

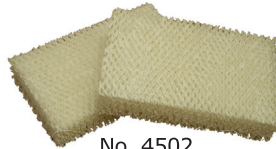


# 1200E SERIES INSTRUCTIONS

For All 1200E series Incubators & Hatchers including  
110 and 220 Volt models



The items listed below should be included with your incubator.  
*Hatcher models will not include the sample egg trays.*



No. 4502  
WICK PADS



TOP LATCH  
UNINSTALLED  
FOR SHIPPING



No. 4500  
MOISTURE PAN



No. 3048  
CORD SET



No. 3036  
HATCHING TRAY (1202E,  
1220E, 1250E & 1254E)



No. 3018  
THERMOMETER



No. 3020  
Hygrometer  
Wicks



No. 3078  
FOOT PAD  
ASSEMBLY

## 1250E & 1254E HATCHER ONLY



X 4

No. 3066  
HATCHING TRAY &  
3068 COVER

## READ THE FOLLOWING BEFORE STARTING

### LOCATION

The location of the incubator is important to successful operation. A thermostatically controlled room temperature between 75 F to 80 F (24 C to 27 C) degrees with fresh air without drafts is ideal. Room temperatures from 55 F to 90 F (13 C to 32 C) are acceptable but good temperature control in the incubator is obtained when the room temperature is held within a few degrees. The back of the incubator and the right side where the vents are located should be placed no closer to a wall or barrier than 12 inches (30 cm) in order to have free air exchange within the room. Avoid areas of strong sunlight or air ducts that could influence the temperature in the incubator.

### TESTING

It is suggested that a small number of inexpensive eggs be used during the first setting to establish the operator's procedure and the incubator's desired operation. (See warranty on last page.) Allow the incubator to run for at least half a day in order to warm the cabinet and stabilize the operation.

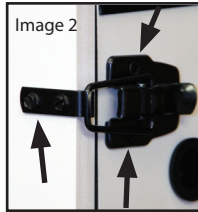
### EGG TRAYS

When operating as expected the eggs may be placed in the turning racks. Plastic trays may be used to hold the eggs upright with the small end down. G.Q.F. offers plastic trays for different size eggs which will allow maximum capacity with proper air flow around eggs. Goose, turkey and other large eggs maybe too tall to stand on end. If so they should be placed with large/small end oriented to the parallel turning axis of the tray. Extremely large eggs may be secured with rows of "V" shaped hardware cloth fastened to the turning rack or a removable tray (see accessories). Sliding metal trays are also an option.

## SETUP



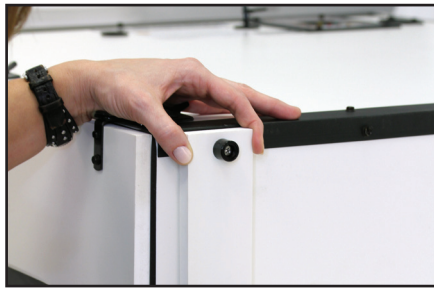
1. Remove plastic film from door window and thermostat.
2. Remove red label & silver shipping screws shown in Image 1 below. Discard screws & shipping block.



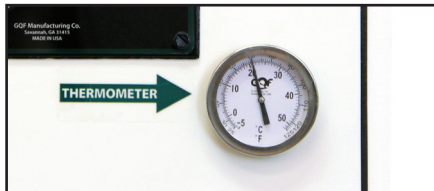
3. Remove cardboard shipping brace and discard.



4. Plug the cord set into the side of the incubator and then into the power outlet. Turn on the power switch located next to the cord set. When turned on the fan should begin to blow. Level trays to remove hatching drawer (1202E, 1220E)
5. Remove contents from hatching drawer and replace it in the bottom.
6. Locate and install the top latch which was left uninstalled for shipping. The long screw with nut is installed in the door tab. See image 2 above.



7. Unplug the incubator and gently lay it on its side to install the foot assembly. Do not lay incubator on the thermostat side.



8. Insert the 3018 thermometer at the designated hole next to the 3248 thermostat.



9. To use the 3018 as a hygrometer, slide one end of a wick over the thermometer probe and place the other into the water filled humidity pan. Allow the incubator to stabilize before reading humidity. Remove wick after reading to avoid mineral build-up.



