

# **Tube Fabricating Equipment**



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# **The World Standard**

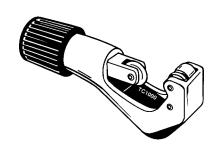
	Sizes 2 to 64	Kloskut Cutters Sizes 2 to 32	Plastic Tube Cutter PTC-001	Sawing Vise		Hand Benders
Tube Cutters					Benders	
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PART NO. DESCRIPTION

#### **Tube Cutters**

For hard or soft copper, aluminum, brass, thin wall steel, stainless steel, monel, titanium and other metal tubing



Rollers have flare cut-off groove, fold away reamer and spare cutting

For 1/8" to 1 1/8" (4 to 28 mm) O.D. tubing, (1/8" to 1" nom.). TC-1000-BPD

Length: 4 15/16" Weight: 6 1/2 oz.

312-FC-BPD For 1/4" to 1 5/8" (7 to 41 mm) O.D. tubing, (1/8" to 1 1/2" nom.).

> Length: 5 1/2" Weight: 7 oz.

TC-1020-BPD Combination tube constictor and cutter for 1/8" to 1 1/8" (4 to 28 mm)

O.D. tubing.

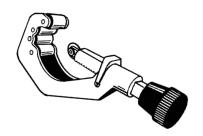
Includes roller for making brazed connections.

**Replacement Parts:** 

S75015-BPD Standard cutting wheel

S75046-BPD Cutting wheel for stainless steel and hard temper tubing

S74762-BPD Screw for cutting wheel



Ratchet feed mechanism speeds up cutting operation. Extra wide rollers

stabilize tubing. Spare cutting wheel included.

206-FB-BPD For 3/8" to 2 5/8" (10 to 66 mm) O.D. tubing, (1/4" to 2 1/2" nom.).

Length (closed): 7 3/4"

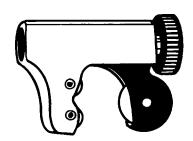
Weight: 2 lbs.

406-FA-BPD 2" to 4" cutter for 2" to 4 1/8" (51 to 104 mm) O.D. tubing,

> (2" to 4" nom.) Length (closed): 11 1/4" Weight: 3 1/2" lbs.

**Replacement Parts:** 

S74761-BPD Cutting wheel for 206-FB-BPD



TC-1050-BPD For 1/8" to 5/8" (4 to 15 mm) O.D. tubing, (1/8" to 1/2" nom.)

Requires only 1 1/4" swing radius. (Requires only 1 3/8" swing radius with

5/8" tube.)

Repositioned rollers to bottom of tool allows for easier cutter engagement on tubing. Enclosed feed-screw minimized contamination, assuring continued free operation. Redesigned feed mechanism improves overall cutting action.

Size: 1 3/4" x 1 1/4" x 1/2"

Weight: 2 1/2 oz.

TC-2050-BPD For 3/16" to 7/8" (5 to 22 mm) O.D. tubing. (Requires only 1 11/16" swing

radius.)

**Replacement Parts:** 

S74762-BPD Screw for cutting wheel TC-1050-BPD

S32633-BPD Cutting wheel for TC-1050-BPD



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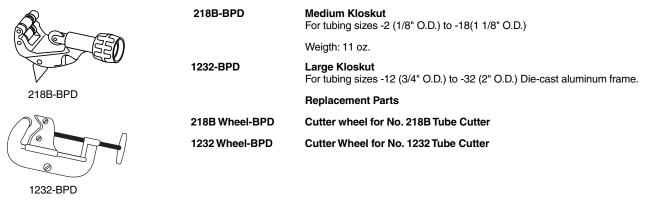
	PART NO.	DESCRIPTION
	174-F-BPD	For 3/8" to 1 1/8" (10 to 28 mm) O.D. tubing, (1/4" to 1" nom.). Requires only 1 15/16" swing radius. (Requires only 2 1/4" swing radius with 1 1/8" tube.)
No. 174-F CAPACITY 38 to 1 110 D		Size: 2 11/16" x 2 1/32" x 1 1/8" Weight: 5 oz.
		Replacement Parts:
	S75015-BPD	Cutting wheel
	S75046-BPD	Cutting wheel for stainless steel and hard temper tubing
	227-FA-BPD	For 1/8" to 3/4" (4 to 19 mm) O.D. tubing, (1/8" to 5/8" nom.). Enclosed feed mechanism.
		Length: 3 1/2" Weight: 5 oz.
		Replacement Parts:
	S32633-BPD	Cutting wheel

