### Lehman's Green Power Grain Mill

#### **Owner's Manual and Warranty**



Congratulations on your purchase! We know you will be thrilled with your new grain mill. Fresh, healthy flour is just a few turns of the flywheel ahead of you!

- Designed to grind hard, dry beans or grains. Moist, soft or oily beans or grains will cause clogging.
- Operating the grain mill without grain in the hopper causes excessive wear to grinding plates ("burrs").
- Protect from moisture. Surface rust on shaft and spring auger or chips in powder coating that expose bare steel may rust. Damaging rust may occur to bearings.





## **Grain Mill Parts**

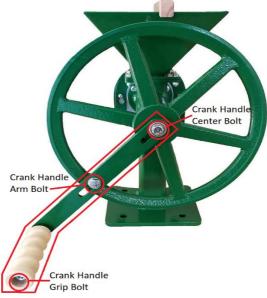




# **Assembly & Setup**

Remove all components from the box and set the mill on a stable surface.

#### **Install Crank Handle**



- 1. Install the Crank Handle Center Bolt through the flat steel Crank Arm into the threaded hole in the grain mill axle until snug.
- 2. Install the Crank Handle Arm Bolt in the rim of the Flywheel until snug.
- 3. Fully tighten the Crank Handle Center Bolt with the 10-14 Wrench.



- 4. Fully tighten the Crank Handle Arm bolt with the 17-19 Wrench and 10 Wrench-A. Make sure the wooden grip spins freely on the bolt.
  - If it does not, loosen the bolt and retighten the lock nut to hold bolt in position so wood grip does not bind.
  - If the wooden grip does not spin freely, it will cause painful blisters.

#### Mounting

- 1. Use the pre-drilled holes in the mounting base to secure the mill to an immovable base object before operating.
  - Use Accessory B with the 17-19 Wrench to mount the base.
- 2. For best results, mount at a comfortable working height for maximum leverage.
  - For most people, that means putting the center of the grain mill shaft near the center of the user's torso.
- 3. The mill can also be mounted on a 2x8 or piece of plywood, which can in turn be clamped to a stable surface.
  - This makes set up and removal of your grain mill fast and easy.

**Caution:** If mounting bolts are over-tightened, and especially if no washer is used between the head of the bolt and the grain mill body, the powder coated finish may be damaged.

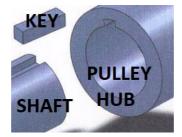


#### How to Re-install the Flywheel

Your grain mill is shipped with the flywheel attached. Should the flywheel be removed, use these steps to reinstall it.

- 1. Turn the shaft until the notch is facing upwards, and put the square key in the notch.
  - The key will protrude from the shaft.
- 2. Slide the Flywheel over the shaft.
  - The Flywheel has a notch that will slip over the protruding key.
- 3. Push the Flywheel onto the shaft until the end of the shaft is flush with the outside edge of the Flywheel.
  - Flywheel must not touch the mill body. Shaft must not extend past the face of the pulley.

Tighten the set screw using the provided hex wrench to hold the Flywheel in place





## **BASIC OPERATION:**

- Start by tightening the Adjustment Knob until the surface of the grinding plates ("burrs") touch each other to achieve full surface-tosurface contact.
- 2. Pour your choice of perfectly dry, free-flowing grain, rice, or beans into the top hopper.



3. Turn the **Handle Crank** until some flour emerges; check the consistency and adjust as needed. Keep adjusting until the fineness of flour is achieved.

This process should be followed every time you set up the grain mill and start grinding a new batch.

**For best performance:** When you reach desired consistency, turn the knob counterclockwise one or two rotations. This will lessen the effort required with little or no loss in flour fineness.

**Please Note:** Extremely fine grinds will cause more wear and tear on the grain mill. The adjustment knob should never be tightened to the point where you can no longer turn the handle with reasonable effort.



#### Fine Grinding [Clockwise Turn]

Finer grinds will produce a light, "fluffy" and consistent pastry and baking flour.

- Start grinding with the burrs tightly together; it is easier to loosen the adjustment knob to make the grind coarser.
- Tightening the adjustment knob clockwise will increase fineness, and will result in a slower grind, requiring more effort to turn the handle.
- Turn the crank handle slowly to feed grain through the grinding burrs as you tighten. This will gradually break down the large particles and grit that make it harder to turn.

#### Coarse Grinding [Counterclockwise Turn]

Coarser grinds may be used for multi-grain breads, cereal, and animal feed. Very coarse grinds are less likely to clog the mill.

