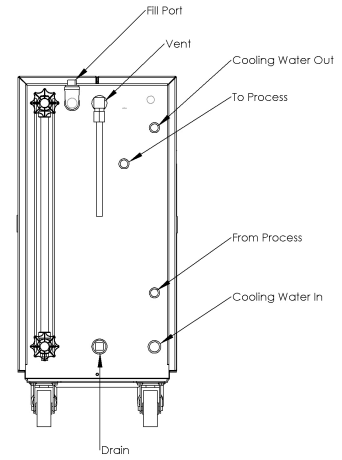


Quickstart Installation Checklist

(Refer to main manual for complete installation instructions).



1. Connect 3-phase power based on nameplate data.
2. Install properly sized plumbing between temperature control unit and primary processing equipment (supply and return).
3. Install properly sized plumbing between temperature control unit and cooling water supply and return. You must provide cooling water at 25 psig to 75 psig (172.4 kPa to 517.1 kPa/1.7 bar to 5.2 bar).
4. Ensure proper pump rotation. (The pump motor should be moving clockwise while looking at the motor fan end).



Unit Operation

(Refer to main manual and controller manual for complete operating instructions).

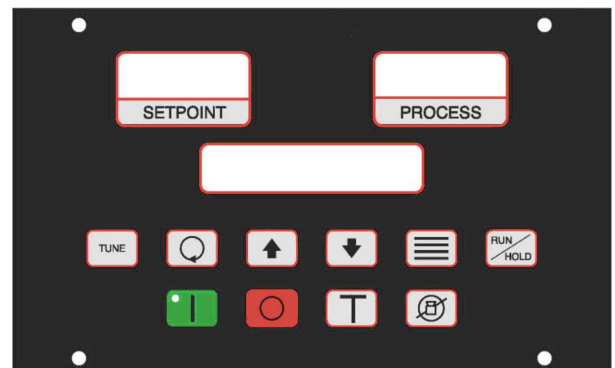
Start Up

1. Add fluid to the reservoir tank until the level is near the top of the sight glass.
2. Turn disconnect switch to ON position.
3. Depress the "Pump Start" button to start the pump.
4. Maintain the level about 4 inches from the bottom of the sight glass.
5. Air and Oil will be vented through the Vent Solenoid and into the reservoir tank for 10 minutes.
6. 2 minutes after the unit has built at least 5psi of pressure, select a set point of 100°F (PV) by pressing the  **Up Arrow** or  **Down Arrow** keys, and switch unit into the "Auto" mode.
7. With 2 minute intervals increase the setpoint to 150 and 200°F.
8. Select a setpoint of 215°F (102°C) and continue to run until no more steam appears and pressure has stabilized.

