

Dairy Tech, Inc.
Service Manual: DT Platinum

Operator Manual

DT-Platinum Series

DT30W & DT30W-EU

Dairy Tech, Inc.

Service Manual: DT Platinum



MADE IN U.S.A.

Dairy Tech, Inc.

Service Manual: DT Platinum



CE Declaration of Conformity

352 N Shores Circle
Windsor, Colorado 80550

Industrial Milk Pasteurizer

- DT30W:** ~ 120 V, 1 ph, PE, 50/60 Hz, up to 10 A
 (~240 V, 2 ph, PE, 50/60 Hz, up to 50 A heater circuit)
- DT30W-EU:** ~240 V, 1 ph, PE, 50/60 Hz, up to 10 A
 (~240 V, 1 ph, PE, 50/60 Hz, up to 30 A heater circuit)

Year of Issue:	July 23, 2010
Applicable Directives:	<ul style="list-style-type: none"> • 2006/95/EC - Low Voltage Directive - Laws for electrical equipment within certain voltage limits • 89/336/EEC - EMC Directive - Laws relating to electromagnetic compatibility
Applicable Standards:	<ul style="list-style-type: none"> • EN 61010-1: 1998 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements • EN 55011: 1998 Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment. (Group 2, Class A) • EN 61000-6-2: 1999 Electromagnetic Compatibility – Generic Standards – Immunity for Industrial Environments

NOTE:

1. This equipment must be installed and used in accordance with the conditions of use described in the user manual.
2. If this equipment is modified without the permission or direction of Dairy Tech, this declaration is no longer valid.
3. EMC compliance is only for that equipment listed above. If this equipment is expanded, modified or installed into a larger system, the user is responsible to guarantee the EMC compliance of the overall system. If this equipment is used with external components, the user must insure that EMC and safety requirements are not violated.
4. All equipment is HiPot and Ground-bond tested prior to final packaging.

Declared Model Numbers: **DT30W** **(30 gallon Internal Heater)**
 DT 30W-EU **(30 gallon Internal Heater)**

Testing performed by :

Aldous Consulting
2845 Willow Tree Ln

Dairy Tech, Inc.

Service Manual: DT Platinum

Lab: 1625 Sharp Point Dr
Fort Collins, CO 80525

Scott Aldous - Proprietor

Thank you for purchasing a Dairy Tech, Inc. DT Platinum Series Pasteurizer. Your satisfaction with this product is very important to us. This guide will help you understand how your pasteurizer operates, and how to get the most benefit from it for you and your dairy operation.

Table of Contents:

Introduction

- Important Disclaimers
- Table of Contents
- Welcome to Dairy Tech, Inc.
- Product Warranty & Registration

Receiving your Pasteurizer

- Receiving your Pasteurizer
- Important Safety Instructions

Installation and Operation

- Mounting the Control Panel
- Attaching Optional Leg Kit
- Choosing a location
- Connecting Optional Hoses
- Electrical Requirements
- Lid Assembly/Storage

External Fuse Board

Initial Start-Up of the Unit

- System Operation and Use of Pasteurizer
 - Cycle options
 - Setting the Clock
 - Delayed Start Options
- Filling and Emptying the Milk Pot
- Heater Maintenance
- Cleaning the System

Quality Control and Milk monitoring

Heater Reservoir Instructions

Trouble Shooting

Dairy Tech, Inc. has provided this use and care guide to assist you in the assembly, installation, and maintenance of your DT Platinum Series Batch Pasteurizer (the "Pasteurizer"). Serious injury and even death to persons and livestock can occur from improper installation and use of the Pasteurizer. Serious property damage can result from improper installation and use of the Pasteurizer.

DAIRY TECH, INC. RECOMMENDS THAT INSTALLATION OF ANY ELECTRICAL, MECHANICAL, GAS OR PLUMBING DEVICES REQUIRED FOR THE INSTALLATION, OPERATION AND MAINTENANCE OF THE DAIRY TECH PASTEURIZERS BE DONE ONLY BY QUALIFIED INDIVIDUALS.

It is your responsibility or the responsibility of the electrician, plumber or other qualified installation expert to obtain all necessary permits and certifications required by your town, county, state or other jurisdiction before installation of the Pasteurizer. It is your responsibility to read and understand the operational requirements of the pasteurizer before using it and to observe all safety precautions. It is also your responsibility to see that your personnel are properly trained to operate and maintain the Pasteurizer.

DAIRY TECH, INC. PROVIDES YOU WITH INSTRUCTIONS AND WARNINGS IN THIS USE AND CARE GUIDE, BUT WE ARE UNABLE TO COVER ALL POSSIBLE CONDITIONS AND SITUATIONS THAT MAY OCCUR IN YOUR DAIRY OPERATION. IT MUST BE UNDERSTOOD THAT COMMON SENSE, CAUTION AND CAREFULNESS ARE FACTORS WHICH CANNOT BE BUILT INTO THE PASTEURIZER. THESE FACTORS MUST BE SUPPLIED BY THE PERSON(S) INSTALLING, MAINTAINING OR OPERATING THE PASTEURIZER.

Under no circumstances is Dairy Tech, Inc., its directors, officers, shareholders or employees responsible for damage to property or injury to persons or livestock resulting from the improper installation or use of the Pasteurizer. Installation by an unqualified individual and improper use and improper maintenance may also void any equipment warranty that Dairy Tech, Inc. offers.

This use and care guide is based on information and data considered to be accurate; however, no warranty is expressed or implied regarding the accuracy of the information or data herein or the results to be obtained from the use of this data or information.

THIS PASTEURIZER IS INTENDED TO BE USED IN THE MANNER DESCRIBED IN THIS USE AND CARE GUIDE. IT IS NOT INTENDED TO PASTEURIZE MILK OR OTHER GOODS FOR HUMAN CONSUMPTION.

Dairy Tech, Inc.

Service Manual: DT Platinum

Please read this guide carefully and thoroughly before installing and operating the pasteurizer.

If you believe the pasteurizer is operating incorrectly, please refer to the trouble shooting guide included with these instructions before calling our service department. If you still have questions, contact your local representative or call 1-866-384-2697 and we will help you to address your needs.



Caution: Important Information



Warning: Hot Surface



High Voltage Warning

Did you know?

Dairy Tech, Inc. offers consultations with an independent Dairy Veterinarian at any time. If you have questions regarding calf health issues or other veterinary related topics, we would be glad to organize a conference call for you to discuss these. On site visits are also available to more thoroughly investigate any problems you may be encountering with calf health.

For your safety, the recommendations and information in the manual must be followed to minimize the risk of serious burns or electrocution, as well as to prevent property damage, personal injury or death.

We recommend professional installation by qualified plumbers and electricians familiar with such devices

If you are burned by the heating coil, hot water, steam or hot milk: Contact a physician or other medical personnel for expert advice, or go to an emergency treatment facility.

Do not feed pasteurized milk to calves without first cooling it back down to a minimum of 110°F (43°C). Milk hotter than 110° can cause severe burns to the calves.

