



Davinci QUICK START GUIDE



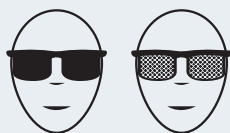
hotkilns.com

KILN CAUTIONS



Details & PDF at
[hotkilns.com](https://hotkilns.com/support/cautions/overview)
[/support/cautions/](https://hotkilns.com/support/cautions/overview)
[overview](https://hotkilns.com/support/cautions/overview)

VIEWING INTO KILN



Use dark glasses (shade number 1.7 to 3.0) to view inside the kiln through the peepholes when firing.

KEEP FLAMMABLES AWAY FROM KILN



Do not put sealed containers or combustible materials such as solvents, paper, rags, in or near kiln. An explosion or fire could result.

TURN OFF POWER WHILE LOADING

Turn off power to the kiln when loading or servicing.



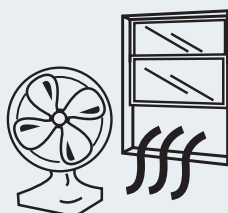
CHILDREN & PETS

Protect any children, animals, and unqualified adults (anyone who is not able to understand these cautions) that may be near the kiln.



VENTILATION IS ESSENTIAL

Kilns generate harmful fumes when firing ceramics. Fumes include carbon monoxide, sulfur oxides, hydrogen fluoride and metal vapors (all of which can be very toxic).



DO NOT STORE ANYTHING ON LID

Do not use the lid as a storage shelf. The lid could crack.



DO NOT FIRE TOXIC, FLAMMABLE, OR UNKNOWN MATERIALS

Flammable or unknown materials can decompose under heat causing the release of highly toxic fumes or rapid uncontrollable combustion.



NO EXTENSION CORDS

Locate the outlet close enough to the kiln to plug directly into it with the kiln's supplied power cord.



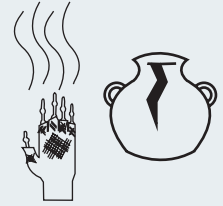
SURFACE IS HOT AND CAN CAUSE BURNS

Kiln surface can be extremely hot: up to 500°F(260°C). You can be severely burned if you touch the hot surface.



DO NOT UNLOAD KILN WHILE HOT

You may burn yourself or you may harm your work.



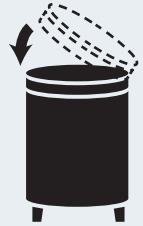
ATTEND THE FIRING

We recommend attending the kiln while firing. Be especially careful about attending the kiln when it is scheduled to shut off.



KEEP LID CLOSED WHEN KILN IS NOT USED

Keep lid closed when not operating the kiln. Keeping the lid closed will keep out dust and extend the longevity of your kiln.



ELECTRICAL SAFETY

Lock out all electrical power before repairing kiln. Have electrical installation performed by a licensed electrician.



SPRINKLER CAUTIONS

If you have a sprinkler system be careful to check the temperature rating and location of the heads so that you do not inadvertently cause them to activate under normal firing conditions.



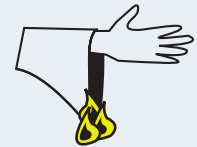
FIRE EXTINGUISHER

Keep an adequate fire extinguisher near the kiln and check it on a regular basis.



AVOID LOOSE/ FLAMMABLE CLOTHING

When working around a hot kiln be careful of the kinds of clothes you are wearing. Some clothes could potentially catch on fire if they touch the hot surface of a kiln.



DO NOT OPEN DOOR ABOVE 250°F

Do not open the kiln door until the kiln has cooled down to 250°F (120°C).



KEEP KILN DRY

Kiln must be kept dry and protected from moisture. It is best to keep kiln in an enclosed room away from inclement weather and dew formation.



PRE-ASSEMBLY

Preparation & Installation



Details at
[hotkilns.com](https://hotkilns.com/support/installation/overview)
[/support/installation/overview](https://hotkilns.com/support/installation/overview)

Before assembling your kiln, make sure your workspace meets all ventilation, power, and clearance requirements.

Follow the link to read our full preparation and installation guide—it covers everything you need to set up your space and operate the kiln safely.

REQUIRED TOOLS

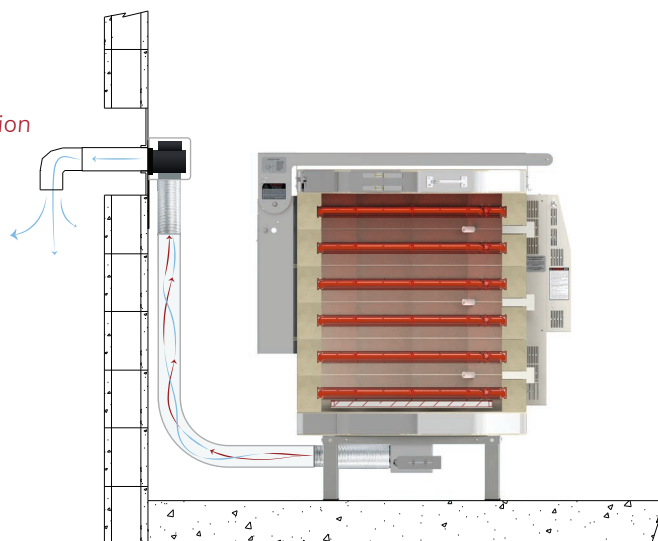
1. 9/16" socket wrench
2. 9/16" adjustable or box-end wrench
3. 7/16" socket wrench
4. 3/16" allen wrench
5. 3/8" socket bit (optional)
6. Powered Phillips-head screwdriver
7. Safety glasses and gloves
8. Utility knife or scissors
9. Pallet jack

VENTILATION



Details at
[hotkilns.com](https://hotkilns.com/support/ventilation)
[/support/ventilation](https://hotkilns.com/support/ventilation)

- **Vent-Sure Downdraft Vent System Recommended:** Removes harmful fumes, prevents corrosion, improves firing uniformity, enhances kiln atmosphere, and extends element life.
- If using without a dedicated vent system, fire in a well-ventilated area with the top peephole unplugged. **Always use a CO-Monitor.** Pro-Rated Element & Thermocouple Limited Warranty may be effected.

