

Back-Saver Clay Mixer

5 HP MODEL

by

Laguna



Manufactured by:

Laguna Clay Co., 14400 Lomitas Avenue, City of Industry, CA 91746, (626) 330-0631



Back-Saver Clay Mixer

OWNER'S MANUAL • 5 HP MODEL

**** IMPORTANT: READ THIS MANUAL BEFORE OPERATING YOUR MIXER ****

Laguna's Back-Saver Clay Mixer has been designed to dramatically reduce the backbreaking work so often experienced in mixing clay. To ensure the safe and productive use of your mixer, study the following safety guidelines and operating instructions BEFORE mixing your first batch of clay. "#s" reference photo illustrations in this manual.

For additional information about this mixer and other quality, clay-processing equipment manufactured and distributed by Laguna, contact 1- (800) 4-LAGUNA or info@lagunaclay.com.

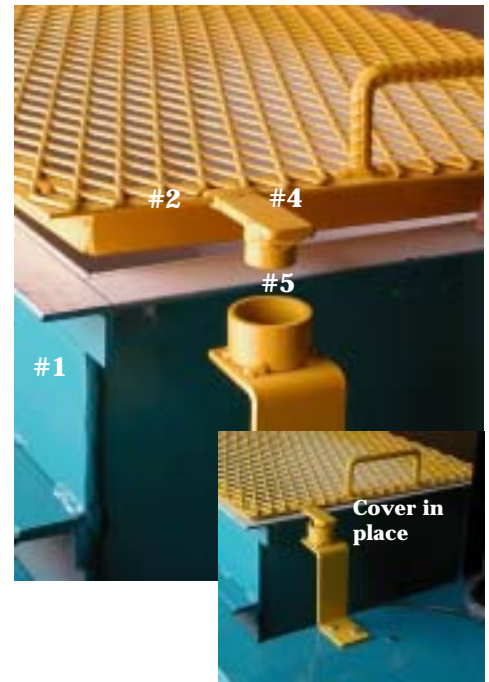
SAFETY FIRST!

NEVER mix clay without the grate-cover (#2) and the motor cover (#14) in place. Except as described in Operating Instruction J below, the mixing blades (#8) will only operate with the grate-cover in place. For your own safety, do not bypass the safety, proximity sensor (#5).

NEVER operate your mixer with more than one person. The safety features of this equipment are designed for a single operator. While emptying clay from the mixer (*Operating Instruction J*), you don't want to have to worry about the location of a helper's hands!

NEVER put your hands anywhere inside the mixing tub (#1) or scrape down the sides of the tub unless the power key (#6) is in the OFF position.

ALWAYS use the yellow safety handle (#9) when rotating or tilting the tub. The tub is heavy, so brace yourself prior to tilting it forward. The yellow safety handle may not be required when tilting the tub full of moist, mixed clay; refer to Operating Instruction J.



OPERATING INSTRUCTIONS:

["#s" reference photo illustrations in this manual]

- A. **Polarity Check for 3 phase motors only.** If you have special-ordered a 3-phase motor for your Back-Saver mixer, refer to the "Polarity Check" information attached to your power cord.
- B. **Drive Chain Tension.** When you receive your new mixer, and before plugging the power cord into the hot receptacle, remove the motor cover (#14) and determine that the drive chain (#18) is fairly taut, not loose. Three small bolts secure the motor cover in place. The chain has been pre-set at the factory, but it is good to check it prior to initial use in the event the motor mount shifted in shipping causing the chain to loosen. If the chain feels loose, refer to the *Maintenance* section of this manual. [Warning: The chain will be greasy, so you may want to use a paper towel or glove to protect your hand.]



C. **Dump the dry ingredients** for your clay formula (or your scrap clay) into the mixing tub (#1). The maximum capacity of your Back-Saver mixer is 300 lbs. of moist clay. This typically equates to 80% dry material and 20% water. This ratio varies depending on desired clay firmness.

D. **Place grate-cover** (#2) on top of the mixing tub as follows. First rest the right side of the grate-cover in place on the tub (#1). Then slowly lower the left side until the proximity sensor “key” (#4) is inserted into the proximity sensor unit (#5). When removed from the mixer, it is recommended that the grate-cover be hung on the 2 hooks protruding from the back of the mixer frame (#3). This will keep the cover and the proximity sensor “key” from becoming damaged.

