

Vertical Slab Roller Bellar Roller

Installation, Operation and Maintenance

US Patent Pending



Manufactured by: Laguna Clay Company
City of Industry, California



SAFETY WARNINGS

READ BEFORE UNPACKING ROLLER

WARNING!!!

BE CAREFUL – SERIOUS INJURY OR DEATH CAN OCCUR WHILE TRANSPORTING, UNPACKING AND MOVING THIS EQUIPMENT INTO POSITION – USE ADEQUATE PRECAUTIONS AND MANPOWER TO AVOID PERSONAL INJURY WHILE MOVING THIS EQUIPMENT INTO POSITION

WARNING!!!

BE CAREFUL – SERIOUS INJURY OR DEATH CAN OCCUR WITH IMPROPER INSTALLATION – STRICT ADHERENCE TO PROPER INSTALLATION PROCEDURES MUST BE FOLLOWED TO AVOID DANGEROUS INSTABILITY

WARNING!!!

BE CAREFUL – SERIOUS INJURY OR DEATH CAN OCCUR IF THIS EQUIPMENT IS OPERATED USING ANY DESIGN MODIFICATIONS - NEVER OPERATE THIS EQUIPMENT WITHOUT ALL GUARDS IN PLACE!

WARNING!!!

**BE CAREFUL – SERIOUS INJURY OR DEATH CAN OCCUR IF THIS EQUIPMENT IS USED BY UNQUALIFIED PERSONS
NEVER ALLOW CHILDREN TO OPERATE THIS EQUIPMENT
WITHOUT PROPER SUPERVISION**

WARNING !!!

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

WARNING!!!

BE CAREFUL – SERIOUS INJURY OR DEATH 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 MAY RESULT IN PERSONAL INJURY OR DEATH





Table of Contents

Safety Warnings	2
Table of Contents	3
Delivery/Unpacking	4-5
Illustration and Specifications	6
Features	7
Placement & Installation	8-10
Assembly	11
Operation	12-14
Adjustments/Maintenance	15-17
Warranty	18



DELIVERY AND UNPACKING

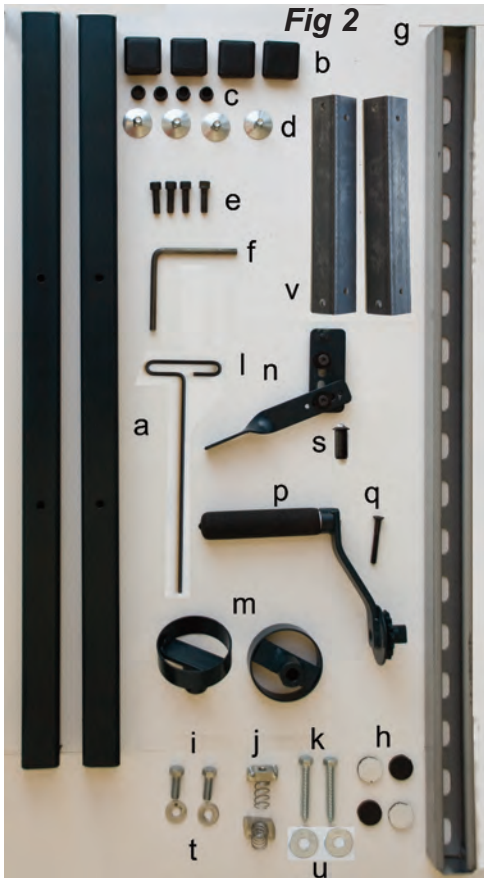
IMPORTANT

**TO AVOID PERSONAL INJURY AND POSSIBLE DAMAGE TO THE MACHINE
EXTRA HELP WILL BE REQUIRED TO MOVE THE PACKAGE INTO THE SET-UP AREA AND TO
ASSIST IN THE SAFE PLACEMENT, INSTALLATION AND ASSEMBLY**

Your new slab roller will come packed in one large carton. Note any damage to the carton or contents on the paperwork you sign to receive the package. The package will weigh nearly 200 lbs. Should it be necessary for you to transport the packaged unit, it would ride best flat on its back. Move the carton as close as possible to the installation location.

Open the carton following these steps (see Fig 1)

- A. With the wood shipping pallet on the floor, cut the shipping bands.
- B. Cut any tape holding the lid. Remove the lid.
- C. Open the plastic sheeting, inspect the roller for shipping damage.
- D. Take out all parts packages and make an inventory of the enclosed parts and tools.



Confirm that the packages contain the following parts, fasteners and tools...Then place them in a secure area for later use (see Fig 2).

- 2 – stabilizers (a)
- 1 – long “T” allen wrench (l)
- 1 – wall-mount channel (g)
- 2 – adjuster knobs (m)
- 1 – drive-lock assembly (n)
- 1 – drive handle (p)
- 1 – hardware pack containing...
 - 4 – Square end caps (b)
 - 4 – snap-in covers (c)
- for free standing installation
 - 4 – Levelers (elevator bolts also for wall mount) (d)
 - 1 – “L” allen wrench (f)
 - 4 – 5/16” x 1” allen head bolts (e)
 - 2 - Small flat washers (t)
 - 2 - Demi feet use with wall mount ONLY (v)
 - 4 – Adhesive backed round pads (h)
- For wall mount installation
 - 2 – 3/8” x 1” hex head bolts (i)
 - 2 – large 3/8” flat washers (u)
 - 2 – 3/8” spring nuts (j)
 - 2 – 3/8” x 2” lag bolts (k)
- Use LAST for handles, drivelock and adjustment
 - 1 – spring-ball insert (s)
 - 1 – 1/4” x 2” flat allen head screw (q)

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UNPACKING THE BELLAR ROLLER



Fig 3

Tuck the loose plastic sheeting under the bottom end of the box. (Fig 3)



Fig 4

Utilizing two able bodied persons, carefully lift the roller and box away from the wooden pallet to a 45° angle. Utilizing caution push forward slightly. The pallet is no longer attached and may move violently and unpredictably if not guided by a third person. When the bottom edge of the roller makes contact with the floor, (Fig 4) continue to lift without pushing to place unit in vertical position.



