



THE GENESIS



MODEL 1588 HOVA-BATOR



PARTS

Unpack the incubator from box. Check for the components listed below.



1588 Top with heat element, fan, pilot light, thermostat, & vent plugs installed.



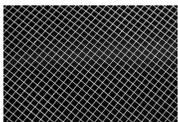
Plastic Liner



Hova-Bator Bottom



Owl Clips x 4

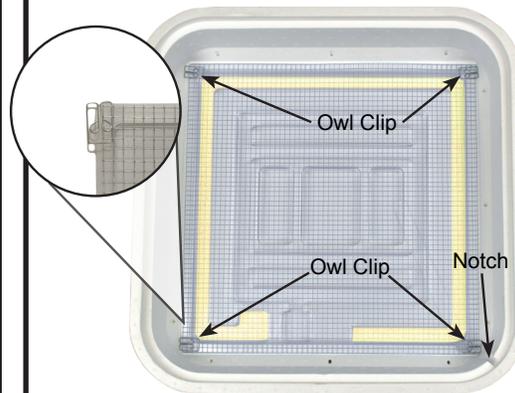


Wire Floor



Power Supply

SETUP



Unpack the incubator from the box and set aside the power-supply, thermometer and wire floor. Remove the top half from the bottom. Attach **Wire Floor** to **Plastic Liner** with **Owl Clips** then place floor and liner in **Hova-Bator Bottom**. Arrange the plastic floor as shown using the water troughs and turner power cord notch as reference. Fill **Center** trough (highlighted) with warm water. Surface area,

not depth, effects humidity; refill trough as necessary to prevent it from drying out. Remove the thin plastic sheet covering the window and LCD display. Place the top over the bottom.

Plug the thin power cord from the incubator's top into the power supply. Plug the cord set for the power supply into the appropriate wall socket. The fan should then run and the small heat indicator light on the thermostat box should be lit. Allow the incubator to warm up for one hour. **When the light begins blinking regularly, the incubator is nearing its set point.**

LOCATION

An Incubator is designed to bring normal room temperature to the desired temperature. Room temperature of 60°F. or below will reduce the temperature in the incubator. Room temperature change of 10°F. or more will change temperature in incubator & is more pronounced below a temperature of 70°F. The location of the machine is important to successful operation. A room temperature from 70° to 80°F. is ideal, and fresh air without drafts is necessary. Be sure no direct sunlight strikes the incubator and that it sets level. A consistent room temperature within a few degrees is best.

OPERATION

This incubator is pre-set for the proper incubating temperature for bird eggs requiring a temperature of about 100° F. (37.5°C) (This is most of the known species.) No temperature adjustment will be required. Because eggs, incubator and water are cold, the incubator maybe slow to heat at first (up to 12 hours to reach 100°F) but will not over heat and damage the eggs. At this stage some moisture may appear on the LCD window. The moisture will clear up as the temperature rises. If after completing one or two hatches you feel it necessary to slightly change the temperature, hold either the up or down arrow on the thermostat for a few seconds and the set temperature will start changing in that direction in tenths of degrees. Keep in mind that thermometers can be off or change over time and should not be relied upon initially. The quality of hatch may be the best indicator as to the temperature setting after considering other factors that can affect the hatch (please see the Poor Hatch section on the last page).



To switch the display between Farenheit and Celcius, hold both buttons down for about a second.

TEMPERATURE & HAND TURNING EGGS

NOTE: It is recommended that you operate the incubator with a small quantity of inexpensive eggs to be assured of your operating procedure and the performance of the incubator, before attempting to hatch large quantities of eggs or expensive eggs. Keep Reptile eggs protected from moving air. (See Warranty on Page 4).



Warm eggs to room temperature (70°F. to 75°F.) and place them on wire floor. Let them lay in a natural manner, which is on their sides with the small end slightly down. Turn eggs 2 to 3 times a day. With a pencil, mark an **X** on one side and an **O** on the opposite side of the egg. Turn all eggs so that **X**'s appear face up. Next turning period turn all **O**'s face up. Alternate this routine each turning until 3 days before eggs are due to hatch.



AUTOMATIC TURNER



Set up incubator as shown on page 1. If you are using the automatic egg turner, place it on the wire floor in the bottom of the incubator. The thermometer should be placed directly on top of the eggs.

The turner motor uses metal gears for additional strength when turning heavy loads. These gears can emit noise during normal operation.