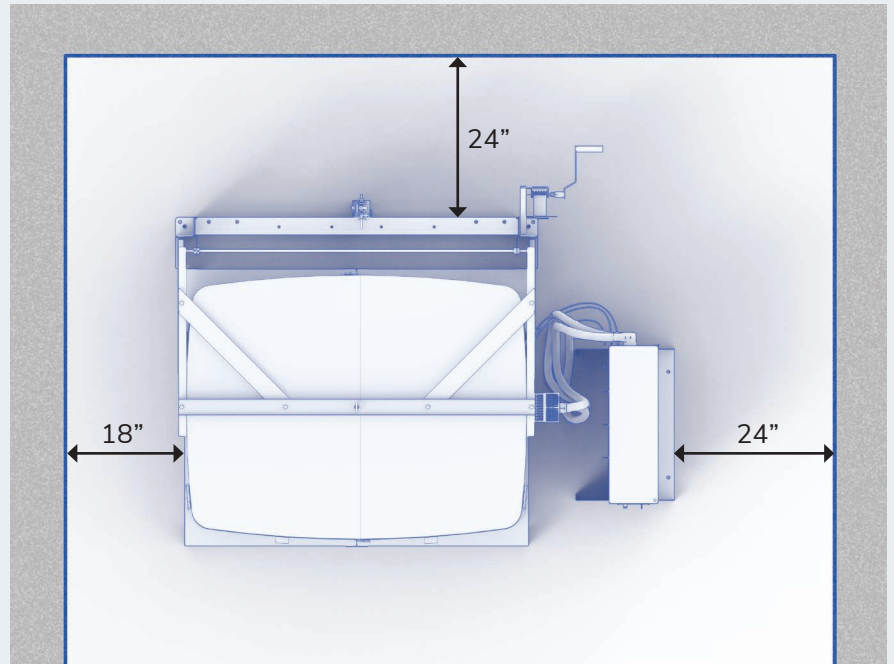


PLACEMENT



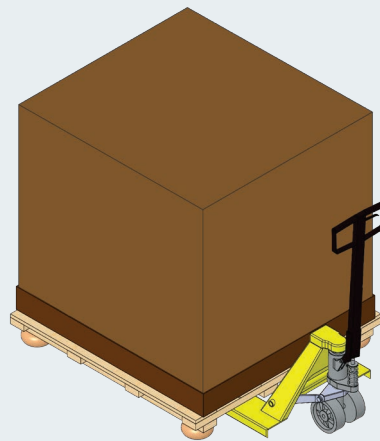
Details at
[hotkilns.com](https://hotkilns.com/support/installation/overview)
[/support/installation/](https://hotkilns.com/support/installation/overview)
[overview](https://hotkilns.com/support/installation/overview)

- **Floor Surface:** Use non-combustible surfaces (cement, ceramic, stone, slate, cinder blocks, brick).
- **Avoid:** Wood, vinyl, carpet; protect linoleum with a non-combustible covering.
- **Clearances:** Maintain 18" (46cm) clearance from non-combustible walls, 12" (30cm) minimum; 36" (91cm) from combustible surfaces. Maintain a 24" clearance from the winch assembly and from the control panel for access.



MOVING

Once delivered, a pallet jack or forklift will be required to move the packed kiln to its installation location.

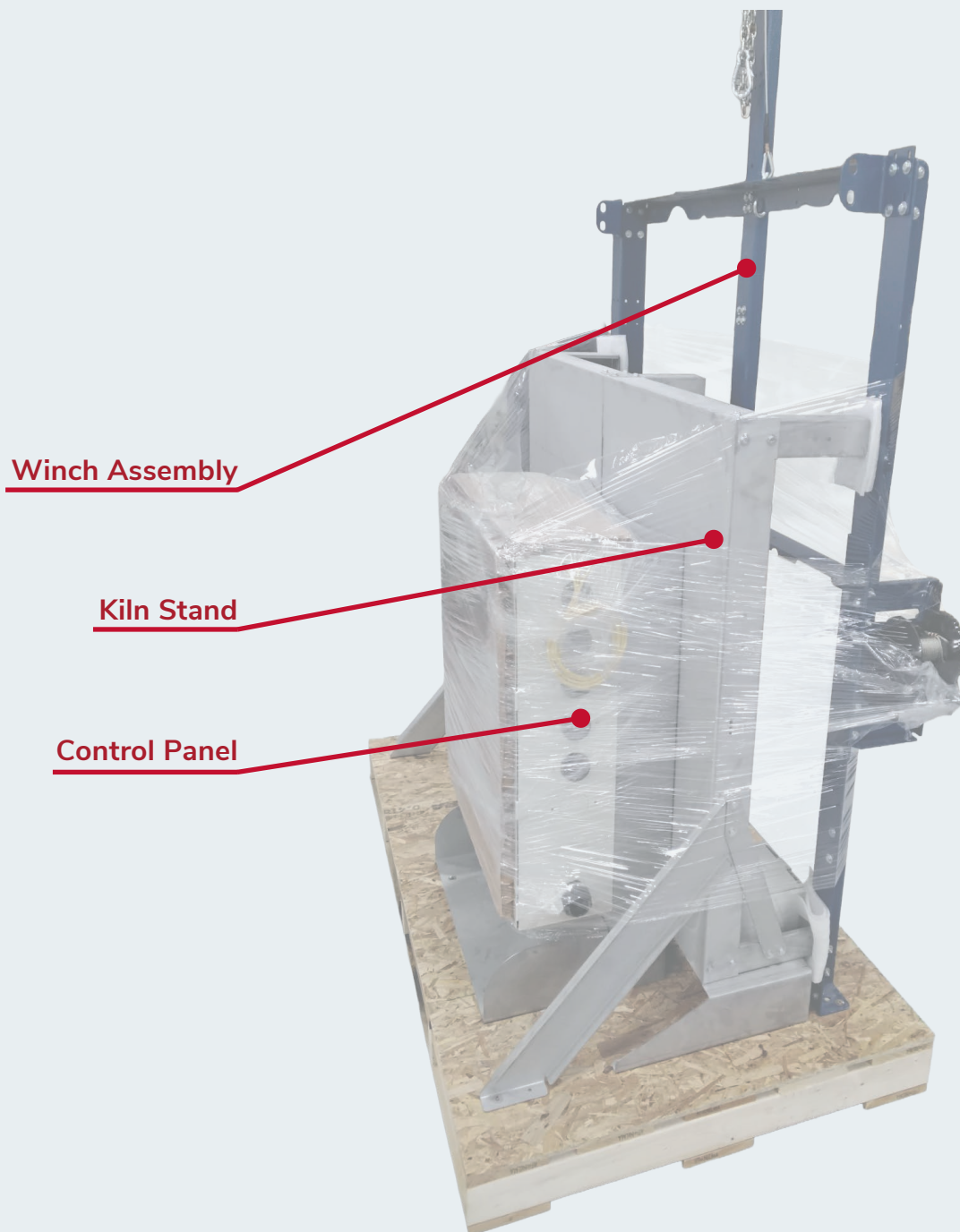


UNPACKING CRATE 1

Deconstruct and remove the top and sides of the wooden crates.