10. The red LED on the rear panel will illuminate when power is supplied to the heater. It is normal for this light to flash on and off. Hold the turner switch to M to test manual turner operation. Flip the switch to A for automatic turning.
11. With power applied and indicator light on, turn temperature adjustment knob to increase. Pilot light should be steadily lit. Watch temperature and keep increasing or decreasing until the temperature reaches 99.5 to 100 degrees F. Continue to watch until the temperature setting is in the correct range. The pilot light will flash on and off while maintaining the set temperature.

**TROUBLESHOOT:** If power does not come on check connection of the power cord. Next, check to see if power is available at the wall plug. Then check the fuse in the incubator located by the OFF/ON switch. Pry open the cover with a very small flat blade screw driver. If needed replace the fuse with a 250-V 5amp fast blow fuse (F5AL250V). A 3 or 4 amp may be used if a 5 amp is not available. If used in countries other than the USA a cord set with the same IEC plug as required by the incubator (similar to those used in computers and other appliances) that fits electric outlets used in that country. Check to be sure that the cabinet incubator is the proper voltage for the power supply (110-VAC or 220-VAC).

## HUMIDITY

Humidity readings are adjusted in the incubator primarily by adjusting the surface area of water exposed to the air. Levels of humidity can be increased by adding one or two wick pads to the pan. If higher levels are required then a room humidifier may be needed in the incubator room. **For setting of most eggs the moisture pan with water in it will be sufficient. A day or two before the expected hatch date a wick pad maybe placed in the pan to increase the humidity to a suitable hatching level.** GQF recommends that this simple rule of thumb be used on the first setting of eggs regardless of humidity readings and if found to be effective continued on all other settings of eggs. If water pools in the bottom of the incubator then humidity is too high. Reduce humidity and mop up excess water.

To reduce humidity levels remove any wick pads. Cover over all or a portion of the moisture pan with foil or plastic wrap. If more reduction is needed then pull plugs in vent holes locate in the back and upper right side of the cabinet. To reduce humidity beyond removal of water from the incubator then a room dehumidifier must be used to reduce humidity in the incubator room. Uses of a room dehumidifier is extreme so review procedures for the type of egg being hatched.

All eggs will lose moisture during incubation. Water is added to the incubator in most cases to prevent excessive drying of the eggs. Humidity levels can be easily checked by the humidity reading on the hygrometer. Keep in mind, however, that humidity requirements differ among egg types and the age of the flock. Pore sizes and numbers vary in the eggs produced between young and old hens. This means that the humidity reading is the level being applied but may not necessarily be what the eggs require. The following is a description of two methods used to determine humidity needs. Most operators do not do either, as they are time consuming, complex and often not required. GQF recommends that the instructions in the first paragraph under HUMIDITY be used for simplicity.

Experienced operators are able to candle eggs to see if the air sack is of the proper size and then make adjustments during the hatch. Air sacks too large require more humidity. Sacks too small need less humidity.

A more accurate method is to weigh the egg with a very accurate scale. Most eggs loose between 12% and 14% of their weight during incubation. Using the starting weight times the weight loss percent divided by the number of days will yield the weight loss per day that is expected. Weigh egg every 5 days or so to see if the weight loss is at the proper rate. If too much weight is lost then humidity level should be increased. If egg(s) is too heavy then humidity should be decreased.

## HATCHING

About three days before the expected hatch date move the eggs from the turning racks and lay them in the hatching tray(s). To do this remove the eggs from their holding cradles or cartons and lay them on the bottom of the hatching tray in their natural, unsupported position\*. It is recommended to use a separate hatcher such as the Model 1250E as temperatures are usually 1/2 to 1 degree cooler for hatching with increased humidity and can be shut down periodically for cleaning. The 1202E incubator has a hatching tray in the bottom, which will allow for hatching eggs while newer eggs are being turned in the setting trays. Do not adjust the temperature in the 1202E for hatching. If possible, avoid opening the door during the hatch as this removes warm, moist air resulting in a slowed or damaged hatch.

The black plastic hatching tray at the bottom of 1202E and 1250E models is deep enough to accommodate small chicks, such as quail, without a cover. Humidity levels are increased in the hatcher by adding a wick pad to the water pan. If necessary add a second wick pad to raise moisture levels 6% to 10% above normal. When setting and hatching at the same time in the 1202E, as soon as the hatch is completed return the incubator to its normal humidity level usually by removing the wick pads.

