

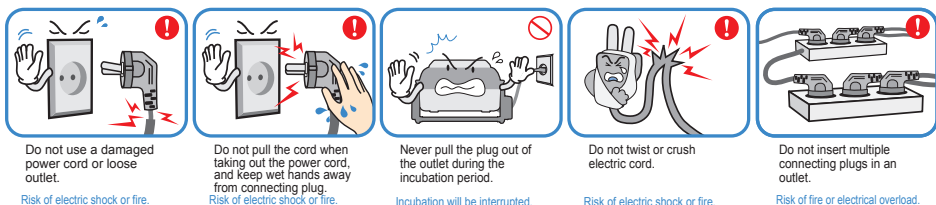
# Rcom KINGSURO ECO 20 MANUAL

EX-SURO

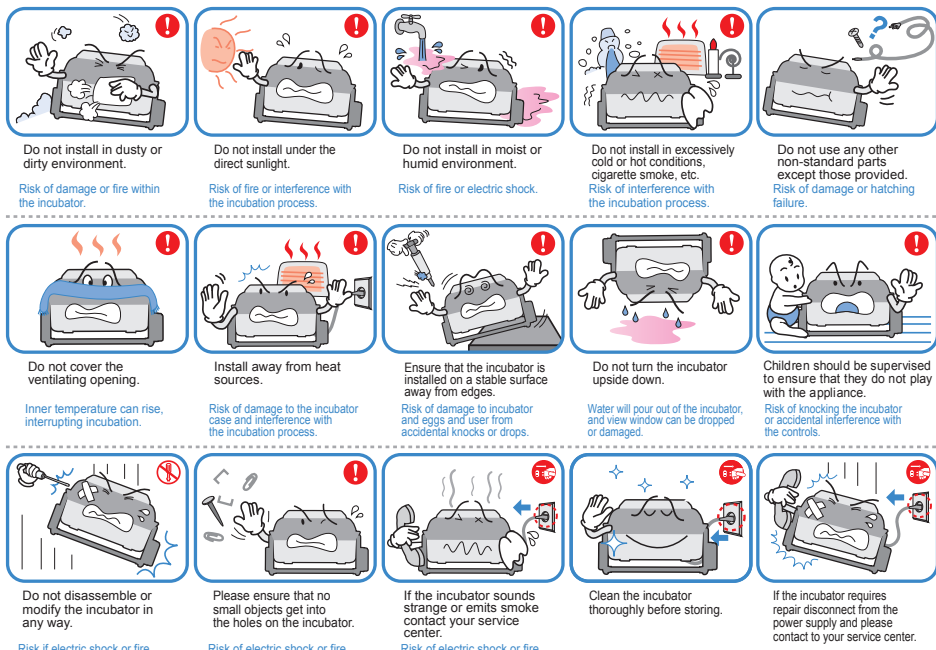
Ver E 1.0

## 1. Safety Precautions

### Electrical hazards

**CAUTION** Be careful the details below when you use.


### Setting Cautions

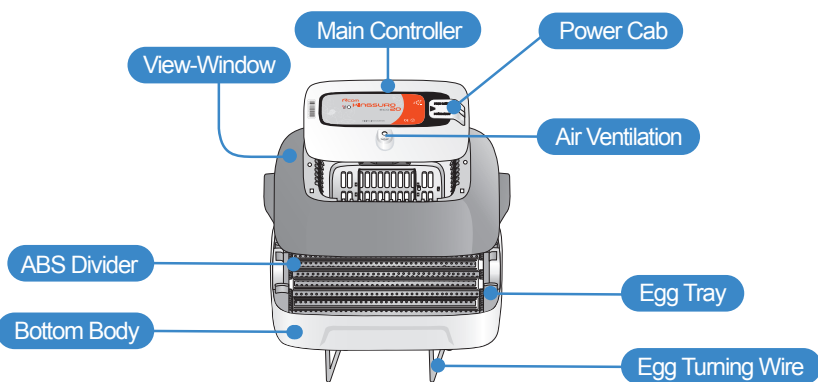
**CAUTION** Be careful the details below when you use.