Product Warranty

This product is warranted to be free of manufacturing defects. For up to 18 months from the date of purchase, all parts will be covered by a free replacement guarantee not including shipping. **Electric heating elements are not covered by this warranty** as the water supply is the responsibility of the operator. This warranty is intended for equipment in use under normal operating conditions and does not cover damages incurred by improper use. Determination of covered defects, damages or repairs is at the discretion of Dairy Tech, Inc. This warranty covers only the cost of replacement parts at Dairy Tech, Inc. current pricing. Service is not covered by this warranty.

Product Registration

If this product was purchased directly from Dairy Tech in Windsor, CO, it has already been registered and no further action is required. If the product was purchased by a distributor or other representative, please call Dairy Tech, Inc. at 866-384-2697 within 10 days to register the product. Failure to do so may result in a decreased or voided warranty period for your unit. When calling, please have the serial number which can be found on the back side of the control housing or back panel.

You may also register on-line at www.dairytechinc.com where you can “Contact Us”, fill in your information and in the notes type the product model and serial number and the word “register”.

Receiving your pasteurizer

Use care when unpacking your DT Platinum Series pasteurizer. It will have arrived in one box or crate. Please make a note of any cautionary labels that are used on the carton suggesting orientation, where to cut with a knife, fragile, etc.

Important Safety Instructions

Warning:

To reduce the risk of electric shock, burns, serious injury or death to persons when using the Pasteurizer, follow these basic precautions:

1. Read all instructions before using the Pasteurizer.

Dairy Tech, Inc.

Service Manual: DT Platinum

- Do not turn on the pasteurizer without first purging the heaters and filling the heater reservoir.
- Always disconnect the electrical power before attempting service. Both power sources must be disconnected before the cover is removed for repair.
- Do not allow children to operate or play around the Pasteurizer. Close observation of children is necessary when the unit is used with children nearby.
- Do not reach into the Pasteurizer when the power is on and the paddle is turning as this can cause serious harm.
- Hot Surfaces include the brass plumbing fixtures, electrical fixtures, hoses, heater body, milk cabinet surfaces, draining water and the milk or colostrum. Touching these surfaces during operation may result in severe burns.
- This equipment is designed to operate in an ambient temperature range of 35°F (2°C) – 100°F (38°C), altitude up to 2000m, maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% RH at 40°C, for indoor use only.
- Do not try to change the settings in the pasteurizer controller without consulting a technical expert at Dairy Tech, Inc.
- Do not repair or replace any part of the Pasteurizer, or attempt any servicing unless specifically recommended in the trouble-shooting portion of this manual. Any modifications made to the unit beyond these instructions will void all warranties.
- Always clean the unit immediately after each use, according to the instructions in the “Cleaning of your Pasteurizer” section of this manual. Build up of residue on the propeller or tank will decrease heating and cooling efficiency, as well as harbor potentially harmful pathogens.
- During the heating cycle, at **Figure 1** certain the Pasteurizer lid is seated on the pot of milk.
- Use the pasteurizer only for its intended purpose. **DO NOT** use for milk intended for human consumption as this product has not been approved for such use.
- Do not touch the tank of milk, motor, hoses or brass fittings while the unit is hot and working.
- Do not attempt to tilt the machine while it is full. It is extremely heavy and can cause severe injury to the operator and may cause failure of the support structures.
- To prevent severe burns, always allow the milk or colostrum to cool completely before handling or feeding to calves.
- The Pasteurizer must be electrically grounded. **DO NOT** modify the plug that is provided with the Pasteurizer; if it will not fit the outlet, have an electrician install a proper electrical outlet.

- The pasteurizer must be installed on a level surface to evenly distribute weight to all the support structures.

Installation:



Warning:

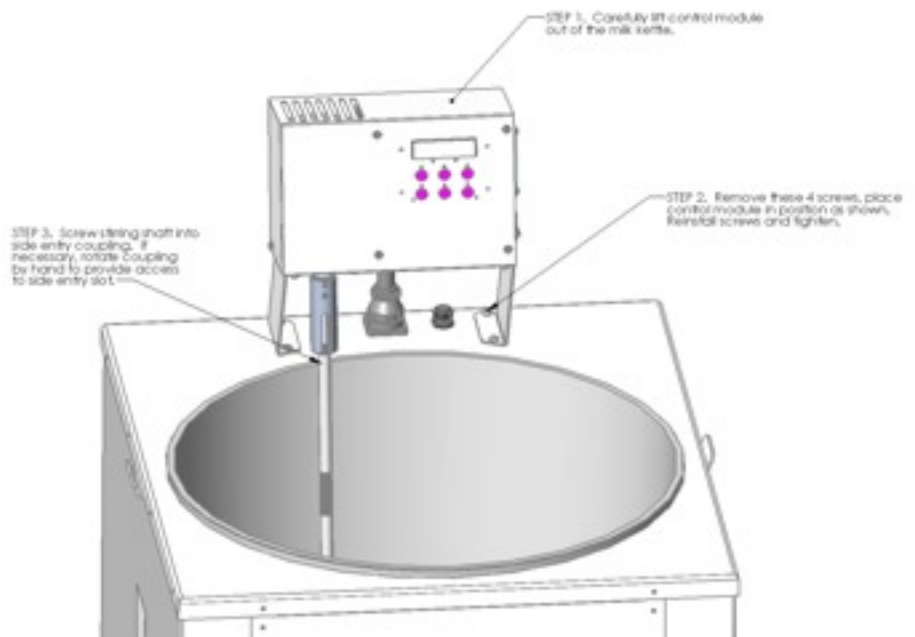
Install the unit according to the installation instructions. To reduce the risk of fire, electric shock, serious injury or death to persons, read the important safety instructions before operating this Pasteurizer.

Before using this unit for the first time, wash out the inside of the drum with hot soapy water and rinse clean.

Step 1: Mounting the Control Panel

The pasteurizing unit is typically shipped with the unit fully assembled. In some instances, mounting of the control box will be required. Gently remove the controller from the milk pot. Four mounting holes are provided on the lid of the unit. Using the bolts that are provided, attach the control unit in an upright fashion to the top lid of the pasteurizer. The electrical connections must also be made by inserting the male and female sides of the connector together. See Figure 1.

The motor shaft must also be attached by inserting it through the side entry of the coupler, followed by right-hand threading



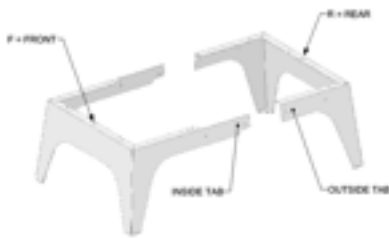
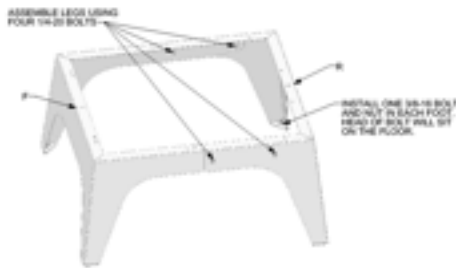
Dairy Tech, Inc.

Service Manual: DT Platinum

of the shaft into the coupler. The shaft can be gripped at the knurling located midway on the shaft.

