

Thank you for purchasing the Reed Machine. If you have any question or trouble please feel free to email me at:

thereedmachine@gmail.com

PREPARING THE BLANK

Whether you make your own blanks or buy them, it is necessary that the blank be made to the same thickness as the guide reed you will be using.

STEP 1: Polish reed blank using 200, 400 then 600 grit sandpaper to assure a flat surface.

STEP 2: Using a utility or reed knife remove bark from blank.

STEP 3: Soak the reed blank in water for 5-10 minutes.

GUIDE REED THICKNESS TABLE

V Guide Reed - .109"

R Guide Reed - .122"

G Guide Reed - .125"

ALIGNING GUIDE TABLE OR REED

STEP 1: Loosen the clamp by turn the knob clockwise.

STEP 2: Remove the attached guide reed or table by sliding it under the clamp to the left.

STEP 3: Slide the wider of the two tables or guide reed that come with the machine under the clamp.

STEP 4: Attach the table or reed with the 2 screws provided using the T-9 tool.

STEP 5: Place the blade parallel and to the far right position and carefully lower it to table. Slide provided brass shim under blade. The shim should slide out with little or no friction. STOP if there is friction. This means the blade may be too close to the table and if used with damage the table. See section on

Replacing the Blade after Sharpening.

TIP: If you do not want to reset the blade at this point, simply apply a thin piece of tape on the underside of the guide reed table and retest. This will raise the blade.

SELECTING A REED

Choose a guide reed or permanent template reed (included). For cane reeds, select a reed that has the proper physical proportions as well as a good playing quality. New reeds seem to make the best guides since they more closely resemble the cane quality of the blank.

STEP 1: Raise the cutting arm to the rest position (top of black handle should rest on work table).

STEP 2: Loosen the clamp by turning the knob clockwise.

STEP 3: Slide the heel of the guide reed under the clamp until the reed's tip is flush with the guideline.

STEP 4: Center the guide reed on the table using the line on the reed table and gently tighten the clamp.

DO NOT OVER TIGHTEN THE CLAMP!

ALIGNING THE BLANK ON THE TABLE

Remember it is important that the bark has been removed from the blank and made the same thickness as the guide reed before continuing with this next step.

STEP 1: Slide the heel of the blank under the right clamp until the tip of the blank is at the guideline.

STEP 2: Center the blank on the table and gently tighten the clamp.

CUTTING THE BLANK

Now with a series of cuts you will begin to form your new reed. The

best results will be achieved only if you work slowly and insure the blank is aligned properly. The blade cuts in a similar manner to that of a hand plane. It is advisable to practice using a commercial reed instead of a blank until you become familiar with the following procedures.

STEP 1: Slide machine arm COMPLETELY to the left of table

STEP 2: Completely tighten the adjustment screw knob, located behind the handle. Then loosen it counter clockwise one complete revolutions. Use the small arrow on the knob as a guide.

STEP 3: Place you left hand on the black handle and your right hand on the side of the base of the machine.

STEP 4: Slide the blade from the left to the right. Do not press the handle downward. If the blade digs into the blank and does not cut smoothly, turn the adjustment screw 1/4 turn COUNTER CLOCKWISE and repeat this step.

STEP 5: Pivot the handle slightly away from you and make another cut.

STEP 6: Continue to follow the contour of the guide reed by pivoting the handle until no more wood can be removed. NEVER PIVOT THE HANDLE TO SUCH A DEGREE AS TO ALLOW THE STEEL GUIDE TO COME IN CONTACT WITH THE REED TABLE!

STEP 7: If no cane has been removed at this point, turn the adjustment screw 1/4 turn CLOCKWISE and return to STEP 4.

STEP 8: Once you have made the initial cuts to the blank, rotate the adjustment screw CLOCKWISE using the following series of turns:

3 - quarter turns 2 - eighth turns (+/-) 1 - sixteenth turn

MAKE SURE EACH TURN IS FOLLOWED BY THE SERIES OF CUTS DESCRIBED IN STEPS 4-6.

As you become more familiar with your REED MACHINE, you may develop your own series of turns according to the thickness of your reeds. However, keep in mind, as you near completion of your new reed the blade will begin shaping the tip. To avoid fraying the tip, turn the adjustment screw by only 1/16th of a turn at a time.

STEP 9: Remove the new reed when the adjustment screw no longer turns. The reed is now ready for clipping.

COMMERCIAL REEDS FIXING

This is a simple process that may save many unusable reeds. Remember to adjust only reeds of equal style and cut as the guide reed. Align the guide reed and the reed to be adjusted following the same procedures as described above in the "CUTTING THE BLANK" section. It is advisable to set reed 1/8" behind guide line to and slowly move it forward to avoid any blank thickness discrepancies.

REPLACING THE BLADE AFTER SHARPENING

This is an important step since an improper setting can cause the reed to be too hard or too soft, and more importantly, cause damage to the reed table if set too low. When you received your REED MACHINE, the blade will already be set at the recommended height for your convenience.

STEP 1: Loosen the bolt on the blade using a 5/32" hex wrench.

STEP 2: Place a piece of cigarette paper or provided brass shim between the blade and the table.

STEP 3: Slide the blade downward until it touches the shim. When the blade is in this position, tighten the bolt making sure the shim slides out easily. The paper shim should slide out with little or no friction.

STEP 4: Slide the blade toward the left of the table making sure it clears the table. IF THE BLADE HITS THE TABLE STOP IMMEDIATELY!!! ALWAYS DOUBLE CHECK THE BLADE SETTING!

ADJUSTING THE SAFETY BAR

If after adjusting the blade the machine does not cut smoothly, the safety bar in front of the blade may have to be reset. This bar controls how much cane is removed with each cut. Lowering and raising it may be necessary after the blade has been readjusting to find the height that produces the desired result. To set the correct opening and height between the blade and bar follow these steps.

STEP 1: Loosen the hex bolts.

STEP 2: Place a standard single edge razor blade (.010") between the blade and bar.

STEP 3: Slide the bar towards the blade until the shim is taught.

STEP 4: Tighten the hex bolts. Check height of bar by gently sliding a piece of cane over the guide and blade. The cane should cut easily when the height is correct. Add and remove clear laminate paper/tape to bottom of guide to raise and lower its level.

PROBLEM SHOOTING GUIDE

If there are LARGE DIPS AT THE START OF THE VAMP OR VAMPS WHICH ARE TOO SHORT, it is likely the blank and guide reed are of unequal thickness.

If the REED IS UNBALANCED, either the guide reed or the blank may

have been centered improperly. Slight changes in positioning may achieve the appropriate result you desire.

If the filings from the reed become stuck between the blade and safety bar, remove them with an old reed or a thin piece of cardboard.

If after resetting the blade the machine is not cutting correctly, loosen the safety bar in front of the blade and readjust.

Try different guide reeds until you find one that will produce the best result.

Always soak the cane before cutting to achieve a smoother reed surface.

If reeds are all coming out heavy on the left, move the guide reed slightly to the right.

If reeds are consistently soft on the left, move the guide reed slightly to the left.

MAINTENANCE

Oil all moveable parts with a Teflon based lubricant. Oil the parts once a week depending on use to prevent wear. One drop of oil may be placed on the guide reed to prevent wear as well.

Remove filings and debris from the machine using a small paintbrush. Filings caught between blade and safety bar can be removed with a cardboard strip.

Blade should retain its edge for a very long time, however, if it becomes dull during the first year of use, return it for a free sharpening and adjustment. After one year sharpening will be available for a nominal fee or you may choose to sharpen the blade, on your own, at your own risk.