Fig 5

With one person stabilizing the top of the unit, cut the tape on the bottom two corners of the box. (Fig 5) Then with one person on each side, securely grasping the exposed front lip of the unit, push the top of the box away from the unit-the box will fall to the ground.



Fig 6

Walk the unit off of the packing material. (Fig 6) While one person holds the unit securely vertical, the other should clear away the plastic and the pallet. Retaining two of the thin boards for use when installing the floor stabilizers (pg 10) and the flattened box lid which provides a place to lay the unit flat (without scratching it) during the installation process.

Be aware of the items retained in the area, as any items on the floor are trip hazards. Lay the unit down on the flattened box lid, front side up. If you will be wall mounting the unit install the demi feet (Fig 2 item v) at this time. Use levelers as shown below.



Please recycle your packing materials at an appropriate recycling facility or repurpose them in your studio. Keep plastic packaging away from children and animals.

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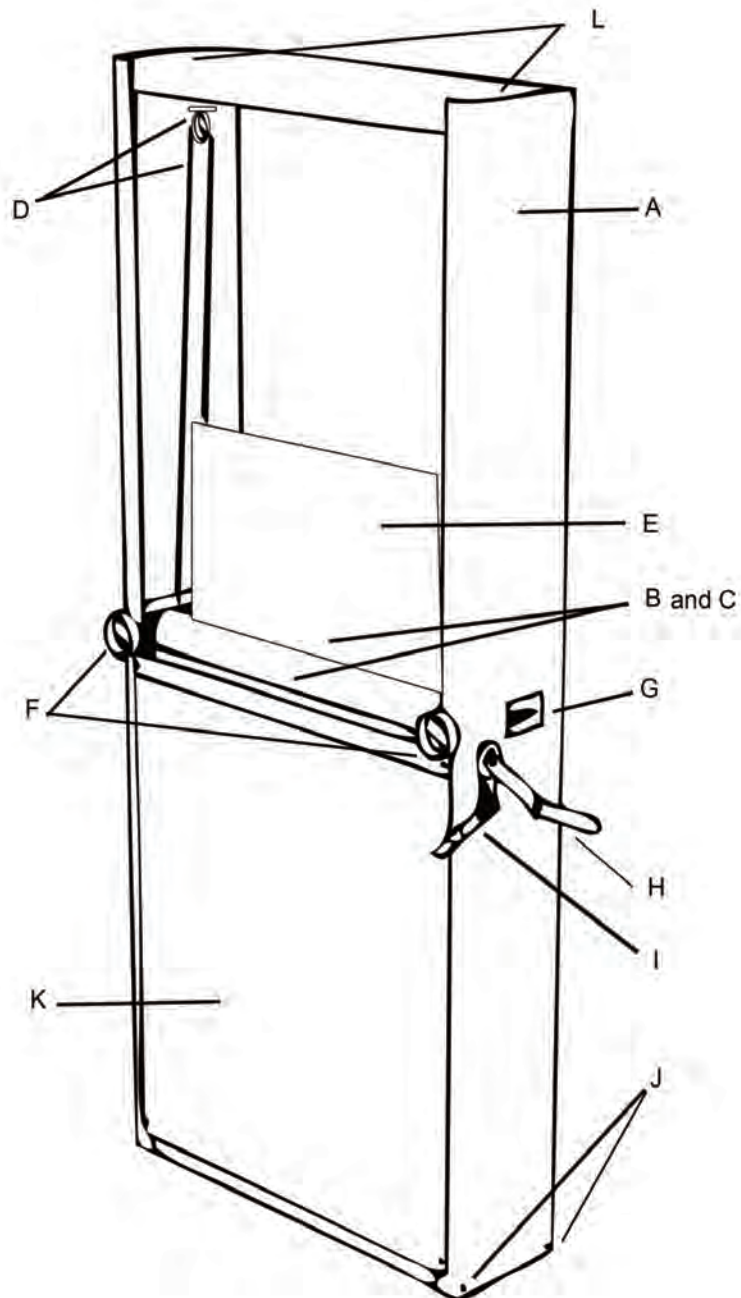
ILLUSTRATION AND SPECIFICATIONS

Fig 7

Get to Know The Bellar Vertical Roller

This listing of part names and locations will be referred to later in this manual.

- A** - Frame
- B and C** - Rollers
- D** - Cable, pulley and tensioner
(one on left and right of canvas)
- E** - Canvas
- F** - Thickness adjuster knobs
- G** - Thickness Gauge
(on both left and right side)
- H** - Soft touch drive handle
(installs on left or right side
of the unit)
- I** - Drive lock assembly "Quick Stop
Switch" (installs on either side)
- J** - Holes for floor stabilizers
or demi feet
- K** - Front cover
- L** - Top cable pulley adjustment bolts



SPECIFICATIONS

Frame	80"x 35"x 10", 11 gauge steel, welded
Rollers	3" ball bearing idler rollers mounted on 3/4" solid steel shaft
Drive	3/4" crankshaft on ball-bearings w/sprocket and chain
Linkage	1/8" steel cable over 1 1/2" ball-bearing pulley assembly
Canvas	#6 (22 oz) natural cotton duck
Adjustment	dual synchronized actuators, chain-driven
Max Capacity	30" width x 30" length x 2" thick
Weight	170 lbs.

