

## Frequently Asked Question

*Open Door error in CO2 Incubator while door is closed*

CO2 Incubator Operations
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Original

## Open Door error in a CO2 Incubator while Door is closed

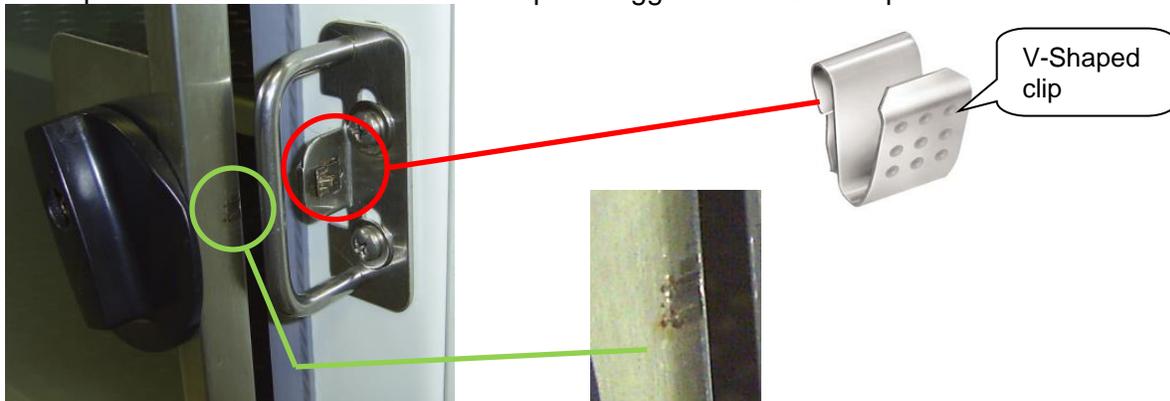
What is causing the “Door Open” error message in a CO2 Incubator although the Inner Door is closed?

When the Inner Glass Door is open on most CO2 Incubators, a Door Switch circuit opens to interrupt the CO2 gas injection, along with interrupting the chamber or door heating operations. This design conserves the CO2 gas while the Inner Door is open and minimizes temperature overshoot after the Door is closed.

However if this Door Switch device fails or gets stuck to indicate an Open Door, the chamber CO2 concentration may drop and the chamber temperature may cool below desired levels.

Check the Door Switch devices described below to further diagnose this issue.

To signal this inner door is closed, the Forma 3110-series uses a V-shaped metal ‘Clip’ to make contact with the metal frame of the Glass door. Corrosion on the Door or Clip, poor tension of the Clip to the Door frame or a broken Clip will trigger a false Door Open alarm.



The Forma 310-series uses a magnet at the top edge of the Glass Door to trigger the Door Switch closed.



The Forma 370-series uses a Push Button with a metal disc on the plunger to be pressed by the top edge of the Glass Door when closed.



## Open Door error in a CO2 Incubator while Door is closed

The Forma 3307 and 3310-series uses a Push Button pressed by the rotation of the Knob on the Glass door to latch the door closed.

A second switch for the Outer door is only active during the high-temperature Sterilization Cycle.



The Forma 3950-series used a pivoting Door Switch at the bottom of the control panel, striking the Top of the Door as it closes.



The Revco and some Fisher Scientific CO2 Incubators use a Push Button as the Door Switch. Either this button is not being pressed by the door, or electrical contacts in this switch are worn.



Heraeus BBD6220 and Cytoperm 2 models have this Push Button switch to make contact with the Outer Door to monitor the Inner Door position.



Heracell-series uses a switch to sense the one-piece Glass doors being Closed, or monitors the Outer Door when the optional Inner Door frame with multiple doors is installed (highlighted below).

