



Owners Manual

The Original Hi Roller has been developed to offer a superior method of producing slabs from prepared clay. To assure safe and reliable operation, it is important to gain a complete understanding of the assembly, installation, use, and care of this equipment. This manual is intended to provide a comprehensive source of information for the Original Hi Roller. Carefully follow these instructions and procedures.

Enjoy your new equipment safely.

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SAFETY WARNINGS

· WARNING - SERIOUS INJURY CAN OCCUR WHILE TRANSPORTING, UNPACKING AND MOVING THIS EQUIPMENT INTO POSITION – USE ADAQUATE PRECAUTIONS AND MANPOWER TO AVOID PERSONAL INJURY WHILE MOVING THIS EQUIPMENT INTO POSITION

· WARNING - SERIOUS INJURY CAN OCCUR WITH IMPROPER INSTALLATION – STRICT ADHERANCE TO PROPER INSTALLATION PROCEEDURES MUST BE FOLLOWED TO AVOID DANGEROUS INSTABILITY

· WARNING - SERIOUS INJURY CAN OCCUR IF THIS EQUIPMENT IS OPERATED USING ANY DESIGN MODIFICATIONS - NEVER OPERATE THIS EQUIPMENT WITH ANY MODIFICATIONS TO THE ORIGINAL DESIGN.

· WARNING - SERIOUS INJURY CAN OCCUR IF THIS EQUIPMENT IS USED BY UNQUALIFIED PERSONS. NEVER OPERATE OR ALLOW ANYONE TO OPERATE THIS EQUIPMENT WITHOUT FIRST BEING COMPLETELY FAMILIAR WITH THE PROCEDURES FOR SAFE OPERATION

· WARNING - SERIOUS INJURY CAN OCCUR AS A RESULT OF IMPROPER USE OF THIS EQUIPMENT – THIS EQUIPMENT IS DESIGNED FOR USE BY ONE OPERATOR ONLY – STRICT ADHERANCE TO PROPER OPERATIONAL INSTRUCTIONS AS DESCRIBED IN THIS MANUAL MUST BE FOLLOWED TO AVOID PERSONAL INJURY

· WARNING - SERIOUS INJURY CAN OCCUR FROM MISUSE OF THIS EQUIPMENT – THIS EQUIPMENT IS INTENDED TO BE USED TO FORM CLAY SLABS FROM PROPERLY PREPARED MOIST CLAY. ANY OTHER USE OF THIS EQUIPMENT OTHER THAN FOR WHICH IT WAS INTENDED WILL VOID THE WARRANTY AND MAY RESULT IN PERSONAL INJURY

FEATURES

The Original Hi Roller is a true innovation in slab making equipment for the studio potter, pottery classrooms, and the ceramics industry. The vertical orientation is an obvious space-saving breakthrough but it is the less apparent elements of this design which truly makes the Original Hi Roller a joy to own and use.

- **Quick and Easy**
 - integrated canvas
 - single-pass operational
 - clutter-free
 - synchronized thickness adjustment

- **Innovation**
 - even pressures forming process
 - flat, touch-free slab removal
 - space-saving vertical design
 - virtually dust-free

- **Versatile**
 - wall-mounted
 - or free-standing with optional casters
 - reversible

- **Durable**
 - steel and ball-bearing construction
 - chain and sprocket drive system
 - Made in the USA

- **Accessories**
 - Large Auxiliary Canvas**
 - Used to roll and transport particularly large or thin slabs
 - Protects the installed canvas from cross-contamination
 - Transports slabs from the machine flat and untouched

 - Small Auxiliary Canvas**
 - Transports slabs from the machine flat and untouched

Installation

The Hi Roller comes packed in one carton. Some minor assembly is required. Following these steps will assure your safety as well as ease of installation and use.

Placement

The vertical slab roller design offers two main set up options.

Free-standing – Bolt-on stabilizers allow placement on any firm, level surface. Adding optional casters offers ease of portability.

Wall-mounted – bolted directly to a wall for maximum space savings.

With the space-saving vertical design you may find that you now have a choice of placement options. Before choosing exactly where you will install your new machine keep these few things in mind.

