OVERVIEW

• Roller gap range from 0.020-0.080" (0.5 -2.0mm)
• Plugs into standard 120 - 240VAC 15A wall socket
• Durable impact resistant thermoformed hopper
• 25lb hopper capacity (uncracked)
• Throughput of up to 350 pounds per hour (this equates to roughly a bag of grain every 8 minutes)
• Tool-less gap adjustment
• Motor and drive-train separated from cracking chamber to reduce fouling from dust
• Food grade 304 stainless steel fluted rollers
• Differential speed rollers to help keep husk intact for better lautering performance
• Large diameter rollers to decrease nip angle and promote grain cracking and increased roller life

IN THE BOX

FEATURES AND SPECIFICATIONS

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HOPPER INSTALLATION

After unboxing the Grain Mill, power supply, and hopper, begin by installing the hopper using the provided (4) M6x1.0x12mm Button Head Screws (which are preinstalled in the Grain Mill) and the hex wrench as shown in the diagram below.
**INSTALLATION INSTRUCTIONS**

**MOUNTING - Ss BREW CUBE | GRAIN MILL KIT**

There are a couple of options for mounting.

1. Purchase the Ss Brew Cube | Grain Mill Kit
2. Mount the assembly to an existing table or bench that has a cutout for grain to flow.

To attach the Grain Mill to the Ss Brew Cube, position the Grain Mill on the Ss Brew Cube so that the 4 outside mounting holes line up with the 4 holes in the Ss Brew Cube top plate. Use the provided (4) M6x1.0x14mm screws that came with your Ss Brew Cube | Grain Mill Kit to secure the Grain Mill to the top plate as shown in the diagram below.
INSTALLATION INSTRUCTIONS

MOUNTING - UNIVERSAL TABLE TOP

If you wish to mount the Grain Mill to an existing bench or other structure, you will need to calculate the size of the screws using the following formula. It is EXTREMELY IMPORTANT to not allow the screw to thread more than 0.5” (13mm) into the bottom of the Grain Mill extrusion. Damage may occur if screws thread into the unit more than 0.5” (13mm).

Mounting Surface Thickness + 0.5” = Length of Mounting Screw

For example: If the surface you wish to attach the Grain Mill to is 1.5” thick, then your screw length should be 1.5” + 0.5” = 2.0” screw length. The screw bolt pattern is shown below.

Note: It is highly recommended to MOUNT the Grain Mill to a rigid structure due to the weight of the assembly. Resting the Grain Mill on a 5 gallon bucket is very dangerous and is not recommended.
ROLLER GAP SETTING

Using the knurled adjustment screw on the Grain Mill handle, adjust the roller gap size to the desired grain crack size using the chart below (For most grain the “0” position is a good starting position). Be sure to unscrew the adjustment knob enough to ensure that it does not contact the Grain Mill extrusion when the handle is moved. Next select a position number on the extrusion and turn the adjustment screw so that it is properly seated in the selected hole.

Note: The Grain Mill should not be operated in positions beyond the “-5” or “5” positions.

### GRAIN MILL GAP RANGE

<table>
<thead>
<tr>
<th>Position Number</th>
<th>Gap (mm)</th>
<th>Gap (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-5</td>
<td>0.50</td>
<td>0.020</td>
</tr>
<tr>
<td>-4</td>
<td>0.70</td>
<td>0.028</td>
</tr>
<tr>
<td>-3</td>
<td>0.85</td>
<td>0.033</td>
</tr>
<tr>
<td>-2</td>
<td>1.00</td>
<td>0.039</td>
</tr>
<tr>
<td>-1</td>
<td>1.15</td>
<td>0.045</td>
</tr>
<tr>
<td>0</td>
<td>1.30</td>
<td>0.051</td>
</tr>
<tr>
<td>1</td>
<td>1.46</td>
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<tr>
<td>2</td>
<td>1.61</td>
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<td>1.76</td>
<td>0.069</td>
</tr>
<tr>
<td>4</td>
<td>1.90</td>
<td>0.075</td>
</tr>
<tr>
<td>5</td>
<td>2.00</td>
<td>0.080</td>
</tr>
</tbody>
</table>

The values listed above are approximate and should be used for reference only. Actual grain crush size should be measured using calibrated sieves.

Note: If a negative gap setting is used, the belt may need to be re-tensioned. See page 7.