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Features

The Bellar Roller is a true innovation in slab making equipment for 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 Bellar Roller a pleasure to use.

Fig 8



INNOVATIVE SLAB FORMING – The clay is *pulled* down between two free-wheeling idler rollers. Even pressure distribution on both sides of the slab as it is formed, equalizing pressure applied as it is ejected—just what you have strived for with just one pass.

FAST – Use the “once and done” technique for slab making because pressure is equally applied to both sides of your slab.

VERTICAL – Good-bye “catch-all”! The vertical surface is ‘at attention’ when you are ready to roll! No shouting required.

CONVENIENT – Close at hand but not taking up space which could be put to better use.

INTEGRATED CANVAS – Always with your machine, always ready, always perfectly aligned

SIMPLE OPERATION – Simple controls with ergonomic design make operation intuitive.

DURABILITY– Welded, powder coated steel frame. ‘Potter tough’ steel components, all self lubricating bearing construction for smooth, low maintenance operation.

SYNCHRONIZED THICKNESS – Twirl one adjuster and you are ready to roll. No more binding, jamming or doing laps from one side to the other.

AMBIDEXTROUS CONTROLS – Handle and quick stop lever/drivelock can be mounted on either side of the machine to fit with your dominant hand or unique special requirements.

ADAPTABLE – Easily switch between several clay bodies. Order extra canvases (part A333935) and send clay through in a canvas ‘sling’. For tile applications use Slab-Mat (see page 14) to keep your slab rigid during transport.

Got five square feet of space? That is all you need! The floor mounts included with the Bellar Roller are 31.5 inches long. The roller is stable and ready for service! Additional floor anchoring may be incorporated at installation if desired.

Floor mount

Wall mount

Not quite twelve inches is all it takes. Use the wall mount included with the Bellar Roller and mount on any interior stud or masonry wall. The demi feet have levelers to raise the roller off the floor and help with getting the unit plumb. The 35” wide Bellar Roller is 10 inches thick, add our beefy 1 5/8 inch wall mount and you are ready!

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PLACEMENT OPTIONS

Your new vertical slab roller has been designed to offer two installation options.

- Direct wall mount (Fig 9), minimizing the amount of space required.
- Free standing (on the manual cover), using a pair of bolt on stabilizers.

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. This would shorten the life of the canvas.

Do not place where your access to and from the machine would be impeded. You will need adequate space to bring clay to and from the machine free from obstructions. Placement which is both near your clay preparation area and work area is also recommended.

If the possibility of excessive dampness or a wet floor exists, the demi feet provided will offer some protection.

Keep in mind that the drive handle can be mounted on either side. Generally, right-handed users find it more natural to rotate the drive handle with the right hand while feeding clay and harvesting slabs with the left hand. This is not to say that natural, fluid motion can not be achieved otherwise. This opens up even more possibilities such as corner placement.

The free-standing configuration offers the option of pairing with a work table and the freedom to move the roller, if needed. This very stable set-up is not only quick and simple but allows you to place the machine on any convenient level surface.

To further illustrate these procedures, you can refer to the video demonstrations provided on the website. Please visit <http://www.bellarroller.com> for the complete series of installation videos.

INSTALLATION CAN BE PERFORMED BY THE USER. HOWEVER, IF THERE IS ANY DOUBT AS TO YOUR ABILITY TO PROPERLY SECURE AND STABILIZE THIS MACHINE, IT IS IMPERATIVE THAT YOU HAVE THE INSTALLATION PERFORMED BY A QUALIFIED INSTALLER. INSTALLATION OF THE TOP OF THE UNIT TO WALL STUDS OR PROPERLY INSTALLED MASONRY ANCHORS IN CONJUNCTION WITH FOUR CORNERS OF THE BOTTOM OF THE UNIT RESTING ON A FLOOR ORIENTED AT A 90 DEGREES OR LESS TO THE WALL IS REQUIRED TO STABILIZE THE VERTICAL ORIENTATION OF THE UNIT WHEN THE WALL MOUNT IS USED. CAUTION-CLIMBING ON UNIT MAY LOOSEN ANCHORS OF A WALL MOUNTED UNIT OR CAUSE A UNIT WITH FLOOR STABILIZERS TO FALL IMMEDIATELY OR SUBSEQUENTLY, CAUSING INJURY OR DEATH. ASSESS THE INTEGRITY OF THE UNIT'S WALL OR FLOOR ATTACHMENTS ON A REGULAR BASIS.

Fig 9



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INSTALLATION

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STUD WALL MOUNT

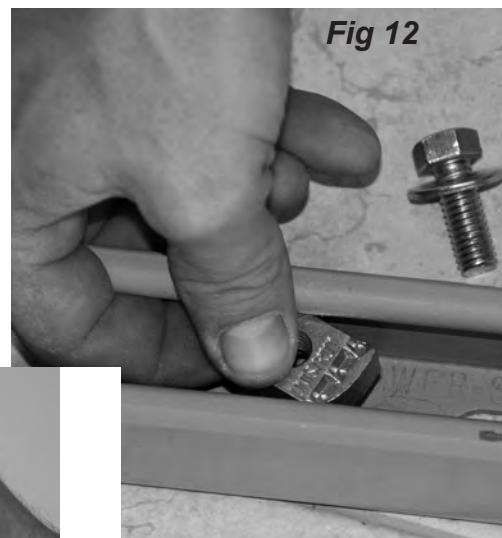


Fig 13

Fig 14

Fig 12

Fig 11

You will need (Fig 10)... helper, pencil, electric drill, $\frac{1}{4}$ " drill bit, $\frac{9}{16}$ " socket and ratchet, 2 – $\frac{3}{8}$ " x 1" lag bolts w/ small flat washers, 2 – $\frac{3}{8}$ " x 2" lag bolts w/ large flat washers, 1 wooden skid (from package), stud finder (helpful, but not required). Single letter references are to items in Fig 2 on page 4. Fasten the Demi feet (v) to the roller with the allen head bolts provided (e). Fasten the wall mount channel (g) to the back edge of the top horizontal frame member using the two $\frac{3}{8}$ " x 1" hex head bolts (i), two $\frac{3}{8}$ " small flat washers (t), and two $\frac{3}{8}$ " spring nuts (j). Secure only finger tight for now (Fig 12).