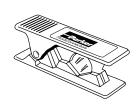
## Kloskut® Tube Cutters

Adjustable tube cutters to produce square cut ends with no external burr and minimum internal burring when used on fully annealed copper, brass, aluminum, and steel tubing. Features a hardened and burnished tool-steel cutting wheel, flare cut-off grooves in rollers for removal of old flares, swing-away reamer for removing internal burrs.

Handle feeds and adjusts cutting wheel to uniformly cut tubing as the cutter is rotated.

NOTE: Tube cutters are not recommended for use with stainless steel tubing because of the work hardening effect. The use of a hacksaw with a "Tru-Kut" Sawing Vise or a rotary teeth saw is best recommended for stainless steel.





PTC-001 Plastic Tube Cutter

May be used with polyethylene, Polypropylene, nylon and other

thermoplastic tubing. For tube O.D. sizes 1/8" to 1/2"

PTC-001RB Replacement blades



#### **Hand Tube Benders**

Sturdy, easy-to-use hand tools for fast accurate bending without kinks or visable flattening. Individual sizes in three modest from size 2 (1/8" O.D.) to 16 (1" O.D.). See Table O3 for part numbers and technical data.

#### **Medium Duty Hand Tube Benders**

Designed and built for fast accurate bends and long service life.

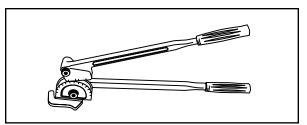
Individual benders for six tube sizes 1/8, 3/16, 1/4, 5/16, 3/8, and 1/2 inch. Will bend copper, aluminum, annealed steel and stainless steel. Can be used in hands or mounted in a bench vise for heavier wall thickness tube. Simply align marks on slide block and radius block then bend tube to desired angle (up to 180°) by pulling steadily on slide block handle. Angles are indicated on radius block both front and back. (Detailed instructions are included with each bender.) This style of bender is also available in metric sizes. See Table O4 for part numbers and technical data.

#### **Ratchet Hand Tube Benders**

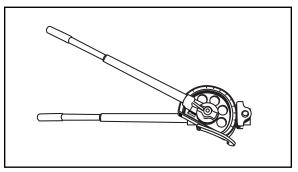
Individual benders for three tubing sizes 5/8, 3/4, and 7/8 inches in copper, aluminum, annealed steel and stainless steel. Can be used in hands or mounted in a bench vise for heavier wall thickness tube. Position tube in bender, close latch and pull ratchet handle away from radius block handle until desired angle (up to 180°) is formed. Angles are indicated on radius block. (Detailed instructions are included with each bender.)

#### 1" Hand Tube Bender

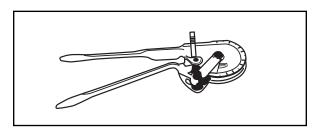
For tubing size 1" O.D. in soft copper and aluminum. Can be used in hands, but suggest mounting on bench vise - especially for heavier wall thickness tube. Align marks and bend tube to desired angle (up to 180°) by pulling steadily on operating handle. Handle may be repositioned for maximum leverage. Angles are indicated on radius block. (Detailed instructions are included with bender.)



