

# INSTRUCTIONS FOR CONVERSION OF MICRODYNAMICS TEC2000 STAND ALONE CONTROLLED FREEZERS TO TEC3000 CONTROL.

**READ INSTRUCTIONS COMPLETELY BEFORE PROCEEDING.**

## UNITS AFFECTED

This kit and procedure applies to freezers originally equipped with the MicroDynamics TEC2000 stand alone controller.

## PARTS SUPPLIED

PART #	Description	QTY.
13223844	LL CONTROLLER TEC3000 NO DSPLY	1
13223836	PANEL FRONT TEC3000 W/TEXT	1
13319598	WIRE HARNESS T2 TO T3 ADPTR	1
11943012	UPGRADE KIT 110V MDC TO JEROME	1
13319601	INSTR UPGRD MDC TO T3000	1
13289481	MNL QK START TEC 3000 ENGLISH	1

## TOOLS REQUIRED

Screw Driver Phillips #2  
Adjustable wrench

## GENERAL

This modification replaces the existing MicroDynamics stand alone controller with a TEC3000 controller. If the freezer is already equipped with the current production Jerome power supply, the Jerome upgrade kit can be returned for credit. Contact Chart Customer/Technical Service at 770-257-1299 or 800-482-2473 for an RMA. The existing temperature sensors will be retained.

**DISCONNECT THE POWER CORD FROM THE WALL OUTLET.**

**SHUT OFF THE LN2 SUPPLY AND DISCONNECT THE TRANSFER HOSE FROM THE FREEZER.**

## CONVERSION PROCEDURE

1. Disconnect the input power cable from the bottom of the existing controller.
2. Remove the existing power supply.
  - 2.1. If the freezer is equipped with the current production Jerome power supply, it can be used with the TEC3000, and so you will not need to remove it. Contact customer service for an RMA to return the Jerome upgrade kit for credit

**NOTE: The earlier MicroDynamics power supply in the galvanized steel enclosure cannot be used with the**

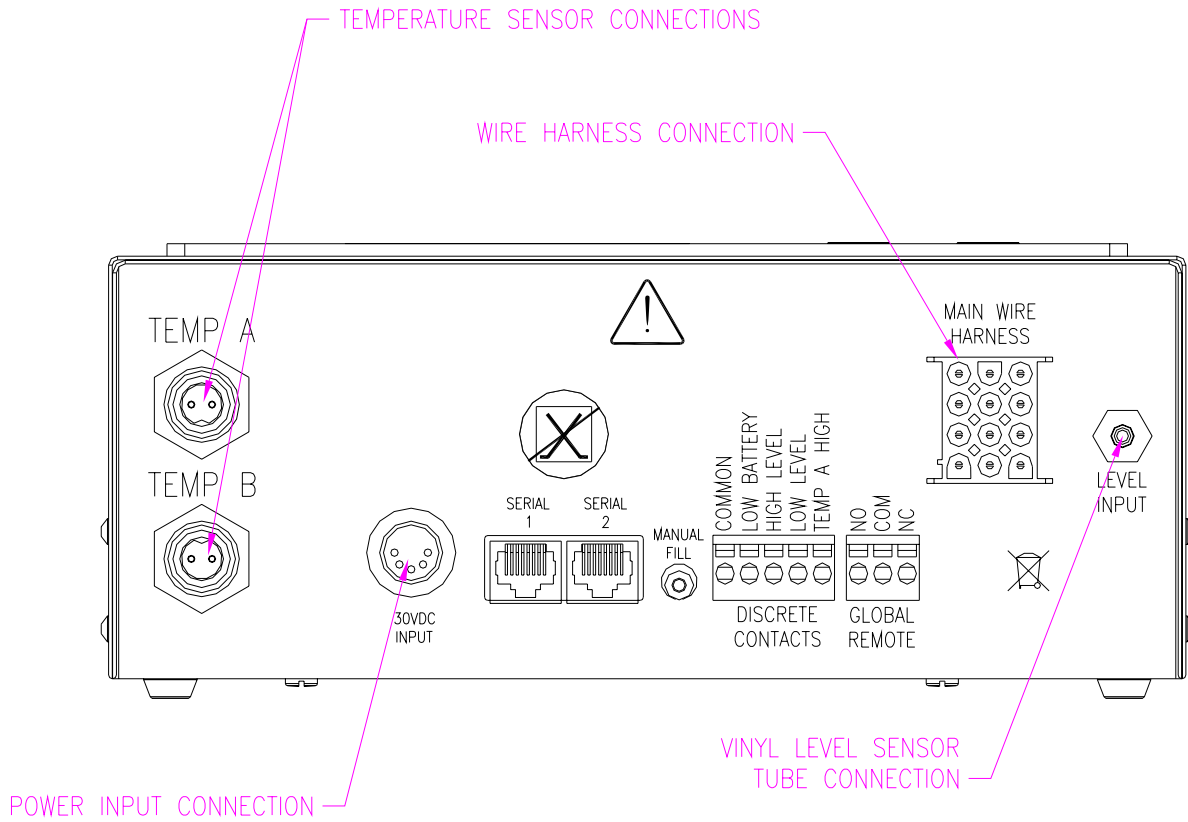
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**TEC3000. It provides 24VAC output to the TEC2000 controller, and may damage the new TEC3000 controller.**