### Cleaning Cautions

**CAUTION** Be sure to disconnect the electric cord from the outlet before cleaning.


※ This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

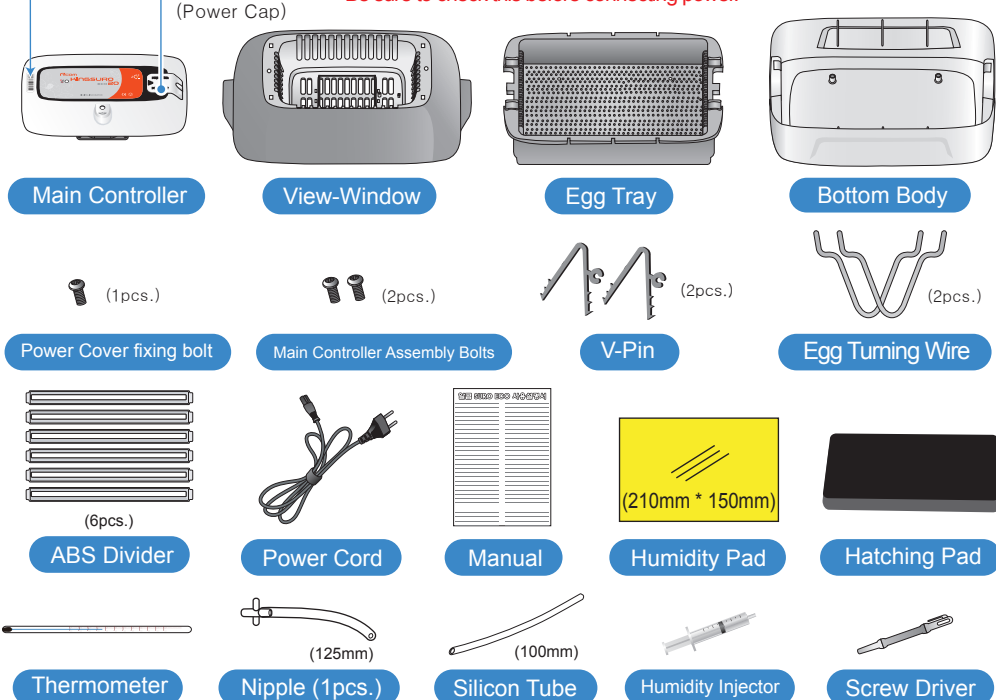
## 2. Identification of Parts



## 3. Basic components

Your Serial no. located on left-side of the main controller. Please be sure not to get dirty or break.  
(ex:RCM0950278)

**CAUTION** Rated voltage and product serial No. are marked inside of power cover. Be sure to check this before connecting power.



**Tip** When the spirit thermometer from KingSuro ECO has an inaccurate reading (separations look like blue dots) caused by transit, please dip the thermometer in very warm water. When the thermometer spirit reaches maximum, please take the thermometer out of the warm water. Please check the spirit has joined together. The dipping method may need to be repeated to remove separations in spirit. At this time, if the water is too hot or maximum temperature is kept for a long time, it may cause malfunction of the thermometer.

