



1202A SPORTSMAN

CABINET MODEL INCUBATOR



Unpack the incubator. The items listed below should be included with your incubator.

Hatcher and horizontal rotational models will not include the sample egg trays.



No. 4502
WICK PADS



X 4

No. 3078
FOOT PADS



X 4



No. 4500
MOISTURE PAN



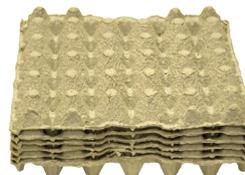
No. 3048
CORD SET



SAMPLE QUAIL
EGG TRAYS



No. 3007
WAFER



SAMPLE CHICKEN
EGG TRAYS



No. 3008
Wing Nut &
Adjusting Screw



No. 3018
THERMOMETER



No. 3036
HATCHING TRAY



No. 3020
Hygrometer
Wicks

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.

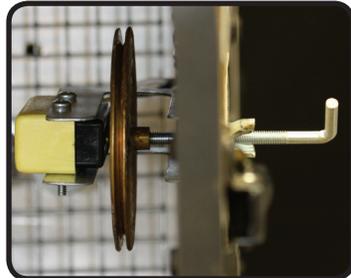
EGG TRAYS

When operating as expected the eggs may be placed in the turning racks. Paper trays or plastic cartons may be used to hold the eggs upright with the small end down. GQF offers plastic trays for different size eggs which will allow maximum capacity with proper air flow around eggs. Most trays have about 1/4" clearance which allows the trays to slide from one side to the other when the racks turn. To dampen or stop this, material such as 1/4" (7mm) weather stripping or wood strips can be added to each rim of the turning rack. Quail eggs may have their trays double stacked. 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. Carefully tip the incubator on its side and install the foot pads with screws provided.



2. Install the wafer, adjusting screw & wing nut. First run the wing nut up the adjusting screw, then thread the screw into the bracket from the outside. Once threads of screw are available inside the incubator, attach the wafer. Tighten the adjusting screw until the wafer is within a few turns of the thermostat switch.



3. Plug the cord set into the side of the incubator and then into the proper outlet. Turn on the power switch located next to the cord set. When turned on the fan should begin to blow.



4. 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.



5. Insert the 3018 thermometer at the designated hole next to the 3124 thermostat.



6. 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.

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 1550 as temperatures are usually ½ to 1 degree cooler for hatching with increased humidity and can be shut down periodically for cleaning. The 1202A 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 1202A 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 1202A and 1550 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 1202A, 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 tray in the hatcher and hatching tray in the 1202A 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 it. 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 or the incubator is being operated at high altitudes the non-punched plugs may be pulled for greater air exchange. Normally the plugs will remain in place at all times.

HATCH ANALYSIS

Record on the 3124 thermostat label the date and time eggs are set in the incubator as well as the target temperature setting and average humidity level shown on the thermometer/hygrometer. 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 un-hatched 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 incubators 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 ½ 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 ½ 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

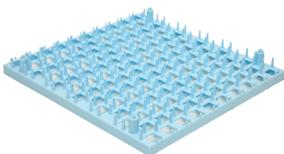


CLEAR ACRYLIC DOOR—Gives full frontal view of interior of incubator, to permit checking of hatching progress, tray turning, water level, etc.



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 1/4" x 15 1/2" x 1 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.



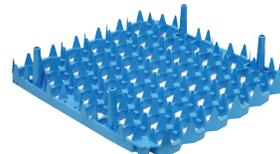
QUAIL EGG TRAYS

Each No. 1502 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 No. 1502 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 No. 1502 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 No. 1502 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

3124 THERMOSTAT PARTS



No. 3007
WAFER



No. 3008
Wing Nut &
Adjusting Screw



No. 3006
Snap Switch

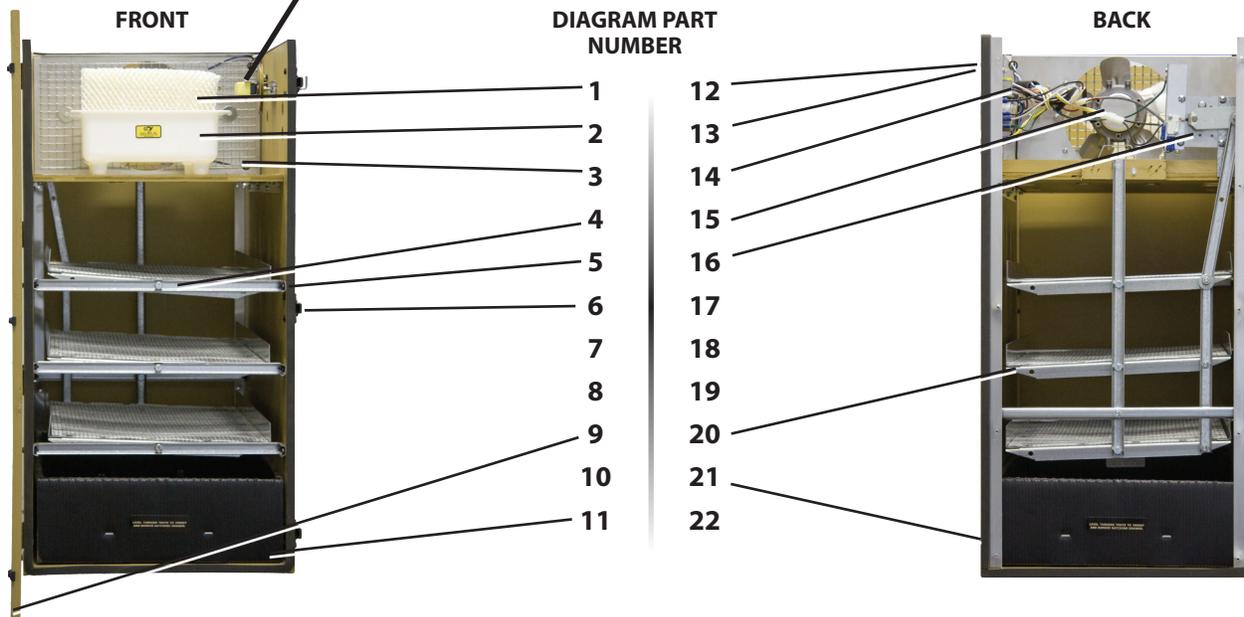


Diagram Part Number	GQF Part Number	Item Description	Diagram Number	GQF Part Number	Item Description
1	No 4502	Humidity wick pads (2)	12	No 3179	Off/On switch with fuse
2	No 4500	Humidity pan	13	No 3178	Fuse 250-V 5amp fast blow
3	No 3170	Heater assembly 110V	14	No 3003	Relay for 1202A thermostat
4	No 3043	Front support bar	15	No 3012	Fan motor assembly 110V
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
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	Incubator feet (4)

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 such as Tektrol. 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.

WARRANTEE & RESTRICTIONS

GQF Manufacturing Co., Inc. guarantees against defect for a period of 1 year from date of purchase. This warrantee 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 warrantee 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.

G.Q.F. MANUFACTURING COMPANY

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