

# 3DTechnics Systems Incorporated

## EZ-Rider/ZB-20 Burnishing/Scoring Tool Attachment Install Instructions



The EZ-Rider or ZB-20 adapter puts an extra spring into the cutting assembly of an engraving machine for burnishing or diamond graving operations. It also allows for a finer control of the burnishing or diamond graving pressure.

The intention is to buffer the cut, so that if during engraving a hole, edge, or raised feature are in the engraving path then the spindle, spindle-motor, X-motor, and Y-motor are protected from stress associated with the impact.

- 1) Remove the cutter knob and cutter from the top of the spindle
- 2) Screw the ZB-20 tool into the top of the spindle. Note that it has a left-handed thread. When viewed from the top, turn it counter-clockwise to tighten it.
- 3) Load the job to be burnished or scored into the machine.
- 4) Move the spindle out over a scrap piece of material and pause.
- 5) Manually or electronically bring the spindle down to the normal engraving height
- 6) Loosen the set screw in the slot on the ZB-20.
- 7) Insert the cutter through the ZB-20 and the spindle, allowing it to come down to rest against the material.
- 8) Lightly tighten the set screw on the ZB-20.
- 9) Manually or electronically bring the spindle down until the ZB-20 set screw is 1/8" to 1/16" above the bottom of the adjustment slot.
- 10) You are now ready to burnish or score. Pick up the cutter, turn the spindle motor on, and begin burnishing/scoring on a scrap piece of material to test the pressure.
- 11) The burnishing or scoring can be adjusted by repeating step 9. If you are burnishing or scoring too deep in the material, move the spindle to reduce the gap in the slot under the set screw. If you are burnishing or scoring and the cutter skips across the surface of the material, increase the gap in the slot under the set screw.
- 12) If you have multiple ZB-20's on other tools, set them all at the same time. You may then interchange between burnishing and scoring tools without further adjustment.