Carefully move the machine into position against the wall, exactly where it will be installed. Level the machine by adjusting the levers on the demi feet then lightly mark a line on the wall along the bottom and sides of the wall mount channel. Carefully move the machine back away from the wall and remove the wall mount channel from the back of the machine. If you do not have anyone to stabilize the machine while installing the mount to the wall, lay the machine on top of the flattened box top (Fig 13). Having located at least two studs (at least 16" apart) within the placement area, reposition just the wall mount channel exactly back on the line. Through the holes provided in the wall mount channel, make marks where the fasteners will be sure to hit solid wood studs. Drill $\frac{1}{4}$ " pilot holes into the studs at the marks (Fig 11). Using the 2 – $\frac{3}{8}$ " x 2" lag bolts(k), large flat washers(u) fasten the wall mount channel securely. Reposition the machine, arrange the spring nuts back into the channel, aligned with the drilled holes and tighten securely using the small washers (t) and the $\frac{3}{8}$ x 1" hex head bolts (i).(Fig 14).

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MASONRY WALL

This installation option will work for either a brick or block wall. It is recommended that if possible, the fasteners securing the wall mount channel to the wall be located within the mortar joint itself. You will need... helper, pencil, electric drill (hammer drill is helpful but not required), 5/8" masonry drill bit, 9/16" socket and ratchet, 2 – 5/8" x 2" lag shields (not supplied), 2 – 3/8" x 2" lag bolts w/ large flat washers. Small letters refer to Fig 2 on page 4.

Fasten the wall mount channel (g) to the back edge of the top horizontal frame member through the holes provided using the two 3/8" x 1" hex head bolts (i), two 3/8" flat washers (t), and two 3/8" spring nuts (j). Secure only finger tight for now.

Carefully move the machine into position against the wall, exactly where it will be installed. Level the machine by adjusting the levers on the demi feet then mark a line on the wall along the bottom and sides of the wall mount channel (Fig 15).

Carefully move the machine back away from the wall and remove the wall mount channel from the back of the machine.

Reposition just the wall mount channel exactly back on the line. Through the holes provided in the wall mount channel, make marks where the fasteners will be located. Placement of fasteners in the mortar joints (cement between the blocks) should be used if possible. Drill 5/8" holes, 2" deep at the marks. Insert the lag shields (not included) in the holes. They should fit snug. Using the 2 – 3/8" x 2" lag bolts(k),large flat washers(u) fasten the wall mount channel securely. Reposition the machine, arrange the spring nuts back into the channel, aligned with the drilled holes and tighten securely using the small washers (t) and the 3/8 x 1" hex head bolts (i).



Fig 16



Fig 15

FREE STANDING

You will need ...helper, "L" allen wrench, provided (f) 5/16" x 1" allen head bolts, provided (e) wooden skid from package. Having raised the machine to its vertical position, have your helper carefully tilt the machine up on one side. Place the wood under the lower frame (Fig 16). With one corner of the machine now slightly raised, securely fasten one of the stabilizers (a) to the lower frame using two of the 5/16" x 1" allen head bolts (e) and the short allen wrench (l) provided. (Fig 16) Press in a snap-in cover (c) at each bolt hole. Remove the spacer. Repeat this procedure for the other side. Carefully position the machine in its place of use. Make sure the selected location has a floor which is firm and level. Adjust the levelers by screwing in or out, if necessary, at each end of the stabilizers to achieve a steady and plumb machine. (Fig 15) To further illustrate these procedures, you can refer to the video demonstrations provided on the website.

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ASSEMBLY

Install the drive lock assembly (n) On the side of the machine where the drive handle will be located, press the spring ball insert (Fig 2, item s) fully into the $\frac{1}{2}$ " hole (Fig 18) Remove the wing nuts from the drive-lock assembly (Fig 17). Using the long "T" allen wrench, fasten the drive-lock over the spring-ball with the bolts remaining. (Fig 19) Lift the locking lever up and press back down to check for proper operation. The left side assembly is slightly different, the plate must be inverted (Fig 22). Always leave the drive lock in the locked position when not in use.



Fig 17



Fig 18



Fig 19



Fig 19

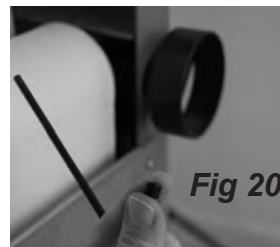


Fig 20



Fig 21



Fig 22

Install the drive handle

(Fig 21) Align the tongue on the drive handle and the groove in the drive shaft. Insert snugly until the handle is close to the frame. The handle is designed to fit very snugly you must push very firmly. **DO NOT HIT WITH ANY TOOL.** With the long "T" allen wrench, secure the drive handle with the $\frac{1}{4}$ " flat allen head screw. (Fig 20) With the drive-lock lever in the unlocked position (up) rotate the drive-handle, bringing the canvas to the start position. Shift the locking lever down, locking the drive-handle.