Step 2: ATTACHING THE LEG KIT

Some units will ship with the leg kit removed for shipping. The leg kit can be assembled using the enclosed hardware kit and instructions, so that the pasteurization unit is mounted on top of the leg stand. Always be certain to build and position the unit on a level floor, with the risers placed in the rear. See Figure 2 for further instructions.



Step 3: Choosing a Location

Criteria for Selecting a Location

- Choose an indoor spot that will be protected from the elements. Extreme heat will allow milk spoilage and freezing temperatures will damage the unit.
- Cold water is required to be connected to the unit for water cooled models, but a nearby hot water source is also necessary for proper cleaning.
- Floor drains will allow for proper cleaning and rinsing of the product as well as to clean up milk spills.
- Power requirements are 120vac 15 amp circuit breaker rated for use as branch circuit protection with a GFCI (ground fault circuit interrupter) for the controls of the DT30W. 240VAC single phase 30 amp supply is required for the heater connection. For the DT30W-EU the 120vac is supplied internally by a step-down transformer so that it can be connected to a normal European 240vac outlet. In DT30W-EU Models, the heater connection is direct to the power source and should therefore contain a switch or other disconnect within reach of the equipment.
- Floor space requirements are approx 36" x 36", similar to a residential dryer or washing machine.
- Avoiding extremely drafty areas will improve heating efficiency of the unit.
- Always have 2 people lift and carry the unit grasping with both hands on the sides of the unit. The supports of the legs can be used for lifting or the handles mounted on the bottom sides.

Step 4: Connecting the Hoses for Water-Cooling

WATER-Cooled Units: This hose with factory ends supplies all the cold water to cool the product when pasteurization is finished. It can connect to any low pressure cold water source including a hose but it **MUST BE ON AT ALL TIMES DURING OPERATION**. Using the supplied hose, attach one end where indicated on the back of the unit, with the other end going to a regular hose bib supply. A pressure reducer is built into the unit and must be used. The water jacket is intended for systems with **15psi**. Install an additional water pressure reducer if necessary for high pressure systems.

WATER DRAIN: This black hose takes cold water out of the unit once it has absorbed heat during the cooling cycle. It should be directed to a drain, cistern, stock tank or other

Dairy Tech, Inc.

Service Manual: DT Platinum

collection system. Using the supplied clamp, connect one end to the hose barb labeled on the back of the unit if it is not already attached for you. **Do not connect the hose to another hose or to any system that can create back-pressure. This will cause damage to the cooling jacket and void the warranty.**

Once the unit is in operation, adjust the flow rate of cooling water to be steady but slow so the water can absorb the most heat without wasting water. High pressure and high flow rates will damage the cooling jacket of the system.



Step 5: Electrical Requirements DT30W

The standard electrical cord emerging from the back of the machine should be plugged directly into a 120vac grounded receptacle on a 15amp breaker. This circuit is rated at 3 amps. The heater power supply is rated at 20 amps and requires a 30 amp circuit breaker. Failure to meet these requirements will void the warranty and could result in serious damage to the unit, bodily injury or death. The receptacle should be fitted with a water resistant cover for added protection. **ALL CONNECTIONS SHOULD BE PERFORMED BY AN ELECTRICIAN OR OTHER TRAINED PERSONNEL.**

- Be certain to use a GFCI receptacle for the 120vac
- The receptacle should be sharing minimal usage with other equipment to avoid unexpected outages and tripping. The Pasteurizer cycle will reset if the power is lost and will resume automatically.
- The 120vac circuit breaker should be 15 amp. The circuit rating is 3 amps. A circuit breaker rated for branch circuit protection should be used.
- The heater power supply is rated at 20 amps. Do not install on circuit breakers greater than 30 amps.
- DT30W-EU Models must be installed with a switch or circuit breaker disconnect within reach of the equipment for power down, which should be labeled as such.
- DO NOT use an extension cord to operate the unit other than the one provided.
- Check your electrical system to make certain it is properly grounded to avoid the possibility of electrical shock.

HEATING ELEMENTS: The heater elements are replaced when necessary by removing the back panel after disconnecting all power to the unit. Electrical connections to the elements are removed so that a socket can be placed over the elements to unthread them. Deposits can be flushed from the heater

reservoir at this time. New elements should be properly sealed before replacement. Reconnect the wires.

In addition to the electrical requirements of the DT30W and DT30W-EU, the 30 gallon system also requires 240vac for the heater. The 240vac supply for the electric heater emerges from the back of the equipment. A 6' length is supplied for termination into an appropriate outlet. The gauge of wire selected for L1 and L2 are very important and will depend on the distance from the panel box and expected amperage. The 30 gallon heater at full capacity will draw 18 amps on a single phase 240 vac system. 30 amp breakers are sufficient in all instances. Always consult a certified electrician.

The Pasteurizer is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be inserted into an appropriate ground-fault outlet that is installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the plug provided with the Pasteurizer; if it will not fit the receptacle, have a proper outlet installed by a qualified electrician.

The connections for the DT30W heater are as follows: White is a common neutral connection. Red and Black are leads 1 & 2 which should carry 120vac each. Green is a ground to earth.



DT30W-EU

This European Model is equipped with a built-in step-down transformer to provide the necessary 120vac supply for control function. Use the provided Euro style plug to connect to standard 15amp 240vac supplies. The heater requirements are the same for this model but will require a different connection scheme using single phase supply. **THIS SHOULD BE PERFORMED ONLY BY LICENSED ELECTRICIANS.**

Connections will be L1 neutral and L2 240vac supply with proper earth ground.

WARNING: DT30W and DT30W-EU
DO NOT wire to 3 phase connections or 480vac.
Pasteurizer controls are 120vac, 15 amp, 50-60Hz
Heater **DT30W** 240vac, 30 amp, dual phase, 50-60Hz
Heater **DT30W-EU** 240vac, 30A, single phase,
50-60Hz

Step 6: Lid Storage

Dairy Tech, Inc.

Service Manual: DT Platinum

- The milk will not cool down at the end of the timing.
- The display will indicate temperature and time, and display “END” when complete.
- COOL ONLY is depressed when the milk has already been pasteurized completely, but is not yet cool enough to feed or handle.
 - The display will indicate temperature and then “END” when complete.
- UP and DOWN keys are used during programming or alterations to the settings.
- REHEAT is used to warm the milk or colostrum back to a feeding temperature after it has been pasteurized and cooled or refrigerated. This is not a pasteurization cycle.
 - The temperature will be displayed until the set point is reached, at which time the unit will display “END” .
- An alarm will beep several times at the end of a completed cycle, and the display will indicate “END”.
- If the cycle has not completed properly within a preset window of time, the alarm will beep continuously and indicate an error on the display.
- If the display indicates other “ERRORS”, look in the trouble shooting guide for further information.
- To power down the unit, turn off the red toggle switch or unplug the unit from the wall

To STOP Pasteurizer cycle: Pause by pressing the button used to start the cycle (Start, Heat Only or Cool Only), or flip the toggle switch off, or unplug the unit from the receptacle.

To restart from the Pause position, simply press the same button again and the cycle will resume. If power is interrupted, the cycle will resume in the cycle it was in when the power was interrupted or failed. The unit will attempt to restart even if manually turned off during a cycle. To reset the unit, hold in the lit LED button for 4 seconds to return to IDLE. For example, if it continues to return to the full cycle, holding in the START button for 4 seconds will first pause and then cancel the cycle and return the unit to IDLE.