Three days before eggs are to hatch remove eggs from turner, lay them on their side on wire floor in their natural unsupported position. Add water according to instructions. Do not attempt to hatch eggs while turner is in the incubator as the slow turning motor could crush the chicks. When turner is removed for hatching, maintain temperature by placing thermometer on top of eggs.

The tuner operates very slowly. You should not expect to see movement upon installation. Proper operation is detected by noting rack angle after 20 minutes.

HATCHING



Add water every few days to trough #1 only. Usually twice a week is sufficient. The amount of moisture in the incubator is determined by the surface area of water exposed to the air. **Under high humidity conditions and for some species of birds, less humidity is required. (The humidity in the incubator can be reduced by covering part of the water trough with aluminum foil and securing it with tape)** Whenever there are doubts about the level of humidity in the incubator, less is usually better than more, except for the last two days. **2 to 3 days before the hatch, stop turning the eggs, and fill both troughs #1 & #2 with water.**

Place top on the incubator and do not remove until hatch is complete*. Remove dry chicks as soon as possible to a brooder that has food and water and temperatures of about 95°F to 100°F. Chicks can survive up to 48 hours after hatch without food or water, but feed and water them as soon as possible to avoid stress. Some cases may require moving chicks to brooder to dry.

*** After hatch pull red vent plugs to help dry chicks if necessary.**

MOISTURE

The purpose of supplying moisture in and incubator is to prevent excessive drying of the natural moisture from within the eggs. The correct amount of humidity can be determined by the size of the air sack when candled, or by weighing the egg to gauge percent of weight loss. Both methods require knowledge and experience that first time operators usually do not have. The Hova-Bator is designed for simplicity in this matter, and works well for most species.



AFTER HATCH

Chicks may be removed 24 hours after they start to hatch. Extremely wet chicks should be left in incubator to dry. If they don't dry in eight or more hours, remove them to a brooder or heat lamp, with temperatures of 95°F to 100°F. Plan to remove chicks once a day, as every time incubator is opened, warm moist air escapes. Avoid chilling of wet chicks. Some chicks may be late in hatching, so you can leave remaining unhatched eggs up to 2 days longer. Clean your incubator after the hatch with soap and water only. The plastic liner for the Hova-Bator bottom can be cleaned using detergents or disinfectants.

VENT PLUG

A red vent plug is located on the top of the incubator. This should be removed when the incubator is used at altitudes greater than 6000 feet above sea level. The plug may also be removed during or after the hatch if water drops appear on the window due to high humidity. This will help to dry the chicks and the incubator. If removing the plug does not reduce the humidity enough, it may be necessary to prop up the top slightly, to facilitate drying. If so, be sure to maintain proper temperature. Alternately, the top may be removed quickly, and moisture wiped from the windows to aid drying. Replace the plug after chicks are removed.



Great Hatch Recipe

- Do not bother the thermostat unless it is absolutely necessary. The working of the machine may be affected if the thermostat is tampered with excessively.
- Do not over crowd the eggs.
- Keep the eggs clean. Perspiration from the hands or any sort of grease is injurious because it stops up the pores of the shells.
- After each temperature adjustment, allow ample time for temperature to stabilize.
- Avoid opening the lid during hatch.

Hatching Time

Chicken—21 days.	Duck—28 to 33 days.
Quail—23 days.	Parakeet—18 days.
Cortunix—17 to 18	Parrots—28 days.
Pheasant—23 days.	Dove—14 days.
Chukar—23 days.	Mynah—14 days.
Turkey—28 days.	Finch—14 days.
Swan—30 to 37 days.	Button Quail—16 days.
Goose—28 to 30 days.	valley Quail—21 to 22 days.

BROODING



When chicks are removed from the incubator they must have a place that is warm and dry. A brooder should have one section that is heated, with a temperature of 100 degrees (for the first week)

and an unheated section for exercise. Food and water should be partially in heated area. Temperature should be reduced 5 degrees each week until it is down to 70 degrees. Some types of chicks need a temperature around 70 degrees until they are nearly grown.

The incubator top is not satisfactory as a brooder, as there is not sufficient heat and the chicks may peck it to pieces. Feed and water chicks at once. Check with a local feed dealer for the proper feed for type of chicks you have hatched.