Crate 1 contains the kiln stand, winch assembly, control panel, and additional accessories.

Cut and remove the plastic wrap. Unscrew these components from the pallet and carefully set them aside until needed.



UNPACKING CRATE 2

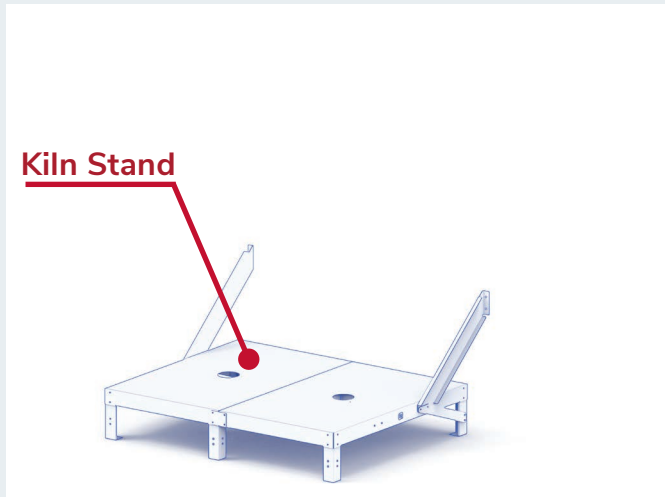
Crate 2 contains the kiln sections (**stacked in reverse order for proper setup**), the kiln top (lid), the kiln bottom (floor)

Cut and remove the plastic wrap. Carefully set the lid aside, as this will go on last. The remaining components come stacked in the order you will need them.

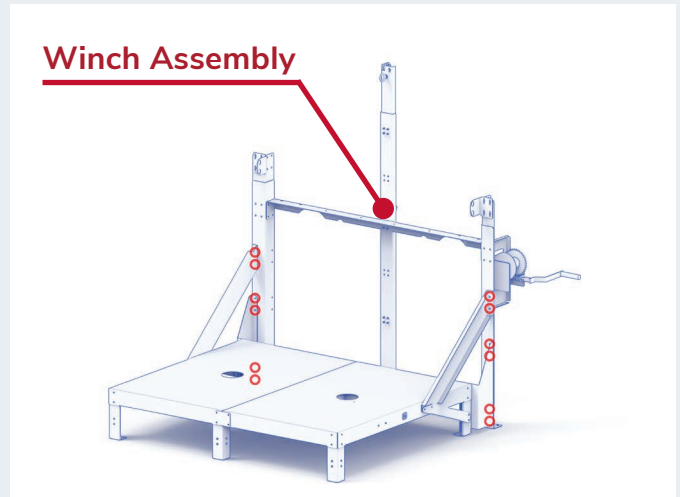


BODY ASSEMBLY

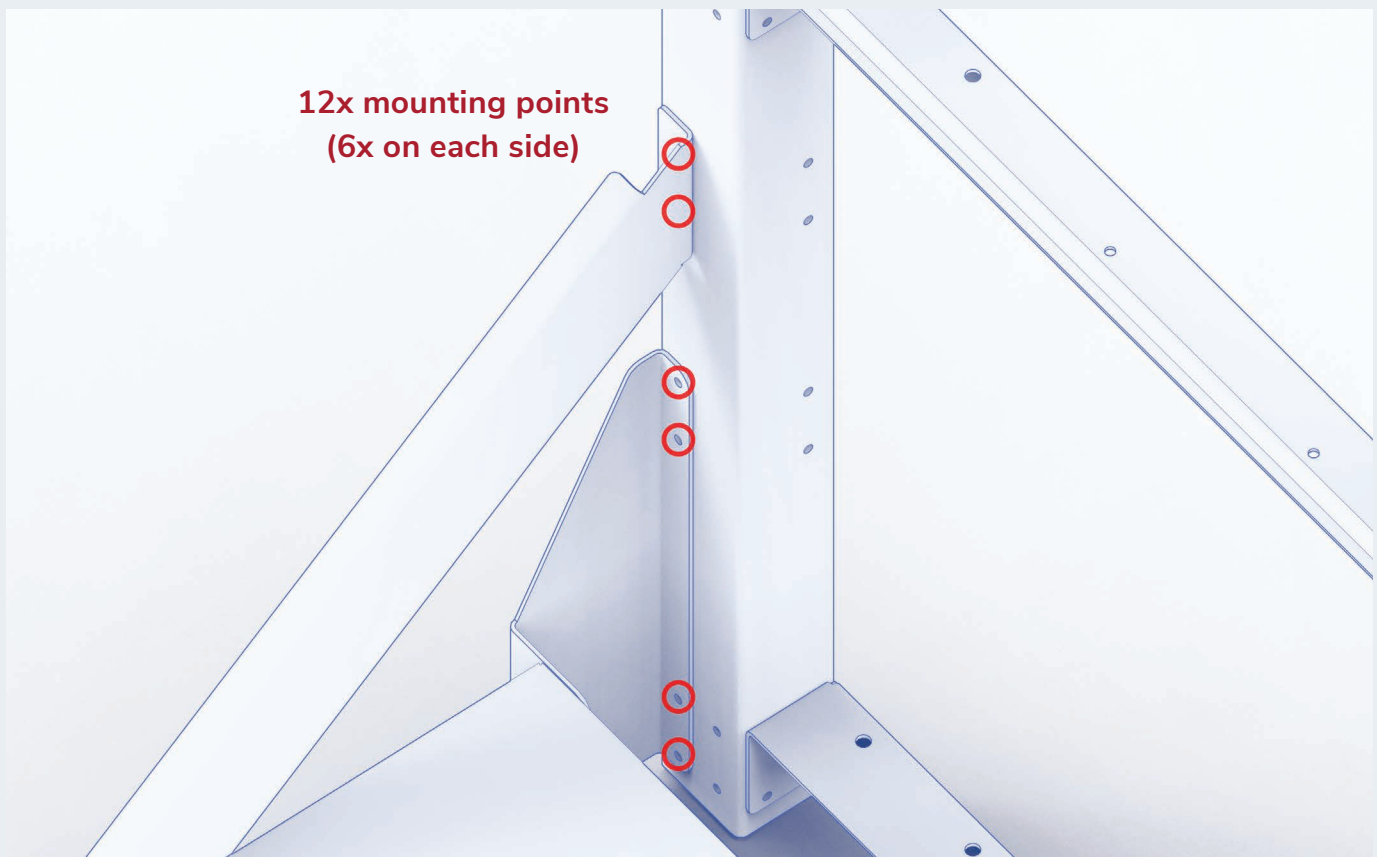
1. Place the kiln stand on the floor in your desired location and **ensure that it is level.**