SETTING THE CLOCK

- Power the unit on so that “IDLE” is displayed on the screen of the controller.
- Depress the START and REHEAT buttons at the same time and hold for several seconds. The real time clock will be displayed.
- Use the UP or DOWN buttons to change the time.
- Depress the HEAT ONLY button to accept the changes and return to the “IDLE” mode.

DELAYED START

- a. Press either the START or HEAT ONLY button so that the word “NOW” is displayed.
- b. Then press the UP key once or twice to choose Delay1 or Delay2.
- c. By pressing the START key once again, the clock will appear and the UP and DOWN keys can be used to set the time you wish the cycle to begin.
- d. Once the time is set, press START again and the screen will again display “delay1 or delay2”.
- e. The unit will now come on at the time you have set.
- f. The two settings are to allow for an AM and PM setting that it will revert to unless a change is made.

Filling and Emptying the Milk Drum

While some dairies may elect to have the milk line pump directly into the pasteurizer, most dairies will be dealing with volumes that can be dumped into the unit from milk cans or collection buckets. Try to avoid unnecessary splashing and provide a sturdy step for short employees who may have trouble comfortably dumping milk into the unit.

To remove the milk: Open the spigot to fill buckets, bottles or storage bags. **DO NOT TILT THE EQUIPMENT TO GET MILK OUT!** This may cause undue stress on the support system and could potentially damage the unit or harm the operator. Any residual milk or colostrum can easily be wiped or brushed from the unit

Maintenance of the DT30W and DT30W-EU Water Heaters

These units are equipped with an electric heater that is immersed in a water bath. The water reservoirs are suspended on the right side of the unit. The water should be changed every 2 months or when dirty. Build up of deposits from water can decrease heat efficiency and increases the likelihood of premature heater element failure. Changing the water often will prevent this. Use de-ionized or distilled water when possible to reduce the amount of sediment and deposits forming on the elements. The maintenance is simple and inexpensive as the unit requires 4-6 quarts of DISTILLED WATER from your local grocery store. The following instructions go into more detail about how to maintain the heater, how to change the water and how to change a heating element if necessary.

SEE THE ATTACHED INSTRUCTIONS FOR HEATER MAINTENANCE FOLLOWING THIS SECTION

Dairy Tech, Inc.

Service Manual: DT Platinum

Energy and Time Saving Tips

- Pasteurize the milk as quickly as possible after collection to take advantage of the heat already in the milk to improve energy efficiency. This will also prevent the immediate heavy growth of bacteria in this fresh product.
- Avoid placing the unit in an area of high drafts to prevent convection heat losses while pasteurizing.
- Colostrum can be stored in the refrigerator for an extended period of time if it is handled cleanly once it has been pasteurized. Filling freezer bags allows for a disposable system that makes it easy to keep track of dates and colostrum quality. These bags also allow the product to be warmed more quickly when they are needed for the newborn.
- Do not dip bottles into the tank for filling as this will likely contaminate the product with bacteria from the bottom and sides of the bottles.
- Always wear nitrile or latex gloves when handling the milk or colostrum to prevent the spread of pathogens from the skin surface.

CLEANING THE SYSTEM (be sure the equipment is powered OFF)

- With the stir motor stopped, raise the lid from the milk pot and place it on the hook on either side of the unit after thorough cleaning in a sink.
- Clean the following milk surfaces with hot water and an appropriate disinfectant. Go over all the exposed surface areas with the included scrub brushes and appropriate disinfectants. A mild abrasive pad may be used to remove any residue on the following components:
 - Motor shaft, coupler and propeller (shaft can be unthreaded for cleaning by grasping the coupler with the slot facing forward and unthread the shaft by grasping the knurling mid shaft for a better grip.)
 - Thermocouple well at bottom of pot
 - Underside of the pasteurizer lid
 - Milk tank and drain spigot/valve
 - accessory spigots, pitchers or hoses
- Stubborn residues may be cleaned with a scour sponge if necessary. Avoid the overuse of acids as they may corrode some of the brass or aluminum parts on the equipment. Follow manufacturers handling recommendations for all chemicals.

When Service is Required

If you purchased the Pasteurizer from an authorized dealer, contact them directly with inquiries or repair questions. For prompt service, work through the troubleshooting guide in this manual to give an accurate description of the problem.

Repair by an unauthorized service technician will void the warranty.

www.dairytechinc.com

Warning:

The aluminum and stainless steel drums and lids can cause severe burns if handled before the product is completely cooled. Always finish the cooling cycle before handling the milk. Grasp the lid by the handles and do not handle the milk or colostrum unless it has cooled.



Time & Temp for proper pasteurization:

Milk 145°F(63°C)/30 minutes or 161°F(72°C)/30 seconds
Colostrum 140°F (60°C)/ 60 minutes

Quality Control and System Monitoring

The following recommendations should be carried out when the system is first installed and then on a monthly schedule to make certain that the pasteurization process is working adequately.

1. Follow all instructions for proper installation by thoroughly reading the manual.
2. Use quality milk and colostrum in the machine. The process can be overwhelmed if there are too many bacteria to begin with.

Dairy Tech, Inc.

Service Manual: DT Platinum

3. Handle the milk cleanly after pasteurization to prevent recontamination.
4. Utilize the Dairy Tech Milk Test Kit to send a sample to the independent lab for milk quality testing.
5. Verify display temperatures periodically with a second thermometer to be sure that the displayed reading matches closely with a trusted calibrated source.
6. Additional milk test kits are available for order at www.dairytechinc.com

READ THESE INSTRUCTIONS BEFORE POWERING THE UNIT!

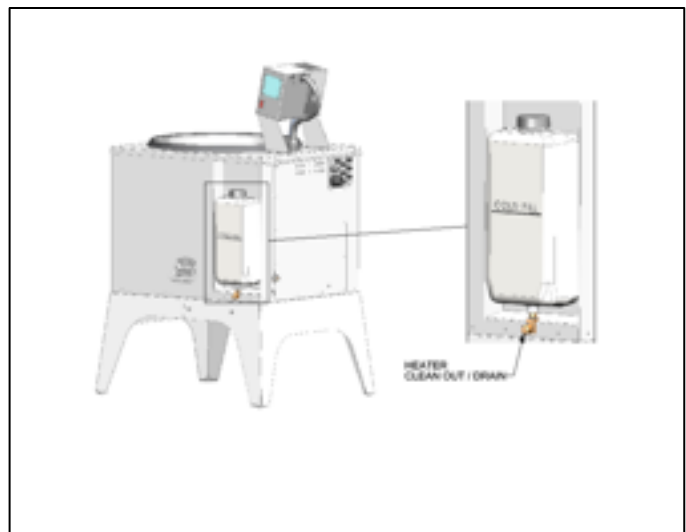
Installation of Hot Water Reservoir Tank

1. The water tank is used as a reservoir for your electric water heater that is the heat source for the unit. The water tank must be installed before any power is applied to the system. **DO NOT TURN ON THE PASTEURIZER UNTIL THE WATER TANK HAS BEEN INSTALLED, FILLED AND TESTED FOR LEAKS ... FAILURE TO FOLLOW THESE INSTRUCTIONS WILL CAUSE THE HEATING ELEMENTS TO BURN UP AND MAY VOID YOUR WARRANTY.**
2. In most instances, the water tank is fully connected and installed on the right side of the machine. If not, the hose connections are exposed for simple attachment and hanging on the side of the unit by the provided hooks.
3. If the water lines are not connected, use the included clamps to connect the ½" ID line to the barb on the bottom of the water tank and likewise, attach the ¼" ID line to the barb on the top of the tank near the cap.

