Operating the Twin Cocks is very simple but please note that for success in hatching operation you must first read the Manual Carefully.

General Notes:

- Before putting eggs into the machine, it should work for 1-2 days to make sure that every parts work correctly.
- If you do not have enough experience to use the machine, it is recommended, not to use expensive eggs. Start with some cheap eggs.
- Do not install the machine outdoor and under direct sun light or wind.
- The ideal temperature of the room is between 23-27 degrees, otherwise the output decreases.
- When using air conditioning systems, make sure that the machine is not exposed to the warm or cold wind.
- Enclosed and poorly ventilated spaces are not recommended .It will reduce efficiency.

• There are some inlets under the machine to enter fresh air. Do not put the machine on the carpet or any floor covering those inlets.

- Please note that the ventilation channel on the machine's door must be open all the time.
- During the hatching period (3 last days) especially when some chicks have been hatched, do not open the machine's door.

- Do not manipulate the electronic systems.
- Ideal humidity of atmosphere is between 50-55 percent.

3 issues are involved in this process:

- 1- Egg incubator
- 2- Eggs

2

3- Operator

Do not use old eggs. maximum time of storage eggs is 7 days. Also eggs must be stored in special condition.

Do not store eggs in refrigerator, the best temperature is 18 degrees and humidity is 55%, store them in dark places.

Temperature fluctuation of the environment should not be more than 4 degrees.

If the temperature fluctuation is more than 4 degrees, output decreases.

Before putting eggs in the machine, put them in a warm place for some hours (about 25 degrees) to prevent any shock.

To put the eggs in the machine, make sure that the eggs stand on their head.

Do not wash the eggs; clean them with a dry brush.

Do not use very big or small or abnormally shaped eggs.

Do the egg candling on the 7th and 14th nights and remove transparent eggs from the machine because they are without embryos and can cause the rest of the eggs be contaminated.

It is suggested that after each period, break the unsuccessful eggs and check out the reason. Note that if after 21 days, eggs still have albumen and yolk it means that they do not have sperm at all.

The Twin Cocks can work with car battery so during the power cut connect the machine to the battery because fan failure and temperature reduction has devastating effects on chicks.

Do not use any chemical for cleaning the machine.

Incubation process definition:

Incubation process is divided to 2 periods of setter and hatch.

- During setter period, the egg is on the tray and turns. In this period the chick grows inside the eggs. Ideal temperature is 37.7 and ideal humidity is 55-65%.
- In hatch period, chick inside the egg is completed .in this period eggs must be put on the hatch basket. Hatch period for chicken eggs is 3 days.

Egg Candling:

For the diagnosis of fertilized eggs and also to ensure the growth of the embryo, do the egg candling on the 7^{th} and 14^{th} nights.

1-Do the egg candling in a dark room.

2- Do the egg candling in a warm room to prevent any shock.

3- Make sure that during egg candling the egg is not exposed to intense shaking.

4- Do the egg candling in the shortest time.

5- Remove the transparent eggs from the machine otherwise the rest of the eggs will be contaminated.

How can you do the candling?

While looking through eggs on seventh night, you must see blood vessels and black spots, otherwise remove transparent eggs.

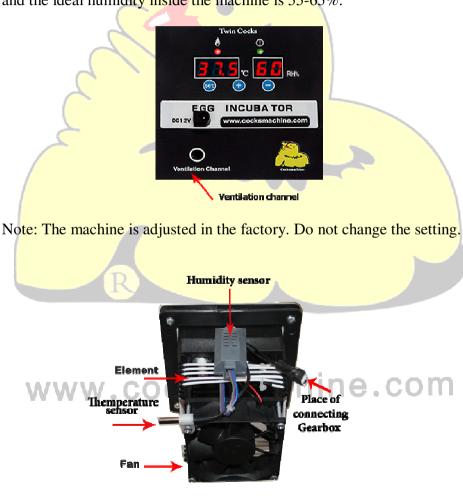


On the 14th night, if you observe eggs, you must see most of the inside dark, otherwise remove transparent eggs again.

Introduction of machine'sparts:

1- Body: it is made of ABS with 3 cm thickness insulation layer.

2- Controller: the digital controller with the precision of a tenth of a degree. The ideal temperature inside the machine is 37.5 - 37.7 degrees and the ideal humidity inside the machine is 55-65%.



5

Note: The machine's fan must work all the time. check the fan daily and make sure that it works properly.

3- Adaptor and battery connectors:

In case of power cut, connect the machine to the battery by using battery cable.