As soon as the hatch is complete remove the chicks to the brooder. Most eggs hatch within a few hours of each other but a normal hatch can take up to 24 hours to complete. If temperatures are incorrect or eggs were set late or pre-incubated the hatch may have some chicks that emerge days before or after hatching of most eggs. Chicks that hatch days late are often weak and do not survive, therefore, it is best to pull the hatched and unhatched eggs from the incubator after a few days for disposal.

\*The black corrugated plastic bottom hatching tray should be lined with paper towels or DACB paper. This makes for quick clean up and offers sure-footing for new chicks.

## VENTILATION



There are two holes in the upper back panel and two holes in the upper right side near the door. These holes are covered with a plastic plug. One plug on the right side and one on the back has a hole punched in them. This is to provide the necessary flow of air into and out of the cabinet. These holes should always stay open. In the event that a dryer incubator is needed refer to the humidity section on working with the humidity pan. Normally the plugs will remain in place at all times.

## HATCH ANALYSIS

Start checking the eggs that are due to hatch a full day before expected hatch day. Look for any signs of pipping or hatched eggs and note this on the calendar for that day. After the hatch is complete check the unhatched eggs for any development such as blood rings, partial or fully formed chicks to establish the number or percentage of fertile eggs that did not hatch. In most batches of eggs there is usually a small number of eggs that have fully formed chicks that never hatch. However, if there are many fertile eggs that did not hatch then there is the possibility that adjustments to the incubator's operation may be needed. Also keep in mind that other factors independent from the incubator's operation can yield the same poor results. Fresh eggs will hatch on time or perhaps a bit early. Eggs that are 10 days or more old will tend to hatch late and may have poor hatches. Pre-incubated eggs or eggs held in warm rooms may hatch early. These factors would not require a temperature change in the incubator. Ideally a good hatch is 75% to 85% hatch of the fertile eggs.

If the eggs pip or hatch a day or more early, and the hatch results were poor among the fertile eggs then the temperature is too warm by  $\frac{1}{2}$  to 1 degree. If the eggs piped or hatched a day or more late, and the hatch results were poor among the fertile eggs then the temperature was too cool by  $\frac{1}{2}$  to 1 degree. If fertile eggs piped or hatched on correct day but the hatch was poor then the humidity probably needs to be adjusted.

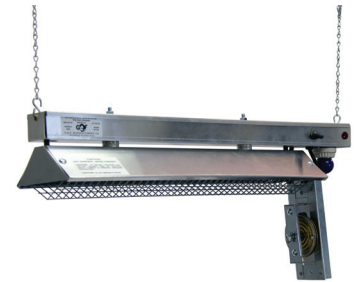
## BROODING

Remove chicks to the brooder within 24 hours after hatching as soon as they are dry. If some of the eggs are late hatching, removal of chicks should be done quickly as possible to prevent chilling of un-hatched eggs. If some eggs appear hatchable, continue the hatch for a day or two more. Chicks hatching a few days beyond expected date are usually weak and may not survive. Discard eggs that are over four days beyond hatch date.



No. 0534

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 100F (37C) for small birds like quail or 95F (34C) for larger birds like chickens. Maintain this temperature for the first week and then lower it 5 degrees (F) each week there after down to normal room temperature. If temperatures are a little too warm the chicks will move to the cooler parts of the brooder on their own. Place food on a flat surface near the feeder. Avoid slick surfaces like cardboard, plastic or flat newspaper as young chicks have difficulty standing on them. Small birds such as quail can easily drown in large drinkers so rocks or marbles may need to be used at first if the drinker is not made especially for them. The GQF catalog has suitable brooders, feeders and drinkers. GQF Vitamins Plus is also recommended for the first seven days to improve survivability.



## ACCESSORIES

**CABINET SETTING TRAY**—Optional setting tray for 1502 and 1500 cabinet model incubators.



Sturdy metal construction with wire floor. Can be used with the No. 3059 (above) or can be loaded with most any other type of plastic or paper trays for quick loading and unloading of incubator racks. This metal tray can be used without other trays if filled to maximum capacity where eggs are stacked against each other.