Plug in the connector to the float switch. This will allow the unit to shut down if the tank should develop a leak or otherwise run dry of water. To test the connection for the float switch, plug in the 115vac plug and power on the red toggle switch on the side of the control box. With the switch down (no water) the controller should not light up

or have power. Only when the float is up (adequate water level) should the control light up and indicate IDLE.

4. Fill the water tank to the fill level and check the system for leaks.
5. The unit is now ready to use. If the water in the tank builds deposits or needs changed, simply empty the tank when the pasteurizer is off and refill.
6. **De-ionized or distilled water** is recommended in the tank for best results to prevent corrosion or build up of residue in the heater but tap water will also be fine for short term use.
7. If the water level gets below the level of the float switch, power to the controller will be cut. Make a habit of glancing at the water level of the unit prior to each use and change the water every 4-6 weeks or as needed.



Dairy Tech, Inc.

Service Manual: DT Platinum

Trouble Shooting DT Platinum Pasteurizers

This guide is intended for use as a troubleshooting directive. All electrical tests and diagnostics should be performed only by those skilled in the electrical profession

All electrical testing and repairs should be performed by an experienced professional or technician trained in the electrical trade

Serious injury or death may result from improperly testing or handling this equipment

This unit contains HIGH VOLTAGE electricity that can cause serious harm or death



1. No power to the control panel
 - a. Check to be certain unit is plugged into 120vac outlet and that there is power at the outlet.
 - b. Be certain that breakers in panel box or ground fault receptacle are not tripped
 - i. If the breakers are being tripped, the system is likely being shorted to ground. Look for any blown fuses to indicate trouble areas and

consult the fuse layout for more detail. Have the system checked by a certified electrician before operating.

- c. Check the 15amp fuse (F1). Make sure there is 115vac to and through the fuse. If not, replace with appropriate fuse. **DO NOT REPLACE WITH OVERSIZED FUSES. (Part # AE-Fuse15)**
- d. Make certain that the float valve in the water heater tank is floating and that there is water in the tank. To protect the heating elements this float switch behaves as a shut-off in case the unit runs dry. It is wired through the transformer 24vac output. If the float is damaged or sticking, replace with **(Part # AE-Float)**.
- e. Check the rocker switch to see if it is lit when switched on. This should indicate that power is getting to the switch. If there is not 115vac leaving the switch through the black/yellow wire when switched on, the switch may need replaced **(Part# AE-Rocker)**
- f. Check the transformer (TX1) for proper voltages. The purple and grey wires should carry a 24-32VAC signal to the control. The black/brown and white/brown wires carry the 115VAC supply to the transformer. **(Part# AE-TXFR)**

Dairy Tech, Inc.

Service Manual: DT Platinum

- g. On the back of the control, make certain that the orange 15pt plug is securely plugged into the receptacle on the back of the controller.
 - h. The control is fused (F2) between the transformer and the control. Check the appropriate fuse to make sure power is getting to the control. (Part# AE-Fuse1).
 - i. The control (Part # E-Control) itself could be malfunctioning or internally damaged. This is only rarely seen. Call for assistance.
2. Milk does not heat and the heater is not hot.
- a. Is there power getting to the pasteurizer heater? Check the plug to make certain it is plugged into the wall. Check the incoming voltage to the contactor through L1 and L3. There should be 120vac on each line coming in. If not, check the breaker. The breaker should be 30amp. Contact an electrician to determine if a heavier gauge wire or larger breaker is necessary.
 - b. Is there power getting to the heater? Initiate a cycle and the contactor should make a loud “click” as it activates. Check to see if the 220-240vac is getting through the contactor and out of L1 and L3 on the bottom. If not, the contactor may need replaced.
- i. If the contactor does not click, check the 115vac leads at the A1 and A2 tabs (brown/white and white/orange wires) on the back top of the contactor to see if it is being signaled by the SS relay. If there is 115vac signal, but no activation of the contactor, replace the contactor (Part# AE-Contact)
 - ii. If no 115vac signal to the contactor, check the solid state relay K2. There should be a D/C signal though the yellow and orange colored wires to the relay and the LED should be lit when activated. 115vac is supplied to the relay through the black/green wire. Once signaled, there should be 115vac out of the red wire to the contactor. If not, replace the SS relay K2 (Part # AE-RelaySS)
 - iii. No D/C signal to the SS relay K2 through yellow and orange wires. Check the fuses for the control (F2). Check the orange plug on the back of the control. Call for service as the control output may be damaged and need replaced. (Part# E-Control)

Dairy Tech, Inc.

Service Manual: DT Platinum

- c. 240vac is getting to the heating elements but still no heat
Check for continuity through the heating elements. Elements can be temporarily replaced with standard thread-in heating elements from the hardware store. 220vac with the longest element possible is the best choice for temporary replacement. Order industrial replacement heating elements (**Part# AE-Element**).
3. Milk does not get to temperature but the Heater is hot.
 - a. There are two heating elements and it is possible that only one is operable. Check resistance on each element with the power off to determine if one needs replaced (**Part# AE-element**)
 - b. Make certain that the agitator motor is turning during the cycle. It should be on during heating, timing, and cooling cycles. Replace if it is not working. (**Part# AE-Motor**)
 - c. Check the bottom of the milk tank to make certain that it is being cleaned properly after each use. If there is milk build up or significant sticking, the unit is not being cleaned properly and heat transfer will be decreased, but more importantly, this is a prime opportunity for pathogens to grow.
 - d. Milk level is not high enough. The thermocouple needs to be fully covered in milk as it measures milk temperature at the tip. Also, too little milk will not allow optimal stirring which will decrease heat transfer and give false temperature readings.
 - e. Cold water is coming into the system. If there is a leak in the system, such as a leaking cold water solenoid valve, or the refrigerant coolant is pumping through the system during the heating cycle, the heater cannot keep up and the milk will not heat properly. Repair the leak or replace the valve (**Part #AP-Valve**)
4. Milk will not cool
 - a. At the end of the heating and time-out cycle, the cooling solenoid valve should automatically open and allow water to drain from the machine.
 - i. Make certain the discharge drain is not blocked, kinked or obstructed with back pressure of any kind
 - ii. Make certain the cold water supply to the unit is always on ... it is common to find that someone has shut the valve not knowing its importance.
 - iii. Make certain that the user did not initiate a “Heat Only” cycle after which the

Dairy Tech, Inc.