- This equipment is intended for indoor use only.
- Do not place in direct sunlight. Ultra-violet exposure will weaken the canvas.
- Do not place where your access to and from the machine would be impeded. You will need adequate space to bring clay, roll slabs, and remove finished slabs from the machine, free from obstructions. Locating the machine which is both near your clay preparation area and work area is also recommended.
- Reversible - The machine can be set up with the drive handle situated on either the right or left side. Generally, right-handed users find it more natural to locate the drive handle on the right side and rotate it with the right hand. This is not to say that natural, fluid motion in slab formation or slab removal can not be achieved by arranging the drive handle on the left side. This opens up even more location possibilities such as corner placement.

Unpacking

Remove the contents of the carton confirming that all components and parts are accounted for and have not been damaged during shipping. **Should you experience any loss or damage, contact your distributor immediately.**

mainframe w/side covers

roller assembly

drive handle

release pedal

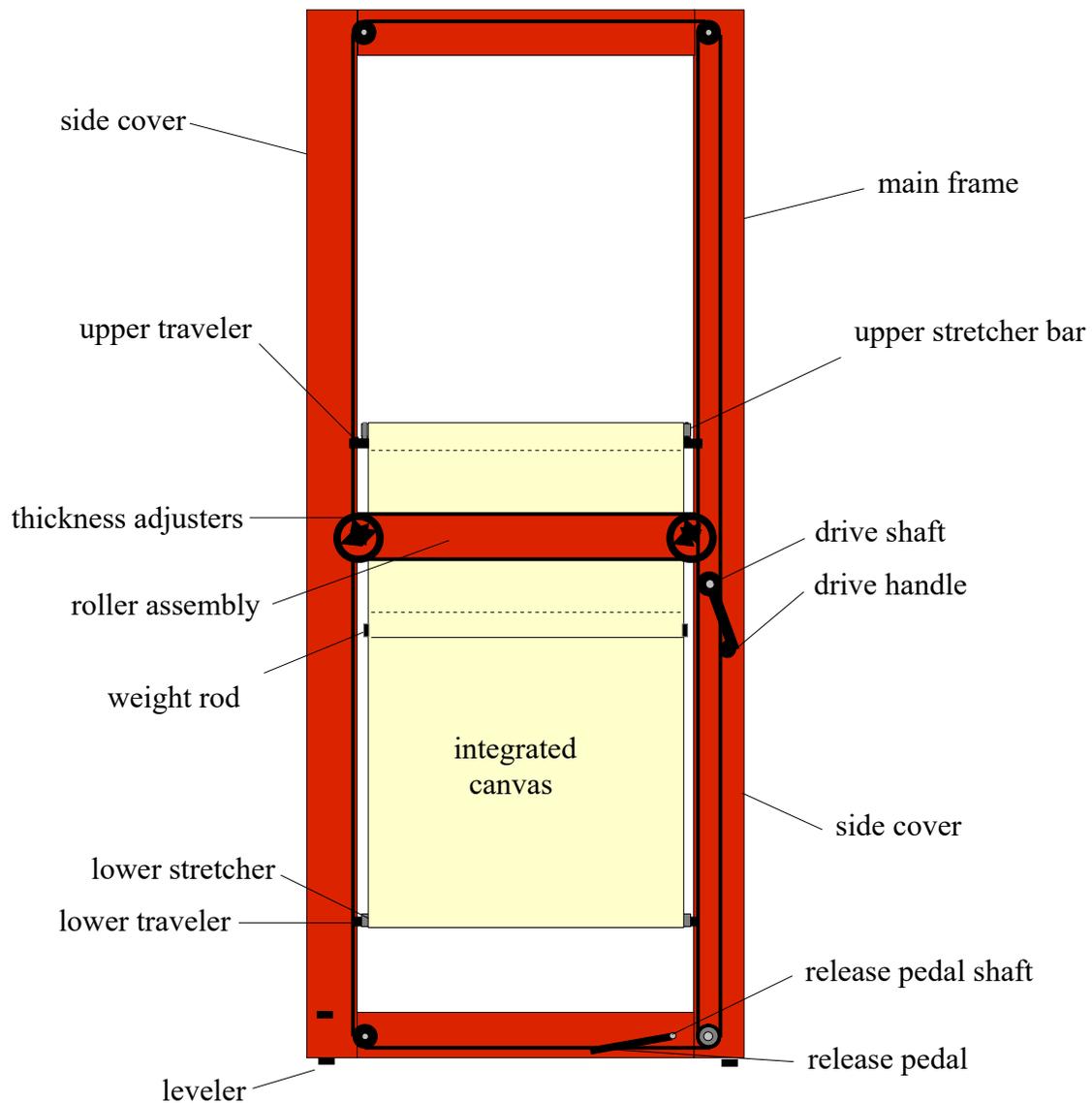
canvas

stretcher bars

weight rod

wall-mounted (2 - wall brackets, 2 levelers, hardware pack)

free-standing (2 - stabilizers, 2 levelers, hardware pack)



Wall Mounting

Wall mounting your machine offers the maximum in space-savings. Follow these procedures to assure a safe wall-mounted installation.