Measures 24.5" X 12.75" **ITEM No. 3067**

**WATER RESERVE SYSTEM** Consists of 5 Gal. reserve tank, connecting hose, with quick disconnect coupling and constant level humidity pan with 2 humidity pads, for increased humidity at time of hatch. For all GQF Cabinet Incubators.

**ITEM No. 3030**

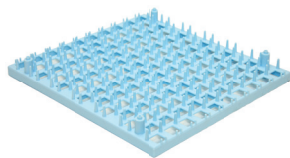


**CLEAR DOOR**—Gives full frontal view of interior of incubator, to permit checking of hatching progress, tray turning, water level, etc.



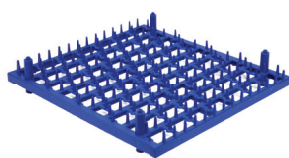
Door comes complete with new hinges and latch tabs for customer installation by removing 8 screws and replacing new door with same 8 screws. For all cabinet model incubators. 31 $\frac{1}{4}$ " x 15 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " **Sold as an accessory for customer's installation only. ITEM No. 3065**

**PLASTIC EGG TRAYS** offer the most efficient system for gathering, spray disinfectant treating and storing of eggs. At time of setting eggs, just remove loaded egg tray from storage area and place it on the incubator turning rack. The No. 1500 and 1502 incubators are equipped with turning racks that will accommodate plastic trays and paper trays (page 19) to hold your eggs in place.



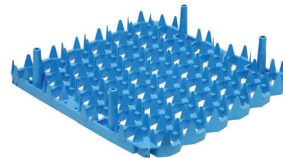
### QUAIL EGG TRAYS

Each cabinet turning rack will hold 4 quail egg trays (456 quail eggs). Molded posts on each tray permits double stacking for a total of 1368 quail eggs. (Caution: GQF HATCHING trays hold a maximum of 250 quail eggs). Outer edge positions of double stacked trays may not be used in top turning rack. **PLASTIC, SET OF 6 ITEM No. 0243**



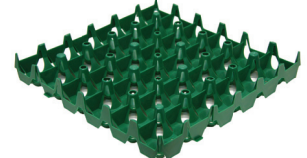
### PHEASANT EGG TRAYS

Each cabinet turning rack will hold 2 pheasant egg trays (118 pheasant eggs) for a total of 354 eggs per incubator. (Not Stackable in GQF incubators). **PLASTIC, SET OF 6 ITEM No. 0245**



### UNIVERSAL EGG TRAYS

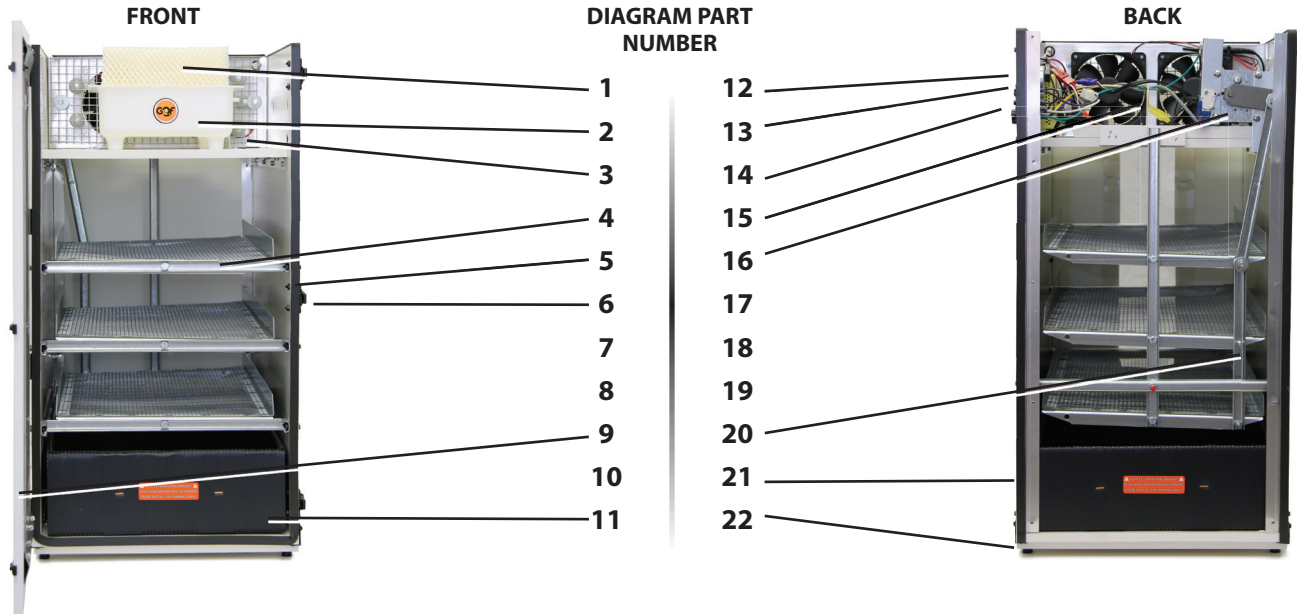
Holds any size egg from bantam, to pheasant, to medium chicken egg. Each of the cabinet turning racks will hold 2 universal egg trays (90 eggs) for a total of 270 eggs per incubator. (Not Stackable in GQF incubators). **PLASTIC, SET OF 6 ITEM No. 0246**