E. **Power.** Turn the power key to the ON position. (#6)

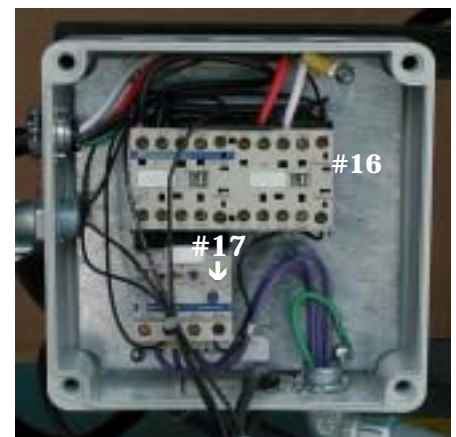
F. **Dry Mix.** Turn the FWD/REV switch (#7) to the FWD position and mix your dry formula for approximately 2 minutes. Turn the mixer switch to the REV position, and mix for another 2 minutes. (Allow mixing blades to come to a stop between forward and reverse.)

G. **Add Water.** Turn the FWD/REV switch (#7) to the forward position, and add water through the grate-cover until the desired consistency of moist clay is achieved. To avoid stalling the mixer’s motor, add the water rapidly. The water can be added with the mixer in either the off mode or in the FWD or REV modes. If water is added too slowly, the motor may stall under the compacted load. If the motor stalls and you lose power: (1) Turn the FWD/REV switch and the power key to the OFF positions and unplug the power cord. (2) Remove the cover on the control box. (3) Press the reset button (#17). (4) Replace the cover. (5) Plug in the power cord. (6) Turn the power key ON and (7) turn the FWD/REV key to FWD to start the mixing blades. If the mixing blades do not begin rotating immediately, switch the rotation to REV. If necessary, repeat this FWD > REV > FWD cycle until the blades begin rotation. As you learn the sounds of your mixer, you may be able to stop the motor before a stall and utilize this FWD > REV > FWD cycle to avoid the stall. Remember, you won’t experience motor stalls if you follow the instructions at the beginning of this paragraph.

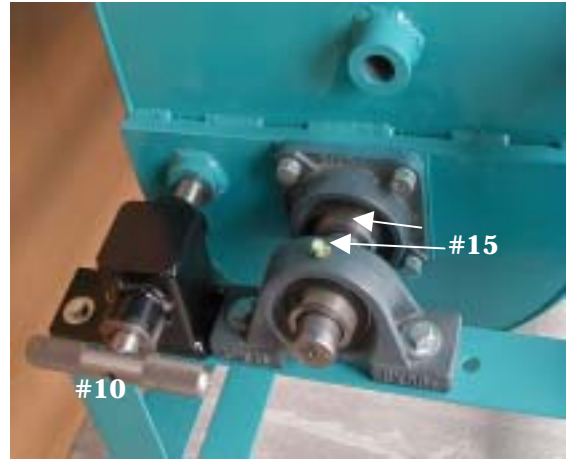
H. **Wet Mix.** With the 5 horsepower model, a typical formula is well mixed after (a) 6 minutes in forward, (b) 6 minutes in reverse, and (c) a final 2 minutes in forward.

I. **Scraping Sides of Mixer.** It is advantageous to scrape clay from the sides of the mixer once or twice during the wet mix cycle – particularly if your mix is somewhat “sticky.” You will probably want to scrape once during the forward cycle and once during the reverse cycle. A flat bladed garden spade is the ideal tool for this process, but **BEFORE SCRAPING; ALWAYS TURN THE POWER KEY (#6) TO THE OFF POSITION.** Also, **NEVER** scrape down the sides of the mixer or dislodge clay from the mixing blades (#8) with your hands. The blades are sharp and they will become even sharper with use. A long-handled, restaurant-grade spatula works quite well. If you can’t find one locally, they are available through 1-(800) 4-LAGUNA.

J. **Unloading mixed Clay.** The following steps will allow you to unload 300 pounds of moist clay safely and easily. **THIS IS A ONE-PERSON OPEATION.** The safety features of this equipment are designed for a single operator. As stated above, when you are emptying clay from the mixer, you don’t want to have to worry about the location of your helper’s hands!

