

THE PHILMILL

Assembly

1. Crank: Find the wooden handle. Unscrew the 5/16" bolt from the handle taking care not to misplace the washer and small spacer on the bolt. Insert the spacer-washer— bolt assembly into the crank arm through the hole. Screw the bolt into the handle and tighten. Screw the handle into the bearing and roller at the front of the mill.

2. Hopper: Find an empty 2 liter soda bottle, cut away the bottom and remove the plastic ring from around the neck. Insert the neck of the bottle into the large hole in the wood base and secure by tightening the screw.

3. Clamp the mill onto a table or other secure surface using the two hook bolts and wing nuts. (Note that the hook bolts will damage the underside of the clamping surface. Pad this surface with wood or metal if this damage is undesirable.) Tables with square edges, as opposed to rounded edges, work best. The wing nuts may need to be retightened as the hooks seat themselves.

If the hook bolts are inadequate for your mounting needs, a common 3" "C" clamp found at any hardware store can be used.

Operation

The grain to be crushed is poured into the hopper - a 2 liter soda bottle will hold about 2 lbs. The grain will be crushed when the handle is turned clockwise.

Adjustment of the crush is made by turning the plastic headed screw on the side of the mill (clockwise for finer - counter clockwise for coarser). Cranking the handle backwards slightly will make for easier adjustments.

Slack (damp) malt can cause milling problems-notably very hard cranking. Should this become evident, the best course of action is to mix the slack malt with dry malt in a proportion that allows for manageable cranking.

From time to time, the grain will contain foreign objects (stones, pieces of metal etc.). To minimize damage to the roll, one should never continue cranking when a dramatic increase in the cranking force is noticed. If this happens, back the adjustment screw out and try to pass the object. If it does not pass, the hopper and mill will need to be cleared of all grain, turned upside down and cranked backwards until the object falls out.

To power your Philmill, one needs only acquire a drive adapter and a 1/2" electric drill. Cut the head off a 3/8" shoulder bolt or purchase one from your retailer. You must remove the crank by unscrewing it from the roller. Disassemble the mill from the wood base. Hold the roller in a vice with small blocks of wood and turn the crank counter-clockwise. It will unscrew out. Replace the crank with the adapter. The drill will chuck on to the smooth portion of the adapter.

The presence of foreign objects in the grain is of special concern when the mill is operated with a power source. If an object is encountered, power must be cut as quickly as possible in order to minimize roll damage and operator physical injury. Never lock the drill "on" with the trigger lock or operate it unattended. A hard jam can occur and cause the drill body to want to rotate counter clockwise, possibly causing injury. It is best to operate the drill trigger with your left hand so that should this occur, the drill will rotate out of your hand, releasing pressure on the trigger and cutting power automatically.

The roll is case hardened to minimize potential damage, however, some objects maybe of a size, shape or material which if left unattended can destroy the knurling of the roll. The Listermann Manufacturing Co. cannot be held responsible for this kind of damage.

Note!

Never probe the grain hole or the underside of the mill with your finger. The roll can grab it and cause physical damage!