2. Place the Winch Assembly directly behind the kiln stand and **align the bolt holes.**

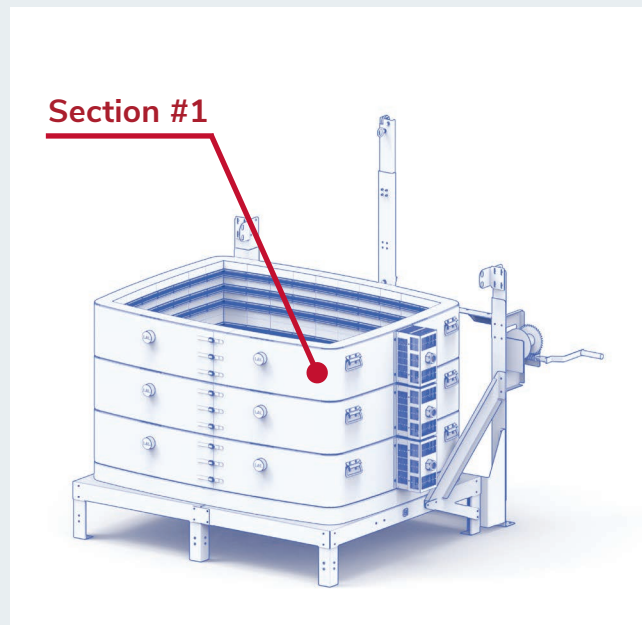
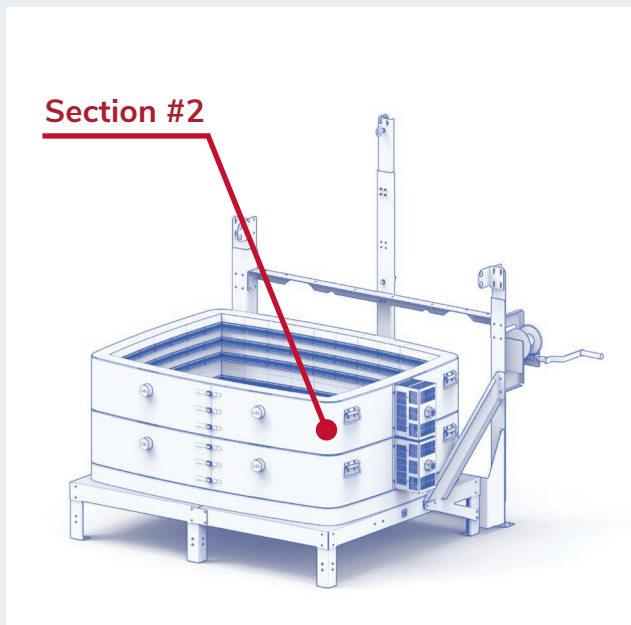
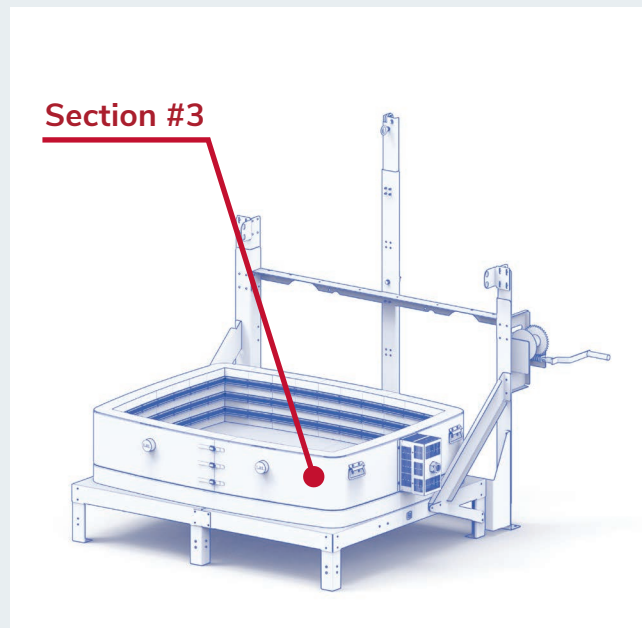
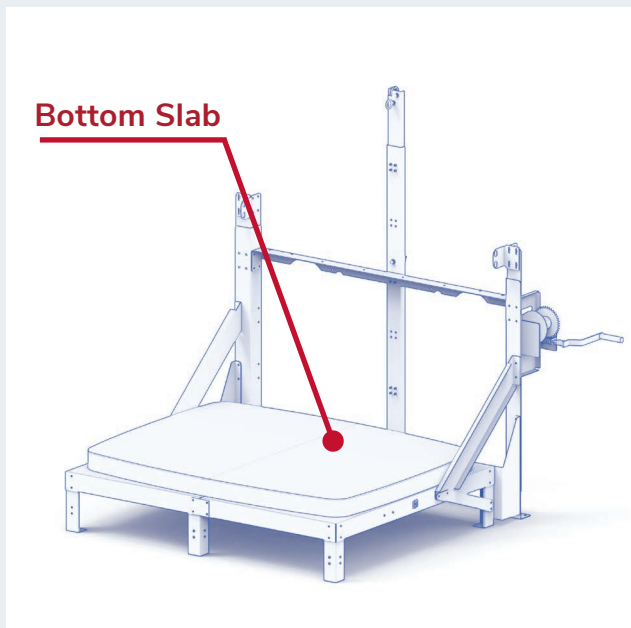


3. Attach the assembly to the stand using 12 provided nuts and bolts. There will be 6 bolts on each side of the assembly.