Important: An improperly installed wall-mounted unit can be dangerous. Be sure the surface chosen for the install location is of adequate strength to support this equipment. If you have any doubt as to your ability to perform this installation properly, have it done by a professional.

1. Choose the front of the (reversible) mainframe, with the drive shaft now on the preferred side.
2. Install the levelers, one on the right and one on the left, in the forward most threaded holes at the bottom of the mainframe.
3. Remove both side covers. Remove the four small hole plugs from the back of the mainframe. Bolt the two wall brackets to the mainframe through these holes with the 5/16" x 1" bolts, washers, and nuts provided.
4. Maneuver the mainframe to the exact install location. Level as required.

Working with a stud wall.

Locate two vertical studs within the area of the selected install location. (ideally 32" apart) Make marks where the appropriate attachment points in each wall bracket intersects with the vertical wall studs. Drill a 3/16" diameter pilot hole into the studs at each mark. Secure each wall bracket to the wall using the 5/16" x 2" lag bolts and washers provided, two per bracket.

Working with a masonry wall. Make marks where the lag bolts and washers will fasten the wall brackets to the wall. Ideally these holes will be 32" apart and located in the mortar joints between the blocks. With a hammer drill and 1/2" masonry bit, drill four holes 2" deep at the marks. Insert one lag shield (provided) in each hole until flush with the wall surface. Fasten the machine to the wall using the 4 – 5/16" x 2" lag bolts and washers provided, two per bracket.

Free-Standing

This option allows for more placement possibilities as well as easy mobility if equipped with optional casters.

1. **Stabilizers** - Install the 4 levelers. Longer stem levelers to the rear, shorter stems to the front of the stabilizers. Choose the front of the (reversible) mainframe, the drive shaft now on the preferred side. Fasten the stabilizers to the bottom of the mainframe with the 3/8" x 1" bolts and washers provided.
2. Level by adjusting the rear levelers up or down until the machine is plumb and steady.

Units equipped with casters – Install the casters with brakes (short threaded stem) toward the front. Install the casters without brakes (longer threaded stem) toward the rear. Level as necessary by adjusting the rear casters.

Assembly

Installing the drive handle, release pedal, roller assembly, stretcher bar, and canvas, will offer you an opportunity to become more familiar with the design and operation of your new slab roller.

Roller Assembly

With the thickness gauge on top and adjuster handles toward the front, rest the roller assembly on the support brackets on the inside surface of the mainframe. Secure the roller assembly to the mainframe with four ¼ - 20 x ½” machine screws and washers provided.

Drive Handle

Slide the drive handle fully over the protruding drive shaft and secure tightly with the hex key provided.

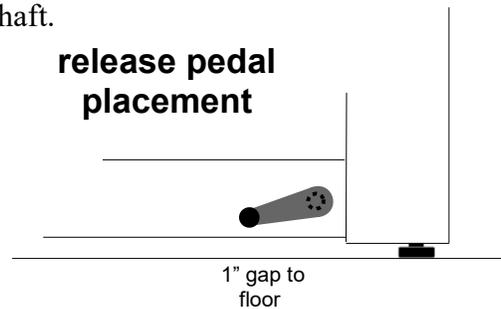
Release Pedal

Slide the release pedal arm fully over the release pedal shaft.

Position the release pedal

with no more than 1” gap above the floor.

