

## "HYDRA-SWAGE" TUBE EXPANDING TOOL KIT PARTS LIST

PART#	DESCRIPTION	TUBE O.D.
71600-03	Expander Head	3/8"
71600-04	Expander Head	1/2"
71600-05	Expander Head	5/8"
71600-06	Expander Head	3/4"
71600-07	Expander Head	7/8"
71600-08	Expander Head	1"
71600-09	Expander Head	1 1/8"
71600-11	Expander Head	1 3/8"
71600-13	Expander Head	1 5/8"
71600-17	Expander Head	2 1/8"
71601	Hydra-Swage (6000 PSI)	3/8" to 1 1/8" (12mm to 28mm)
71601-D	Adapter for 71601	3/8" to 1 1/8" (12mm to 28mm)
71602	Hydra-Swage (10,000 PSI)	3/8" to 2 1/8"
71602-D	Adapter for 71602	3/8" to 2 1/8"
71685	Inner - Outer Reamer	
71600-PB	Molded Box for 71600 & 71650	

### METRIC

PART#	DESCRIPTION	TUBE O.D.
71600-10M	Expander Head	10mm
71600-12M	Expander Head	12mm
71600-15M	Expander Head	15mm
71600-16M	Expander Head	16mm
71600-18M	Expander Head	18mm
71600-22M	Expander Head	22mm
71600-28M	Expander Head	28mm



**Mastercool<sup>®</sup> Inc.**  
"World Class Quality"



## User Guide and Parts List 71600 "HYDRA-SWAGE" TUBE EXPANDING TOOL KIT



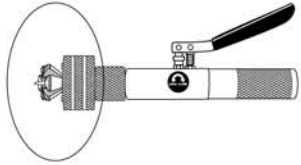
### Hydra-Swage saves **TIME & MONEY!**

- Eliminate fittings
- Save 1/2 on soldering points
- Save 1/2 on soldering material
- Easy one-hand operation
- Hydraulic Power
- Lightweight and portable

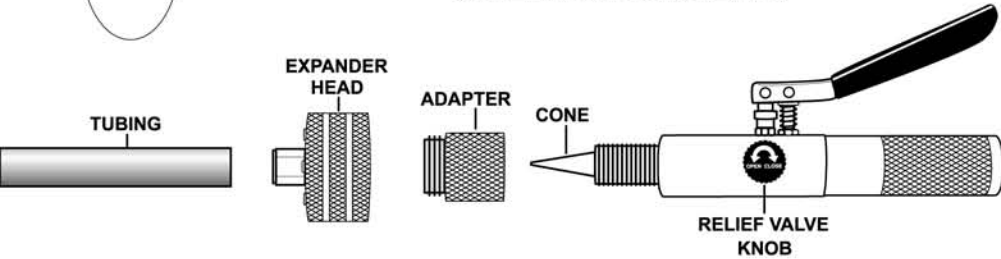


# TUBE EXPANDER INSTRUCTIONS

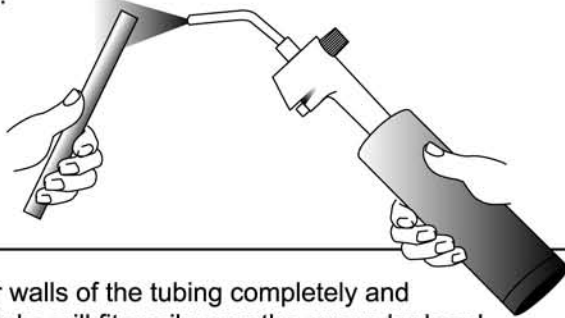
**! WARNING**  Wear Safety Goggles



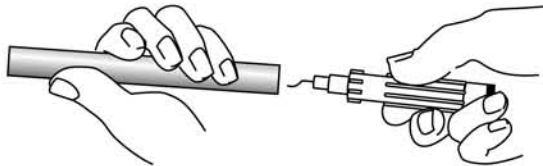
**NEVER OPERATE PUMP  
WITHOUT TUBING  
ON EXPANDER HEAD!**



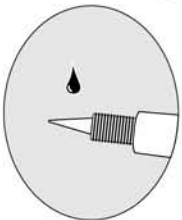
- 1) Use soft copper tube or heat (anneal) the section of hard copper tubing to be expanded.



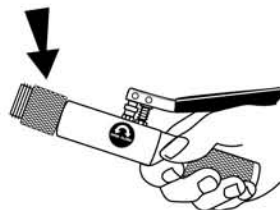
- 2) Debur the inner walls of the tubing completely and make sure the tube will fit easily over the expander head.  
**DO NOT FORCE THE TUBE OVER THE EXPANDER HEAD!**



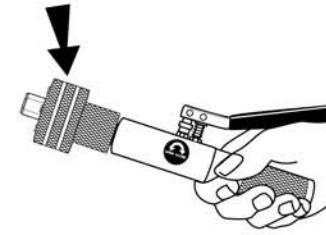
- 3) Apply lubricant (preferably grease) to the cone before using.



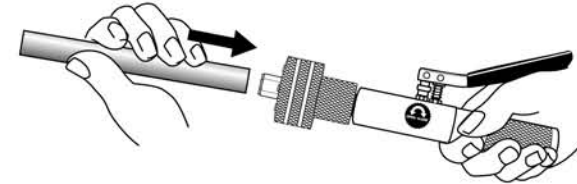
- 4) Screw the adapter onto the shaft of the pump all the way.



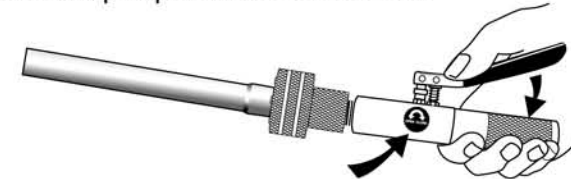
- 5) Screw the selected expander head onto the adapter.



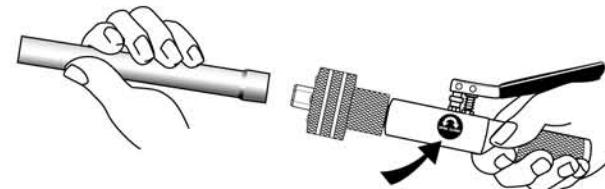
- 6) Place the tubing onto the expander head. Make sure that the expander head travels into the tube **FREELY**.  
**WARNING!! Do not force or twist the tube while you are placing the tube on the expander head.**



- 7) Tighten the relief valve knob and pump handle until tubing is expanded and pump handle becomes firm.



- 8) Loosen the relief valve knob to release the finished tubing.  
**If the tube does not release from the die head because of tube configuration or burrs, unscrew the adapter and die head (together) from the pump body.**



**TECHNICAL ASSISTANCE: PLEASE CALL...1-888-825-6989**