

# INSTRUCTIONS FOR FINISHING RIO RONDO CASTINGS **BR2**

There are two steps to finishing Rio Rondo castings:

1. **Cleaning up flash and seams**
2. **Polishing the part to a brilliant shine.**

It really doesn't matter which order you finish and polish your parts in. You can choose to finish your parts by hand, or by using a motorized tool such as a Dremel. If you plan on finishing large quantities of parts, a moto-tool is recommended since it will speed up the work quite a bit.

For either method, I suggest the following items to have on hand:

- **Pair of small cutters**— to remove any large burs or metal from the piece
- **X-Acto knife and blades**— (*no. 11 blade recommended*)—for removing excess flash from the insides of holes or other areas impossible to reach with a moto-tool or by other means.

## SAFETY EQUIPMENT

- 1) Always wear goggles when working with metal parts as small chips can injure your eyes
- 2) Keep hair contained, and avoid wearing loose clothing or hanging jewelry, particularly when using a moto-tool
- 3) Use fabric-type band-aids to protect your fingers from cuts or accidentally polishing yourself as you work. Use them on your thumb and forefinger.

## MOTO-TOOL METHOD

### **SUPPLIES NEEDED:**

**Dremel or other brand motorized tool** (*adjustable speed is best*) mounted on your bench. Note that a special holder to mount your moto-tool to use as a small bench grinder is available for under \$10 at many hobby outlets.

**Special Tip:** permanently anchor this mount to a piece of wood, then use C-clamps to hold the wood to your bench or work table. This way you can quickly set up your moto-tool for use, but not commit to a permanent space for it. Also note that the actual mounting device simply uses a hose clamp to hold the dremel in place.

**Screw mandrel** (*Rio Rondo part # MD1*) and Grinding Wheel (*part #GRW1*). Many soft grinding wheels made of a rubbery substance that binds the cutting medium together into a disc shape will work, including BrightBoy and Cratex brands. **Do not use a grinding STONE.**

Attach the grinding wheel to your mandrel, and attach the mandrel to your moto-tool. Using a medium speed (approx. 12-15,000 rpm) you can easily remove any nibs, flash, seams, etc., from any cast part in seconds.

**Stiff Bristled Brush wheel** (*part #MD4*). Use this on your moto-tool to shine up the surface of any casting. (**This is a fiber brush, DO NOT USE A METAL OR WIRE BRUSH!**)

Use with red rouge (#GRW9) sparingly and only on parts that are too stubborn to shine up easily. You can also use other metal polishing compounds such as Flitz and Simichrome with this wheel. Operate the moto-tool at about 12-15,000 rpm for best results.

**Screw end mandrel and 'bullet' shaped grinding heads.** Screw the bullet onto

the shank, then attach the shank to the moto-tool. The bullet shape will allow you to smooth out the insides of items such as stirrups.

### **MOTO-TOOL SPECIAL TIPS:**

Using a moto-tool for finishing parts can cause two primary problems:

1. The speed at which the tool operates causes friction and parts can heat up **VERY QUICKLY** and become too hot to handle. Keep a cup or can of cold water handy and dip the part into the water every few seconds or as needed to regulate the temperature.
2. A quickly spinning wheel can easily flip the part right out of your hand. If you're wearing goggles, your eyes are safe, but the problem often remains of having to locate a lost item on the floor or other hard-to-reach place. The problem gets worse if you choose to hold the part with some sort of tool. It is almost impossible to hold a part firmly enough with a tool and NOT mar the surface of the part or damage it. (However, if you can locate a pair of rubberized 'tips' to slip over the jaws of your pliers, this will give additional gripping power without marring the pieces.)

If you are working with new parts that have pegs on the back side, you can get a pretty secure grip on the pegs with needle-nose plier, which should alleviate the problem of flinging parts. The pegs can be snipped off afterwards if you don't wish to use them.

In most cases, holding the parts firmly with your thumb and forefinger and using a finger from your other hand to support the piece and hold it steady is best. My best advice is to hold on **VERY** tight.