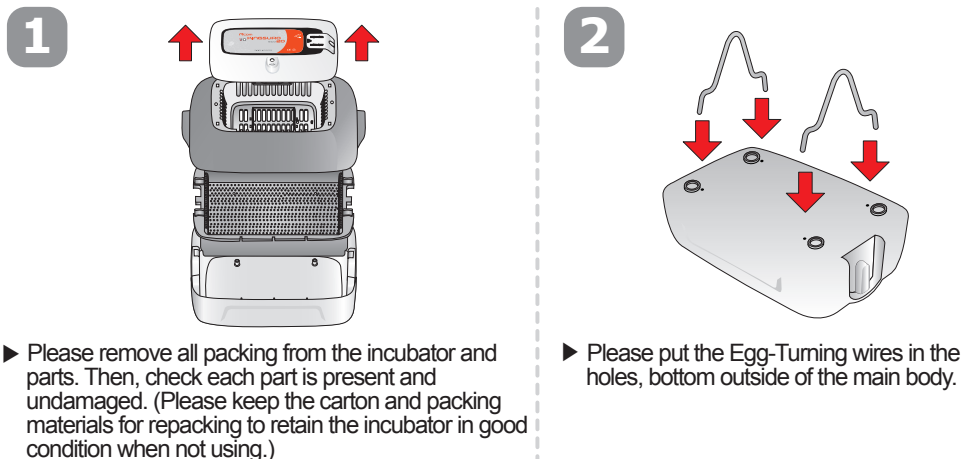
## 4. Display



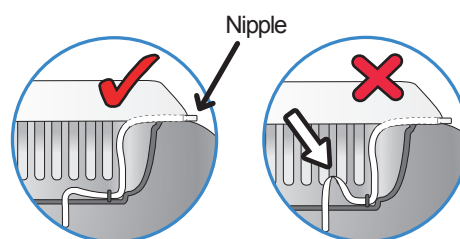
### Name & Function of operation Parts

- ① Heater Operation Lamp  
- Light on when working
- ② Temperature Control Regulator  
- Using screw driver and turn to "+" to make Temp. Up, and "-" to make Temp. Down.

## 5. How to Assemble (Before Using)



- 3** ▶ Loose 2 screws, connecting Main-controller and View-window. And then, disassemble Main-controller and View-window by pushing out 4 hooks on Main-controller.
- ▶ Fix silicone tube which is assembled with nipple into the hole.



**CAUTION** Be careful to ensure the silicon tube is not folded.

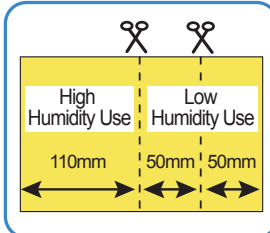
- 4** ▶ Insert the nipple into the holder, located on edge of main controller, and assemble View-window and main controller with 2 screws

**CAUTION** Please do not tighten the screws too much.

- 5** How to cut and fold the Humidity pad properly.

50mm X 150mm  
(Low Humidity Use : When using under 60% Humidity setting)  
110mm X 150mm  
(High Humidity Use : When using over 60% Humidity setting)  
After cutting the Humidity pad as above sizes for your purpose, fold up as below picture and insert it with 2 of V-pins.

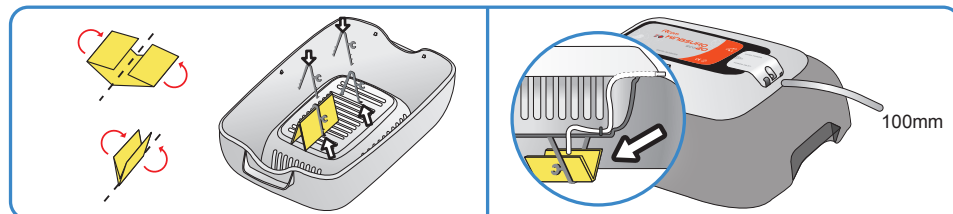
**CAUTION** Humidification ability is different as the pad sizes. Please make sure that the silicon tube end is located onto the Humidity pad.



- ▶ Please change the '50mm X 150mm sized humidity pad' to '110mm X 150mm sized pad' about 3 days before bird hatching to give much more humid environment inside of the incubator.

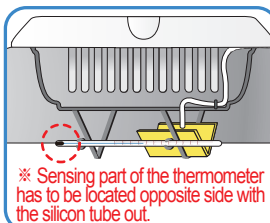
※ The 'use by' of Humidity pad is about 4-6 months, but if you use dirty water, the life of pad will be short. (Using Distilled-water strongly recommended) Humidity pad can be purchased separately again from our shop.

- ▶ Please put about 100mm long silicon tube to the other end of the silicon tube nipple, made of plastic, located outside of the incubator as below picture.



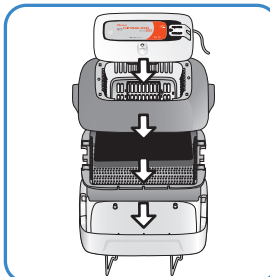
- 6** ▶ Please put the thermometer to the V-pin as right picture.

