



MVE Tech Tips



October, 2007

Stand Alone TEC 2000

Chart is starting to run low on TEC 2000 parts. Because we are phasing the TEC 2000s out and replacing them with TEC 3000s, when the parts are gone, we will not be able to order anymore.

We currently have 19 TEC 2000 stand alone controllers with numerical displays (PN 12997231) left in stock. We have no rear panel TEC 2000 (PN 10717486) for cabinet units available, no numerical front panels (PN 10713338) and only 4 of the symbolic front panels (PN 11857659) left.

If a front panel breaks and the customer doesn't want the symbolic display, they will need to replace the entire controller. When we run out of replacement TEC 2000 related parts, the customer must order one of the TEC 3000 upgrade kits listed below.

Description	Part Number
Stand alone upgrade kit for LSCI to TEC-3000	13319491
Stand alone upgrade kit for MDC to TEC-3000	13319512
Upgrade kit cabinet LSCI to TEC-3000	13319475
Upgrade kit cabinet MDC to TEC-3000	13319459
USB converter kit USB to RS-485	13376947

Tank Switcher

Gordineir has developed a tank switcher to work with the TEC 3000, but it generally does not work properly. When connected to the freezer, the tank switcher causes the freezer to fire the hot gas bypass solenoid at all times, whether the freezer needs to fill or not. This causes liquid nitrogen to pour onto the floor of the facility. When the Gordineir equipment is disconnected, the freezer functions normally.

This tank switcher splices into the wiring of the TEC 3000 in two places. The first place is at the bottom of the TEC 3000 between the controller and the 12 pin connector. The second place is inside the controller between display panel and the RJ45 connector that plugs into the display.

Please be aware that this version of Gordineir's tank switcher does NOT function properly with our freezer. **If a Gordineir switcher has been hooked up to one of Chart's TEC 3000 units, the customer voids the 2 year warranty of the controller.**

TEC 3000 Backwards Compatible

The TEC 3000 is fully backwards compatible with the TEC 2000. While the TEC 3000 has some additional features, it communicates in the same manner as the TEC 2000. In the advanced menu in the TEC 3000, you will see settings for COM1 and COM2. Change the settings to your desired COM port to the proper speed and mode to communicate with your control system. The available settings are 9600 N81, 9600 N82, 19200 N81, and 192000 N82. TEC 2000s generally used 9600 N81.

The other setting for the COM port allows you to change between ASCII, OFAF, Modbus and PRINTER. If the system queries the controller, then ASCII is the correct setting. The ASCII query commands have not changed from the TEC 2000 to TEC 3000 regarding level and temperature.

Timed Filling

One of the many new features introduced with the TEC 3000 is Timed Filling. This option allows the user to schedule the frequency, start time and duration of fill cycles. Even when Timed Filling is activated, the controller will still initiate a fill cycle whenever the low level setpoint is reached and terminate a fill cycle whenever the high level setpoint is reached.

Instructions for activating timed filling

1. PRESS "SETUP"

Enter your password and press "ENTER" to continue.

2. PRESS "SETUP"

Until the display reads "Advanced Settings".

3. PRESS "ENTER"

The display should read "Advanced Fill Menu".

4. PRESS "ENTER"

The display should read "Timed Fill". Use the up/down arrow keys to select "ENABLED" and press "ENTER" to save the selection.

5. PRESS "SETUP"

The display should read "Timed Fill Frequency". Use the up/down arrow keys to change the "Timed Fill Frequency" to the desired frequency and press "ENTER" to save the selection.

6. PRESS "SETUP"

The display should read "Timed Fill Start". Use the up/down arrow keys to select the hour in which the timed fill will start and press "ENTER" to save the selection.

7. PRESS "SETUP"

The display should read "Maximum Fill Time". Use the up/down arrow keys to select the desired maximum fill time and press "ENTER" to save the selection.

Planer Data Logger

Planer has stopped shipping a 3.5" floppy disk containing the ShipsLog™ software with their Data-Loggers. Customers now need to download ShipsLog™ from the Planer Web site. The instructions for this are in MA008019 SHIPSLOG SAFETY INSTRUCTIONS Issue 4, which should be included with the loggers. The instructions you require are on page 3 section 2.1, *Installing the Software*. Planer's website is www.planer.co.uk.

New Tool for Your Chart Toolbox

A Pin Extractor is a helpful addition to your Chart/MVE toolbox. This will be very helpful especially with the TEC 3000 connectors.

The .084" pin extraction tool is used for removing crimped wires from the TEC 3000 12 pin adapter plug connector. Although Chart does not sell these, most local hardware or electronic stores will carry these. If you cannot locate this tool, please call Chart Technical Service and they can direct you to an online supplier.

Customer/Technical Info

For ordering information contact

Customer Service:

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Europe: +44 1344-403100
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