Certain areas on some parts, such as the rein and headstall rings on bits, or small filigree holes are **not** suited for finishing with a moto-tool. For those areas I rec-

ommend using either an x-acto knife, or possibly a small needle file to remove any seams or flash.

## HAND-FINISHED METHOD

### **SUPPLIES NEEDED:**

**150 to 220 grit sandpaper**—use the sandpaper to remove any seams and flash around the edges of your parts and smooth them up.

**400 grit sandpaper** (*wet or dry*)— this very fine sandpaper can smooth-sand the surfaces of any part, especially around the edges on rounded items to make them silky smooth

**600 grit sandpaper** (*wet or dry*) can really put a finished surface and shine on areas you've worked over to smooth out.

**Polishing Cloth** (*part #HD20*) —Turn the part face down on the cloth, then press the part down with your finger and move it back and forth with pressure in a brisk rubbing motion. The harder you rub, the better the shine with this cloth. You can also work on it from the top and get into the corners by pushing the cloth into crevices with a blunted toothpick.

Simichrome or Flitz (metal polishing compounds) can be used on a cotton swab and rubbed in, then washed off to help obtain a shine. If you opt to use a polishing compound such as these, do this first, then put a finishing buffing on the parts with the polishing cloth.

**X-Acto knife**— can be used to easily and quickly remove any sizable nibs or seams from the edges of parts. Be sure your fingers are protected (band-aids are recommended) before you begin working.

Depending upon the part, it can take anywhere from 30 seconds to 10 minutes to finish and polish a part by hand.

Most etched parts come with mounting pegs on the reverse side. You can poke a hole through your leather with a push pin or awl, then thread the pegs thru the holes. Bend the pegs over and gently 'squish' them down on the back side of the item for a secure fit.

### **SPECIAL NOTES:**

For some items, (*most notably halters and bridles*), the pegs will be too bulky. There are several ways around this.

- 1) Remove the pegs with a pair of cutters, nail clippers etc. (*after finishing/polishing.*) Sand or grind down any remaining 'stub' at the surface and super-glue the plate in place instead.
- 2) If you use a "00" size hole punch on larger items (such as breastcollars and saddle skirts), the holes will be a little larger than you actually need. This will allow the part to have some "play" in it—and possibly make it easier to get the plate perfectly aligned. Place a little super-glue to the back side of the plate to secure it, once it has been properly positioned. Again, bend the pegs over and gently smush them into place.
- 3) On some items the pegs may be a bit heavy. You can use a grinding wheel or needle file to whisk off some extra metal on two opposing sides of a peg to make it flat and narrow, and less bulky.
- 4) If the pegs do not want to bend over where you wish them to, file a small notch at the base on the side you want the pegs to bend and they should bend over at that point easily.

### **AN UNUSUAL PART:**

One of our buckles, FB57, comes with an extra bit of metal on the bottom so that you CAN indeed hold the part with a good pair of needle-nose pliers to hang onto it while you sand or grind on it.

When you get the part polished and finished as desired, simply use your cutters to remove the extra metal there.

You may find with the slip-type buckles, that threading a length of scrap leather lace onto the center bar of the buckle will provide a handle for you when using the moto-tool method.

### **SMOOTHING OFF ETCHED PARTS**

The following recommendations are for working with our etched parts.

- 1) Separate parts from the sheet or each other by cutting with a pair of cutters, or toe-nail clippers. Do not twist or bend the parts to remove them as they may warp or break.
- 2) To begin separating items from a sheet, it usually works well to remove part of the outside 'frame' with a cutters, and then remove a strip or section at a time, then separate the parts from the strip or section.
- 3) To remove extra 'nubs' remaining on the parts, use 320 grit wet-or-dry sandpaper or a small fine needle file.
- 4) Wherever a part was connected to a sheet, the bare metal (brass or copper) is going to be exposed in that area and could be subject to future tarnishing. In many cases, such spots are going to be located where they will be covered by leather and never seen. However, in areas where they might be visible, if you wish, once the area has been smoothed up, you can apply a tiny dot of clear nail polish to the area to seal it from tarnishing. This, of course, is optional.

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