3. Disconnect wire harness, temperature sensors, and tubing from the controller.
4. Remove the existing controller and mounting bracket from the freezer.
5. Remove the controller from the bracket.
6. Install the new controller on the bracket.
7. Re-install the mounting bracket on the freezer.
8. Connect the new adapter harness to the base of the controller. Reference Figure 1 and Figure 2
9. Plug the phoenix connector from the existing wire harness into the inline phoenix receptacle on the adapter harness.
  - 9.1. Reference the pin configuration shown in the table of Figure 2, and make sure that the existing harness connector is plugged in correctly. The receptacle on the adapter harness is 10 pin to accept the existing 8 pin connector in addition to the 2 pin battery backup connector if so equipped. So be careful not to misalign the connections.
  - 9.2. If the freezer is equipped with a battery backup, check the polarity of the existing 2 pin connector and confirm that it matches the polarity of the adapter harness before plugging it in.
10. Connect the new temperature sensors to the base of the controller. Reference Figure 1
11. Connect the level sensor tube to the hose barb on the base of the new controller. Reference Figure 1
12. Connect the 30VDC input cable from the power supply to the receptacle on the base of the new controller. Reference Figure 1.
13. Connect the mains power cord provided to the new power supply.
14. Follow the instructions in the new quick start manual provided for startup check out and programming.

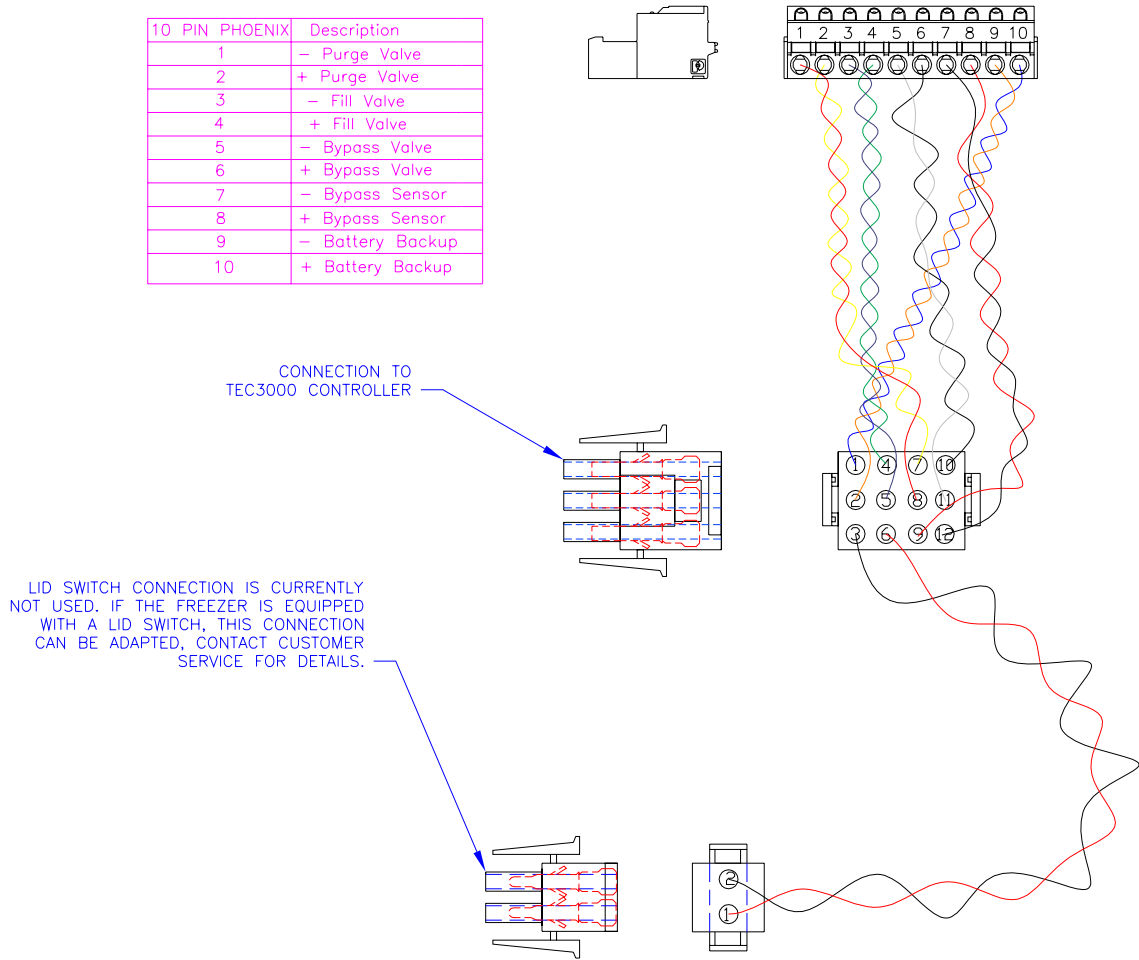
For additional technical information on the new TEC3000 control system, contact Chart customer/technical service at 770 257-1299 or 800 482-2473 and order the technical manual P/N 13289499.

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**Figure 1, TEC3000 CONTROLLER CONNECTIONS**

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**Figure 2, ADAPTER WIRING HARNESS.**