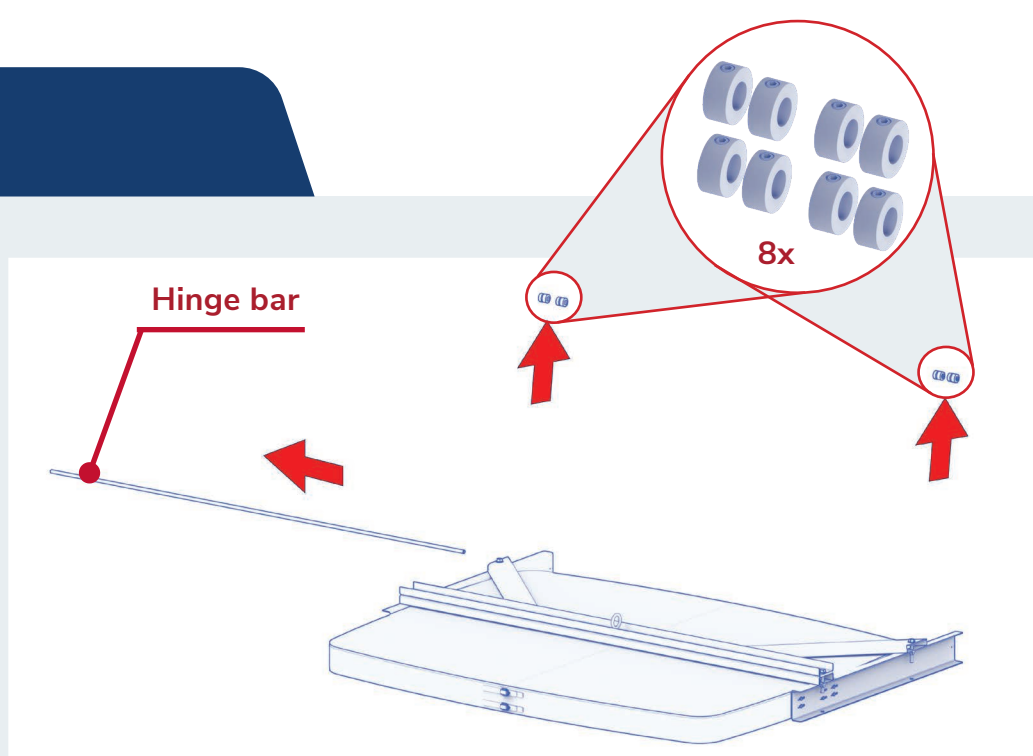
4. Stack the kiln sections:

- Gently place the bottom slab onto the kiln stand and ensure it is perfectly centered.
- each kiln section has a numbered power cord. #1 will always be the top section and the largest number (#3 in this example) will always be the bottom section.
- When delivered, the sections will be stacked in the opposite order. The top section in the crate will be the first one you place on the slab.
- Stack the sections in the correct order, ensuring the numbers match. **Keep them aligned and flush with the Bottom Slab.**

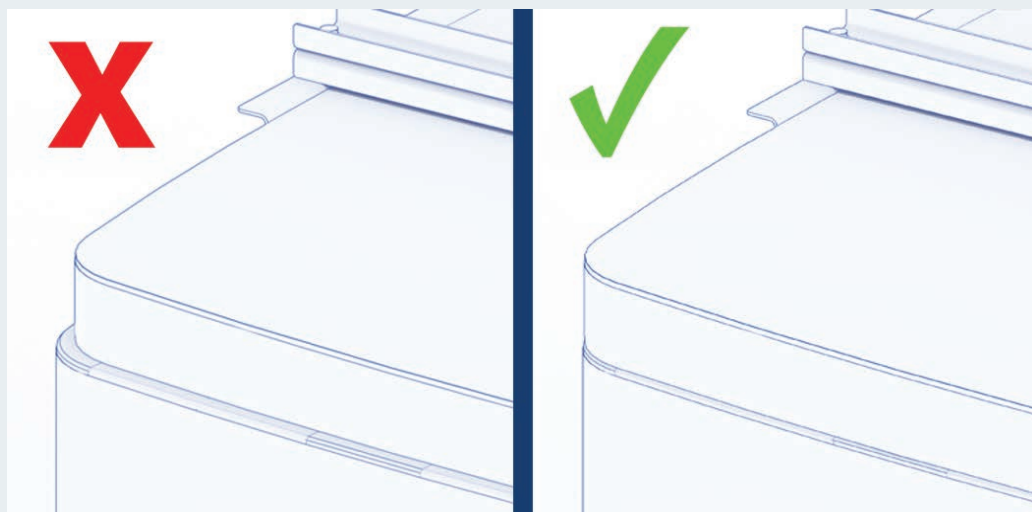


LID ASSEMBLY

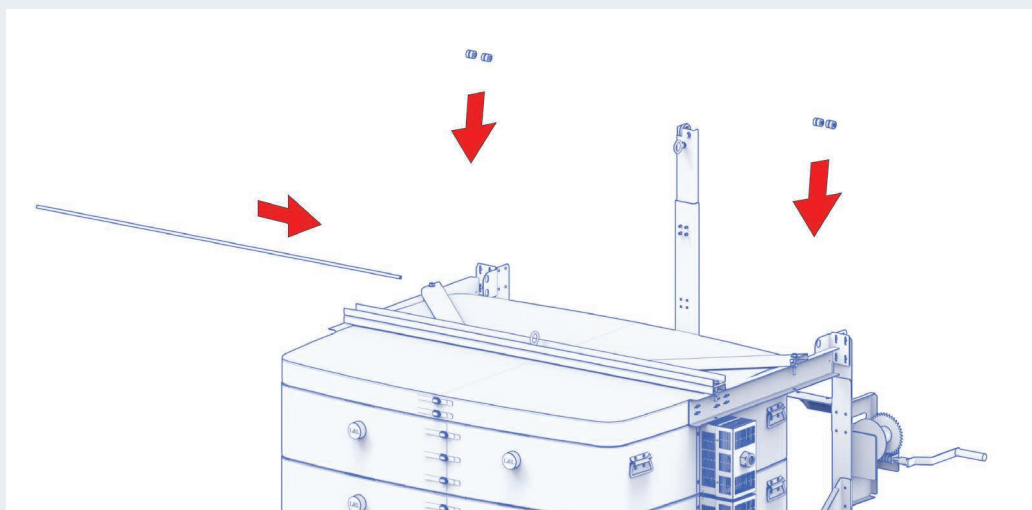
1. Remove the hinge bar and the eight shaft collars from the lid.



