



**MODEL No 99**

**OWNER'S MANUAL**

*Grain  
Maker*




## INTRODUCTION

Your heirloom quality GrainMaker mill comes complete with everything you need to start grinding. Just add quality grain, seeds, legumes or nuts. Your mill can produce cracked grains to fine flour and creamy nut butter in just one pass.

Each mill has been tested before it leaves our shop. You may notice some residual flour in the mill from this testing. Your GrainMaker mill was manufactured in a facility that contains wheat and nuts.

This mill is intended for use with dry or oily grains, seeds, legumes, nuts and similar food items. Your mill is not intended for use with anything moist or wet.

It is imperative that you fill out and return the Heirloom Guarantee Card 90 days from the date that your mill was received. You may also go online and register here: [grainmaker.com/registration](http://grainmaker.com/registration)

	<b>HEIRLOOM GUARANTEE REGISTRATION CARD</b> PLEASE RETURN WITHIN 90 DAYS FROM DATE MILL WAS RECEIVED.
NAME _____	
STREET _____	
CITY _____ STATE/PROVINCE _____	
ZIP CODE _____ COUNTRY _____	
PHONE _____	EMAIL _____
DATE THAT YOU RECEIVED YOUR MILL _____	
MILL SERIAL NUMBER _____	
PURCHASED FROM _____	
HOW DID YOU HEAR ABOUT GRAINMAKER? _____	
COMMENTS _____	
THANK YOU FOR YOUR PURCHASE!	



## SETUP

### 1. ATTACH THE EXTENSION HANDLE

A. Remove the bolts securing your mill to the shipping board and secure the handle using the large Allen wrench. Place the first bolt furthest away from the wood grip into the shaft.  
B. Place the second bolt into the tapped spoke of the V-pulley flywheel.

### 3. BEGIN MILLING

A. Place the safety guard in the hopper.  
B. Fill the hopper with grain.  
C. Loosen the click and lock adjustable knob as it has been tightened for shipping.  
D. Turn the extension handle clockwise.

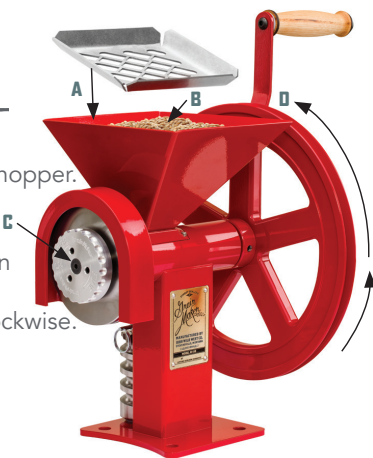
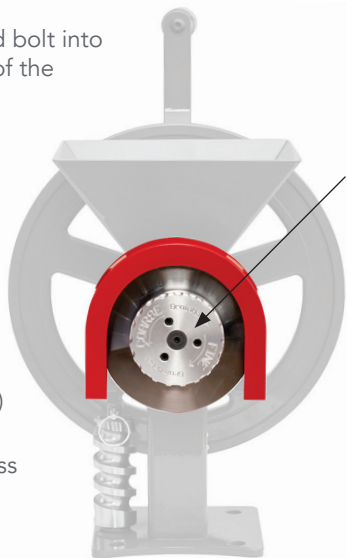
### 4. FINE-TUNING

A. As the grain works into the burrs, tighten the adjustable click & lock knob 1 to 2 clicks, then turn the extension handle 3 to 4 times, test consistency and repeat this process until you reach the desired consistency.  
B. Remember, making small adjustments of 1 to 2 clicks does change the consistency, but it is necessary to turn the extension handle a couple of times. Do not go by what is in your collection container as this will have various consistencies during this process. Do not overtighten. This will not allow the media to flow as there needs to be room between the grinding burrs to allow the flour to escape.

**Note:** When grinding grain into flour, it is normal to have more flour accumulating on one side of your container versus the other.

### CUSTOM MOUNTING CLAMP (sold separately)

This custom machined heavy-duty clamp needs 1" overhang clearance with a thickness of up to 3". This clamp is not ideal for those with rounded or waterfall edge counters.



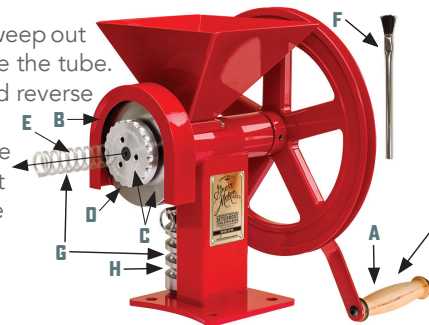
## MILL DETAILS

**COIL AUGER** Each mill is shipped with the coil auger already inserted in the mill. This auger looks like a big spring and is used to grind smaller grains. The coil auger must be inserted with the flat end first - towards the mill.