4- Egg Candler: doing egg candling on the 7th and 14thnights.

5- Tray: this machine has 3 kinds of trays for all kind of bird eggs. You can watch the method of changing trays on the video.



This machine has 2 shelves and note that first floor tray is different from the second floor. As shown in the below picture, the tray of the upper shelf has 4 added corners. **CSMACHINE**.**COM**



Note: Turning the eggs cannot be seen easily. To make sure that the gearbox works, put your hand on it and you must feel its shake and warmth.



Place of connecting the motor to the digital part is shown in the previous page.

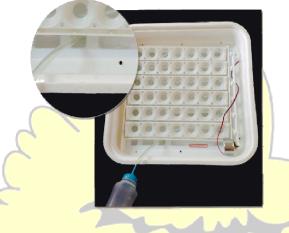
6- Water container: It has different grooves. At first only pour water in the middle groove. If after 2 hours humidity doesn't reach to 60%, add water to another groove.

The machine has a special container to help you to pour water so there is no need to remove the tray to pour water. Pour some water in the machine Every 3 days.



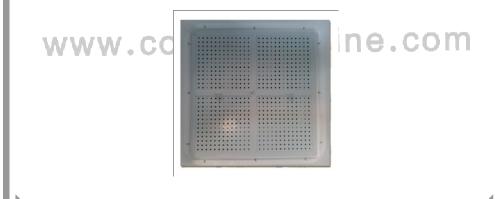
7

Gearbox must be in the direction that shows on the water container. In this situation you can pour water without removing turners.



8-Hatching basket: only put this basket in the machine during the last 3 days, if you do not remove the basket during the first days, humidity does not go up. Note that the hatching basket of the second floor is bigger.

In hatching period, remove the tray from the machine and put the basket on the water container and put eggs on it.



Machine installation:

Put the water container in the machine and pour water in the middle groove.

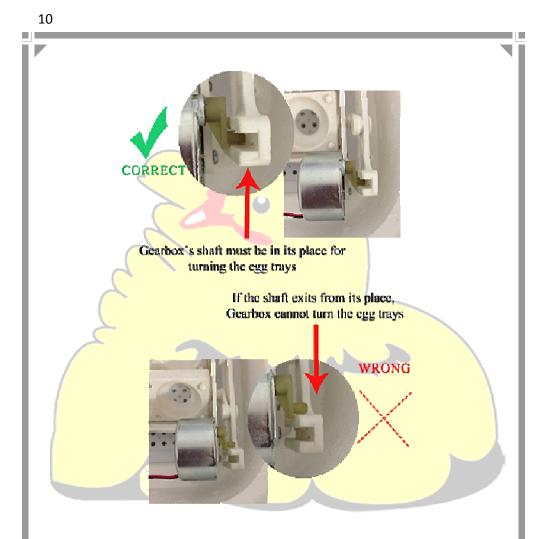
Put the tray in the machine and connect the gearbox to the digital part.



Note: before putting eggs in the machine, let it works for a day to make sure that every part works properly.

Then put the eggs. Eggs must be stand on their head. Close the machine door and make sure that air cannot enter.

Turn the machine on.



The machine has alarm **so** that when temperature or humidity is not adjusted, it goes on. To turn the alarm off, press the (-) button for 3 seconds.

Note: the machine is adjusted in the factory, do not change the setting.

Turn the machine on and note the following:

• The fan works with high speed.

- Signal lamps in the place of connecting gearbox must be on.
- The gearboxes are warm and shake.

During the 18 days of setter, every3 days pour water in the machine.

The ideal temperature inside the machine is 37.5 - 37.7 degrees and the ideal humidity inside the machine is 55-65%.

In the 7th and 14thnights, do the candling with considering all important notes.

Hatching operation:

- Remove the trays from the machine.
- Pour water in the water container to make sure that there is no need to open machine door during rest of the days.
- > Put the hatch basket of the first floor on the water container.
- > Put the eggs on the basket without any shake.
- > Then put the hatch basket of the second floor.
- > Put the eggs on the basket without any shake.

Note: Operation of transferring eggs must be done in a warm room to prevent any shock. COCKSMACTINE COM

Close the machine door and do not open it.

It is suggested to open the door on the 2^{nd} and 4^{th} days, then take the chicks out, because with each opening and closing the door some chicks could die.

The humidity will rise while chicks hatching; in this case remove the plastic plug on the glass to remove the extra humidity.

The hatching of all chicks may extend to the 25th day.



www.cocksmachine.com



13

