



WAXMELTERS

Industrial Thermal Processing Equipment & Systems

WAXMELTERS EQUIPMENT DOCUMENTATION

PRIMO MELTER

Owner/Operator Manual & Troubleshooting

Setup

Normal Operation

Controller Guidance

Maintenance

Symptom-Based Diagnostics



CURRENT EDITION

August 2026

For the latest instructions and revisions, use the live PRIMO guide.

[Open the current online guide](#)

Applies to PRIMO heating and melting tanks. The nameplate, exact controller face, written order documentation, and model-specific instructions always take precedence.

WELCOME TO THE PRIMO CREW

Hello, heat wrangler!

You just got a serious piece of thermal process equipment, and this guide is its co-pilot. It is built to scan fast: colored section tabs, numbered step cards, and callouts that flag what matters. Read the Safety section first (it really is the important part), keep this handy at the workstation, and scan a QR code any time you would rather watch than read.

QUICK START

 The short version, copied word for word from the full sections inside.

START-UP

From: Normal operation

- 1 Put on the required PPE. Confirm ventilation, a closed valve, a dry control area, and a clear work zone.
- 2 Load approved material before turning on heat. Maintain at least the model-specific minimum fill; as a general starting point, use one-third full or more.
- 3 Plug directly into the matching grounded circuit. If equipped, turn on the green main button, then the permitted red heat-zone buttons.
- 4 Set the approved temperature. Use the lid and safe mixing method when the process permits.
- 5 Remain present and monitor material condition, displayed temperature, actual bulk temperature, heat indicator, valve, and electrical connection.

SHUTDOWN

From: Normal operation

- 1 Turn every heat-zone button off.
- 2 Turn the main power off, then disconnect the plug by the plug body, not the cord.
- 3 Close and secure the valve, protect the material as the process requires, and allow the unit to cool completely.
- 4 Clean only after the material and equipment reach a safe handling temperature.

SCAN & WATCH

[How to reprogram a melter controller](#)[WaxMelters Support Center](#)

WHERE TO FIND IT

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Tap any line to jump there. Every section is also a PDF bookmark.

01

START HERE, IT PAYS OFF

Document use & unit identification

This manual consolidates the current PRIMO setup, operating, controller, maintenance, and troubleshooting guidance into one searchable document. Use it with the exact nameplate and controller installed on your unit.

**TIP · CURRENT INFORMATION CONTROLS**

The linked online guide may be revised after this PDF is downloaded. When wording differs, follow the current online guide and any written model-specific direction from WaxMelters.

Record these details before use or support

ITEM	RECORD FROM THE UNIT OR ORDER
Model	_____
Serial number	_____
Order number / date	_____
Electrical nameplate	Voltage: _____ Phase: _____ Amps: _____ Hz: _____
Controller face / model	_____
Heat zones / accessories	_____

Get to the right answer faster

1

Identify the exact unit and controller. Photograph the nameplate and controller face.

2

Follow the current guide for the matching symptom. Do not copy controller values from a different generation.

3

If the issue remains, submit the completed checks, photos, readings, and timing through technical support.

**TIP · USING THIS PDF**

Select a contents entry to jump to that section. Video titles are clickable; QR codes open the same videos on a phone or tablet.

[Browse all WaxMelters manuals](#)

Safety information

**SAFETY · SAFETY STOP**

Turn the unit off, disconnect it, and allow it to cool completely before inspection, cleaning, valve service, or troubleshooting. Stop immediately for smoke, burning odor, uncontrolled heating, repeated protection-device operation, exposed wiring, or leakage near electrical components.

Operator, location & materials

- Use only by trained personnel wearing PPE appropriate for the material, temperature, splash, and cleaning hazards.
- Place the unit on a stable, level, full-load-rated surface. Maintain at least 20 ft from combustible materials unless exact written model instructions state otherwise.
- Process only approved materials. Review the supplier instructions, SDS, flash point, and temperature limits before heating.
- Provide appropriate ventilation and suitable fire protection for the material and facility.