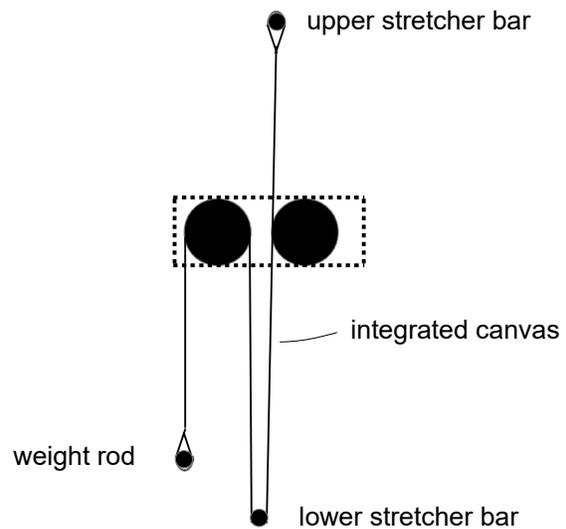
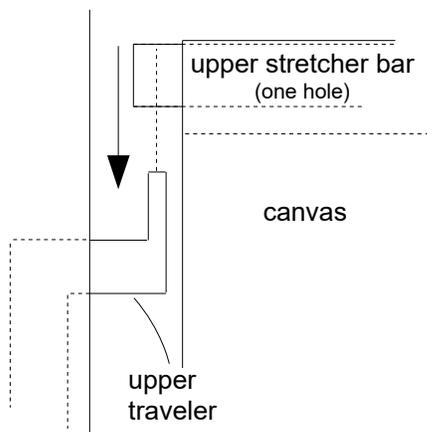
Secure tightly with the hex key provided.



Stretcher Bars/Integrated Canvas

1. Depress the release pedal and rotate the drive handle until the traveler is near the middle.
2. Insert the upper stretcher bar into a rod pocket on one end of the integrated canvas.
3. Hang the upper stretcher bar w/canvas over the pins on the upper traveler.
4. Route the loose end of the integrated canvas down through the rollers, under the lower stretcher bar (factory installed), back up through the rollers, over the forward roller, and then back down between the forward roller and the roller frame.
5. Slide the weight rod into the remaining rod pocket.

installing the integrated canvas



Basic Operation

Set slab thickness - There are dual thickness gauges located on top of each side of the roller assembly. Rotate either of the synchronized thickness adjuster handles so that the thickness gauge indicates the desired slab thickness.

Prepare the feed clay – The original Hi Roller is designed to form clay slabs from properly prepared moist clay in a single pass. The clay should be similar in consistency to that used in throwing and thoroughly wedged for best results. The feed clay should be dimensioned in such a way that when rolled, produces the desired size slab in a single pass. The width of the block of clay fed will approximately equal the width of the finished slab. The thickness and/or length of the clay fed will determine the length of the finished slab. Although the machine can handle most any amount of properly prepared feed clay, for best results the feed clay should be no more than 4 times the thickness of the finished slab. Clay that is too wet or too dry may not produce the best slabs.

Form the slab – Grasp the drive handle, depress the release pedal and begin to roll as you lay the prepared clay on the canvas-covered front roller.

IMPORTANT! - SERIOUS INJURY MAY RESULT FROM ALLOWING YOUR HAND OR ANY OTHER PART OF YOUR BODY TO BE DRAWN INTO THE ROLLERS. NEVER ALLOW ANYTHING OTHER THAN PREPARED CLAY TO BE DRAWN INTO THE ROLLERS.

The integrated canvas will be pulled down through the rollers with the clay entrained within as you continue to rotate the drive handle. When the slab has been formed, reverse direction of the drive handle returning the canvas to the start position. The finished slab will be gently adhered to the upper canvas panel and ready for removal.

Harvest the slab – Removing your foot from the release pedal locks the machine in position for safe, two-handed removal of the slab.

Using the large auxiliary canvas - To form particularly large or thin slabs, to keep a slab perfectly flat throughout the process, or to guard the integrated canvas from cross-contamination of differing clay bodies, use the large auxiliary canvas. Lay a few inches of the large auxiliary canvas over the upper stretcher and integrated canvas. Tuck the mid-point of the large auxiliary canvas between the rollers. Place the feed clay in position on the forward roller, depress the release pedal, and roll down as usual. Grasp both ends of the auxiliary canvas as the formed slab reaches the lowest point of the forming process and lift the large auxiliary canvas away as it emerges from the rollers.

Using the small auxiliary canvas - Lay a few inches of the small auxiliary canvas over the upper stretcher and integrated canvas. Roll down as usual. Grasp the handle of the small auxiliary canvas and lift the small auxiliary canvas and slab as it emerges.

Keep in mind that any additional material rolled with the clay will affect the overall thickness of the finished slab with respect to the thickness gauge.