Medium Hand Tube Bender



Ratchet Hand Tube Bender



1" Hand Tube Bender

				RADIUS TO	MIN. WALL		NDED MAX. WALL HIKNESS
PART NUMBER	TYPE OF BENDER	SIZE	TUBE O.D. (IN.)	TUBE CENTERLINE (INCHES)	WITHOUT FLATTENING (INCHES)	COPPER ALUMINUM	STEEL STAINLESS STEEL (IN.)
2-2829S-BPD 3-2829S-BPD 4-2829S-BPD 5-2829S-BPD 6-2829S-BPD 10-2829S-BPD 12-2829S-BPD	MED. DUTY	2 3 4 5 6 8 10 12	1/8 3/16 1/4 5/16 3/8 1/2 5/8 3/4	7/16 9/16 9/16 15/16 15/16 1 1/2 2 1/2 3	0.012 0.020 0.028 0.032 0.032 0.042 0.042 0.042	ANY	0.032 0.032 0.083 0.083 0.083 0.083 0.049 0.049
10-2829-BPD 12-2829-BPD 14-2829-BPD	RATCHET RATCHET RATCHET	10 12 14	5/8 3/4 7/8	3 3 3/4 3 3/4	0.042 0.049 0.049	ANY	0.049 0.065 0.065
16-2829-BPD	1#	16	1	3 1/2	0.065	ANY	Not Recommended

TUBE O.D. (mm)	PART NUMBER	BEND RADIUS	MAX. WALL STEEL/SS
5	2829-5mm-BPD	14.3	1.2
6	2829-6mm-BPD	14.3	1.6
8	2829-8mm-BPD	23.8	1.6
10	2829-10mm-BPD	23.8	2.1
12	2829-12mm-BPD	38.1	2.1
14	2829-14mm-BPD	38.1	2.1



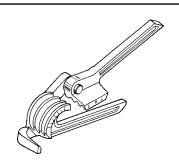
PART NO. DESCRIPTION
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367-FH-BPD

368-FH-BPD

## **Tube Benders, Lever Type**

For soft copper, aluminum, brass, steel and other metal tubing



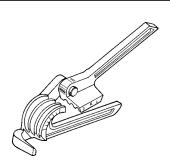
#### **Triple Header Benders**

Calibrated markings for making accurate left-hand, right-hand and offset bends. Ninety degree start requires less effort - making bending fast and

For 1/8", 3/16" and 1/4" (3, 4, and 6 mm) O.D. tubing, 9/16" radius to center of tube.

For 1/4", 5/16" and 3/8" (6 and 8 mm) O.D. tubing, 15/16" radius to center

#### **Metric Tube Benders**



#### **Triple Header Benders**

For annealed copper, aluminum, steel, stainless steel and hard copper tubing of bending temper.

Lever type, multiple size benders. Calibrated markings for making accurate left-hand, right-hand, and offset bends. Ninety degree start requires less effort; makes bending fast and easy.

BENDING RANGE				
Tube C	Radius to of Tub			
(Inches)	(mm)	(Inches)	(mm)	
1/8, 3/16, 1/4	3,4, 6	9/16	14.2	
1/4, 5/16, 3/8	6, 8	15/16	17.5	

367-FH-BPD 368-FH-BPD

## **Tube Benders, Spring Type**

For soft copper and aluminum tubing





#### For 1/4" to 3/4" O.D. tubing.

Tools allow hand bending of soft tubing to any shape without collapsing walls. Special spring steel, nickel finished. End belled for quick tube removal.

		BENDER	-	
	T.IDE 0.D			
	TUBE O.D.	LENGTH	WEIGHT	
	(INCHES)	(INCHES)	(OZ.)	
102-F-04-BPD	1/4	10	3	
102-F-05-BPD	5/16	10	3	
102-F-06-BPD	3/8	10	4	
102-F-07-BPD	7/16	12	6 1/4	
102-F-08-BPD	1/2	12	6 1/2	
102-F-10-BPD	5/8	12	8	
102-F-12-BPD	3/4	12	10	
-	Set of 8 benders for tubing.	or 1/4", 5/16",	3/8", 7/16", 1	/2", 5/8", 3/4" and 7/8" O.D.
112-F-BPD	Set of 3 benders f	or 1/4", 5/16" a	and 3/8" O.D.	tubing.
163-F-BPD	Set of 4 benders f	or 1/4", 3/8", 1	/2" and 5/8" (	O.D. tubing.