**GRAINBREAKER AUGER** This auger is designed to break larger media into smaller pieces while pushing it into the grinding burrs for the final grind. It must be used for legumes, corn, coffee and nuts.

### CHANGING THE AUGERS

A. Position the extension handle and grip to its lowest point.  
B. Remove dust cover.  
C. Hold the burrs together with one hand while turning the click & lock adjustable knob counterclockwise with the other hand until it is completely unscrewed.  
D. Remove the front grinding burr. It is not necessary to remove the stationary burr when changing the augers.  
E. Pull the auger out.  
F. Use the provided brush to sweep out any remaining media left inside the tube.  
G. Insert the desired auger and reverse the steps above.  
H. Store the other auger on the storage post. The storage post is shipped with blue protective tape at the top to protect it during shipping. You may choose to remove it if desired.



### SHAFT AND BEARING ASSEMBLY REMOVAL

A. Remove pulley v-belt flywheel by loosening the set screw.  
B. Remove dust cover and adjustment knob.  
C. Remove rotating front burr and auger.  
D. Use a rubber mallet or block of wood placed on the end of the shaft where the adjustment knob (B) was and tap. The shaft and bearing assembly will come out on the opposite end where the pulley v-belt flywheel was.

**NOTE:** To replace, do the reverse of the above steps.

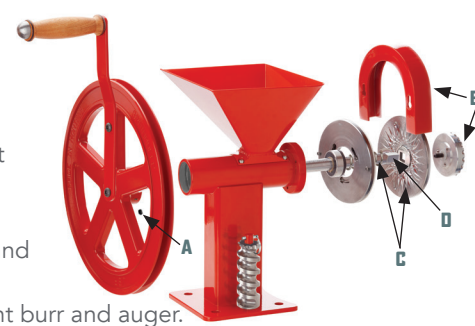
### GRINDING BURRS

A. Over-tightening the grinding burrs will not allow media to flow.  
B. If the grinding burrs are hot, you may have the knob too tight. This is common especially when using your own motor and running it too fast.

### CLICK & LOCK ADJUSTMENT KNOB

A. Loosening the knob: Larger gap between burrs = coarser grind.  
B. Tightening the knob: Less space between burrs = finer grind.

**NOTE:** When you loosen the knob, position the extension handle and grip to its lowest point. If you fail to do this, the handle and grip will lose resistance and rotate quickly towards the base of the mill. This could harm your fingers or hands.



## CLEANING

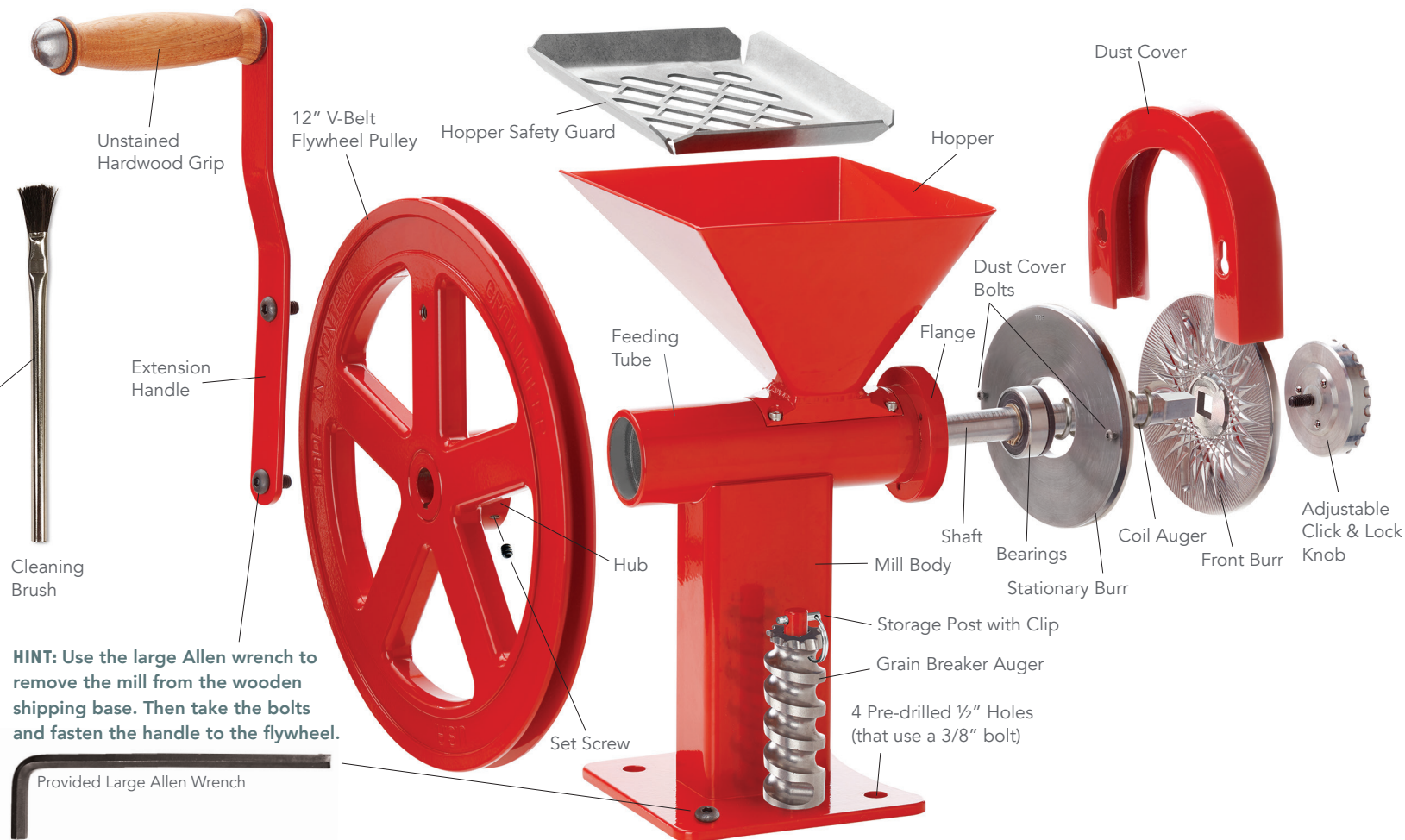
It is normal to find residual grain left in the mill under the auger area. The space around the auger allows the handle to rotate and the grain to be pushed into the burrs.