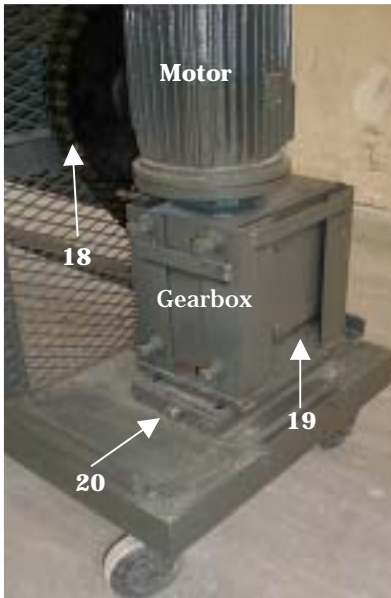


1. Remove the grate-cover (#2), and store as recommended in Paragraph D above.
2. Install the safety handle (#9).
3. Disengage the Safety Position Lock (#10) on the right side of the mixer frame by pulling the lock handle out and rotating it ¼ turn. This handle is spring loaded, and a firm pull is required to disengage it from the mixing tub.
4. Rotate the tub forward to approximately 100° with the safety handle, but do not force the rotation. If the stiffness of the clay prevents the rotation of the tub, remove the safety handle and go on to step 5. below.
5. Place one hand each on the two, discharge buttons (#11, #12).
6. While depressing Discharge 1 (#11), press Discharge 2 (#12) intermittently. This will cause the mixing tub to tilt forward into the unloading position.
7. Repeat this process several times until the tub has tilted is resting on the Stop Bar (#13).
8. Place a table, cart, or wheelbarrow into which the mixed clay is to be unloaded in front of the mixing tub.
9. Repeat step 5 above allowing the mixing blades to push your mixed clay out of the mixing tub and into the waiting container.
10. Once the blades cease to eject clay, turn the power key (#6) to the OFF position and use a scraping tool to remove any remaining clay.



K. Cleaning. Always clean with the power cord disconnected. The easiest way to clean your mixer is to roll it to a suitable location and using the detachable tub handle (#9) tilt the mixing tub forward allowing it to rest on the Stop Bar (#13). The tub is heavy, so brace yourself prior to tilting it forward. Using a garden hose, rinse out the mixing tub. **Never use your hands to clean the tub or the mixing blades; the blades are sharp.**

Maintenance & Upkeep



- A. Check Drive Chain Tension.** The drive chain (#18) will stretch, particularly during initial use. At a minimum, it is recommended that you check the chain for proper tension upon receipt of your new mixer, after the first 20 batches, and every 4-6 months hereafter. **REMEMBER; ALWAYS DISCONNECT POWER TO THE MIXER BEFORE CHECKING OR ADJUSTING THE CHAIN TENSION.** Access the chain by removing the motor housing (#14). The chain will be greasy, so you may want to use a paper towel or old glove to protect your hand. Push on the chain to make sure it is almost taut with only a slight amount of slack or give. If there is more than ⅛ - ¼” slack when you apply pressure to the chain, continue to paragraph B below.
- B. Adjust Drive Chain Tension.** Disconnect electrical power to the mixer. Remove the motor housing (#14). Loosen (do not remove) the 4 mounting bolts (#19) below the gear box; rotate the tension adjusting bolt (#20) counterclockwise to tighten the chain tension or clockwise to loosen the chain tension. Retighten the 4 mounting bolts (#19). Replace the motor housing.
- C. Lubrication – Chain.** The chain was properly lubricated at the factory, and it should be lubricated every six months using any standard chain lubricant available at a local hardware store.

D. Lubrication – Bearings. The bearing assemblies (through which the shaft is mounted on either side of the mixing tub) were properly greased at the factory, but they should also be greased every six months to preserve the life of the bearings. There are four grease fittings. Usually 1 or 2 “shots” of grease is plenty. Too much grease can be as damaging as none at all!

Congratulations!

Your decision to purchase a Laguna Back-Saver Mixer will provide you with years of trouble-free service if the safety, operating and maintenance instructions provided in your Owner's Manual are adhered to.

Direct questions about your new Mixer or other equipment available through Laguna Clay Co. to 626/330-0631 or info@lagunaclay.com.

You are encouraged to read the following warranty information carefully, and complete and return the warranty registration immediately to ensure the full warranty service to which you are entitled.

Limited Warranty

This warranty does not cover:

- Damage resulting from moving or transporting the mixer
- Negligence or abuse to the mixer, whether intentional or unintentional, including, but not limited to, the introduction of foreign objects or material into the mixer for which the mixer was not designed – objects or materials which could damage the mixing blades, tub, bearing assemblies, gear box, or motor
- Unauthorized changes or alterations to the original mixer which prove detrimental to the operation of the mixer

Laguna Clay Co.
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(626) 330-0631 ♦ info@lagunaclay.com

BACK-SAVER Mixer Warranty Registration

Complete and return this card immediately to ensure full warranty coverage on your new mixer. In lieu of a properly completed and returned warranty registration card or the providing of an original purchase receipt at the time warranty work is required, the warranty period for this product will commence on the date the mixer was initially shipped from the manufacturer. (Please print all information.)

NAME: _____

ADDRESS: _____
NO. & STREET CITY, STATE, AND ZIP

DEALER _____
NAME CITY & STATE

MODEL AND/OR SERIAL NO.

DATE OF PURCHASE

Detach and return this section immediately to:

**LAGUNA CLAY CO.
14400 LOMITAS AVE.
CITY OF INDUSTRY, CA 91746**