### OPERATING PROCEDURE

1. Secure the Grain Mill to a surface (Ss Brew Cube I Grain Mill Kit or table top)
2. Connect power cable to Grain Mill unit
3. Connect power supply to a standard AC wall outlet and turn power switch to “On”
4. Move adjustment screw on handle to the desired position number / gap, then turn the adjustment screw so that it is properly seated in the selected hole position
5. Depress power button on Grain Mill to power the unit on (blue LED light will turn on)
6. Load grain into hopper

Note: Ensure the power switch on power supply is in “On” position before powering on Grain Mill.
BELT TENSION

The Ss Grain Mill requires very little maintenance. The internal sealed roller bearings require no lubrication and have an extremely long service life. The belt is also a very durable component but may require occasional re-tensioning as the unit wears in. The process to re-tension the belt is minimal and is shown below.

1. Unplug power supply from Grain Mill.
2. To tension the belt, position the adjustment handle 2 notches above the position where you will normally be cracking grain. For example, if you plan to use notch “0” to crack the majority of your grain, position the adjustment screw in notch “-2” to tension the belt.
3. Remove the (4) M6x1.0x45mm screws from the drive side cover (the plastic cover that does not have a power button or Ss logo plate).
4. Loosen but do not completely remove the shoulder screw that holds the idler pulley in place.
5. Push the idler pulley down and outward in order to put tension on the belt. While pushing on the idler pulley, tighten the shoulder screw so that the idler pulley spacer stays securely in place.

Note: DO NOT OVER-TIGHTEN the shoulder screw as damage to the side plate may result. A standard 3” long hex wrench is more than sufficient to tighten the shoulder screw, a T-handle or longer hex wrench is not needed.

If the rollers are overloaded, the idler pulley that provides belt tension will loosen by design to prevent damage to the rest of the system. If this occurs, the belt will need to be re-tensioned following the process shown above.
BELT ROTATION

The drivetrain belt can be rotated if one side becomes worn or damaged. Depending on the extent of the damage, the belt may need to be replaced.

1. Unplug power supply from Grain Mill.
2. Remove the (4) M6x1.0x45mm screws from the drive side cover (the plastic cover that does not have a power button or Ss logo plate).
3. Loosen but do not completely remove the shoulder screw that holds the idler pulley in place.
4. Push the idler pulley inward and remove the belt.
5. Flip the belt over (or replace belt) so the outside teeth are now oriented to the inside and will mesh with the gears. Route the belt in same orientation as diagram below.
6. To tension the belt, position the adjustment handle 2 notches above the position where you will normally be cracking grain. For example, if you plan to use notch “0” to crack the majority of your grain, position the adjustment screw in notch “-2” to tension the belt.
7. Push the idler pulley down and outward in order to put tension on the belt. While pushing on the idler pulley, tighten the shoulder screw so that the idler pulley spacer stays securely in place.

**Note:** DO NOT OVER-TIGHTEN the shoulder screw as damage to the side plate may result. A standard 3” long hex wrench is more than sufficient to tighten the shoulder screw, a T-handle or longer hex wrench is not needed.
The Grain Mill should be cleaned by using an air compressor and compressed air to blow debris out and off of the unit. A vacuum can also be used to collect any debris on or around the Grain Mill.

If something causes the rollers to jam, the unit may begin to “stutter”. If this occurs, power off the Grain Mill immediately. Unplug the Grain Mill from the power supply. Inspect the unit and clear any obstruction from the rollers.

The power supply is equipped with a fail-safe mode to protect the Grain Mill if it begins to draw too much current. When the power supply enters the fail-safe mode, power will stop being supplied to both the Grain Mill and power supply. The green light on the power supply will also turn off. To reset the power supply, follow the steps below:

1. Depress power button on the Grain Mill so that is in the “Off” position.
2. Unplug the power supply from the Grain Mill.
3. Turn the power supply switch to the “Off” position and unplug it from the wall.
4. Wait 10 seconds for the power supply to automatically reset.
5. Plug the power supply back into the wall and turn the switch to the “On” position. The green light should light back up on the power supply.
6. Depress power button on the Grain Mill to “On” position.
7. Continue milling your grain.

Keep fingers away from rollers while unit is plugged-in or in use.

Always unplug power supply from Grain Mill if any servicing to unit will be done.

Never use water or other liquids to clean the Grain Mill.

Only dry grain should be run through the Grain Mill.