Electrical & heat safety

- Use a grounded supply that exactly matches the nameplate. Do not use an extension cord, power strip, timer, adapter, or shared circuit.
- Keep the cord, plug, controller, buttons, protector, and connectors dry and clean. Never handle live connectors or internal components.
- Never bypass, up-rate, or repeatedly reset a fuse, breaker, or protection device.
- Never use a torch, heat gun, or open flame to warm the tank, valve, or material.
- Never operate empty, below the stated minimum fill, unattended, after a leak, or while a fault is unresolved.
- Do not add water to hot material unless an approved process specifically requires it and the material supplier confirms it is safe.

**SAFETY · HOT SURFACES**

The tank, lid, valve, fittings, and product can remain hot long after power is turned off. Use thermal PPE and verify safe temperature before contact.

03

LET'S GET YOU SET UP

Installation & first-use setup

Before energizing

- Confirm the unit is cool, unplugged, empty, undamaged, and standing on a stable level surface.
- Compare the outlet and facility circuit with the complete electrical nameplate: voltage, phase, amperage, and frequency.
- Inspect the power cord, plug, receptacle, buttons, controller face, protection device, valve, and tank exterior.
- Keep all controls and electrical connections dry. Do not energize a wet unit.

Valve & fitting check

- 1 Inspect the ball valve, gasket or approved thread seal, and mating threads.
- 2 Start threaded parts by hand. Tighten firmly without over-tightening; do not use the valve body as a lever.
- 3 Close the valve before loading. A closed ball-valve handle is perpendicular to the flow path.
- 4 Do not add unapproved downstream piping, reductions, or restrictions.

First controlled heat cycle

- 1 Load approved material before heating. Begin at least one-third full unless the exact model requires a higher minimum.
- 2 Connect directly to the correct grounded circuit. Turn on the main control and only the permitted heat zones.
- 3 Set a conservative approved temperature. Keep the lid in place when the process permits.
- 4 Monitor the controller, heat indicator, actual bulk temperature, tank, valve, cord, plug, and surrounding area.
- 5 At the end of the test, turn all heat zones off, turn the main power off, unplug, and allow the unit to cool.

**PRO MOVE · OPTIONAL ACCESSORIES**

An EZ-Mix accessory has additional operating and troubleshooting requirements. Use the separate Filling + Heated-Transfer System guide for that equipment.

04

DAILY DRIVING

Normal operation

VIDEO GUIDE

**How to operate and use a PRIMO heating and melting tank**

Scan or select the linked title.



Start-up

- 1 Put on the required PPE. Confirm ventilation, a closed valve, a dry control area, and a clear work zone.
- 2 Load approved material before turning on heat. Maintain at least the model-specific minimum fill; as a general starting point, use one-third full or more.
- 3 Plug directly into the matching grounded circuit. If equipped, turn on the green main button, then the permitted red heat-zone buttons.
- 4 Set the approved temperature. Use the lid and safe mixing method when the process permits.
- 5 Remain present and monitor material condition, displayed temperature, actual bulk temperature, heat indicator, valve, and electrical connection.

Heat-zone use

- Do not energize an upper heat zone until material is above that zone's minimum-fill line.
- If the tank has more than one zone, record which zones are on whenever comparing heat-up performance.
- Temperature at the sensor is not always the same as bulk-product temperature. Mix safely and verify with a calibrated independent thermometer when required.

Shutdown

- 1 Turn every heat-zone button off.
- 2 Turn the main power off, then disconnect the plug by the plug body, not the cord.
- 3 Close and secure the valve, protect the material as the process requires, and allow the unit to cool completely.

4

Clean only after the material and equipment reach a safe handling temperature.

Temperature controller

**SAFETY · MATCH THE CONTROLLER**

Controller generations differ. Use the instructions that match the face installed on your unit. Never copy RELAY, SSR, sensor-type, calibration, or high-limit values from a nonmatching controller.

■ Normal setpoint adjustment

- Use the UP or DOWN arrow to change the temperature setpoint.
- Stop at the approved value and allow the display to blink or time out so the value saves.
- Confirm the heat-output indicator responds appropriately. The unit may continue transferring stored heat after output turns off.

■ Units & calibration

- For supported TC4 controllers: hold MODE to enter PAR2, advance to UNIT, select °F or °C with the arrows, then press MODE to save.
- Calibrate only with a stable, safely mixed batch and a calibrated independent thermometer.
- For IN-b correction, calculate actual bulk temperature minus displayed temperature. Enter only that correction, save, and verify at steady state.
- Do not change other parameters without exact written direction for the model and controller.

