

1. CHARGING SYSTEMS  
 2. GAUGES  
 3. RECOVERY MACHINES  
 4. VACUUM PUMP SYSTEMS  
 5. VACUUM AND CHARGING HOSES  
 6. HOSE ADAPTERS, VALVES & PARTS  
 7. WIRELESS AND ELECTRONIC INSTRUMENTS  
 8. LEAK DETECTORS AND MONITORS  
 9. HEATING INSTRUMENTS  
 10. SYSTEM TOOLS

## TUBING EXPANDER/SWAGER For 5/16" to 1-5/8" O.D.



60407



With long handles for comfortable leverage, easily expand 5/16" to 1-1/8" O.D. soft copper and aluminum tubing in seconds. Select from nine expander heads to attach to the front of the handles.

- Precise swaging on the job
- Re-round deformed tubes and fittings
- Salvage shorts and scrap to make couplings
- Handles, tapered expanding pin, and other moving surfaces heat treated for durability
- Use on 0.063" wall soft copper and aluminum to 1-5/8" O.D. (anneal hard copper prior to use)
- Use on 0.047" wall soft steel to 7/8" O.D.
- Kit includes six expander heads; three optional sizes sold separately

### Sets in case

UPC#	Description
60407	Expander kit with handles; heads for 3/8", 1/2", 5/8", 3/4", 7/8", 1-1/8" tubing O.D.; deburring tool, carrying case, instructions
60412	Expander handles
60405	Nut and bolt
60410	Expander handle hinge bolt (9 mm)
60411	Blue case
60427	Steel roller
60429	Drive pin

### Expander heads

UPC#	Description	Maximum wall thickness	Swage depth	Segment stretch
60413*	5/16" Expander head	0.039"	0.24"	—
60414	3/8" Expander head	0.039"	0.35"	0.06"
60415	1/2" Expander head	0.047"	0.43"	0.06"
60416	5/8" Expander head	0.047"	0.57"	0.06"
60417	3/4" Expander head	0.047"	0.59"	0.06"
60418	7/8" Expander head	0.047"	0.71"	0.06"
60420	1-1/8" Expander head	0.063"	0.77"	0.90"
60422*	1-3/8" Expander head	0.063"	0.77"	0.90"
60424*	1-5/8" Expander head	0.063"	0.77"	0.90"

\* Optional sizes sold separately.

## HYDRAULIC TUBE EXPANDER KIT

- Hydraulic power
- Eliminates fittings



60493

## PUNCH-TYPE SWAGING TOOL



60475

- Expands one end of copper tubing for connecting same size tubes
- Heat-treated and plated alloy steel
- Made in the USA

### Swaging sets

UPC#	Description
60475	Set – 4 piece in pouch for 1/4", 3/8", 1/2" and 5/8"
60476	Set – 5 piece in pouch for 1/4", 5/16", 3/8", 1/2" and 5/8"
60461	Set with clamping bar and 6 punches 3/16" to 5/8"
60462	Clamping bar only



MADE IN THE USA

60460

### Single tools

UPC#	Description
60460	Multi-swage punch, 6 sizes 3/16" to 5/8"
60463	3/16" O.D. punch
60464	1/4" O.D. punch
60465	5/16" O.D. punch
60466	3/8" O.D. punch
60467	1/2" O.D. punch
60468	5/8" O.D. punch
60469	3/4" O.D. punch
60470	7/8" O.D. punch

- Lightweight and portable
- Easy one-hand operation

UPC#	Description
60493	Deluxe hydraulic expander kit: heads for 3/8", 1/2", 5/8", 3/4", 7/8", 1-1/8", 1-3/8" and 1-5/8" tubing O.D.; small cutter, tube reamer, carrying case and instructions
60495	Replacement expander pin 3/8" to 1-5/8"
60498	Replacement case
60499	Replacement grease tube
60413-24	Replacement expander heads (see above)