



**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



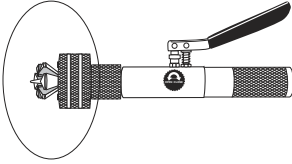
# TUBE EXPANDER INSTRUCTIONS



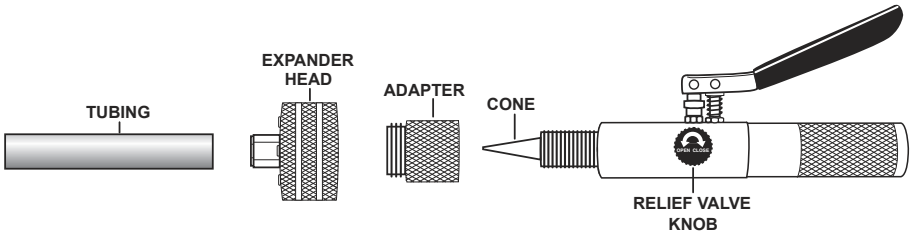
**WARNING**



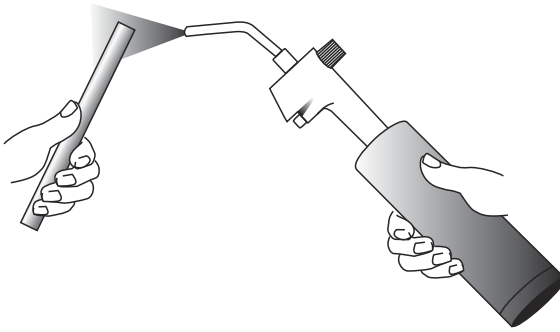
**Wear Safety Goggles**



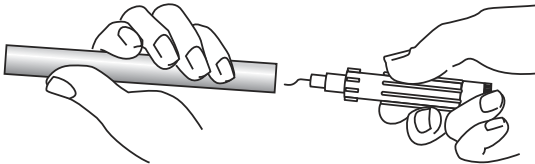
**NEVER OPERATE PUMP WITHOUT TUBING ON EXPANDER HEAD!**



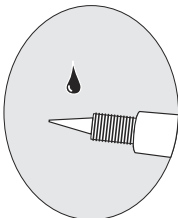
- 1) Use soft copper tube or heat (anneal) the section of hard copper tubing to be expanded.



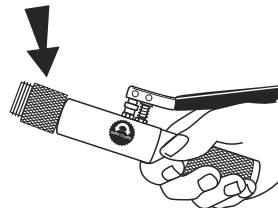
- 2) De-burr the inner walls of the tubing completely and make sure the tube will fit easily over the expander head. **DO NOT FORCE THE TUBE OVER THE EXPANDER HEAD!**



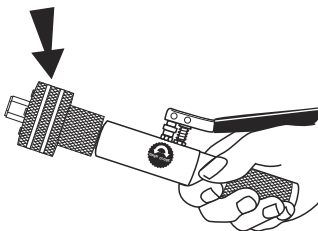
- 3) Apply lubricant (preferably grease) to the cone before using.



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

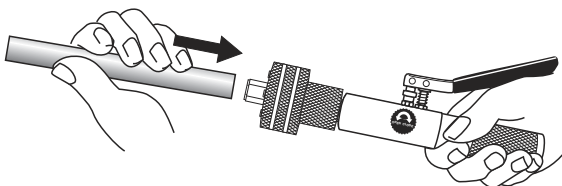


5) Screw the selected expander head onto the adapter.

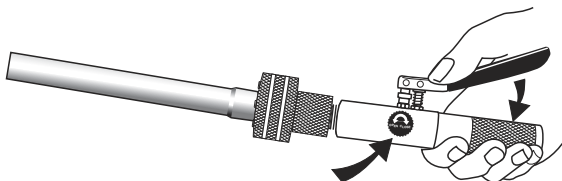


6) Place the tubing onto the expander head. Make sure that the expander head travels into the tube **FREELY**.

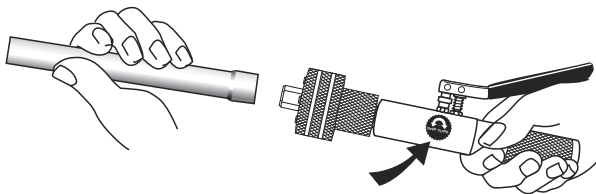
**WARNING!! Do not force or twist the tube while you are placing the tube on the expander head.**



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**

# “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	
71601-D	Adapter for 71601	
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