### TO DISASSEMBLE FOR CLEANING:

If your mill is motorized, be sure to unplug from power supply.

1. Remove the dust cover.
2. Unscrew the click & lock adjustable knob, taking care to hold the burrs together at the bottom with one hand while unscrewing the knob.
3. Remove the front burr.
4. Remove the auger.
5. Use the provided long cleaning brush and sweep out all residual grain. You may discard, or simply place it in your mill or container to be used for your next grind.
6. If you need to remove the stationary burr, use the 1/8" Allen wrench to loosen and remove the bolts holding the stationary burr onto the flange.

**HINT:** For a thorough cleaning after grinding oily materials, place a clean container under the burrs and run dry grain through the mill to absorb some of the oily residue, then disassemble and clean. You may wash the burrs by hand in soapy water, but you must dry immediately. If you do notice any rust on your burrs, simply run some wheat or dry grain through the mill and discard the flour.



**HINT:** Use the large Allen wrench to remove the mill from the wooden shipping base. Then take the bolts and fasten the handle to the flywheel.

## CLEANING SCHEDULE

It is important to clean and maintain your mill according to the schedule below.

Depending on how often you use your mill, it is important to follow the recommended monthly cleaning schedule.

### RECOMMENDED CLEANING SCHEDULE:

- Average use (10 cups a month): Once a month
- Extra use (30-50 cups a month): Once a week

**HINT:** If you live in a humid area, you may wish to apply some olive oil to your burrs and feeding tube between uses.

**IMPORTANT!** Do not immerse the mill in water. This WILL damage the bearings and the mill.





## GRINDING INFORMATION

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### LARGE NUTS & LEGUMES

1. It is necessary to use the GrainBreaker auger.
2. Break them into smaller pieces to allow them to fall more easily into the auger.
3. Nuts need to be lightly toasted in a warm oven to process nut butter.
4. When grinding nut butter, remove the dust cover.
5. Use a spatula to remove the nut butter that gathers around the edges of the burrs.

### CORN

1. It is necessary to use the GrainBreaker auger.
2. Remove the adjustment knob and front grinding burr and coarsely crack.
3. The pieces will be large, and you may even notice some kernels coming through whole.
4. Once you have run the corn through once, depending on the consistency you desire, you may place the front burr on with the GrainBreaker auger still in the mill and leave the knob adjusted on the looser side. Then, place the cracked corn back into the hopper, and begin grinding.

### OATS

1. Toasting raw oats helps to remove any bitterness. This is very easy to do and requires a short amount of time.
2. Place the oats on a baking sheet (about ¾ of an inch deep) and bake for 25 minutes at 300 degrees.
3. Cool, then grind.

### SPEED AND MOISTURE

1. Speed and moisture are two main reasons the mill clogs up when milling.
2. Soft grains like spelt and oats require slow milling.
3. It is important to know the moisture content in your grain as too much can cause clogging as well. A moisture content of 9% or below is a good rule of thumb.
4. If using your own motor, the mill needs to run under 100 RPM.

### WILL IT MILL IT?

Our mills were designed to grind whole grains, coffee, nuts, seeds and dry, dehydrated vegetables. Items such as mesquite bean pods and sugars do not process well in our mill. If you have any questions regarding other foods that you would like to try in the mill, email us at [sales@grainmaker.com](mailto:sales@grainmaker.com).