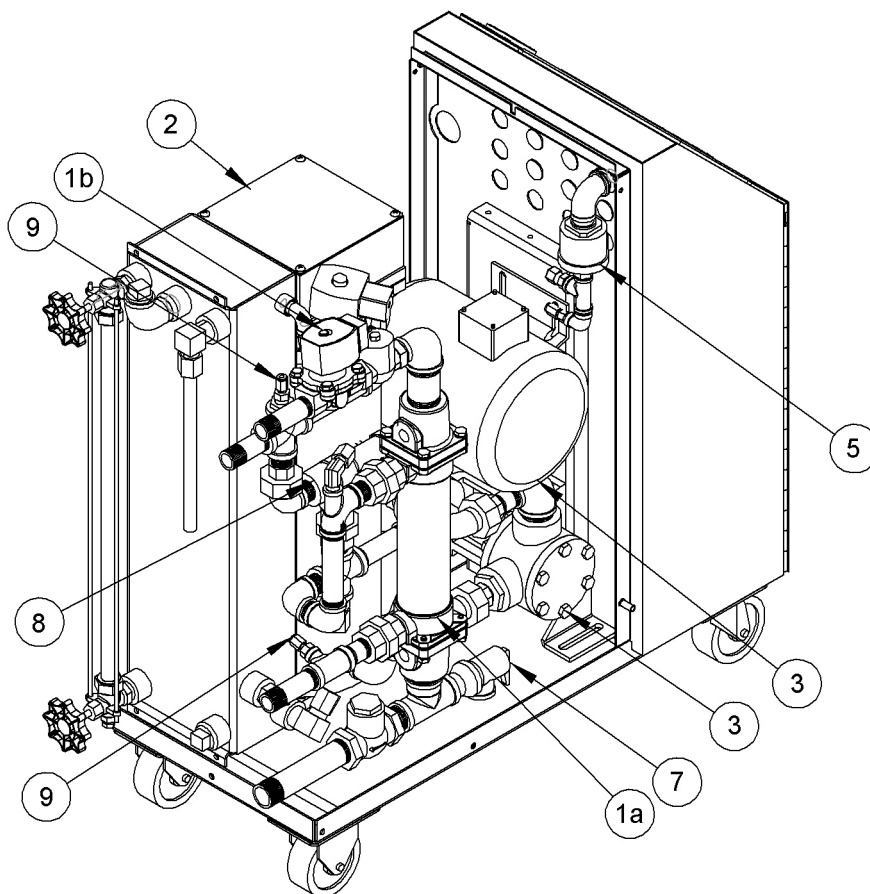
Shut Down

1. Switch the Mode switch to the "Manual Cool" position.
2. Allow temperature to stabilize at 120°F (50°C).
3. Push the **Pump Stop** button to de-energize the unit.

Advanced Controller



Spare Parts Location
(See next page for Spare Parts List)





COT-C Series Oil Temperature Control Units
 Reference Manual (PN: 682.94403.00) for
Complete Operation and Installation Instructions
 (Available online at www.colortronicna.com)

Spare Parts List
 (See previous page for Spare Parts Location)

Cooling Heat Exchanger - Valves 1a 1b		Complete Heat Exchanger		
	1.5 sq. ft.	106.00024.00		
	½ inch (1.3 cm)	732.00012.02		
Immersion Heaters 2		230/3/60	460/3/60	575/3/50
	6-kW (1 req'd)	722.00138.02	722.00138.05	722.00138.06
	6-kW contactor	726.00270.02	726.00268.02	726.00265.02
Motor Pumps 3		230/3/60	460/3/60	575/3/50
	Pump	075.00381.02	075.00381.02	075.00381.02
	¾-HP (0.56 kW) motor	720.09217.00	720.09217.00	720.09024.00
	¾-HP (0.56 kW) MCP	726.00334.00	726.00330.00	726.00330.00
Pump Seal Kits 4				
	Pump	162.00030.		
Common Parts 5 6 7 8 9		Pressure switch **		
		Safety thermostat (1 per heater)		
		Safety thermostat probe (1 per heater)		
		Relief valve		
		Ful-flo bypass valve		
		1000 Ohm RTD Probe		
		Temperature control module		
	AEC Document #	2005-spares-tcu		

** Reference complete manual (PN: 682.94402.00) for proper settings and installation.

Troubleshooting - Quick Guide

Problem	Possible cause	Solution
Unit does not turn on	No power Wrong voltage supplied to unit Defective START push button Control circuit fuse blown Defective control transformer	Check main disconnect, fuses, wiring, and power lead to unit. Voltage must be within plus or minus 10% of nameplate rating Replace Replace Check transformer. Replace if necessary.
Unit does not run	Broken or loose wire in pump motor control circuit Pump motor contactor holding coil is open Pump overload light on	Locate and repair Repair or replace Reset and test each leg for balanced amp draws
Temperature fluctuations/rapid cycling from hot to cold.	Undersized connectors/lines. Long connecting lines between unit and mold. Blocked line in process. Carbon build-up in unit piping or fittings.	Increase size of connectors/fluid lines. Move the unit closer to the process and shorten connecting lines. Check process for debris or deposits. Clean mold. Clean or replace affected piping. Replace fluid.
Unit overheats or does not cool.	Water supply to unit is turned OFF. Water drain is plugged or excessive back pressure in drain line. Heat exchanger tubes plugged by lime deposits. Faulty solenoid valve.	Open water supply. Clear drain line or eliminate back pressure condition. Remove tube bundles; clean/replace as required. Test solenoid valve by switching to Manual Cool mode and listen for valve operation. Replace if faulty.
Unit does not heat/can not achieve set point.	Loss of fluid in process. Vent valve open. Faulty/dirty solenoid valve; usually detected when there is a steady stream or trickle of water out of the drain line. Degraded fluid. Defective heater contactor. Defective immersion heater. Heater burnout. Heater contactors are not energizing, but HEAT LED is on.	Check all lines/connections/fittings. Allow vent timer to run out; or , check valve operation when unit is cold by opening the fill port. Switch to Manual Cool mode several times to flush valve. If the leak continues, disconnect the power to the unit, turn off the water supply, and clean or replace the solenoid. Drain and replace fluid. Visual inspection of coil and contacts. Repair/replace defective contactors. Check resistance on all three (3) legs of heater with an ohmmeter. If not all equal, contact factory for replacement heater. Check resistance on all three (3) legs of heater with an ohmmeter. Replace heater as needed. Set process temperature to maximum and check for control voltage at heater contactor.