

# BOILERMASTER™

## QUICK REFERENCE CARD

### Set-Up and Operation of TRI TOOL™ BOILERMASTER™ End Prep Tool.

*NOTE: This reference is intended only as a procedural reminder and does not relieve the operator of the responsibility of reading and understanding the operators manual and being completely familiar with the safety, operation and maintenance procedures provided with the machine.*

**WARNING: Do not adjust, install / remove, or work on the tool in any way with the air line connected to the tool, other than to operate in a cutting mode or for tests which require the machine to be running.**

**1. Install the cutter head as required.** A 2.63" diameter cutter head is available for low radial clearance and a 4.0" diameter head is available where clearances are not a problem.

**2. Determine the ID of the tube to be beveled.**

If the ID is greater than 1.2", configure the standard mandrel with the ramp blocks and jaw blocks required to fit the ID, or install a reduced size mandrel as required.

**3. Install the tool bit(s) in the cutter head.**

**4. Check the air caddy to see that the water trap is drained, there is oil in the lubricator, and the regulator is set for 90 psi.**

**5. Retract the feed to extend the mandrel for clearance between the tool bits and the end of the tube.**

**6. Install the mandrel into the tube end and position the mandrel so that the ends of the mandrel ramps or jaw blocks (as applicable) are 1/4 to 1/2" inside of tube, to prevent machining of the mandrel ramps or jaw blocks.**

**7. Clamp the mandrel to the tube.** Approximately 20 foot - pounds of torque on the mandrel ratchet is required.

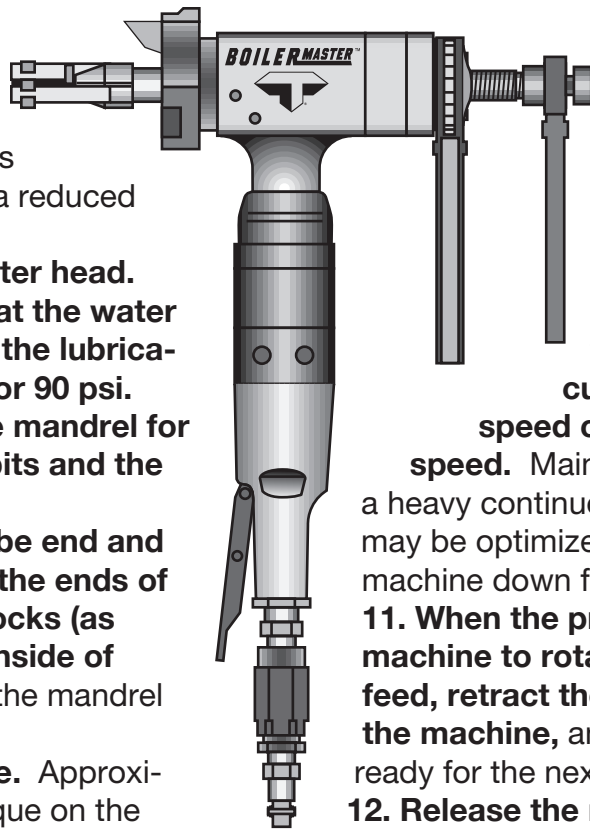
**8. Connect the air line, actuate the deadman control, and adjust the speed control valve for the desired cutter head speed.** Note, the no load cutter head speed is about 2 times greater than the maximum HP speed.

**9. Feed the machine up to the end of the tube, being careful not to overfeed the machine until the tool bit has engaged the work (especially important for good tool bit life on rough flame cut ends).**

**10. Advance the machine into the work until a full surface cut is being made, opening the speed control valve to maintain the speed.** Maintain a continuous feed to keep a heavy continuous chip running. Surface finish may be optimized on the prep by slowing the machine down for the final revolutions.