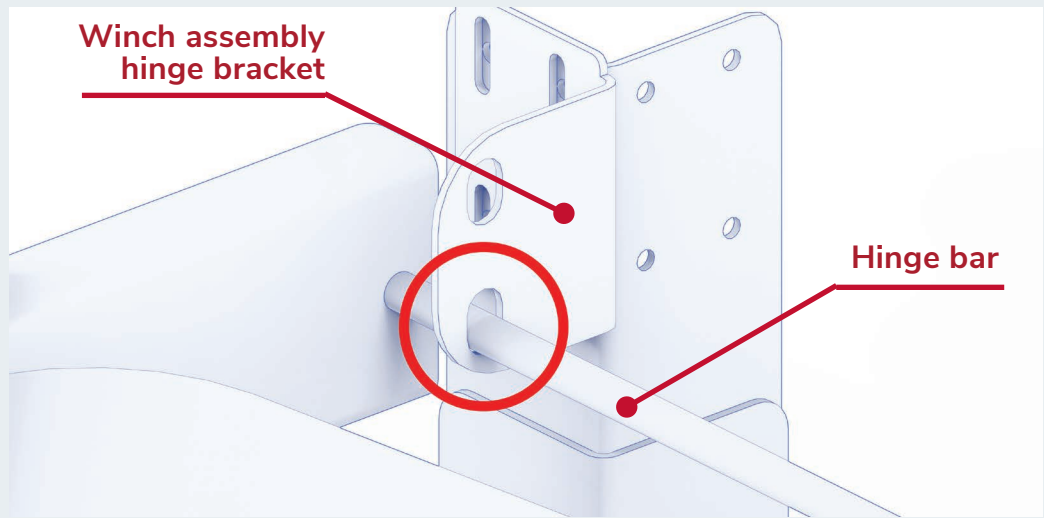
2. Once removed, place the lid on top of the kiln. Ensure that it is flush with the kiln body and that the hinge holes are aligned. If something isn't aligned, you may need to adjust it until it is.



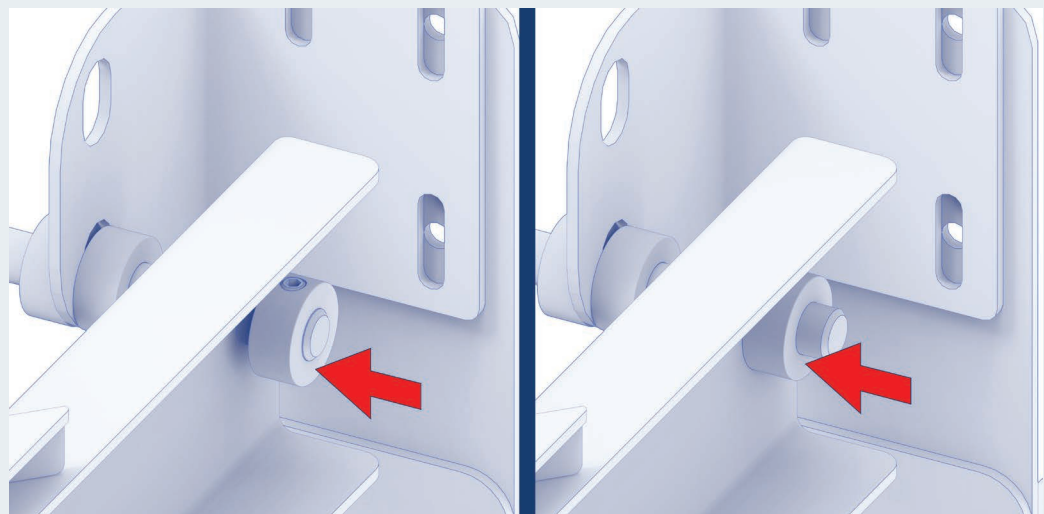
3. Once the lid is seated properly, insert the hinge bar back through the lid, the winch assembly, and the eight shaft collars.



4. The hinge brackets on the winch assembly have slotted holes. Ensure the hinge bar sits at the bottom of these slots. If the hinge bar sits above the bottom, you will need to loosen the hinge brackets, adjust, and re-tighten them.

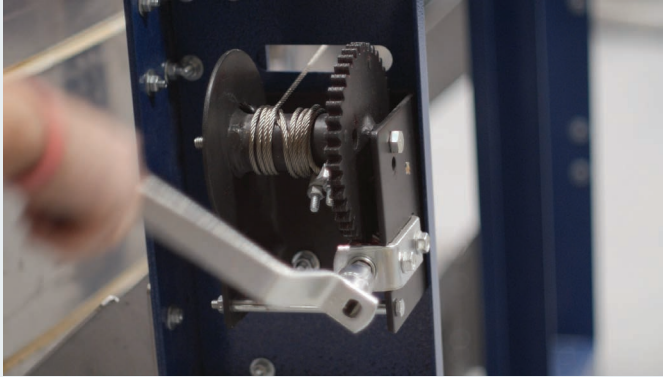


5. Ensure that all eight shaft collars are pushed flush against either side of each piece of the hinge. Once pushed flush, secure them in place with the set screw.



CONNECTING WINCH CABLE

NOTE: The winch can be driven by the included hand crank or a power drill.



1. Unwind the winch **while keeping tension on the cable with your other hand.**



2. Keep tension on the cable and unhook it.



2. Attach to the eye bolt on the top of the lid.



3. Re-wind the winch **until the cable is under its own tension.**



NOTE: If the cable loses tension while unwinding, you will need to fully unspool and then respool the cable.

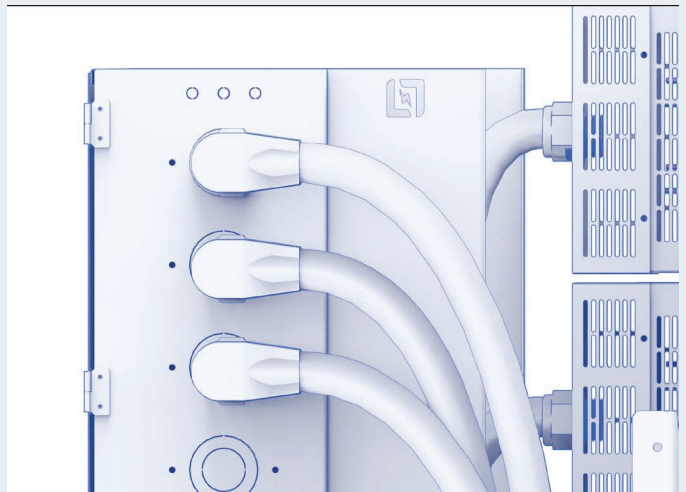
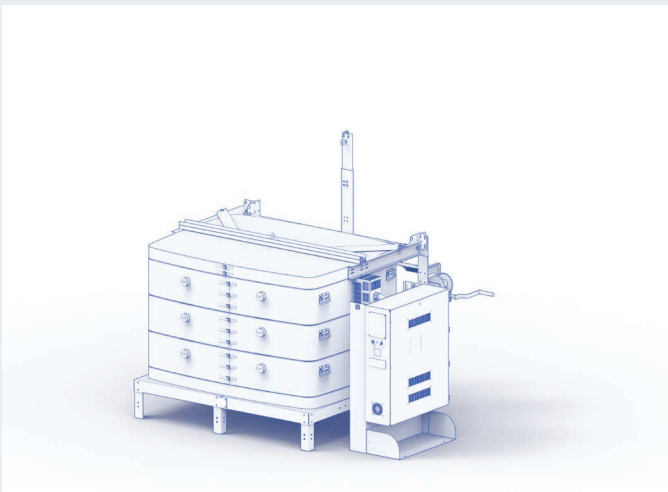
TESTING THE LID