Install the adjuster knobs (Fig 19) Position the adjuster knobs fully onto the adjustment shafts. Using the long "T" allen wrench, securely fasten the two adjusters to the shafts by tightening the set screws which arrive installed in the adjusters (Fig 20). Rotate either adjuster knob. Notice that the other knob turns in a synchronized fashion and together causes the gap between the rollers to change in size. Read the actual size of the gap from the indicators located on each side of the frame.

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OPERATION

The Bellar Roller can be operated with the same efficiency regardless of which side the drive handle has been installed. The reversible nature of the drive handle is provided to enhance the overall versatility of the machine in terms of installation possibilities as well as user comfort.

Basic Operation

Facing the machine, rotate the synchronized adjusters to set the desired slab thickness. Gauges located on each side of the machine reads the actual thickness in inches or millimeters (III. 1). **NOTE:** Any additional material, other than the integrated canvas provided, rolled with the clay will affect the overall thickness of the finished slab with respect to the thickness gauge. Adjust the finished slab thickness accordingly. (see Advanced Slab Making on pages 13 and 14)



III. 3 See the quick stop lever installed on the left side of the machine. The configuration is slightly different from the right hand side.



Grasp the drive-handle with your drive hand and with the thumb of your drive hand, shift the position of the drive-lock lever from the locked position to the unlocked position.

Introduce, with your other hand, the desired amount and orientation of prepared clay to the nip area of the roller assembly. (III. 4)

Begin to rotate the drive handle to draw the clay downward the desired distance.

Reverse the rotation of the drive handle to reveal the now finished clay slab gently adhered (III. 2) to the upper canvas panel. Using your thumb again, lock the drive-handle.

Remove the clay slab from the upper canvas panel. (III. 5)

WARNING!!! TO AVOID INJURY, DO NOT RELEASE THE DRIVE HANDLE UNTIL THE DRIVE LOCK-HAS BEEN ENGAGED

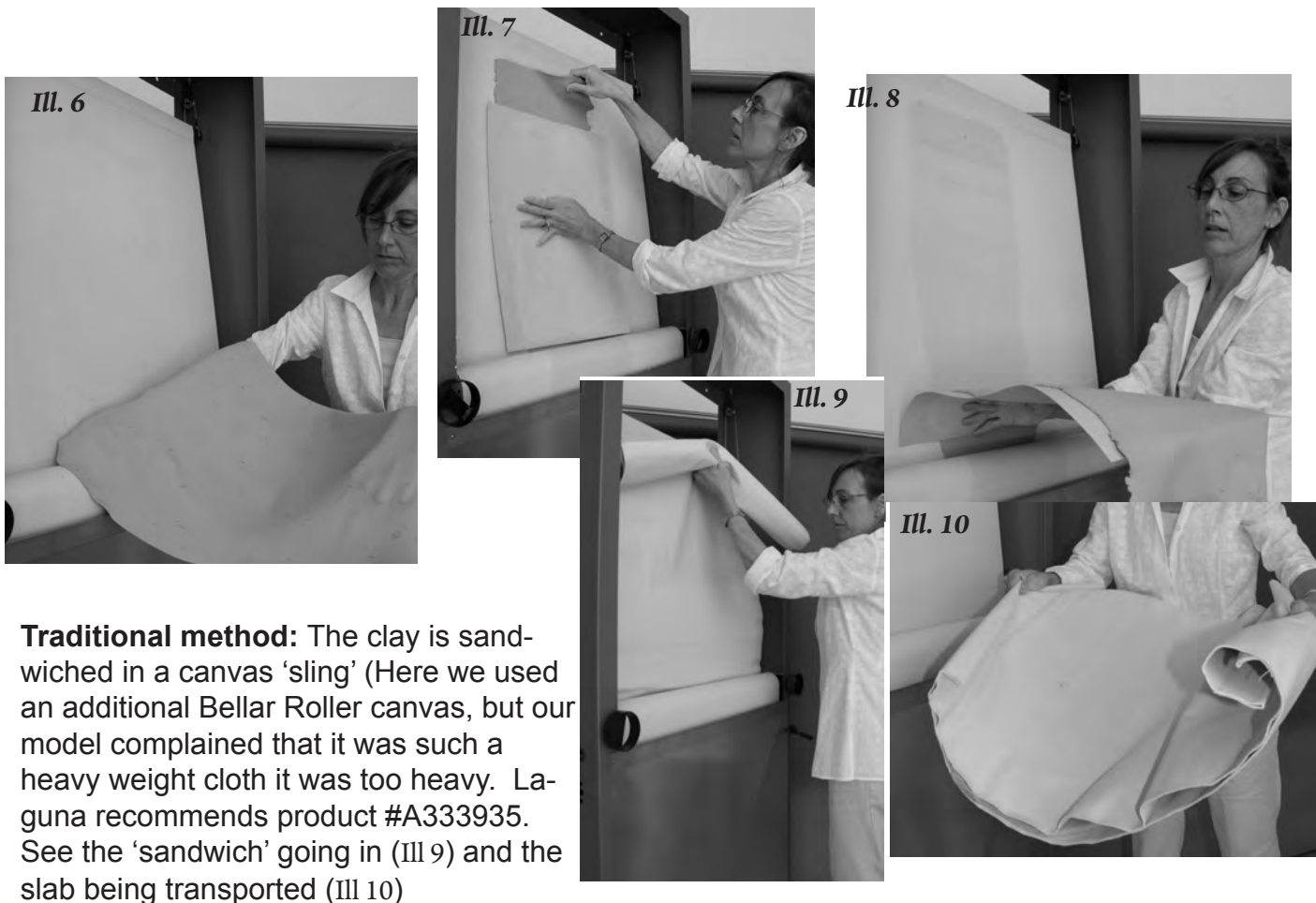
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Advanced Slab-Making

Forming large thin slabs, slabs from different clay bodies, or slabs for use in tile making processes can be managed with ease. Here is a brief, quick start overview to help you utilize the Bellar Roller in all of these instances.

