CONVERTING SMART INCUBATORS BUILT FOR EMU/OSTRICHES TO HATCH CHICKENS AND GAME BIRDS

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The incubator that you have purchased has an alarm control that was basically a gimmick to appease the ostrich and emus industry.

Turning the right hand controller clockwise as many times as possible can disable it but it leaves a relay continually activated. (To set and use the alarm control, first set the main thermostat on the left then slowly turn the alarm controller on the right anticlockwise until the relay starts to click, then turn the right hand controller ¼ of a turn clockwise.).

Or it can be permanently be disabled by an electrically competent person taking off the top removing the sheet metal baffle, then moving the element connection to the outer two brass studs on the output of the main circuit board, and removing the fuses of the alarm circuit board. I recommend that procedure because the alarm circuit relies on the alarm relay being activated all the time that the incubator is operating, and eventually the relay gives out and the incubator stops heating.

To convert the trays

To convert the trays the bottom of the tray has 12mm X 12mm mesh fitted tightly across the bottom to stop the chickens falling into the water tray at the base of the incubator.

To convert to chook egg trays screw 25mm diameter dowels at 50mm centres running from front to back. So as to get maximum capacity from the tray, one of the dowels is sawn in two length wise, and the edge is routed down to the dowel using a "carb-I -tool bit" # T8220B This allows for 12 X 12 (144) eggs per tray. A piece of 50mm x 50mm x 4mm mesh is cut so that the mesh fits in the tray and can move back and forward to tilt the eggs.

If you don't want to mess around splitting a dowel then 11 columns X 12 rows will work OK.

Note the piece of 12mm X 12mm mesh at the back to prevent the chicks from jumping out at the rear of the tray.
To roll duck eggs use a piece of 75mm X 50mm X 5mm wire and lay it on the 12mm X 12mm base mesh to roll 84 eggs per tray.

Game birds and bantams use 19mm dowels at 37mm centres. The mesh is welded from 5mm rod at 43mm centres. This allows 210 eggs per tray.

This is a view from under the chook egg tray.

The large water tray will give about 40% humidity, and is ok for most poultry. If you want a higher humidity then purchase a wallpapering trough and cut down with a jigsaw to 70mm high and place it on the bottom of the incubator together with the large white tray. That will increase the humidity to about 50%. Two wallpaper trays will give about 55% humidity.

You will need to set the temperature accurately to 37.6 ± 0.4°C (99.75 ± 0.8°F) a cheap glass body temperature thermometer can be used to check the thermometer that you have.

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