Instructions for using the Useful Tools 3-IN-ONE Hand Beading Tool

1) Using the handle:

- Clamp the beading tool in a vice.
- Attach the handle onto the hex end of the shaft and make sure the handle can be turned freely.
- Prepare pipe end to be swaged by squaring it off and de-burring.
- Apply a small drop of grease or oil to the tube/rollers.
- Release the adjusting knob and slide the tube end over the small spindle until it touches the tool body buffer plate.
- Turn the adjusting knob until the tube is lightly gripped between the rollers.
- Holding the tube lightly against the tool body, turn the handle until the tube
 has rotated at least one turn.
 (Note: It may pay to wear a pair of industrial gloves to avoid chaffing the hand
 holding the pipe if lots of beads are to be formed.)
- Turn the adjusting knob down slightly say 1/4 turn or so.
- Still holding the tube lightly against the tool body, turn the handle again until the tube has rotated at least one turn.
- Repeat until the bead has started to form.
 At this point, the tube should have formed enough of a 'track' to hold itself in position on the rollers.
- Carry on turning the main crank turning the adjusting knob 1/8 to 1/4 turn per turn of the crank until you have formed a satisfactory bead.
- Release the adjusting knob to allow the tube to be removed from the tool rollers.
- Clean oil/grease from the tube end and dress with wire wool or lap mop material to burnish end.
- Finally, check the appearance of the bead formed. If you see stress/crack
 marks, check with your material supplier on the specification of material they
 supplied. Alternatively the tube may need annealing.

2) Using a drill:

- Clamp the beading tool in a vice.
- Put a drill chuck onto the hex end of the shaft instead of the handle
- Follow the instructions in (1) above carefully.

3) Rolling the beading tool around the pipe to form a bead:

- Do <u>not</u> attach the handle or a drill.
- Clamp/hold the tube firmly.
- Prepare pipe end to be swaged by squaring it off and de-burring.
- Apply a drop of grease or oil to the tube/rollers.
- Release the adjusting knob and slide the beading tool over the tube end until it touches the tool body.
- Turn the adjusting knob until the tube is very lightly gripped between the rollers.
- Holding the beading tool lightly against the tube, rotate it around the tube circumference 1-2 times.
- Turn adjusting knob down very slightly say 1/8 turn or so.
- Still pressing the beading tool lightly against the tube, slide the beading tool around the tube circumference 1-2 times
- Repeat until the bead has started to form.
 At this point, the tube should have formed enough of a 'track' to hold itself in position on the rollers.
- Carry on sliding the beading tool around the tube and turning the adjusting knob until you have formed a satisfactory bead.
- Release adjusting knob to allow beading tool to be removed from the tube.
- If during the process you feel the tool "stall" against the tube ease the pressure on the adjuster slightly and rotate the tool as normal