POOR HATCH

There are many factors involved with the hatching process and any one can hamper or stop chick development. Old eggs, infertile eggs, damaged or dirty eggs, poor flock health, and eggs not properly turned during incubation are some of the factors. Some chicks may only partially emerge from the shell. These chicks after time may be assisted out of the shell but due to their weak condition often do not survive. It is not unusual in a large batch of eggs to have a few of these even with good hatches.

Check the unhatched eggs. Take note of the exact number of days it took to hatch any eggs (counting the day they were set as day one) or note the number of days for any eggs to pip the shell. Check unhatched eggs for chick development and note the number of these eggs in the batch. If all or most of the eggs have no development (clear inside) then the microscopic embryo had died before or at time of incubation or the egg was never fertile. **If over 70% of the developed eggs hatched then there is little adjustment that can be done with humidity or temperature to improve this.** If many of the unhatched eggs are developed or partially developed into chicks and if eggs were of good quality and properly handled then perhaps adjustments in temperature or humidity may be required.

If eggs hatched on time, then begin any adjustments with the humidity first. Review the section under MOISTURE for adjustments. Make only one adjustment and then test it on a setting of eggs before making any other adjustments.

If eggs have been determined to hatch late or pip late (one day or more), first check for too much humidity then look for too low of a temperature setting. If eggs pip or hatch early (one day or more) then look for too high of a temperature. Eggs hatching early or late due to temperature are probably within one degree of the proper temperature setting.

INCUBATION PERIODS FOR SEVERAL SPECIES OF BIRDS

Requirements	Bobwhite Quail	Coturnix Quail	Ostrich	Emu	Rheas	Duck	Muscovy Duck	Goose	Guinea	Pheasant	Peafowl	Chicken, Bantam	Turkey	Chukar Partridge	Grouse	Pigeon
Incubation period (days)	23-24	17	42-48	43-50	35-40	28	35-37	28-34	28	23-28	28-30	21	28	23-24	25	17

* % Weight loss: Total weight loss from beginning to end of Incubation should be 12%-16%.
 % Weight Loss = $\frac{\text{Original wt.} - \text{Present wt.}}{\text{Original wt.}}$

Average Daily Wt. Loss Required = $\frac{\text{Original wt.} \times .14}{\text{Incubation Period}}$ (Based on 14% total loss)

IF THE EQUIPMENT IS USED IN A MANNER NOT SPECIFIED BY THE MANUFACTURER, THE PROTECTION PROVIDED BY THE EQUIPMENT MAY BE IMPAIRED.

1.4.1 Normal environmental conditions - This equipment designed to be safe at least under the following conditions: a) indoor use; b) altitude up to 2000m; c) temperature 5°C to 40°C; d) maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C; e) mains supply voltage fluctuations up to ±10% of the nominal voltage; f) transient overvoltages typically present on the mains supply (impulse withstand category II 1500 V transient; g) pollution degree 2.

INPUT: AC 100-240V 50/60 Hz 1.5A OUTPUT: 12V 3000mA

LIMITED WARRANTY

GQF Manufacturing Co., Inc. guarantees against defect for a period of 1 year from date of purchase. This warranty is void for product more than 3 years old when not sold direct from GQF to the consumer. Notify GQF Mfg. Co. of any defective items, giving catalogue number and name of item and what is wrong with item. Send copy of invoice showing date of purchase. GQF Mfg. Co. will send replacement, or replacement parts, or notify regarding return. Shipping charges for express shipping or shipments outside of the continental USA are to be paid by the customer. Product being used outside of the continental USA may need to be returned to GQF at user's expense for warranty work. Returning of items without written permission will be at owner's expense.

Whereas GQF Mfg. Co. has no control over usage of equipment and product supplied, it assumes no responsibility for losses or damage from the equipment or product other than replacement of defective parts. No guarantee on hatchability of eggs. GQF assumes no responsibility for losses due to shipping damage, late shipment or arrival of product.

Do not expose electrical parts to water. Installation of electrical parts should be done by a qualified electrician. Use of replacement parts other than intended by GQF Mfg. Co. is not permitted. GQF not responsible if product does not comply with local product codes or codes outside of the USA.

For help or comments contact our technical support at:
 Ph 912-236-0651 / Fax 912-234-9978 / e-mail: sales@GQFmfg.com or mail to:



GQF Manufacturing Co., Inc.
 PO Box 1552
 Savannah, GA 31402-1552