Service Manual: DT Platinum

- unit does not cool the milk automatically. Use the “Start” button to initiate full cycles.
- b. Check the cooling solenoid valve. The thermocouple temperature must be above 100F or above your coolT setting in the control for the cycle to initiate.
 - i. Is there power to the valve on the top receptacle inside the machine? If so, and it is not opening, replace the valve. (Part# AP-Valve)
 - ii. No power to the valve: Check the fuse marked Refrigeration-Circulation (F5). Replace if necessary and check for power to the fuse from the cube relay K3 via the black wire. There should be 115vac power supply to the top of the K3 through the brown wire. The 115vac signal from the control comes through the blue wire to open the relay. If the relay is powered, replace the relay or the base of the relay. (Part# AE-relay8 or AE-relaybase)
 - iii. If there is no 115vac signal to the relay from the blue wire, check the cold control fuse (F2) or the output from the control may be malfunctioning (Part# E-control)
 - c. Check the pressure reducing valve to make certain water is flowing through. This valve is extremely important to prevent excessive pressures in the cooling jacket and requires replacement before further use if is not working. (Part# AP-ValRed)
 - d. Refrigeration system does not seem to be working
 - i. Circulation pump may not be working. Look in the rear of the unit for pink coolant to flow through the clear fittings to see if the pump is working.
 1. Check for power to the pump top receptacle. If no power to the receptacle during the cooling cycle, trouble-shoot the same electrical issues at K3 as 4.b.ii above.
 2. The pump can be removed and tested by lowering the intake port into a bucket of water to see if it pumps. If it is powered but will not

Dairy Tech, Inc.

Service Manual: DT Platinum

- pump, replace with (Part# AP-Pump)
3. The coolant level may be too low for the pump to self prime or to continue to stay primed once it starts. Check the levels of coolant and add if necessary.
 - ii. The refrigeration units for DT10R and DT30R have a temperature control that is dialed in to keep the coolant temperature low. Check for power to the control which is located under the unit on the inside of the grill cover. If the unit is not on, check for power at the receptacle, check the refrigeration fuse F4 (Part# AE-Fuse10amp), and check the display on the temperature control (Part# AE-tempctrl).
 - iii. If there is no power to the fuse F4, check the cube relay K4. The power supply is through the brown wire. Power out is through the brown/white wire. The signal from the control is through the white/blue wire at position 8. If properly signaled but no power out, replace the relay (Part# AE-Relay8) or base (Part# AE-relaybase). If no signal, the control output may be damaged. (Part# E-control)
 - iv. If the compressor is running, the coolant level is adequate and the pump is circulating the coolant but still no cooling, call a certified refrigeration repair to investigate the compressor/condenser unit. (Part# AE-Condenser)
5. Error message appears: The display is on but is flashing an Error message.
 - a. If it shows only “ERROR” without a number, the unit has exceeded the set amount of time it thinks is required to complete the cycle and is indicating that the process should be monitored for problems. This setting is labeled “terr” in the E-type submenu of the controller and will likely be set for 3-5 hours depending on the unit size and whether refrigerated or not.
 - b. Check to make certain that the thermocouple terminal strip is plugged into the back of the controller inside of the control box. There may also be corrosion at a terminal, or a break in continuity of the

Dairy Tech, Inc.

Service Manual: DT Platinum

thermocouple system that is causing the error.

c. Error codes

- i. Error 1, Error 2 or Error 3: controller malfunction. Cycle the power off and then back on. The system may be too cold to operate. If the error persists, return the controller for replacement. (Part# E-Control)
- ii. Error 4: calibration error in the controller. Return the controller for recalibration or replacement.
- iii. Error 5 and Error 7: temperature sensor input 1 (milk) is incompatible with the controller, has lead wires improperly terminated (leads switched at the terminal) or is measuring a condition below the normal temperature range. Check the lead wires for t/c 1 and check the controller for proper t/c selection and parameters. Check all t/c connections to make certain they are making a good connection. See thermocouple diagnostics below for more information and troubleshooting procedures.

1. This is the thermocouple that travels from

the positions 1&2 on the back of the control down to the milk tank where it enters into the milk well that protrudes up into the tank.

- iv. Error 6 and Error 8: temperature sensor input 1 (milk) is incompatible with the controller, has lead wires improperly terminated (leads switched at the terminal) or is measuring a condition above the normal temperature range. Check the lead wires for t/c 1 and check the controller for proper t/c selection and parameters. Check all t/c connections to make certain they are making a good connection. See thermocouple diagnostics below for more information and troubleshooting procedures.

1. This is the thermocouple that travels from the positions 1&2 on the back of the control down to the milk tank where it enters into the milk well

Dairy Tech, Inc.

Service Manual: DT Platinum

- that protrudes up into the tank.
- v. Error 9 and Error 11: temperature sensor input 2 (heater) is incompatible with the controller, has lead wires improperly terminated (leads switched at the terminal) or is measuring a condition below the normal temperature range. Check the lead wires for t/c 2 and check the controller for proper t/c selection and parameters. Check all t/c connections to make certain they are making a good connection. The system may be too cold to operate.
1. This is the thermocouple that travels from positions 4&5 on the back of the control down into the cabinet where it enters into the hot water heater to monitor water temperature. Located in the front or rear of the machine between the heating elements.
- vi. Error 10 and Error 12: temperature sensor input 2 (heater) is incompatible with the controller, has lead wires improperly terminated (leads switched at the terminal) or is measuring a condition above the normal temperature range. Check the lead wires for t/c 2 and check the controller for proper t/c selection and parameters. Check all t/c connections to make certain they are making a good connection.
1. This is the thermocouple that travels from positions 4&5 on the back of the control down into the cabinet where it enters into the hot water heater to monitor water temperature. Located in the front or rear of the machine between the heating elements.
- vii. Error 13: ambient temperature around the equipment is too high or too low.
- viii. Error 14: Real time clock error. Not a fatal error but may require replacement if the clock is not able to be used properly for delayed

Dairy Tech, Inc.

Service Manual: DT Platinum

start function. (Part# E-control)

6. Temperature Display is erratic or incorrect.

- a. Troubleshooting the thermocouple system
- b. The thermocouples are polar sensitive and will yield erratic numbers or even move down in temp when the process is heating if they are wired in reverse. The unit may also flash an unusually high number and then immediately indicate END or begin to countdown because the unit thinks it has reached temperature. Make certain that purple or white leads are positive (+) and red leads are negative (-) at all junctions.
- c. The thermocouple rod itself could be damaged or kinked. To test this, unplug the thermocouple from the black plug on the back of the control. Make a u-shaped jumper with a paperclip and insert it into the plug. If the error goes away, the problem is in the respective thermocouple (Part # AE-tc-HTTC66-E-14U-2).
- d. The milk thermocouple occupies positions 1&2 on the back of the control. The water heater thermocouple occupies positions 4&5.
- e. The controller may be programmed to read the wrong

type of thermocouple. (This condition may allow the unit to operate but at temperatures that are different than what is displayed ... cross reference with a second thermometer if concerned about this rare occurrence and contact your dealer immediately to reprogram the control).

7. Milk is separated or congealed

- a. The most common cause for milk or colostrum to separate or congeal is acidification of the milk caused by two processes:
 - i. Fermentation of the milk by bacteria will cause the release of lactic acid and other acidic by-products resulting in a lower pH of the milk. This in turn allows it to separate. The heat of pasteurization will exacerbate this problem. To control this, cool the milk during holding stages or pasteurize the milk sooner after collection to prevent the start of fermentation.
 - ii. Acidic cleaners are not being rinsed from the system. Rinse properly before each use. Do not use acids to clean the aluminum parts as this can cause severe damage to the tanks and

Dairy Tech, Inc.