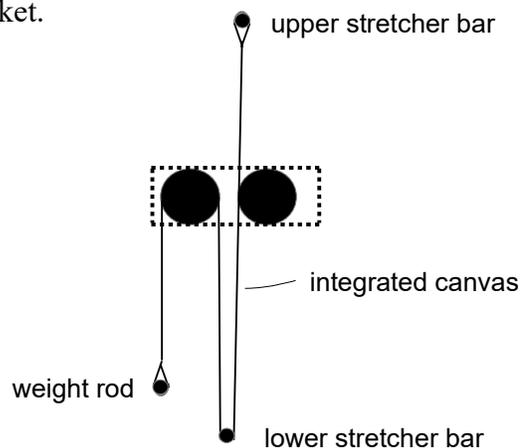
With drier conditions and/or dry clay, a light spray of water applied to the upper canvas panel prior to rolling the first slab will assure proper adhesion to the canvas. Subsequent slabs will likely not require additional dampening.

Maintenance

After initial assembly and under normal use there should be no further need for adjustments. Should there appear to be a problem with normal operation, please refer to the initial set-up (assembly) procedures. Contact customer service if necessary.

The original Hi Roller is engineered to offer years of trouble-free operation. There are very few maintenance requirements with normal use. Use in industrial, commercial or institutional environments may call for additional care. Contact customer service to discuss your particular needs.

- **Lubrication** - A few drops of oil applied annually to the thickness adjuster shafts, synchronizer chain, and drive chain will meet all the lubrication needs. Industrial, commercial or institutional users should lubricate these parts as needed. The ball bearings are sealed and do not require any maintenance.
- **Driven chain adjustment** – Remove any looseness in the driven chain by removing the side cover on the drive handle side and adjusting the twin turnbuckles. Make sure to replace the safety wire to maintain adjustment.
- **Cleaning** - The painted steel parts of the machine can be cleaned of dirt, dust, and clay with a damp cloth and mild detergent if desired.
- **Canvas** - Scrubbing the canvas panels with a damp sponge will help to remove residual clay build-up from the surface of the canvas.
- **Switching the integrated canvas** – Having an integrated canvas for each clay body used in the studio will help to avoid cross-contamination. Follow this procedure to switch the integrated canvas.
 1. Press the release pedal and rotate the drive handle until the traveler is about in the middle.
 2. Slide the weight rod out of the lower rod pocket of the currently installed integrated canvas.
 3. Lift the upper stretcher bar w/canvas off of the upper traveler.
 4. Slide the upper stretcher bar out of the integrated canvas.
 5. Gently pull the integrated canvas from the roller assembly and set aside.
 6. Insert the upper stretcher bar into the rod pocket on one end of the replacement canvas.
 7. Hang the upper stretcher bar w/canvas over the pins on the upper traveler.
 8. Route the loose end of the integrated canvas down through the rollers, under the lower stretcher bar, back up through the rollers, over the forward roller, and then back down between the forward roller and the roller frame.
 9. Slide the weight rod into the remaining rod pocket.



Accessories

integrated canvas

one for each clay body used

large auxiliary canvas 72" x 30"

solutions for...

protecting the integrated canvas

transport and handling of large or thin slabs

small auxiliary canvas 30" x 30"

solutions for...

keeping slabs flat from machine to work surface

caster set

allows quick and easy portability of the machine
around the studio for additional placement options
or storage

wall-mount conversion kit

wall-mount brackets and associated hardware
to convert a free-standing unit to a wall-mount.

free-standing conversion kit

stabilizers and associated hardware
to convert a wall-mounted unit to free-standing

Limited Lifetime Warranty

The Original Hi Roller is warranted to be free from defects in materials and workmanship for the entire period of ownership by the original purchaser. The original purchaser must have completed the warranty registration form and return it to the manufacturer at the time of purchase.

Covered materials under this warranty includes the mainframe, roller assembly, stabilizers (if equipped), wall-mount bracket (if equipped), fasteners, drive system, bearings, shafts, stretchers, hardware, and entire release assembly as well as any shipping costs associated with any covered claim.

Excluded from this warranty includes any canvas fabric as well as any part of the Original Hi Roller shown to fail or be damaged by abuse, neglect, or any installation or any use inconsistent with the procedures of installation or use as described in this owners manual. Additional exclusions may include machines used for the purpose of institutional teaching as well as commercial or industrial applications.

Pottery Carolina, LLC reserves the right to repair or replace any part or parts covered under this warranty and may require substantive evidence of any defect of material or workmanship claimed.

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