Freeform slab making: (III. 6) The slab shown was made with the adjustment on a very thin setting. The formed slab was removed by loosening the top edge of the slab, starting on the side where the handle is. As the slab pulls free the arm is lowered slightly so the slab drapes over it and the other arm is placed under the lower end to support it. The slab can then be transported to the table.

Modified freeform slab technique : (III 7) A Slab mat is applied over the slab when it is in the full up position. The top is loosened as shown. The slab is then removed (III 8) from the back canvas. The slab mat (or other substrate) supports the whole slab during transport.



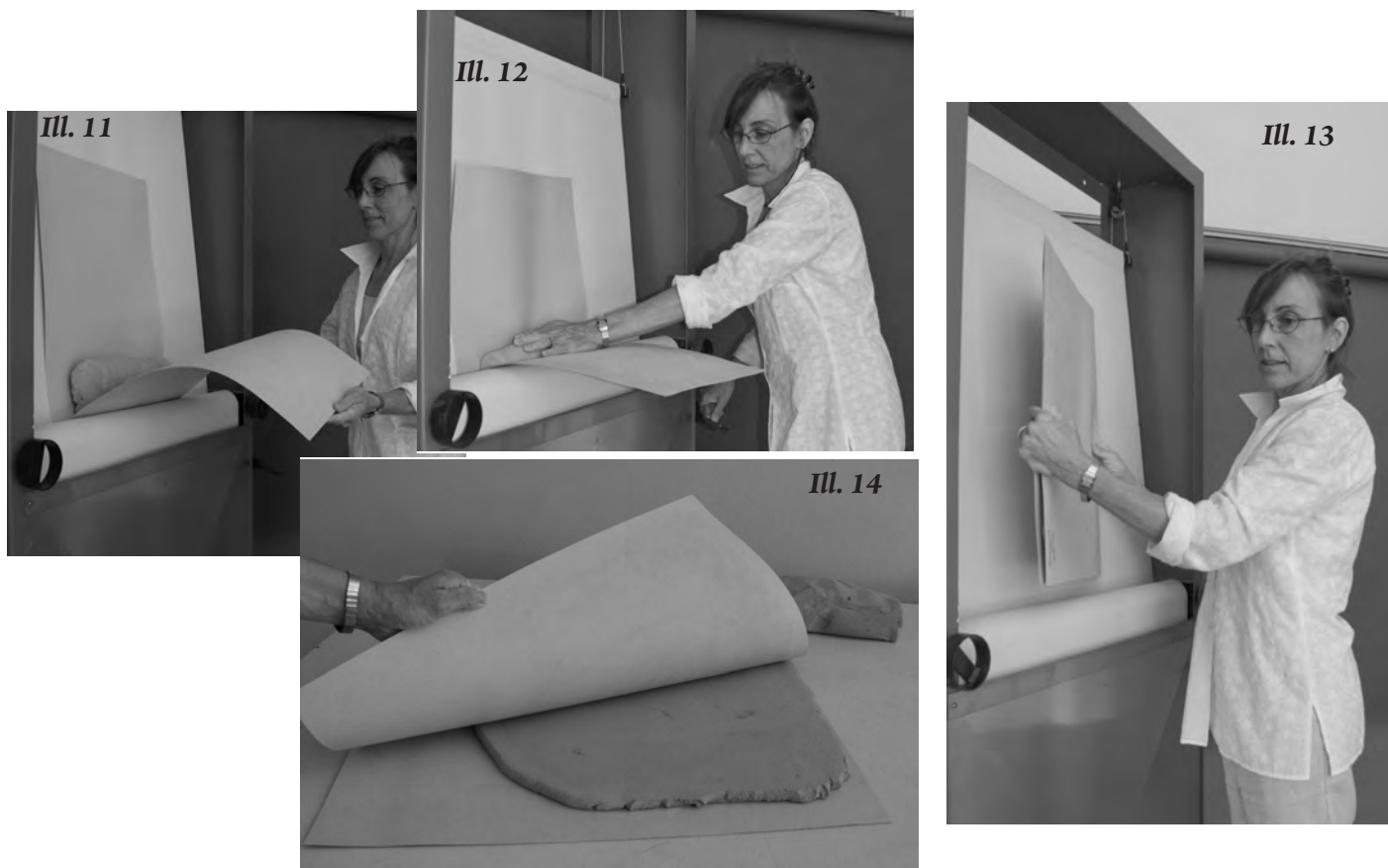
Traditional method: The clay is sandwiched in a canvas 'sling' (Here we used an additional Bellar Roller canvas, but our model complained that it was such a heavy weight cloth it was too heavy. Laguna recommends product #A333935. See the 'sandwich' going in (III 9) and the slab being transported (III 10)

To further illustrate these procedures, you can refer to the video demonstrations provided on the website. Please visit <http://www.bellaroller.com> for the complete series of operational videos.

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Making Slabs for use in tile making: Tile are particularly prone to warping. Keeping a flat slab all through the making process is one step toward perfectly flat tiles. The Bellar Roller's equal pressure on both sides of the slab make it possible to avoid cupping due to uneven pressure. Here two Slab Mats (product #NL29016) are used to rigidize the slab while forming(III. 11). A teardrop shaped roll of clay (inserted point down to assist feeding at the nip point) is placed between two Slab Mats (III. 12). The completed slab can then be transported vertically (III. 13) or augmented with a rigid substrate and transported horizontally without flexing. When using this technique be aware that any item included as the clay passes down between the rollers will thin the slab, making the guide read slightly more than the true slab thickness. A simple measure of slab without and slab with substrate will help dial in accurate thickness.