### CONSISTENCY

If the consistency of your grind is not to your liking, then place the milled product back into the hopper and mill again.

### SAFETY FIRST

1. The mill must be bolted or clamped securely to a work surface before using, and the hopper safety guard must be in place.
2. Our shiny red mills and finely crafted accessories are practically irresistible to children. Get in the habit of leaving the handle in the upright position, so children aren't tempted to reach for it, and please, always supervise children around the mill.
3. Consumer assumes all risk and responsibility when operating the mill by hand, bicycle, electric power or any alternative power method. As the designer and manufacturer, we reserve the right to make changes that improve our products. Models and prices subject to change.



## AVAILABLE ACCESSORIES



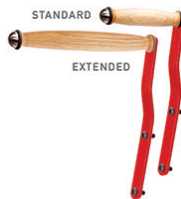
**ELECTRIC GEAR MOTOR** This gear motor was designed exclusively for GrainMaker mills. Easy conversion with no belts needed, simply remove the flywheel and slide the motor directly onto the shaft.



**BICYCLE KIT** Want to make flour faster, without electricity? Use pedal power! Our bicycle conversion kit and your geared bicycle with 26" wheels is the answer.



**DIY MOTORIZING KIT** Designed for consumers with basic knowledge of mechanics and carpentry. It allows you to convert your own 1 HP motor that runs around 1725 - 1800 RPM's. The motor will require a minimum of 200 inch pounds of torque.



**EXTENDED WOOD GRIP** This grip is designed for customers that choose to use two hands while turning the hand crank on the flywheel. It is 10.5" wide compared to the 5" grip that comes standard with all of our mills.



**CUSTOM MOUNTING CLAMP** This custom machined heavy-duty clamp needs 1" overhang clearance with a thickness of up to 3". This clamp is not ideal for those with rounded or waterfall edge counters.



*Our accessories are designed and manufactured with the same attention to detail and craftsmanship as your hand-made mill. Photos shown without safety guarding for illustration purposes only.*

## HEIRLOOM GUARANTEE

1889 Wild West Co. guarantees this GrainMaker mill to be free from defects in materials and workmanship under normal household use and conditions for a lifetime. This Lifetime Heirloom Guarantee covers all parts including the burrs and excluding the finish. This Heirloom Guarantee is void if the mill is used commercially, or in any way other than recommended.

1889 Wild West Co. will repair, or at its discretion, replace the mill or mill parts free of charge (less shipping), if in the opinion of the company, it has been proven that the problem is related to defective parts or an error in workmanship.

**MONEY-BACK GUARANTEE:** Your mill comes with a 30-day money-back guarantee. Contact 1889 Wild West Co. immediately to arrange return and full refund of purchase price (less shipping), if you are not satisfied with your purchase. Mill must be securely packaged and returned in new condition.

**REGISTRATION:** The Lifetime Heirloom Guarantee registration card must be completed and mailed to 1889 Wild West Co., PO Box 130, Stevensville, MT 59870, within 90 days of receipt of merchandise. This proof of purchase must be on file with the company when requesting guarantee service. If you purchase a mill without a Lifetime Heirloom Guarantee card, please contact 1889 Wild West Co.

**SHIPPING DAMAGE:** Damage due to shipping should be reported immediately to 1889 Wild West Co. Limitations: The Lifetime

Heirloom Guarantee is void if the product is used for any other purpose than that for which it is designed or intended. The product must not be altered, repaired or serviced by anyone other than 1889 Wild West Co. The product must not have been subject to accident or damage in transit, or while in the owner's possession misused, abused or operated contrary to the instructions contained in the instruction manual. This Lifetime Heirloom Guarantee is valid in all countries. The consumer will pay postage for repairs.

### EXPRESSED OR IMPLIED WARRANTIES:

Except to the extent prohibited by law, no other warranties whether expressed or implied, including warranty merchantability and fitness for a particular purpose, shall apply to this product. Under no circumstances shall 1889 Wild West Co. be liable for consequential damages sustained in connection with said product. 1889 Wild West Co. neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than such as is expressly set forth. This Lifetime Heirloom Guarantee covers only the GrainMaker and its specific parts, not the food or other products processed in it.

### PAYMENT AND SHIPPING INFORMATION:

Call 406-777-7096 or 1-855-777-7096 for shipping information. Make checks payable to: GrainMaker PO Box 130 Stevensville, MT 59870

1889 Wild West Co.  
PO Box 130  
Stevensville, MT 59870  
Phone: 406-777-7096  
Toll-Free 1-855-777-7096  
GrainMaker.com  
sales@grainmaker.com

**PROUDLY MADE IN STEVENSVILLE, MONTANA**