Service Manual: DT Platinum

- pose a safety risk for the employees.
- b. Thickened milk or colostrum that is stuck to the tank may be due to:
 - i. Improper stirring (make certain the propeller is moving during heating, time out and cooling cycles)
 - ii. Temperatures that are too high (rarely a problem since our units cannot superheat water).
8. Stir motor is not turning
- a. Check the fuse for the motor F7 (**Part# AE-fuse2**)
 - b. If the fuse is good, make certain that the wire to the motor has not been damaged or pulled out of the unit going to the control box motor housing or on the rear of the motor.
 - c. If there is power to the motor and it will not turn, replace the motor (**Part# AE-motor**)
 - d. If there is no power to the motor and the fuse is good, check the solid state relay K1. During heating, timing or cooling cycles, the red LED should be on at this relay indicating power from the controller. If this light is not on, check for a DC signal from the controller through the red and black wires and check fuses to the control. The output from the control may be malfunctioning, replace the control (**Part# E-control**).
- e. If 115VAC power comes into the SS relay K1 through the brown wire but does not go out through the black/red wire when the LED is on, replace the relay (**Part # AE-RelaySS**)
9. Delay start does not come on automatically
- a. Check the clock settings to make certain that the time of day is set correctly
 - b. Make certain that the steps for using the delay start are being followed exactly. The start button should be pushed a total of 3 times during a setup of the delay start mode.
 - c. The control output could be damaged. (**Part# E-control**)
10. Cycle starts automatically when toggle is switched on
- a. Your pasteurizer is equipped with a security feature that reminds it to come back on to its last unfinished cycle once power is restored after a power failure. This will also occur if someone shuts the unit off prior to completion of its assigned cycles, and the unit will automatically restart when the toggle switch or power is restored. To reset to IDLE, hold the START, HEAT ONLY, or COOL ONLY (whichever button is lit) button in for 3 seconds ...

Dairy Tech, Inc.

Service Manual: DT Platinum

let it go to pause and continue to hold in until back to IDLE.

11. Cooling solenoid valve will not stop running

- a. Shut off cold water supply and remove the 4 bolts into the body of the solenoid valve. Check for debris that may be preventing the diaphragm of the valve from reseating properly.
- b. The valve may need to be replaced if it is powering properly but not closing when the solenoid closes (**Part # AP-valve**)

12. Fuse and electrical schematic:

- a. DT10W and DT10R
 - i. F1 Main power supply
115vac 20A **Part# E-fuse20F**
 - ii. F2 Control protection
1A **Part# E-fuse1**
 - iii. F3 Cold valve or circ pump
2A **Part# E-fuse2**
 - iv. F4 Refrigeration
15A **Part# E-fuse15**
 - v. F5 Relay Fuse
1A **Part# E-fuse1**
 - vi. F6 Heater

- vii. F7 Stir motor
2A **Part# E-fuse2**
- b. DT30W and DT30R
 - i. F1 Main power supply 115vac 15A
Part# E-fuse15
 - ii. F2 Transformer
1A **Part# E-fuse1**
 - iii. F3 Cold valve/pump
2A **Part# E-fuse2**
 - iv. F4 Refrig/Accessory
10A **Part# E-fuse10**
 - v. F5 Ctrl/Refrig
1A **Part# E-fuse1**
 - vi. F6 Ctrl/Valve or pump
1A **Part# E-fuse1**
 - vii. F7 Stir motor
2A **Part# E-fuse2**
- c. DT30W-EU
 - i. Call to special order 2mm x 5mm fuses and fuse holders

13. Water or coolant is leaking from the cabinet

Dairy Tech, Inc.

Service Manual: DT Platinum

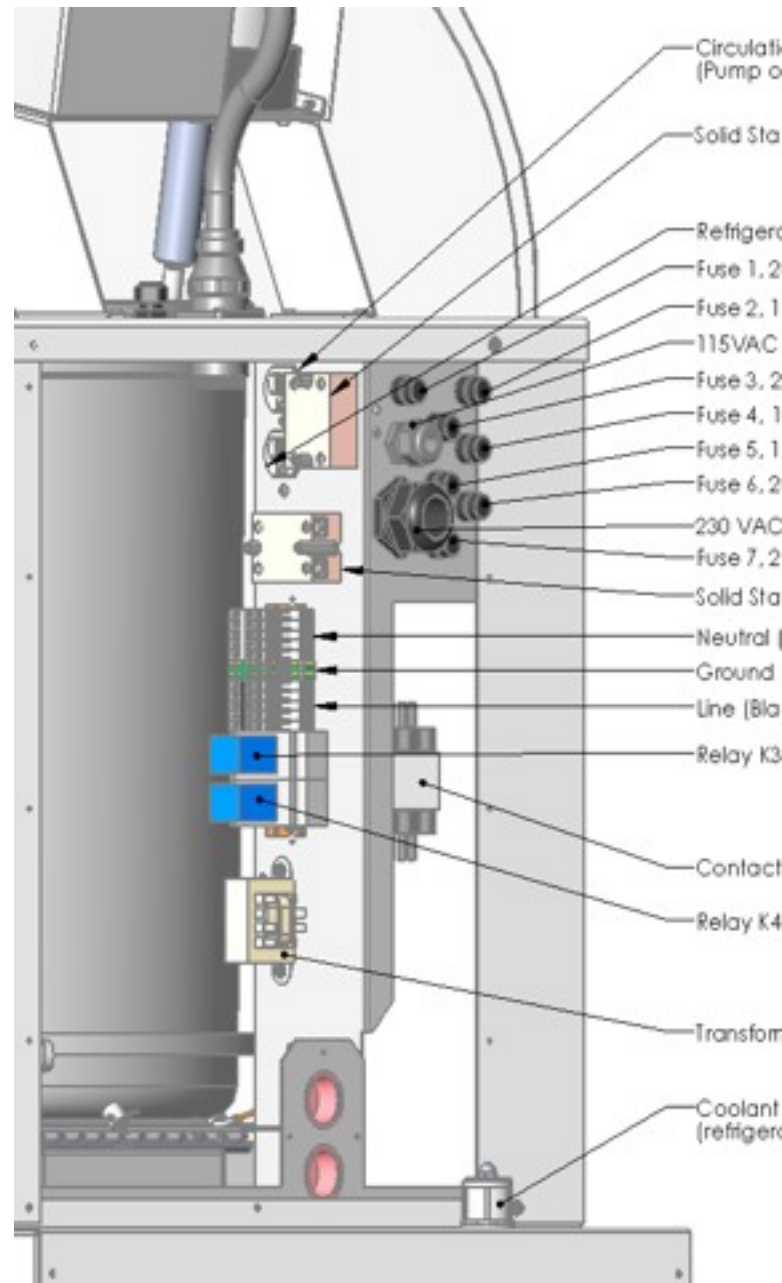
- a. Minor dripping may simply be due to condensation, especially in refrigerated units.
- b. A small leak may exist in the internal plumbing or around the edges of the water jacket. Call for advice in repairing leaks.
- c. The coolant tank in DT10R and DT30R is not sealed at the top; therefore, tipping of the unit or overfilling may cause coolant leaks to appear. This is not a major concern unless the coolant continues to leak and levels drop below operable cooling levels. Call for advice.