- It is much easier to move from FINE to COARSE than it is to move from coarse to fine.
- Loosening the adjusting knob/burrs will create a progressively coarser consistency that will make the handle easier to turn.
- An inconsistent mixture of flour AND cracked grains is normal when mill is set for a coarse or "loose" grind.



# TROUBLESHOOTING

If the mill is too hard to turn:

- Loosen the Adjustment Knob by one half to two turns. You shouldn't lose too much consistency and it will be easier to turn.
- 2. Run the grain through the mill two or three times:
  - Use the first grind to produce coarse, gritty flour with the consistency of corn meal.
  - Run the coarse flour through a second or third time to get the consistency you want.

### CLEANING

- 1. Disassemble by removing the cover for the grinding burrs followed by the Adjustment Knob.
- Slide the grinding burr plate off of the shaft; DO NOT LOSE the square "key" that keeps the outer grinding plate in place.
- 3. Clean:
  - **Grinding burrs:** They are stainless steel and can be washed in the dishwasher.
  - Mill body, shaft and spring: use a soft bristled brush to sweep out any residue.
  - **Mill body:** wipe with a damp cloth; avoid abrasive cleaners, scouring pads and harsh chemical cleaners, which may damage the finish. Do not submerge in water.
- 4. Remove all foreign matter and make sure that all surfaces are dry to avoid stains and rust.



## MOTORIZATION

Your grain mill can be flywheel motorized. The is grooved for use with a standard V-belt that is half inch wide, often referred to as an "A" V-Belt. Because of variables in equipment availability, we do not provide specific instructions recommendations or for motorization.



#### DANGER:

- Do not exceed 75 RPM at the pulley and shaft. It may require the use of gear motor to achieve such slow speeds.
- All moving parts must be fully enclosed. Hair, loose clothes and extremities can become entangled in the moving parts, resulting in severe bodily injury.
- Do not leave your motorized grain mill unattended while running.
- Keep away from children and pets.
- Motor and grain mill must be safely and securely fastened to an immovable surface.
- The wooden hand-crank handle and handle arm MUST be removed before motorized operation.



#### CAUTION:

- Do not overtighten the adjusting knob. Even when motorized, you should still be able to move the pulley by hand with the motor turned off. If you cannot move the pulley by hand with the motor off, the adjusting knob is too tight.
- Excessive belt tension will result in bearing and/or shaft damage.
- Do not run the grain mill without grain in the hopper.
- Due to the many variables introduced during motorization, the warranty is void if the mill is motorized.
- By motorizing your grain mill, you accept full liability and responsibility for complying with all applicable Federal, State, and Local Safety Standards.

#### LIMITED ONE YEAR WARRANTY

Lehmans Hardware, Inc (Lehmans) warrants only to the original purchaser of this product ("Purchaser") that the product will be free from defects in material and workmanship under normal use and service for a period of one (1) year from the date of purchase. Lehmans sole obligation and liability under this limited warranty shall be, at its absolute option, to either repair or replace the defective product at no cost to the Purchaser (except as provided for herein), provided the product is found, to Lehmans satisfaction, to be in breach of this limited warranty. Lehmans reserves the right, before having any obligation under this limited warranty, to inspect the defective product, and all costs of shipping the product to Lehmans for inspection shall be borne solely by the Purchaser. This limited warranty is void if the product is not handled and used as prescribed in the instructions and manual accompanying the product. Additionally, the foregoing limited warranty does not include damage, repairs or replacements as a result of the following: normal wear and tear; product variations; misuse; abuse; negligence; accident; modifications; alterations; or services rendered by persons other than Lehmans. This limited warranty is nontransferable.



**PROCEDURE**. In order to recover under this limited warranty, Purchaser must either notify Lehmans in writing or return the defective product to Lehmans within sixty (60) days of the product becoming defective, and Purchaser must provide Lehmans acceptable proof of original ownership (such as original sales receipt or other documentation Lehmans deems acceptable). Purchaser shall be responsible for all shipping and handling related costs and expenses related to the return and replacement of the product.

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# ON THE SQUARE in Kidron, Ohio

Lehman's exists to provide creative solutions for a simpler life. From our products to our events, there's fun for everyone at Lehman's.

Check out our full schedule of events at Lehmans.com/events. We have a fun event planned for every weekend.





Lehman's retail store is over 35,000 square feet long, hosting four Civil War era buildings. The original store front was restored in 2011 to look just like it did in 1955. Lehman's is a place to embrace the past. When you visit, we suggest you walk through twice once looking at the products and once looking up at all the beautifully restored antiques.



### DID YOU KNOW?

Lehman's added over 14,000 new products last year. New lines include an all year 'round Christmas shop, camping equipment, a section for your furry friends and more. If you haven't been to Lehman's lately, you haven't been!