PART NO.	Tools for flaring larger tubesizes. Quick slip-on yoke. Positive clamping action of flaring bar eliminates tube movement. Weight: 3 3/4 lbs.
103-FS-BPD	action of flaring bar eliminates tube movement.
103-FS-BPD	action of flaring bar eliminates tube movement.
103-FS-BPD	organic o or a loo.
	For $3/4$ ", $7/8$ " and 1" O.D. tubing, $(5/8$ " and $3/4$ " nom.).
203-FA-BPD	For 5/8", 3/4", 7/8" and 1 1/8" O.D. tubing, (1/2", 5/8", 3/4" and 1" nom.).
195-FC-BPD	For 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" and 5/8" O.D. tubing, (1/8", 1/4", 3.8" and 1/2" nom.). Self-centering yoke with swivel-type, hard chrome-finished flaring cone forms better flares with less effort. Design of yoke permits flaring where there is little space between nut and tube end.
	Weight: 2 lbs.
296-FC-BPD	For 3/16", 1/4", 5/16", 3/8", 1/2", and 5/8" O.D. tubing, (1/8", 1/4", 3/8" and 1/2" nom.).  Economical and fast operating. Swivel type, hard chrome-finished cone assures smooth flares. Bar is lighter than 195-FC-BPD and is not hardened.  Weight: 1 3/4 lbs.
300-FB-BPD	For 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" O.D. tubing, (1/8", 1/4", 3/8", and 1/2" nom.).  Hard chrome-finished cone makes exceptionally smooth, high strength flares with a radius at base of flare - instead of the sharp angle formed by ordinary tools. Positive gripping and self-gauging of tube for exact flare size.  Weight: 1 5/8 lbs.
500-FC-BPD	For flaring and burnishing 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" O.D. tubing, (1/8", 1/4", 3/8" and 1/2" nom.). Flares rolled out above die bar by super-smooth faceted conve. Automatically burnished flare face. Slip-on yoke permits use in tight quarters. Heat treated dies grip tubing without scoring.  Weight: 1 1/2 lbs.
	296-FC-BPD 300-FB-BPD



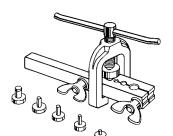
#### PART NO. DESCRIPTION

#### 525-F-BPD

Flares and burnishes 3/16" to 5/8" (5 to 16 mm) O.D. tubing.

Unique, self-adjusting, tube holding mechanism permits use in tight quarters. Faceted, hard chrome finished cone rolls out and burnishes perfect 45° flare above the tube holding mechanism.

Weight: 1 3/4 lbs.

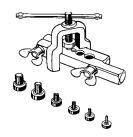


#### 93-FB-BPD

For 3/16", 1/4", 5/16", 3/8" and 1/2" O.D. tubing.

Recommended for Bundy, GM and other brazed or welded soft steel tubing (wall thickness to .035"). Also makes single or double flares in soft copper or aluminum tubing. Forged steel yoke; swivel-type hard chromefinished flaring cone.

Weight: 3 lbs.

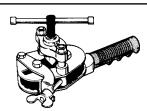


#### 195-FB-BPD

For 1/4", 5/16", 3/8", 1/2", 5/8" and 3/4" O.D. tubing

Designed for automotive air conditioning service. Makes double flares in soft copper or aluminum tubing (wall thickness to .035"). Easy operating, ball bearing, swivel-type, hard chrome-finished, flaring cone. Makes flare with double-thick, double-strength walls. Also makes single and oversize flares.

Weight: 5 1/2 lbs.



#### 945TH-BPD

#### Rolo-flair® Manual Rotary Flaring Tool

For soft metal tubing. Precision burnished  $45^{\circ}$  flares in tube sizes from 2 (1/8" O.D.) to 12 (3/4" O.D.) with an easy turn of the handle. For copper and aluminum alloy.

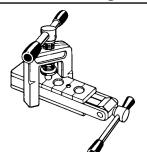
Weight: 2 1/2 lbs.



## Metric Flaring Tools

#### PART NO.

## **Metric Flaring Tools**



#### 293-F-BPD Bubble Flaring Tool

For 4.75 (3/16"), 6, 8 and 10 mm O.D. tubing

Flares soft double wall steel tubing with a wall thickness to .028". For soft copper and aluminum tubing.

Also forms international Standard bubble flare in one fast operation. Flares metric hydraulic brake lines used on European, Japanese and domestic automobiles and light trucks. Can also be used for industrial applications where movement or vibration is a problem.