PART NUMBERS

Small auxilliary canvas 15" x 36" - #A333916
 Medium auxilliary canvas 29" x 35.5" -# A333918
 Large auxilliary canvas 30" x 72" - # A333935

Slab Mat (for smooth slab surface) Above shows two slab mats used together.

Small slab mat 16" x 22" NL29016
 Medium slab mat 22" x 50" NL29022
 Large slab mat 30" x 50" NL29030

Bellar Roller Replacement Canvas- Please specify when ordering.

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ADJUSTMENTS

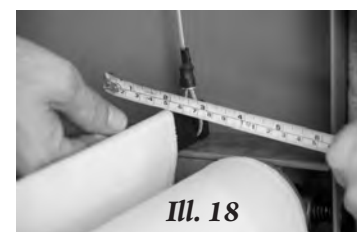
The drive system alignment, drive-lock, roller assembly and canvas tension have all been set to factory specifications and should not require any further adjustment. Should you find it necessary to apply more or less tension to the integrated canvas, follow the following procedure.

Locate the canvas tension bolts in the upper corners of the main frame. (Fig 7, item L) **Using a pair of 1/2” open-end wrenches**, back off the lock nuts on (III. 15) the canvas tension bolts. Rotate the bolts (III. 16) to achieve the desired tension. Confirm that each side is tensioned equally and the pulleys are properly aligned with equal distance from the frame to the bottom of the pulley, taking care not to make the canvas too tight. (see the Goldilocks Zone).

Re-tighten the lock nuts. One up to the frame and one down to the pulley (III. 17).

The Goldilocks Zone. Check the “travel” of the canvas while it is in the down position (III. 18). Press forward on the bar which goes through the canvas. The canvas should move from 1 inch to 1.5 inches when you press. Use a tape measure to assess how far the canvas travels. Keeping the canvas too tight can result in ripping. Keeping the canvas too loose can result in wrinkles which mar the finished slab.

III. 15



MAINTENANCE

The Bellar 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 light machine oil applied annually to the adjuster shafts (a more viscous gun grease may be easier to apply. A DAB WILL DO IT! Place lubricant on a sturdy rag for even application), (III. 19) synchronizer chain, (III. 21) and drive chain (III. 20) will meet all the lubrication

needs. Industrial, commercial or institutional users should oil these parts as needed. The ball bearings are sealed and do not require lubrication.

The machine can be cleaned of dirt and dust with a damp cloth and mild detergent if desired. **DO NOT HOSE DOWN YOUR BELLAR ROLLER.** Flooding the machine with water will cause rust to form, impairing function of the moving parts.

Wiping the canvas panels with a damp sponge will help to remove residual clay from the surface of the canvas. Allow the canvas to dry before use.

To further illustrate these procedures, you can refer to the video demonstrations provided on the website. Please visit <http://www.bellaroller.com> for the complete series of maintenance videos.

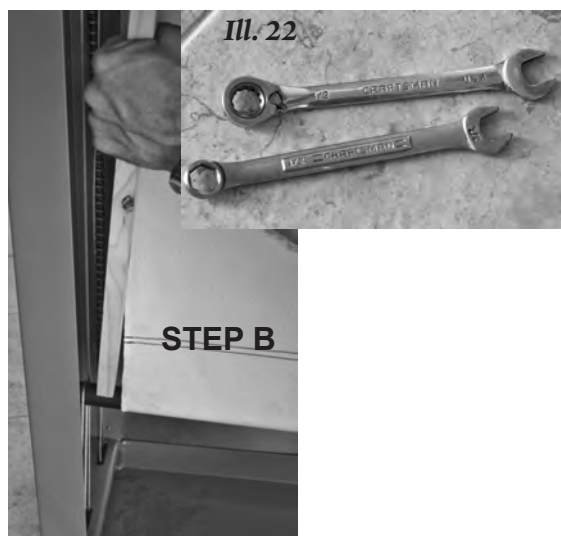
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CANVAS REMOVAL

The canvas provided with your Bellar Roller should provide many years of trouble free service. When switching between clay bodies frequently, use of a Slabmat product or auxilliary canvas is recommended. For infrequent changes between clay bodies, simply use a wet sponge to clear clay particles away and allow the canvas to dry before use.

If you do need to change the canvas there are **two important guidelines**:

1. **Enlist a helper to assist** with deinstalling your roller from the wall mount and holding it steady while you remove the old canvas and install the new canvas. You will need access to both front and back of the roller while installing the new canvas.
2. **BE SURE THAT CABLES ARE INSTALLED CORRECTLY ON THE PULLEYS BEFORE ROTATING THE HANDLE.** If the cables are beside the pulley instead of in the groove which goes around the circumference, the cable can become wedged beside the pulley. Take your time while you align each cable on each pulley to avoid costly repairs.



STEP A: Lower the canvas into the down position. Using a small ladder and two 1/2 inch crescent or ratchet wrenches (*Ill. 22*) loosen the nut on the top of the frame. This will allow the cables to become loose. Leave at least two threads on the bolt to retain the cable attachment.

STEP B: Using a 1 inch square stick or your hand (if you are tough) press down on the round pivot pipe.

STEP C: Then ease the cable out of the groove where it rests and off the end of the pivot pipe. Then remove cable from other end of the pipe (which will be much easier) and slide the pipe out of the canvas pocket.