**11. When the prep is complete, allow the machine to rotate 1 or 2 revolutions without feed, retract the tool bit out of the cut, stop the machine, and complete the retraction to be ready for the next cut.**

**12. Release the mandrel and move on to the next tube.**



## TRI TOOL INC.

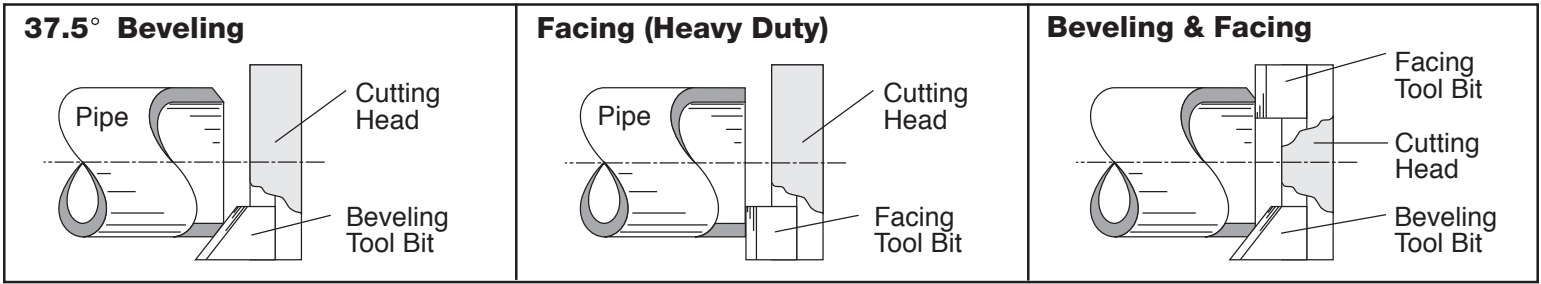
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**KEEP IN BOX WITH MACHINE**