VIDEO GUIDE**PRIMO temperature-controller settings: 2023+ models**

Scan or select the linked title.



Legacy controller references: [PRIMO 350+ \(2014 to 2022\)](#) | [PRIMO 25 to 250 \(2014 to 2022\)](#) | [Controller reprogramming](#)

Cleaning & preventive maintenance



SAFETY · BEFORE CLEANING OR SERVICE

Turn off all controls, unplug the unit, and allow the tank, material, valve, and fittings to cool completely. Use the material supplier's approved cleaning method and PPE.

FREQUENCY	INSPECTION OR MAINTENANCE
Before each use	Cord, plug, receptacle, buttons, protector, controller, valve, tank exterior, dry controls, and stable support.
After each use	Remove approved residue safely; wipe exterior; confirm valve closes; keep controls dry.
Periodically	Compare displayed temperature with a calibrated thermometer at stable, safely mixed conditions.
After changes	Inspect any approved valve or accessory work before heating; verify correct supply and fill level.
Performance log	Record batch weight, starting temperature, setpoint, zones used, room conditions, and heat-up time.

Valve care

- Keep the outlet and valve clear using only approved cleaning methods after safe cooldown.
- Inspect seals, gaskets, and threaded joints for damage before reassembly.
- Do not probe a hot valve, strike fittings, weld the tank, or apply a field seal to a tank seam.

Electrical protection

- Do not bypass, replace with a higher rating, or repeatedly reset a fuse, breaker, thermal protector, or safety device.
- Internal electrical work must be performed by qualified personnel using the exact wiring and parts information for the unit.
- If a wet electrical area, damaged cord, discolored connection, or repeated trip is found, keep the unit out of service and contact support.

07 DETECTIVE MODE: ON

Troubleshooting overview

**VIDEO GUIDE****Full guide: PRIMO Melter heating, temperature & performance fixes**

Scan or select the linked title.

**SAFETY · ONE CONTROLLED CHECK**

Troubleshooting does not authorize repeated resets, live electrical measurements, bypassing protection, field wiring changes, welding, open-flame heating, or replacing parts without identifying the cause.

SYMPTOM	START HERE
No display / no power	Verify the nameplate-matched supply, controls, protection device, setpoint, and output indicator.
Fuse or breaker operates	Stop repeated resets. Identify exactly which device opened and when.
Slow / uneven / no heat	Confirm fill level, zones, supply, output indication, lid, mixing, and actual bulk temperature.
Temperature too high	Measure actual bulk temperature, lower setpoint, allow lag, and confirm output behavior.
Leak	Turn off, unplug, cool, photograph, and identify the source before touching fittings.
No material flow	Confirm valve position, complete melting, viscosity, and approved downstream configuration.

■ Stop and escalate

- Smoke, burning odor, melted or discolored wiring, sparks, exposed conductors, or a hot plug/receptacle.
- Uncontrolled heating, an output indicator that remains abnormal, or actual temperature above the safe process limit.
- Repeated fuse/breaker/protector operation, any tank-seam leak, or liquid near electrical components.
- Any condition that cannot be evaluated safely with the unit off, unplugged, and cool.

08

LIGHTS OUT? LET'S FIX THAT

Unit will not turn on

VIDEO GUIDE

**Melting tank won't turn on: troubleshooting power issues**

Scan or select the linked title.



- 1 Stop immediately for burning odor, smoke, arcing, exposed wiring, liquid near controls, or a hot/discoled plug or receptacle.
- 2 Read the complete nameplate. Confirm the facility supply matches voltage, phase, frequency, and required circuit rating.
- 3 Remove any extension cord, power strip, timer, adapter, or shared load. Connect only to the correct grounded receptacle.
- 4 Confirm the plug is fully seated and the facility disconnect is on. Inspect the cord and receptacle with power removed.
- 5 Set the green main button and permitted red heat-zone button(s) to ON. Confirm the controller display illuminates.
- 6 Verify the setpoint is above the displayed process temperature and observe whether the controller's output indicator turns on.
- 7 Inspect only the user-accessible protection device shown for the exact model. Do not bypass it or substitute a higher rating.
- 8 Record which controls illuminate, displayed values, output-indicator behavior, supply information, and any trip timing.