#### 395-FAM-BPD

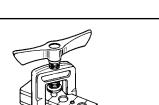
#### 45° Flaring Tool

DESCRIPTION

For 4, 6, 8, 10, 12, 15 and 16 mm O.D. tubing.

Flares soft copper, aluminum and brass.

Forged steel slip-on yoke and hardened flaring bar. Positive clamping action of bar prevents tube slippage. Self-centering yoke with swivel-type, hard chrome-finished flaring conve forms better flares with less effort. Design of yoke permits flaring where there is little space between nut and tube end.



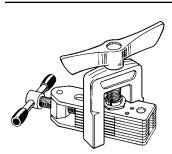
#### 500-FCM-BPD

#### 45° Flaring Tool

For flaring and burnishing 6, 8, 10, 12, 15 and 16 mm O.D. tubing.

For soft copper, aluminum and brass.

Flares folled out above die bar by super-smooth faceted cone. Automatically burnishes flare face. Slip-on yoke permits use in tight quarters. Heat treated dies grip tubing without scoring.



#### 525-F-BPD

#### 45° Flaring Tool

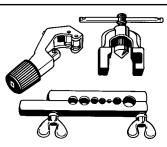
For flaring and burnishing 5 to 16 mm O.D. tubing.

For soft copper, aluminum and brass.

Unique, self-adjusting tube holding mechanism permits flaring any size tubing within the range of 5 to 16 mm O.D. Single opening design is compact and easy to use. Faceted, hard chrome-finished cone rolls out and burnishes perfect flares above the tube holding mechanism. Slip-on self-centering yoke.

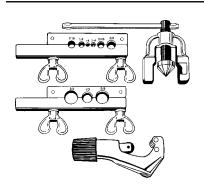


PART NO. DESCRIPTION **Tubing Tool Kits** For soft copper, aluminum and brass tubing 45° Flaring Kits Compact kits contain two flaring bars and one yoke. Self-centering forged steel yoke has slip-on feature. Swivel-type flaring conve reduces effort required. Positive clamping action of flaring bars eliminates tube movement. In plastic case. For 1/8" 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", and 3/4" O.D. tubing, (1/8", 1/4", 3/8", 1/2" and 5/8" nom.). 375-FS-BPD Weight: 4 3/4 lbs. 376-FS-BPD For 1/2", 5/8", and 3/4" O.D. tubing, (3/8", 1/2" and 5/8" nom.). Weight: 2 lbs. 123-FA-BPD 45° Flaring and Cutting Kit Contains TC 1000 tube cutter; 300-FB flaring tool for 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" O.D. tubing, (1/8", 1/4", 3/8" and 1/2" nom.). 124-FA-BPD Contains TC 1000 tube cutter, 500-FB flaring tool (same range as 300-FB). 000000 1226-FA-BPD 45° Flaring and Cutting Kit Contains TC 1000 tube cutter for 1/8" to 1 1/8" O.D. tubing and 195-FC



Contains TC 1000 tube cutter for 1/8" to 1 1/8" O.D. tubing and 195-F0 flaring tool for 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" and 5/8" O.D. tubing, (1/8", 1/4", 3/8" and 1/2" nom.).

Weight: 3 lbs.



#### 120-F-BPD 45° Flaring and Cutting Kit

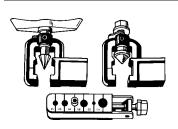
Contains TC 1000 cutting tool and 375-FS multiple-size flaring tool for 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8" and 3/4" O.D. tubing, (1/8", 1/4", 3/8", 1/2" and 5/8" nom.). In plastic carrying case.

Weight: 5 1/4 lbs.

#### 121-F-BPD All Purpose Tubing Tool Kit

Contains tools listed above plus three 102-F bending springs for 1/4", 3/8" and 1/2" O.D. tubing; and our 123-C ratchet wrench with 1/4" ratchet, 3/16" and 1/4" Square opening and 1/2" hex in handle. In steel carrying case.

Weight: 5 3/4 lbs.