14. Milk tank is becoming pitted.

- a. Some of the tanks used in the Platinum Series are food grade aluminum tanks. These are the same quality found in all commercial kitchens. Exposure to milk acids or other harsh chemicals can result in eventual erosion of the tank. Do not use milk cleaning acids in the tanks. Like in a kitchen, mild detergents such as DAWN® dish soap and a scouring pad are adequate for all cleaning purposes if it is done after each use of the equipment.

15. List of components and respective relays:

K1 solid state relay	stirring motor	AE-relaySS
K2 solid state relay	Heater or heater contactor	AE-relaySS
K3 cube relay	cold water valve or circ pump	AE-relay8
K4 cube relay	refrigeration unit	AE-relay8
K5 contactor	220vac heater contactor	AE-contact
Receptacle top	cold water valve or circ pump	AE-recept
Receptacle bottom	refrigeration unit	AE-recept
Cube relay base	K3 and K4 relays	AE-relaybase



Dairy Tech, Inc.

Service Manual: DT Platinum

for parts list and ordering visit
www.dairytechinc.com

Dairy Tech, Inc.

Service Manual: DT Platinum

Accessing controller function

*** IMPORTANT WARNING ***

DO NOT ALTER SETTINGS IN THE CONTROLLER WITHOUT CONSULTING A DAIRY TECH REPRESENTATIVE ANY UNAUTHORIZED ADJUSTMENTS WILL VOID THE PRODUCT WARRANTY AND MAY LEAD TO SERIOUS HEALTH CONSEQUENCES FOR THE CALVES.

To access the controller main menu for milk/heater temperature settings as well as process timing, follow these steps:

Instructions for setting the Dairy Tech DT Series controller functions:

Number the keypad buttons across the top then bottom from left to right

1 2 3
4 5 6

1. Turn power on to the display so that it reads IDLE.
2. Press and hold **3** and **6** for 3 seconds until straight lines appear across the screen.
3. Press and hold **4** and **5** for 3 seconds to get into the menu screen .. eType should appear on the screen.
4. Press **1** to go into this menu. DO NOT go into other menus.
5. Use **3** and **6** to toggle up and down thru this menu. The code and its numeric value will flash back and forth between each other. The following 6 parameters are set here:
 - a. Setpt – pasteurization temperature to reach
 - b. Coolt – temperature milk will cool to
 - c. Mntr – maximum temperature of heater
 - d. tHeat – length of time at Setpt temperature
 - e. terr - time allotted for complete cycle before alarm sounds
 - f. rHeat- feeding temp to reheat milk to
6. Press **1** to select a parameter to change; the numeric value will be displayed.

7. Press **3** or **6** to raise or lower the value.
8. Press **2** to accept the change ... repeat steps 6-8 for any other changes.
9. Press **2** repeatedly until you are back to the idle screen and the changes should have been accepted.

Pasteurize Profile

Starting the Profile

The Pasteurize Profile can run four different modes, Full Mode, Heat Only Mode, Cool Only Mode and Reheat. Each of these modes can be started immediately or set to start at a programmed time. When the initial key is pressed (see description below) the display reads nOW. If the same initial key is pressed, the selected mode will start immediately. At the nOW display, the increment and decrement keys can be used to select between nOW and dELAY1 or delay 2. Initially at the dELAY display, if the same initial key is pressed, 12:00AM time will be displayed. The user may set the starting time by using the increment and decrement keys to adjust the time. When the same initial key is pressed, the control will remain in the Idle State (the display will now read delay1 or delay2), but will start the appropriate mode of the Pasteurize Profile at the time selected. This delay time will default to each time this option is selected, but can be changed each time as well.

Using the Start key (Key A) as described above will select the Pasteurize Profile in the Full Mode. When the Full Mode starts, the Pasteurize Profile will execute both the Heat Stage and the Cool Stage (first the Heat Stage and once it completes, the Cool Stage will begin).

Using the Heat Only key (Key B) as described above will select the Pasteurize Profile in the Heat Only Mode. When the Heat Only Mode starts, the Pasteurize Profile will execute only the Heat Stage.

Using the Cool Only key (Key E) as described above will select the Pasteurize Profile in the Cool Only Mode. When the Cool Only Mode starts, the Pasteurize Profile will execute only the Cool Stage.

Dairy Tech, Inc.

Service Manual: DT Platinum

Using the Reheat button will cause the product to go through a heat stage only to the temperature set in the E-Type menu. It will then shut off without cooling.

Heat Stage

When the Heat Stage is initiated, the heater (Output 1) is enabled to control heat to the setpoint (`setpt` parameter in the Equipment Type Submenu), the cooler (Output 2) will turn continuously off, and the motor (Output 3) will turn continuously on. Once the heater temperature sensor (Sensor Input 1) value becomes greater than or equal to the setpoint (`Setpt` parameter in the Equipment Type Submenu), an internal timer is started. The internal timer will be set to expire in a time interval equal to the `theat` parameter in the Equipment Type Submenu. Once the internal timer expires and if the Start key (Key A) was used to start the profile, the Cool Stage will begin. Else if when the internal timer expires and the Heat Only key (Key B) was used to start the profile, the profile will be completed.

Cool Stage

When the Cool Stage is initiated, the heater (Output 1) is disabled from controlling heat, and the cooler (Output 2) and the motor (Output 3) will turn continuously on. Once the heater temperature sensor (Sensor Input 1) value becomes less than or equal to the cool setpoint (`coolt` parameter in the Equipment Type Submenu), the cooler (Output 2) and the motor (Output 3) will turn continuously off, and the profile will be completed.

Pausing the Profile

If the Pasteurize Profile is in the Full Mode, a single press of the Start key (Key A) will pause the profile. An additional press of the Start key (Key A) will resume the profile running. If the Pasteurize Profile is in the Heat Only Mode, a single press of the Heat Only key (Key B) will pause the profile. An additional press of the Heat Only key (Key B) will resume the profile running. If the Pasteurize Profile is in the Cool Only Mode, a single press of the Cool Only key (Key E) will pause the profile. An additional press of the Cool Only key (Key E) will resume the profile running.

Canceling the Profile

If the Pasteurize Profile is in the Full Mode, pressing and holding the Start key (Key A) for 3 seconds will cancel the profile. If the Pasteurize Profile is in the Heat Only Mode, pressing and holding the Heat Only key (Key B) for 3 seconds will cancel the profile. If the Pasteurize

Profile is in the Cool Only Mode, pressing and holding the Cool Only key (Key E) for 3 seconds will cancel the profile.

Contact Dairy Tech, Inc.

Dairy Tech, Inc.
352 N. Shores Circle
Windsor, CO 80550

Phone:
1-866-384-2697
1-970-674-1888
1-970-686-5871 fax
Monday – Friday
7:00 a.m. – 6:00 p.m., MST

Web:
www.dairytechinc.com