**PRO MOVE · IF POWER DOES NOT RETURN**

Keep the unit unplugged. Submit the model, serial number, nameplate, controller photo, supply details, and completed checks to WaxMelters Technical Support.

09

TRIPPED UP? SLOW DOWN

Fuse or breaker operation

VIDEO GUIDE



Blown fuse or tripped breaker: melting tank troubleshooting

Scan or select the linked title.



SAFETY - DO NOT REPEATEDLY RESET

A protection device opening is evidence of a problem. Repeated resetting, bypassing, or installing a higher rating can create fire, shock, and equipment-damage hazards.

- 1 Turn all controls off, unplug, and allow the unit to cool. Photograph the control state and the device that opened.
- 2 Identify the exact device: facility breaker, GFCI, unit-mounted protector, or fuse. Record its rating and trip position.
- 3 Inspect the cord, plug, receptacle, controller area, buttons, and exterior for moisture, damage, discoloration, debris, or overheating.
- 4 Confirm the facility circuit and receptacle match the nameplate and are not shared with other loads.
- 5 Record when the trip occurs: immediately at plug-in, at main power, when a specific heat zone turns on, after heating, or during dispensing.
- 6 Only if a known facility overload was corrected and no equipment defect is visible, one controlled reset may be made under observation. Stop if it opens again.
- 7 Never energize equipment to 'dry it out.' Do not open electrical enclosures or perform live testing unless qualified and authorized.

RECORD	RESULT
Device and rating	_____
Exact trip timing	_____
Heat zone involved	_____

RECORD	RESULT
Supply / shared loads	

10

NEED MORE HEAT?

Slow, uneven, or no heating



VIDEO GUIDE

Melter heating slowly, unevenly, or not at all

Scan or select the linked title.



- 1
- Confirm the tank is loaded before heat and at least one-third full, or above the higher model-specific minimum. Do not run an upper zone below its minimum-fill line.
- 2
- Verify the nameplate-matched supply and direct grounded connection. A unit on the wrong supply may power the display but not heat correctly.
- 3
- Confirm the setpoint is above process temperature, the output indicator turns on, and the intended heat-zone buttons illuminate.
- 4
- Use the lid when permitted. Eliminate strong drafts and confirm safe circulation or mixing for the product.
- 5
- Compare the controller display with a calibrated independent thermometer in a stable, safely mixed batch.
- 6
- After complete cooldown and disconnection, inspect the accessible exterior, cord, plug, controls, valve, and tank for damage or residue.
- 7
- Run a controlled performance check and record batch weight, starting temperature, setpoint, heat zones, room conditions, and temperature at timed intervals.



PRO MOVE · PERFORMANCE COMPARISON

Heat-up time changes with batch mass, material, starting temperature, lid use, mixing, room conditions, voltage, and active heat zones. Compare like-for-like conditions before concluding that performance changed.

ELAPSED TIME	CONTROLLER	ACTUAL BULK	ZONES / NOTES
Start			
15 min			

ELAPSED TIME	CONTROLLER	ACTUAL BULK	ZONES / NOTES
30 min			
60 min			

11

TOO HOT TO HANDLE

Temperature too high / overheating

VIDEO GUIDE

**Melter overheating: temperature too high**

Scan or select the linked title.

**SAFETY - UNCONTROLLED HEATING**

If actual temperature exceeds the material's safe limit, the output indicator behaves abnormally, or heating continues after shutdown, turn off all controls, unplug if safe, keep personnel clear, and contact support.

- 1 Verify actual bulk-product temperature with a calibrated independent thermometer. Measure only where it can be done safely.
- 2 Confirm the fill level safely covers the active heat zone and sensor location. Low fill can produce misleading or localized readings.
- 3 Lower the setpoint and allow time for stored heat and thermal lag. The bulk temperature may continue rising briefly after output turns off.
- 4 Observe the controller output indicator. Record whether it cycles off as the display reaches setpoint.
- 5 Safely mix or circulate only if approved for the material and equipment. Recheck the bulk temperature after stabilization.
- 6 Verify controller units (°F/°C) and calibration. Do not change sensor type, output mode, relay/SSR values, or high limits.
- 7 Record setpoint, display, actual bulk reading, fill level, active zones, elapsed time, and output-indicator behavior.