### EXTRA LARGE EGG TRAYS

Holds extra large eggs; Turkey, Duck, Jumbo Chicken, etc. Each of the cabinet turning racks will hold 2 extra large egg trays (54 eggs) for a total of 162 eggs per incubator. One rack per setting tray must be trimmed to fit GQF incubators. **PLASTIC, SET OF 6 ITEM No. 0248**

# PARTS



| Diagram Part Number | GQF Part Number | Item Description         | Diagram Number | GQF Part Number | Item Description                                  |
|---------------------|-----------------|--------------------------|----------------|-----------------|---|
| 1                   | No 4502         | Humidity wick pads (2)   | 12             | No 3179         | Off/On switch with fuse                           |
| 2                   | No 4500         | Humidity pan             | 13             | No 3178         | Fuse 250-V 5amp fast blow                         |
| 3                   | No 3170         | Heater assembly 110V     | 14             | No 3248         | Analog Electronic Thermostat                      |
| 4                   | No 3043         | Front support bar        | 15             | No 3170         | Heater/Fan Assembly                               |
| 5                   | No 3045         | Door gasket              | 16             | No 3175         | Turner assembly 110V (after 2007 production)      |
| 6                   | No 3051         | Complete door latch (1)  | 17             | No 3048         | IEC/USA cord set for cabinet                      |
| 7                   | No 3063         | Set of 4 hinges for door | 18             | No 3182         | Black vent plugs                                  |
| 8                   | No 3070         | Back panel               | 19             | No 3023         | Turner timer motor (attached to thermostat panel) |
| 9                   | No 3073         | Door                     | 20             | No 3041         | Rear connecting bar                               |
| 10                  | No 3077         | Top panel                | 21             | No 3047         | Back and top gasket                               |
| 11                  | No 3036         | Hatching tray            | 22             | No 3078         | Foot Pad Assembly                                 |

## CLEANING & SERVICE

The incubator may be cleaned of feather dust and hatching debris with a damp cloth and mild soap, for those surfaces accessible from the front door. Finish with a wipe or spray of a mild disinfectant. Plastic egg racks are machine washable. The hatching tray should be washed and disinfected after each hatch. At the start or end of a season it is recommended that the top and back of the incubator be removed so that feather dust may be removed. To do this, turn off and unplug the incubator before removal of the top and back. Use a soft bristle paint brush to remove feather dust. Take care not to stretch the heat element if cleaning in that area. Do not wet down or spray into electrical boxes, heater or motors. Other surface areas may be wiped with a damp cloth and a mild disinfectant used in the same manner.

## WARRANTY & RESTRICTIONS

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 are to be paid by the customer. GQF's warranty applies to residents of the USA only. International warranty claims are handled by the authorized GQF dealer that sold the equipment in that area. 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. Custom modifications and use of non GQF parts can void the warranty. GQF is not responsible if product does not comply with local product codes or codes outside of the USA.

### 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.

- All 110V units 110V, 50/60Hz, 325W
- All 220V units 220V, 50/60Hz, 350W

Unit must be plugged into a grounded outlet to maintain the safety of the equipment. This appliance must be located so the power switch and cord set are accessible as they are relied upon to disconnect the device. Appliance protection may be impaired if used in a manner not specified by the manufacturer.



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