**CAUTION** If you push too strong to put the thermometer into the V-pin, the thermometer can be broken. Please make sure to put the thermometer just like right picture. The sensing part of the thermometer has to be same side with the picture. Also, the thermometer must not be touched with Humidity pad for exact temperature read.



- 7** ▶ Please assemble Bottom-body, Tray, and Hatching-pad order.

**CAUTION** Ensure the Hatching-pad is placed on the Tray. After hatching finished, be sure to wash and dry the Hatching-pad completely for next use. Please keep the hatching pad, and if not using the pad during incubation, the hatching rate will be lower.





# KINGSURO<sub>eco</sub>20

## 6. How to install incubator

- Place assembled incubator on horizontal.

- Open the power cap to insert the power code, and then put reassemble.

**!** Be careful and ensure the cord not to get jammed when you tighten screw bolt.

- Ensure rated voltage of the incubator ①. If you open power cap, there is sticker which tells rated voltage in the position picture. ②

- Check the temperature inside of the incubator before putting eggs. When setting temperature, use the provided screwdriver. [Ref. 10]

- Slowly inject water with provided syringe, and be careful not to drop on the eggs.

**!** If you put too much pressure on syringe or not to inject slowly, water can be dropped on the eggs.

- Place eggs by adjusting tray divider according to egg size and cover view window.

**!** Control the space of eggs and divider optimally, so the eggs are not interrupted for incubation.

**Tip** It is recommended to place eggs with sharp end side down.

**Tip** When the first operated, there could be odor for temporarily, but this is not incubator problem.

**Tip** Set the eggs in the incubator, and then operate 1~2 hours to get internal temperature stable. please calibrate temperature once. We usually recommend higher temperature for incubation. [37.5 ± 0.5 °C]

**!** If the view window is not closed completely, internal temperature will not go up.

## 7. Egg turning

- Depends on eggs of birds, egg turning cycles are various. We recommend 1 hour, and maximum of egg turning time is 3 hours, turn right or left. During the first week, interval of the egg turning cycle is 1 hour, and stop the egg turning before hatch.

**Tip** For automatic egg turning, you can buy optional item, KING SURO Eggvan.

- Before 3 days of hatching, remove egg turning wires, and place incubator on horizontal to stop egg turning.

**!** While egg turning, be careful and ensure the view window is not opened nor pour eggs.

## 8. Incubation Termination

※ There is no specified ON or OFF button on the incubator.

- Just take off the power cord after hatching.

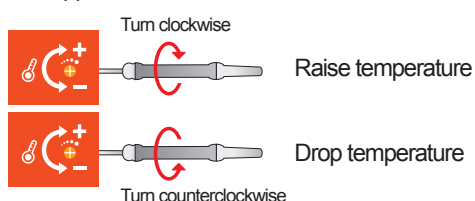
## 9. Water supply for humidity.

- During hatching, supply water to humidity pad at least once a day.
- Use provided syringe, inject 15ml water through silicone tube.

Suitable installation environment	Temperature and humidity at the installation site are low [Below 20°C(68°F), 40%]	Temperature and humidity at the installation site are high [Over 25°C(77°F), 60%]	Before 3 days of hatching
1 time per every 5~6 hours	Whenever day	1 ~ 2 times a day	At the end of incubation, exchange to high humidity pad and inject 20~25ml
Humidity pad (50mm x 150mm)			Humidity pad (110mm x 150mm)

## 10. How to set temperature.

- If you want to adjust the desired temperature, open the power cap and turn temperature control volume using the supplied driver.



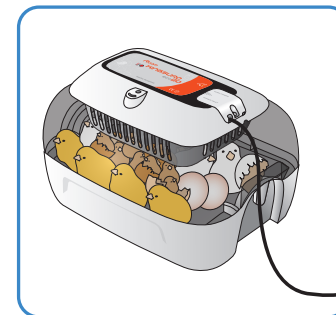
**!** Temperature regulator can be damaged if you use unspecified tool, and repair service will be paid.