STEP D: Remove the cables from the top stabilizer bar by pushing out, then down. Remove the bar from the canvas pocket. Repeat procedure for the bottom stabilizer bar. The canvas can now be removed from between the rollers.

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INSTALLATION OF REPLACEMENT CANVAS

The canvas on your Bellar Roller is a high grade cloth part which should give many years of trouble free service. Clean with water and a sponge. If for any reason you would need to replace the canvas use the following procedure

STEP 1: The new canvas has a pivot pocket, a short and a long canvas with end pockets. With the longer side to the front of the machine, push the pivot pocket between the two rollers.

STEP 2: Guide the long canvas over the front roller and behind the front panel (Fig 7, item K). Allow other portion of the canvas to hang over the rear roller and the back center frame. Standing at the front of the roller, retrieve the end pocket at the back of your Bellar Roller and insert a flat stabilizer bar. Carefully lay the bar with each end on top of the metal rails at the top of the rollers. Slide the loop of cable over each end of the bar, careful that the cable inserts into the notch at the bottom of the bar.



STEP 3: Move to the back of the roller. Insert the round pivot pipe with grooves at each end into the pivot pocket at the center of the Bellar Roller Canvas

STEP 4: Remaining at the back of the machine, insert the flat stabilizer bar into the canvas pocket previously guided between the roller and the front cover of the machine in step 2.

STEP 5: The stabilizer bar, placed in step four rests behind the drive chain and the cable should be free (not wound around the drive chain).

STEP 6: Pull the pivot pipe down and AFTER CHECKING TO BE SURE CABLES ARE RIDING PROPERLY ON PULLEYS insert the bar under cable loop and push cable into the groove at the end of the pivot pipe. Repeat process on opposite side. (The second one will be more difficult). If installing the cable on the groove is impossible, trouble shoot by checking to see if the tensioning bolts can be loosened for additional length, check to be sure cables are not wound around drive chain or snarled beside pulleys instead of riding on the circumference groove of pulleys.

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Limited Warranty

All Bellar Rollers (excluding the canvas) are guaranteed for two years against any defects in construction or materials. Your Bellar Roller can be registered with us by filling out the Owner registration card included. We currently maintain a record of everyone who purchases a Bellar Roller directly from Laguna or Axner and already have the purchaser, billing address, shipping address and serial number of your Bellar Roller in our files.

A Laguna or Laguna authorized technician must authorize or perform any warranty work to be completed.

If you have a problem with your Bellar Roller, the most efficient way to have it repaired is to contact the customer service department, and describe the nature of the problem. If it is determined that there is a warranty repair needed you may be asked to pack and ship the Bellar Roller or components to the Laguna company for inspection and repair. Any items being sent should be sent prepaid. It is advisable to retain the box and packing material that the Bellar Roller was originally sent in to accommodate shipment if it becomes necessary. For your protection your shipment should be insured.

There will be no charge for parts or labor if your Bellar Roller is still under warranty. In addition if it is determined that the work to be completed is covered by the warranty, Laguna will reimburse the customer for the shipment of the Roller or parts to the Laguna Clay Company as well as pay the return shipment to the customer. On repairs necessitated by abuse or that have exceeded the warranty period, we will charge for necessary replacement parts and labor and all shipping. Ultimate determination of validity of all warranty claims is at the discretion of the Laguna Clay Company.

IN CASE OF SHIPPING DAMAGE

In almost all cases, the equipment arrives to our customer in the same excellent condition it left the factory. This is not always the case. THEREFORE, IT IS EXTREMELY IMPORTANT THAT YOU INSPECT YOUR NEW EQUIPMENT IMMEDIATELY UPON RECEIPT. DO NOT SIGN THE TRUCK DRIVERS RECEIPT IF YOU SEE OR SUSPECT DAMAGE, NOTE THE DAMAGE ON THE TRUCK DRIVERS RECEIPT.

RETAIN DAMAGED ITEMS- Damaged item, containers, and inner packing materials must be held in the receiving area pending an inspection by the freight or carrier responsible.

CALL CARRIER TO REPORT DAMAGE AND REQUEST INSPECTION- According to Interstate Commerce Commission regulations, the call should be placed immediately upon discovery of the damage. Under no circumstances should you delay calling beyond 15 days, this will almost certainly result in denial of your claim.

CONFIRM CALL IN WRITING-Retain a copy of your letter for your records.

When the carrier makes an inspection of the damaged merchandise, have the merchandise in the receiving area. Damaged items must not be moved from the receiving area. Allow inspection of the items, cartons, packing materials used and freight bill. Retain your delivery receipt, as it will be needed as a supporting document to your claim when it is filed.

After the inspection is complete read carefully and fully the inspection report prior to signing. If you do not agree with all the facts or conclusions on the report do not sign it. If repair of the damaged merchandise is not satisfactory, insist that the inspector specifies "replacement" on the inspection report. A replacement may be ordered only if the inspection report indicates, "REPLACE".

RETAIN DAMAGED MERCHANDISE- although inspection has been completed, damaged items must not be used or disposed of without written consent from the carrier.

DO NOT RETURN DAMAGED MERCHANDISE-Return of damaged items must be authorized by the Laguna Clay Co.

SECURE RECEIPT FROM THE CARRIER IF DAMAGED ITEMS ARE PICKED UP FOR SALVAGE.

If your claim is to be considered, RETURN ALL FORMS TO LAGUNA CUSTOMER SERVICE DEPARTMENT, include copies of correspondence, freight receipts and inspection report.

Keep this and all other paperwork included in the delivery of your roller for your records and to better assist you in the rare event that there is a problem.

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