeling, be careful not to cut your hand.**

13. Troubleshooting

• If you notice something amiss while operating the unit, please refer to the following:

Stage	Issues, symptoms	Additional info	Likely Cause	Solution
Preparation	No power	No reaction at all	Has the power cord become unplugged from the wall outlet?	Check the power cord.
			It is conceivable that an internal fuse has blown.	Replace the fuse.
	Nothing shows on the display.	--	There is an internal problem with the unit.	Notify the Company, then return the unit for servicing.
	Operation is slow.	--	It is normal for the unit to require up to five seconds to start.	--
	The unit moved by itself	The spring became twisted	When the arm is out of position, it will return automatically to the start position.	Do not touch the unit until it returns to the Standby mode.
	The unit stops and an error code (ME002, 003, 004) is displayed.	The arm is stopped at an odd angle.	The arm may have been left out of position after maintenance, etc.	Return the arm to the correct start position (by hand), then restart the unit.
		The arm was started in the correct position, but stopped out of position.	There is an internal problem with the unit.	Notify the Company, then return the unit for servicing.
Affixing the fruit to the Holding Prong	I'm afraid of stabbing my hand.	--	If the prong is the correct size, it will not protrude from the fruit.	Encircle the item with your hands, then safely press it down.
	Can't affix/hard to affix an item to the prong.	--	Is the top of the fruit larger than the space between the prongs?	Try inserting the item from the opposite end.
			Is there a large seed inside the fruit?	A specialized prong is available. Contact the Company.
			Is the item very hard overall?	A specialized prong is available. Contact the Company.
Peeling	"Arm misaligned – realign" is displayed.	Peeling action does not start.	The Arm is not in the correct start position.	Return the arm to the starting position, and press start/stop button.
	Skin remains after peeling.	The skin peels off in a striped pattern.	The peeling thickness setting is incorrect.	Making the peeling adjustment thicker will prevent striping.
		Concave portion unpeeled	The blade cannot peel contours that are too deep.	An example of this is a peach with a vertical side grooves.
			The peeling thickness or spin speed setting is incorrect.	Increase the peeling thicknes, and slow the spin speed to leave less peel.

Stage	Issues, symptoms	Additional info	Likely Cause	Solution
Peeling	Skin remains after peeling	Targeted part remains unpeeled.	Certain shapes cannot be peeled by the blade.	Increase the peeling thickness, and slow the spin speed to leave less peel.
			It is possible that part of the blade is particularly worn.	Replace the peeler blade with a new one.
		Sometimes the skin fails to be peeled.	Is the skin already in contact with the blade before starting?	Adjust the starting angle and spin speed to reduce fouling.
			Has it been some time since you used the peeler? Has juice hardened on (in) it?	Use a damp cloth to carefully wipe clean the peeler blade.
			Have you inserted the item far off center?	Affixing an item to a prong requires practice.
	Peeling stops in mid-operation.	The peeler seems to be catching on something	In some cases the peeler will hit a hard spot, or a thick peel (i.e. on citrons) which it cannot remove.	Adjust the start angle, peeling thickness and spin speed to improve peeling.
			There is a chance that fruit juice has entered the unit during a peeling operation.	If cleaning does not correct the issue, notify the Company.
	An item separates from the prong.	--	It is possible that the selection of the pin does not match the item to be peeled.	Choose the prong that matches the size of the item.
			Are you peeling a very large item, or a very soft item?	Reducing the spin speed may help, but there is a limit.
			Have you attempted to affix the item once again, or peeled it more than once?	Inserting an item twice increases prong damage as well as increasing the , and the chance the item will weaken and slip off the prong.
	An item wobbles on the prong.	--	Have you inserted the item off center?	Some wobble is OK, assuming that the item is peeled correctly.
	Skin scatters in small pieces.	--	Some hard items, such as onions and potatoes, are peeled in thinner pieces.	This is normal.
Others	The red lamp flashes and the message "cool down" is displayed.	After long continuous use	The unit is overheating internally.	After the unit cools, the red light goes out. Wait until this light goes out.

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14. In Conclusion

- This completes the basic user instructions for the KA-700H.
- If you have further questions, or issues with the unit, please contact Astra for additional consultation.

Warranty

1) The warranty period for this unit is one year from delivery, or 1000 hours of use.

2) Where the unit has been correctly operated and maintained as directed in this manual, and the Company is responsible for a defect, malfunction or failure of the unit, the Company will repair the unit at no cost to the customer during the warranty period .
The Company's responsibility will be to replace or repair only the inoperative part(s).
- Correct operation of the unit is defined as follows:
1. Operating temperature and humidity: 0 – 30°C, 85%RH (relative humidity) or below.
2. All operations are carried out per this user manual alone.

3) Even during the warranty period, the following repairs will be not be covered by the warranty:
1. Damage or breakdown due to natural disasters, civil strife, or other acts of God.
2. Breakdown due to salt corrosion, flammable gas, corrosive gas, radiation, dust, high temperatures, sulfuric emissions, pollutants or other adverse environmental factors.
3. Damage resulting from contact with insects, rodents or other vermin.
4. Breakdown or damage resulting from the use of the unit in ways not described in this manual.
5. Breakdown or damage resulting from service carried out by a person not designated by this Company.
6. Damage resulting from electrical noise.
7. Operating this unit from a power source other than those indicated in this manual.
8. Damage caused by dropping the unit, or otherwise applying an impact to it.
9. Any damage deemed by the Company's service department as outside the coverage of this warranty.
10. All consumable parts and attachments.

4) Other issues for which the Company is not liable
1. Regardless of whether the unit is within or outside of the warranty period (during or after), the Company will not be held responsible for the cost of lost business, damage to other equipment, cost of labor costs, loss of productivity, or remuneration for shipping, as well as any other costs associated with operations carried out by the unit's owner.
2. The Company will not be held liable for, or offer remuneration against, any claims of damage or infringements of patents, etc., by a third party, concerning the unit.

5) All repairs and inspection costs after the expiration of the warranty period will be paid for by the unit's owner. If during the warranty period the unit is returned by the user for repair or service, and the cause of the problem is found to be other than those covered by the above warranty, the owner will be responsible for all associated costs.

No.

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