**!** Temperature control is very sensitive. therefore, turn it little by little. (After setting, read temperature about 10~20 minutes later.)

**!** In the first time when putting the eggs, adjust temperature after 1~3hours for stabilization. Please do not turn high from the first time, raise temperature from low to high little by little carefully.

## 11. Maintenance after Hatching

- Newly-born birds, just after hatching are very weak for clod. Therefore, a brooder should be ready for them. In case a brooder is not prepared, please let them stay in the incubator for 1~2 days after hatching. If you have a brooder, the temperature must be around 35~37 °C (95~98.5°F) .
- There are differences in bird feeding due to their various species, so please find out proper feeding before hatching. (we have many information for bird breeding on our web-site.)



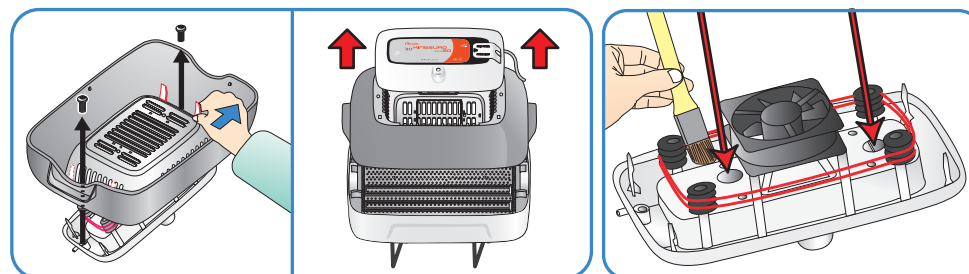
## 12. How to clean up after hatching finished

**!** Be sure to pull out the power cord before clean up incubator.

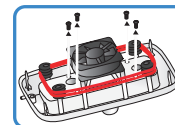
**Tip** After incubation terminated, never leave the incubator covered with the View-window because all the moisture inside of the incubator can break electric parts, especially PC board, and make your next hatching be failed. Please be sure to remove the View-window and dry the incubator perfectly.

※ Remove Main-controller from View-window.

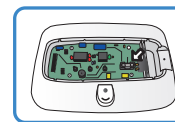
- Take off all the dust and feathers using brush carefully. Please do not brush too hard. The sensor, heater or fan can be broken.



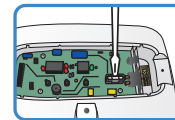
## 13. How to replace the Fuse



- If you have power failure even though you plug in power cord, please check the Fuse. If you disassemble the PC board after loosening 4 screws as left picture, there is a Fuse, and if the Fuse is damaged, please remove and replace it.



- Please make sure the Fuse standard. (250V 2A Ø5\*20mm)



- After replacing the Fuse, please assemble in reverse order of disassemble.

**!** If the cover is not perfectly assembled, the rubber seals are not perfectly block the moisture from incubation room, and this can make the PC board broken.

**Tip** You can purchase the fuse separately at the shop, you purchased.

## 14. Specification

power input	AC 100~120[V], 50/60[Hz] / AC 220~240[V], 50/60[Hz]	
power consumption	Max : 48[W]	Average : 25[W]
Operating serviceable temp.	20 ~ 42[°C] (68~107.6[°F])	
Size	(W)370×(D)231×(H)209 [mm]	
Weight	2.4[kg]	
Fuse Standard	250[V] 2[A] (Ø5×20[mm])	
Incubation Capacity	Chick : 24[eggs] Pheasant : 40[eggs]	Duck : 20[eggs] Quail : 60[eggs] Goose : 9 ~ 12[eggs] Amazon / Macaw : 36[eggs]

**!** The success of incubation may vary according to different factors. The manufacturer and distributor are not responsible for failure of incubation of costly eggs, loss of life, property damage due to negligence of user, remodeling, painting, modification of purpose of use or power failure. Please read carefully the instruction manual before use to avoid failures.

For improvement, the functions of the incubator, design, how to use, etc. can be changed without notice in advance.

North America Sales & Service

<https://www.R-com-hatcher.com>