#### 402-FA-BPD

## Flaring and Reaming Kit

Contains 400-F flaring tool and 401-FA reaming yoke for 1/4" to 5/8" O.D. tubing. In plastic kit.

Weight: 3 1/8 lbs.



#### PART NO. DESCRIPTION

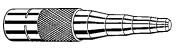
## **Swaging Tools**

For soft copper, aluminum and brass tubing

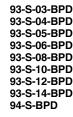


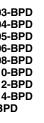


193-S-BPD



94-S-BPD





# **Punch-Type Swaging Tools**

Use these tools for making tubing connections without fittings. Enlarge end of tube, insert another tuber, solder like a sweat fitting.

	O.D. SIZE (INCHES)	NOM. SIZE (INCHES)	WEIGHT
Swaging punch.	3/16 1/4 5/16 3/8 1/2 5/8 3/4 7/8 1/2	1/8 1/4 3/8 1/2 5/8 3/4 3/8 5/8 7/8	3 oz. 3 oz. 1/4 lb. 1/4 lb. 1/2 lb. 1/2 lb. 3/4 lb. 1 lb. 1 lb. 1/2 3/4

193-S-BPD **Swaging Punch Kit** 

> Contains four swaging punches - 1/4", 3/8", 1/2" and 5/8" O.D., (1/8", 1/4", 3/8" and 1/2" nom.) in vinyl case.

Weight: 1 lb.

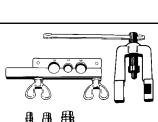
195-SA-BPD **Swaging Punch Kit** 

> Contains flaring bar and four swaging punches - 1/4", 3/8", 1/2" and 5/8" O.D., (1/8", 1/4", 3/8" and 1/2" nom.). In steel kit.

Weight: 2 lbs.

75531-BPD Flaring bar only.

Weight: 1 lb.

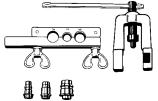


195-SA-BPD

194-S-BPD

For 1/2", 5/8" and 7/8" O.D. tubing, (3/8", 1/2" and 3/4" nom.). Screw-type swaging tool provides perfect swage alignment of tube every time. Adapters change quickly. In plastic kit.

Weight: 2 1/8 lbs.



275-FS-BPD

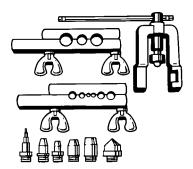
45° Flaring and Swaging Tool

For 1/8", 3/16", 1/4", 5/16" 3/8", 7/16", 1/2", 5/8" and 3/4" O.D. tubing, (1/8", 1/4", 3/8", 1/2" and 5/8" nom.).

Includes five swage adapters for 3/16", 1/4", 5/16", 3/8", 1/2" and 3/4" O.D. tubing, (1/8", 1/4", 3/8", 1/2" and 5/8" nom.).

Flares or swages. Converts quickly. Screw-type-feed. Ideal close quarters tool. Swivel-type swaging adapters and spreader cone are hard chromefinished for easy opertation. Self-centering, slip-on forged steel yoke. In plastic kit.

Weight: 3 1/2 lbs.





Catalog 3501E		Tube Fabricating Equipment
	PART NO.	DESCRIPTION
Testing and Service	e Tools	
1/4 3/9	105-FF-BPD	<b>Pinch Off Tool</b> 1/4", 3/8" and 1/2" O.D.
	7	Temporarily closes soft copper, aluminum or steel tubing so no liquid or gas passes sealed part. Opens tubing and rounds ti back to shape.
	)	Weight: 3/4 lb.
Ratchet Wrenches For refigeration/air conditioning se		Steel forged. For use on small refrigerant cylinders, shut-off valves
For refigeration/air conditioning se		Steel forged. For use on small refrigerant cylinders, shut-off valves, packing gland wrenches, etc. Ratchet has 1/4" square drive and raised face. Handle has 3/16" and 1/4" square drives and 1/2" hex.
	)	
	124-C-BPD	Combination wrench with the four sizes most needed for servicing automotive air conditioning:  * 9/16" hex for dust cap on Schrader type valves and plug oil check on York compressor
		* 1/2" hex for mounting bolts on Tecumseh, York and Airtemp



125-C-BPD

Rugged, steel forged wrench with four sizes covering almost any application.