1. With the winch cable now attached and under tension, fully lift the lid
2. With the lid lifted, it is a good idea to test the safety chain and ensure it reaches.
3. If the lid lifts properly, gently lower the lid back on top of the kiln. **There should be no grinding from the brick of the lid to the top kiln section.**
4. Examine the lid to ensure it has remained completely flush with the kiln sections below. If it hasn't, you will need to re-adjust the kiln sections until centered. **Make these adjustments from the bottom slab.**



HOOKING UP CONTROL PANEL

1. **Have a professional electrician hook up the panel to power.**
2. **Once hooked up by an electrician,** you can hook up the element box jumper cords and the thermocouple wires. Ensure each cord and thermocouple wire on the kiln is attached to the correct corresponding connector on the control panel (TC1 is the top, TC2 the middle, and TC3 the bottom thermocouple). On a 2-section high DaVinci, TC2 is the bottom TC.



INSTALLATION CHECKLIST



Details at
[hotkilns.com](https://hotkilns.com/support/installation/checklist)
/support/installation/
checklist

Safety Approvals & Codes

(If required - usually for commercial or institutional spaces)

- ☐ Review the relevant safety approvals and codes
- ☐ Determine if my kiln is listed to UL499 or Canadian Standards
- ☐ Consult the local safety authorities

Clearances & Surfaces

- ☐ Review the kiln's General Dimension Drawing (available on each kiln page)
- ☐ Ensure a 12" clearance (18" recommended) from non-combustible surfaces and 36" from combustible surfaces.
- ☐ Install the kiln on a non-combustible floor, 2" thick, extending 12" beyond the kiln
- ☐ Install the kiln on the factory-supplied kiln stand.

Kiln Room Environment

- ☐ Install the kiln in a dry, weather-proof area
- ☐ Ensure the kiln is inaccessible to children and pets
- ☐ Post clear warning signs (if the kiln is operated in public areas)
- ☐ Have a regularly inspected fire extinguisher nearby
- ☐ (if applicable) Consult local fire codes regarding sprinkler systems

Ventilation

- ☐ Have an exhaust fan OR HVAC system and a thermometer to monitor excess heat
- ☐ Install a downdraft kiln vent OR plan to vent the kiln to manage fumes manually (If manually venting, ensure there is adequate room ventilation)

Electrical Installation

- ☐ Hire a licensed electrician for the installation
- ☐ (If required) Obtain approval from the facility owner
- ☐ Ensure my kiln's voltage, amperage, and phase requirements match the building's supply
- ☐ Ensure the kiln will be located within 50' of the breaker
- ☐ Use copper wire (NOT aluminum) of the appropriate gauge to wire the kiln
- ☐ Have an electrician determine the appropriate wire gauge based on the kiln's amperage load and room conditions. Model-specific electrical specs are available on our website
- ☐ Install a dedicated ground conductor (suggested - but check with your electrician)
- ☐ (if required) Install a fused disconnect switch for lockout/tagout procedures
- ☐ Ensure no wires, cords, or plugs are making contact with the kiln's exterior

Kiln Assembly

- ☐ Follow the assembly directions for my specific kiln

PRE-FIRING

1. Ensure all the elements are seated properly in the holders.



2. Remove the red plastic element clips.



3. Remove any remaining tape or packaging.



4. Power on the kiln to ensure it works.



FIRST FIRING



Details at

[hotkilns.com
/support/first-firing](https://hotkilns.com/support/first-firing)

PURPOSE OF FIRST FIRING

- Removes any moisture from firebrick and sets brick coating
- Forms a protective oxide layer on elements.
- Identifies electrical issues (e.g., wrong voltage or wiring).
- Helps elements settle into holders.

BEFORE YOU START

Check elements

- Ensure all elements are fully seated in holders—no coils hanging out.
- Stretch coils slightly if needed; vibration during transit may cause shrinkage.

Fire without ware

- Fire without any ware to prevent fumes from damaging the element coils.

Fire with kiln furniture

- Fire with evenly spaced shelves to help with heat circulation and prevent rapid, uneven cooling.
- Apply kiln wash to shelves during this firing if desired.

Fire with cones

- Place cones near thermocouples, at least 2" away from tips.
- We include 04 cones and a recommended firing schedule, but you're welcome to use your own.

Venting

- **With Vent-Sure:** Leave vent on; keep lid closed and peephole plugs in.
- **Without Vent-Sure:** Remove top peephole plug during first firing for airflow.

RECOMMENDED FIRING SCHEDULE

Ceramic Glaze Cone 04 Medium (Firing Time: ~8 hours)

Segment	Firing Rate	Setpoint Temp (F)	Hold Time
1	150	180	0:00
2	150	250	0:00
3	400	1695	0:00
4	120	1945	0:00

GENESIS PROGRAMMING STEPS

1. Press LOAD
2. Press GLAZE
3. Current setting will display—press OK
4. Press EDIT
5. Set CONE# to CONE 04
6. Set SPEED to MEDIUM
7. Hold should remain at 0.00
8. Press BACK, returning to the Main Menu
9. Press START
10. Choose to start now, later, or remote

Follow the link or QR code for a more detailed first firing guide and Dynatrol programming steps.

KILN CALIBRATION

Get To Know Your Kiln



Details at
[hotkilns.com](https://hotkilns.com/support/operation/calibration)
/support/operation/
calibration

OVERVIEW

New kilns sometimes overfire and may need to be calibrated.

