



CO₂ incubators are widely used in scientific research to grow and maintain cell cultures. Proper maintenance of the CO₂ incubator increases its life expectancy and ensures that the unit will provide optimum environmental conditions to support the growth and development of cells. A CO₂ incubator is considered as one of the most vital equipment in a laboratory that is why proper maintenance is a must. Here are some guidelines to help keep your incubator working at its optimum performance.

PROPER INSTALLATION REQUIREMENTS

- 1 The CO₂ incubator should be placed on a dry, stable, and sturdy platform or on the various optionally available floor.
- 2 Never place the CO₂ incubator close to heating or cooling ducts, flammable materials, or devices that produce excess heat such as autoclaves, radiators, ovens, and the like.
- 3 Ensure adequate air ventilation around the CO₂ incubator to allow proper heat and gas dissipation. Do not place the unit directly in the path of moving air currents.
- 4 Ensure that the CO₂ incubator is connected to a dedicated power source with a protective grounding installed.
- 5 Check if the CO₂ incubator is leveled by placing a bubble level on the center top shelf of the unit.



GENERAL MAINTENANCE

- 1 Check the pressure gauge on the two-stage gas regulator daily to ensure that the pressure is not below 15 psig. Replace tank if necessary.
- 2 Check the water level and refill the humidity pan with sterile distilled water once a week.
- 3 Disinfect surfaces of CO₂ incubator with a general purpose laboratory cleaning agent weekly. During the cleaning process, the operator should use Personal Protective Equipment (PPE) according to the provisions of the laboratory.
- 4 It is recommended to calibrate at least once a year to ensure continuous and optimal performance of the CO₂ incubator.
- 5 Inlet filters are installed to remove any contaminant in the CO₂ or N₂ gas supply. Replace the inlet filters at least once a year or when the filter is dirty by visual inspection.
- 6 The ULPA filter provides contaminant-free air within the work area of the CO₂ incubator. It is recommended to replace the ULPA filter once a year.
- 7 Decontamination in CO₂ incubator uses high heat sterilization or moist heat decontamination cycle to kill organisms that commonly contaminate workspace including all installed components. Decontaminate the inner chamber of the incubator as needed.