■ Before returning to service

- The reason for the high reading is understood and corrected.
- The controller and independent thermometer agree within the documented process tolerance at steady state.
- No protection device operated, no wiring or control damage is visible, and heat output cycles normally.

12 GET THINGS FLOWING

Leaks or no material flow

VIDEO GUIDE**Melter leaking: how to troubleshoot tank leaks**

Scan or select the linked title.

**■ If material is leaking**

- 1 Turn off all controls, disconnect the unit if safe, contain the area, and allow the tank and material to cool completely.
- 2 Photograph the leak before cleaning. Identify whether it originates at the valve stem, threaded connection, gasket, tank seam, or near a control/electrical area.
- 3 Only a cool, empty threaded-valve connection may be inspected and reassembled using the exact approved sealing method.
- 4 Do not weld, braze, torch, heat-gun, patch, or field-seal a tank seam. Do not operate a unit leaking near electrical components.
- 5 Submit photos of the source, the complete valve assembly, nameplate, model, serial number, material, setpoint, and when the leak began.

■ If material will not dispense

- 1 Confirm the valve handle is in the correct open position and the receiving container is stable and ready.
- 2 Confirm material at the outlet is fully liquid and within the approved dispensing viscosity and temperature range.
- 3 Allow the valve to warm only from normal tank operation. Never use an open flame, torch, or heat gun.
- 4 After cooldown, remove unapproved downstream restrictions, reductions, or piping and inspect for solidified material using an approved cleaning method.

5

Do not probe, strike, or disassemble a hot or pressurized valve. Stop if the source of a blockage is uncertain.

**SAFETY - LEAK AT A TANK SEAM OR CONTROL AREA**

Keep the unit out of service. Do not attempt a field repair. Send clear photos and the identification/support checklist on the next page.

Technical support checklist

Sending complete information reduces follow-up questions and helps WaxMelters match the instructions, electrical configuration, controller, and parts to the exact unit.

INCLUDE	DETAILS
Contact	Company, contact name, phone, email, best contact time
Unit	Model, serial number, order number/date, clear nameplate photo
Electrical	Voltage, phase, amperage, frequency, circuit/receptacle, any device that opened
Controller	Controller-face photo, setpoint, process display, output indicator, °F/°C
Configuration	Heat zones used, optional accessories, valve/downstream fittings
Material	Product, supplier, melt point, approved temperature range, batch weight/fill level
Performance	Starting temperature, room conditions, elapsed time, timed controller and bulk readings
Symptom	Exact behavior, when it starts, what changed, photos/video, completed checks and results

■ WaxMelters Technical Support

Phone: (888) WAX-MELTERS | (888) 929-6358 Ext. 2

Email: support@waxmelters.com

Current PRIMO guide: [Open online](#)



SAFETY · IMPORTANT

Troubleshooting guidance, inspection, or a support request is not warranty authorization. Do not replace components or perform internal work unless specifically authorized and qualified.

Video & online resource directory

- [Current PRIMO manual & troubleshooting guide](#)
- [All equipment manuals & troubleshooting](#)
- [PRIMO operation overview: video 1](#)
- [PRIMO operation overview: video 2](#)
- [Full PRIMO troubleshooting guide](#)
- [Heating slowly, unevenly, or not at all](#)
- [Temperature too high / overheating](#)
- [Blown fuse or tripped breaker](#)
- [Melting tank will not turn on](#)
- [Tank leak troubleshooting](#)
- [2023+ PRIMO controller settings](#)
- [2014 to 2022 PRIMO 350+ controller settings](#)
- [2014 to 2022 PRIMO 25 to 250 controller settings](#)
- [Reprogram a melter controller](#)



TIP · LINKS & REVISIONS

Video availability and controller generations can change. The current online guide is the authoritative directory for the latest matching instructions.

[Open the current PRIMO guide](#)

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NEED A HAND? WE HAVE GOT YOU.

(888) WAX-MELTERS | (888) 929-6358

support@waxmelters.com · waxmelters.com/support



Scan for the WaxMelters Support
Center