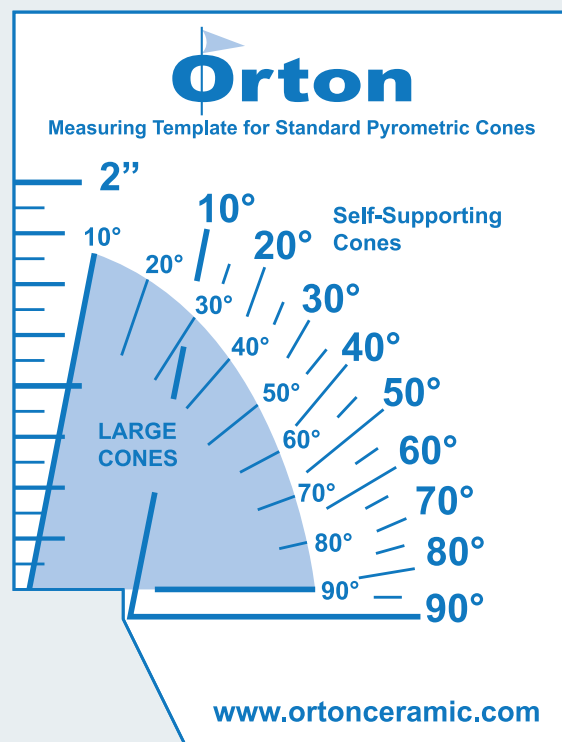
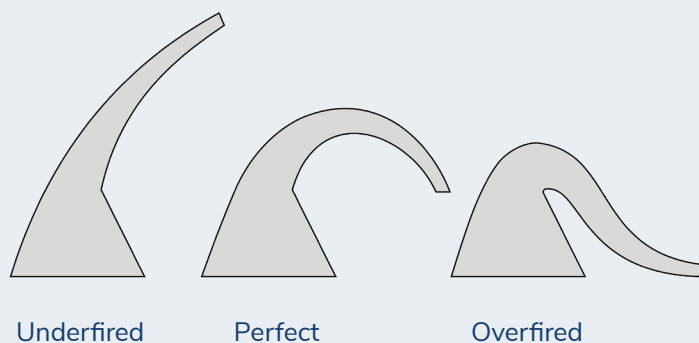
Calibration can also become necessary as elements and thermocouples age. Always use witness cones to verify accuracy and adjust as needed. For detailed instructions, see our guides on kiln calibration and using pyrometric cones.

BASIC PROCESS:

1. Fire to your target cone using a full cone pack (guide, target, guard) in each kiln section.
2. After firing, inspect the cones and adjust as needed:
 - If the entire kiln is off, apply a **Cone Offset** for that specific cone number.
 - If one section is off in a multizone kiln, apply a **Thermocouple Offset** to even out that zone.
3. Use our Offset Calculator to help estimate the right adjustment:



Details at
[hotkilns.com](https://hotkilns.com/support/cone-offset-calculator)
/support/cone-offset-
calculator



GENESIS FIRMWARE UPDATES

If using the Genesis Control, periodically check for firmware updates. See the Genesis Control Manual for more details.



Details at
[hotkilns.com](https://hotkilns.com/support/operation/genesis-control)
/support/operation/
genesis-control



INSTALLATION

Space and wiring guidelines, site-preparation checklist — everything you need for kiln installation support.

Pages:

- Overview
- Checklist



VENTILATION

Best-practice for downdraft and hood vents, airflow calculators, and health-and-safety guidelines for kiln ventilation.

Pages:

- Overview
- Vent-Sure Instructions
- Vent Control



OPERATION

Controller programming videos (Genesis®, One-Touch™, Dyna-Trol), calibration guides, and firing-profile templates for precise kiln operation support.

Pages:

- Genesis
- Dynatrol
- One Touch Control
- Manual Control
- First Firing
- The Ceramic Process
- Calibration
- Pyrometric Cones
- Orton Firing Tips



MAINTENANCE

Element replacement, thermocouple testing, brick repair, and preventive-maintenance focused on long-term reliability.

Pages:

- Routine Maintenance
- Changing Elements
- Changing Thermocouples
- Changing Relays
- Changing Transformers
- Changing Controls
- Changing Fuses & Fuse Holders
- Brick Repair

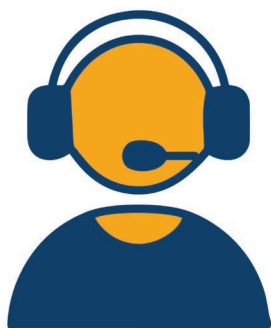


DIAGNOSTICS

Troubleshooting flowcharts, complete error-code tables, and electrical-supply tips so you can quickly resolve kiln troubleshooting issues.

Pages:

- General Diagnostics
- Electrical Diagnostics
- Error Codes
- Paper Test
- Element Diagnostics
- Firing Log
- Genesis Log



SERVICE

How to get service, how to prepare for a service call or visit, how to hire an electrician, warranty help, and for urgent kiln repair help.

Pages:

- Get Service
- Warranties



RESOURCES

Knowledge-base articles, PDF libraries, wiring diagrams, legacy manuals, external links, and our video library — a deep archive of ceramic-kiln resources at your fingertips.

Pages:

- Video Library
- PDF Library
- Knowledge-Base
- External Links
- Discontinued Kilns
- Receiving
- Wiring Diagrams
- Dimension Drawings



CAUTIONS

Critical safety notices, high-temperature handling advice, and best practices to protect people, property, and your kiln investment.

Pages:

- Cautions Overview
- Cautions Poster
- Safety Data Sheets

Control Operation Manuals

GENESIS



[hotkilns.com
/support/operation/genesis-control](https://hotkilns.com/support/operation/genesis-control)

DYNATROL



[hotkilns.com
/support/operation/dynatrol](https://hotkilns.com/support/operation/dynatrol)

Moving Your Kiln After Firing

- A pallet jack or forklift will be required for moving a Davinci kiln
- If the kiln has been fired, tighten the steel case before moving (heat cycles can loosen it).

Helpful Links

SERVICE



[hotkilns.com
/support/service/get-service](https://hotkilns.com/support/service/get-service)

PARTS



[hotkilns.com
/parts](https://hotkilns.com/parts)

RESOURCES



[hotkilns.com
/support/resources](https://hotkilns.com/support/resources)

Wiring Diagrams



Download wiring diagrams:
[hotkilns.com
/support/resources/
wiring-diagrams](https://hotkilns.com/support/resources/wiring-diagrams)

Electrical Installation: Have all electrical installations performed by a licensed electrician or qualified technician to ensure safety and compliance with electrical codes. Do not use aluminum wire for the final connection to the kiln. Route the power cord (or electrical connection wires) away from the kiln so that it cannot touch the hot case of the kiln or run under the stand. Never use an extension cord with your kiln. Follow the amperage rating on the diagram or the kiln specifications on the website to ensure proper fusing and wire gauge selection. Note that the recommended wire gauge for kiln hookup is based on 75 °C wire. Adjust the wire accordingly for the length of the run to the kiln and any local conditions, such as excessive heat.