



LOCKING PIN:The locking pin on top of the egg tray lid is designed to be pressed down in the front to fully engage the pin into the water tray. It has a detent, which the pin handle should be in front of and has positive pressure on the lid to stop the pin from vibrating out due to water flow. The back detent position will allow you to remove the egg basket and lid intact from the water tray. Pulling the locking pin all the way back will allow you to open the egg tray lid, inspect for and remove dead eggs.

WATER TRAY: The MariSource egg tray fits tightly into the water tray. This forces more water to flow through the screened section of the tray instead of passing around the outside of the tray. All of the components are injection molded plastic with tight fit tolerances.

MARKING LABELS: The MariSource marking labels are provided for your convenience to identify batches of eggs.

PROBLEMS: If any problems of fit or interchangeability occur, do not hesitate to call our toll free number, 877-735-8910 Email MariSource at info@marisource.com or visit our website at www.marisource.com.

PRIOR TO USE: After installing your vertical incubator, it is recommended that the system be cleaned. Run water through the system or clean the system by using a brush and disinfectant and running water through the system.

***Please refer to the MariSource catalog or website for more product information.
www.marisource.com***

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**Vertical Incubator
Installation**

Caution

Do not store in temperatures above 80 degrees Fahrenheit or expose plastic components to direct sunlight. Ultraviolet rays degrade the plastics, high heat will cause the plastics to expand and the screening may become loose or pop out.

VERTICAL INCUBATORS ARE SHIPPED FULLY ASSEMBLED WITH SCREENING SPECIFIED BY CUSTOMER. WE RECOMMEND THAT YOU CHECK THE FOLLOWING:

MESH: Typically, 12x12 mesh is used for most Salmon eggs, although the 14x18 mesh normally used for Trout eggs may be more appropriate for Steelhead and other types of fish producing smaller eggs.

CLEANOUT RODS: Remove the cleanout rods lying on the basket and insert them into the water tray. Be careful not to puncture egg tray screening.

RUBBER STOPPERS: Rubber stoppers or cleanout rods stoppers are located on the front of unit.

LEVELING BOLTS: Leveling bolts and nuts are provided for the four corners of each stack. These bolts are used to attain the correct slope of the cabinet on the stand, floor, or base on which it rests. It is desirable to set the cabinets approximately 1" or more higher in back than in front. The sloping position allows air bubbles that may form to expel themselves into the water receiving area.

NOTE: If air pockets persist, there are several possible causes:

- 1) Water flow rate is too high, reduce flow rate to less than 5 gallons per minute (19 liters per minute); (see water flow rates)
- 2) The screen, because of shipment dust or storage, may acquire additional surface tension which can be reduced by rinsing with clean water.
- 3) The water feeding into the top tray has too much splash, lower the water inlet pipe closer to top tray to reduce splash
- 4) We can provide individual dams to be installed at the back of each water tray, which serve as a de-aeration and the spreading out of the water flow.

WATER FLOW RATES: Generally, water flow rates should be 3-6 gallons per minute (11-23 liters per minute). Higher flow rates cause a concentrated flow down the center of the water tray, underneath the egg basket part # CPM5618 and may overwork some species of fish. A rear dam (available through MariSource) may be placed in each water tray and will allow higher flow rates and disperse the water flow across the width of the tray, but should not exceed 6 gallons per minute.

NOTE: Water flow rates are only a recommendation by MariSource - you ultimately decide the best flow rate depending on your use of the system and your water source.

For densely packed incubators, MariSource provides a water tray insert (#CPM5667) which dams up the space between the front of the water tray and egg tray to force more flow up through the eggs.

When 8 tray units are stacked one on top of the other to make a 16-tray incubation system, fresh water is introduced and discharged from each 8-tray stack. A 4" spacer between top and bottom stack incubators is available from MariSource (#CPM5601) and comes standard when the units are ordered as a 12 or 16-tray stack. This allows separate water sources to each 8-stack. It is possible to incubate 16-tray stacks with one continuous flow water, however the water source must have good oxygen content, higher flow rates are recommended as trays that are fully packed with eggs may result in the bottom water tray having inadequate oxygen content.

CLEANOUT ROD: Slide each tray half way forward in the cabinet, pull out the stopper, slide the cleanout rod slowly back and forth two or three times, replace stopper, slide the rod back into position.

SILT OR DEBRIS PROBLEMS: As silt and other debris may accumulate on the bottom of the water trays, depending on the water source, some customers use the top tray as a filtration device.