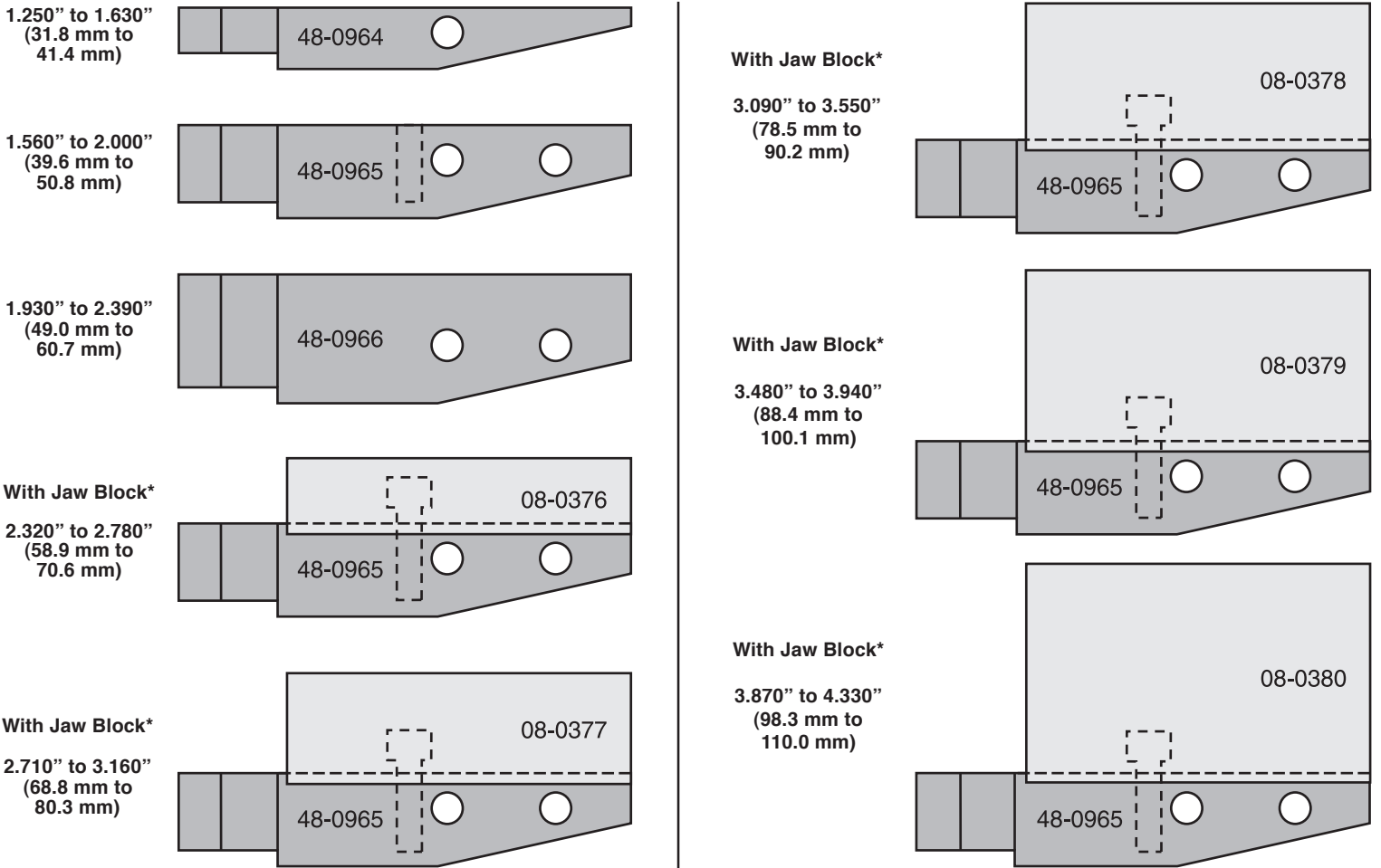
*Insist on the best...*





Head	Range	Beveling P/N	Facing P/N	Beveling & Facing P/N	
<b>2.63 Dia. Kit</b>	1.25" ID thru 2.63" OD 1.25" ID thru 1.90" ID 1.83" ID thru 2.57" ID	(31.8 mm ID thru 66.8 mm OD) (31.8 mm ID thru 48.3 mm ID) (46.5 mm ID thru 65.3 mm ID)	BOILERMASTER™ --- ---	99-5243 --- ---	--- BOILERMASTER™ and 99-0257 BOILERMASTER™ and 99-2095
<b>4.0 Dia. Kit</b>	1.25" ID thru 4.50" OD 1.25" ID thru 3.27" ID 1.83" ID thru 3.92" ID	(31.8 mm ID thru 114.3 mm OD) (31.8 mm ID thru 83.1 mm ID) (31.8 mm ID thru 99.6 mm ID)	BOILERMASTER™ --- ---	99-5243 --- ---	--- BOILERMASTER™ and 99-0257 BOILERMASTER™ and 99-2095

**Mounting Diameters for Steel Jaw Blocks and Ramps for the Standard Mandrel Assy. (P/N 06-0415)**



Parts illustrated full scale for easy reference. \*Note: Blocks can only be mounted on the mid sized ramp (P.N. 48-0965).

**Minimum Mounting Length:**

Required straight length of pipe/tube with ramps only:  
**3.00"** - fully expanded to maximum diameter.  
**3.75"** - at minimum diameter.

Required straight length of pipe/tube with ramps and jaw blocks:  
**2.35"** - fully expanded to maximum diameter.  
**3.20"** - at minimum diameter.

**Accessories:**

**CUTTER HEAD KITS**

2.63" Diameter Head Kit (P/N 03-0047)  
 4.00" Diameter Head Kit (P/N 03-0048)

**MANDREL ASSY., Reduced Diameter (P/N 06-0413)**

.625" to 1.00" range  
 (15.9 mm to 25.4 mm)

**MANDREL ASSY., Reduced Diameter (P/N 06-0414)**

1.00" to 1.25" range  
 (25.4 mm to 31.8 mm)