



PROTEAN® II XI Multi-cell 2-D Conversion Kit

Catalog Number 165-1956

Introduction

The PROTEAN II xi multi-cell 2-D conversion kit provides an additional cooling system which upgrades the PROTEAN II xi multi-cell to the PROTEAN II xi 2-D multi-cell configuration. The conversion kit includes two aluminum cooling coils, coated with electrically non-conductive material, which maintain the lower running buffer at an optimal temperature of 8-12° C.

The PROTEAN II xi 2-D multi-cell conversion kit requires a modified lid with two grooves on each side to accept the two cooling coils. Older PROTEAN II multi-cell, manufactured prior to March 1988 (catalog number 165-1960 and 165-1952), have lids that have not been modified. A new lid (catalog number 165-1959) should be purchased or alternatively, grooves can be cut at the proper locations on the existing lid.

The accompanying PROTEAN II xi 2-D multi-cell manual provides detailed information on the PROTEAN II xi multi-cell and its use. Refer to this manual for additional information.

Parts Description

- 2 aluminum cooling coils coated with electrically non-conductive material
- 2 cooling manifolds (rubber tubing with plastic elbow fittings)
- PROTEAN II 2-D Multi-Cell Instruction Manual

Installation

The installation of the PROTEAN II xi 2-D multi-cell conversion kit takes only a few minutes.

1. Place the two cooling coils into the lower buffer tank on either side of the center cooling core. The elbows of the cooling coils rest on the sides of the buffer tank (See Figure 1).
2. Attach the three long sections of one cooling manifold to the outlets of the three cooling cores on one side of the buffer tanks as shown in Figure 1. These sections are long enough to allow you to remove individual cooling cores when necessary, without detaching the manifold.
3. Attach the two short sections of the manifold to the two cooling coils.
4. Attach the other manifold to the outlets on the other side of the multi-cell. Make sure that the tubing is securely attached at all points to insure a leak-free system

Operation

The cooling manifolds should then be attached to an appropriate refrigerated water recirculator. Direction of flow is not important, as it is a closed system. For optimal results, the water chiller should be filled with a 50% solution of any common antifreeze*, and the water chiller should be started at least 2 hours prior to operating the multi-cell to insure that the system is between 8-12° C. For SDS gels, the system should not be run lower than 8° C as the SDS will precipitate in the gels.

* Note: Do not use a methanol based solution as a coolant for the PROTEAN II xi multi-cell. Use as ethyleneglycol based antifreeze. Continuous expose to methanol will damage the plastic components of the cell.

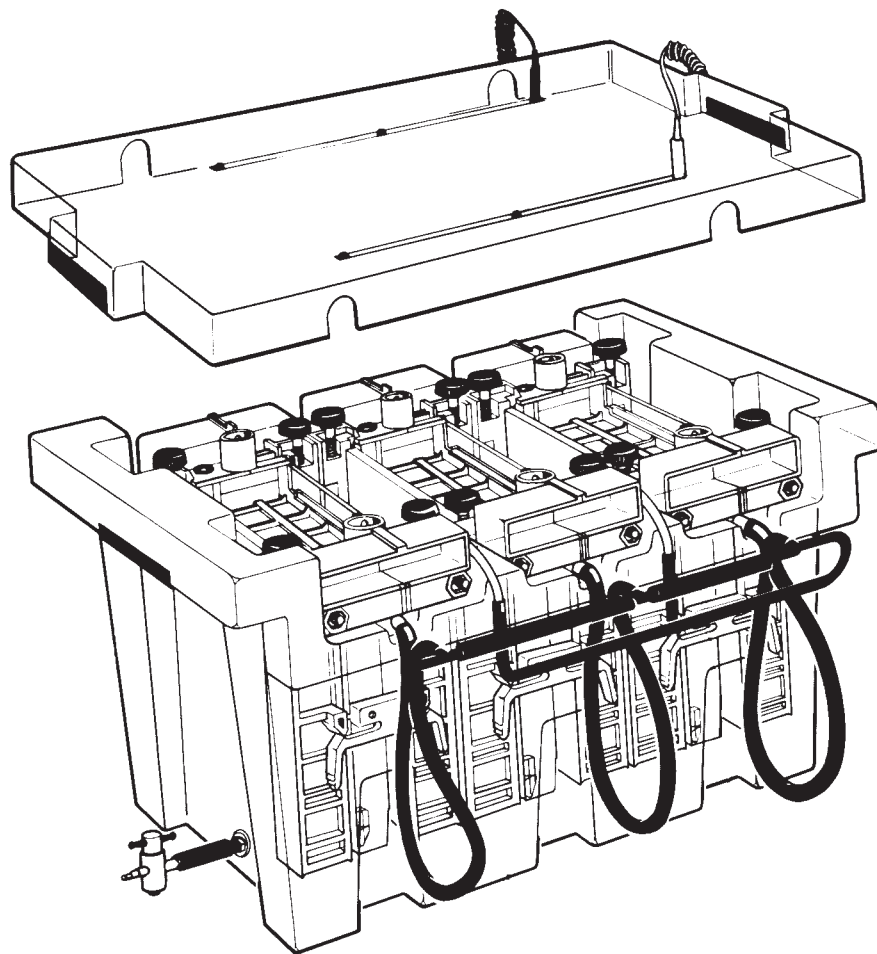


Fig. 1 Installation of cooling coils and cooling manifold



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