3/16" square for valve on old style refrigerant charging tanks.

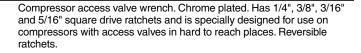
compressors

old style compressor valves

1/4" square ratchet for valve stem on York and tecumseh service valves, and old style compressor valves. Other end has 3/16" and 5/16" square openings, plus 9/16" hex opening for dust cap on Schrader type valves, and plug for oil chekc on York compressor.

1/4" square for valve stem on York and Tecumseh service valves and









## $\Lambda$

#### Par-Lok® Wrench

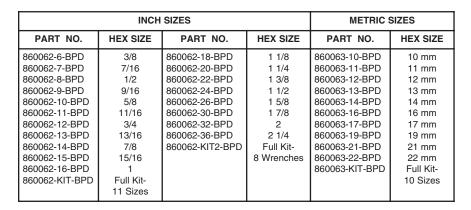
360° Snap-action ratchet wrench for hex sizes from 3/8" to 2 1/4" across the flats and metric from 10mm to 22mm. Inch sizes meet government specifications and are listed as NSN-5120-00-474-7227.

#### **Install Tube Fittings Faster**

Easy across ratchet wrench speeds fittings installation in tight locations. Rugged, snap-action jaws can be opened over tuve lines, locked onto fitting hex and ratcheted within 1/8 turn. Full six point contact prevents fitting distortion common with wrench slippage. Ideal for tube line installations where compact runs require multiple fitting make-up, disassembly and remakes.

#### **Specifications**

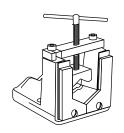
Par-Lok wrenches are available individually or in 3 different kit combinations. Par-Lok jaws are constructed fromdrop-forged, high carbon steel material with a black conversion coat finish. Par-Lok handles are made from heavy guage steel material, heat treated and with a corrosion resistant black finish. Solid stainless steel rivets and tempered jaw springs are designed into every wrench for maximum stringth.





	PART NO.	DESCRIPTION
In-Ex® Tube Deburring	Tool	
	226-BPD	A quick twist of the wrist will deburr either the O.D. or the I.D. of the tube end. Parker's In-Ex deburrer can be used on annealed steel, stainless steel, copper and aluminum, for tube sizes 1/8" to 1 5/8" O.D.  Insert tube into the convexed end of the In-Ex for inside deburring and the opposite end for outside deburring Rotate in either direction. Replacement blades can be ordered. See bulletin 4391-B226 for details.
		Weight: 10 oz.
	226RB-BPD	Replacement Blades
	208-FSS-BPD	Reamer for aircraft grade stainless steel tubing. Black finish
		Weight: 10 oz.

## Tru-Kut® Sawing Vise



710439-BPD

Hacksaw quide will accommodate tube, pipe and hose from sizes 3 (3/16" O.D.) to 32 (2" O.D.). Assures square cut-offs within  $\pm$  1°. Use a fine tooth hacksaw blade for smoother cuts.

**How To Use:** Mount in vise or bolt to bench. Clamp tubing, pipe or hose into the Tru-Kut vise and cut off; guide ensures accurate square cuts.

### **Multi-Flame Torch**

Each torch is designed to direct jets of flame against the entire circumferenced of the tube and fitting. This allows the maximum amount of heat to be equally distributed in a minimum amount of time.

The small torch is recommended for use on TL and LHB3 fittings sizes 16 and below. The large torch is best suited for sizes 20 and 24. The large torch can reduce brazing heavy wall tubing in sizes 12 and 16. Threads is 3/8-24 LH hose connections.

	PART NO.	DESCRIPTION
	870035-BPD	Small Multi-Flame Torch, (6 jets)
	880009-BPD	Large Multi-Flame Torch, (8 jets, heat shield)
. /		Torches are recommended for use with acetylene gas only.



PART NO. DESCRIPTION

#### **Braze Flux**

Black braze flux can be used for brazing either steel or stainless steel components. When applied liberally this flux helps the flow of the silver braze alloy and prevents oxidation.



FLUX-1-BPD Black Flux 1 lb.
FLUX-1/2-BPD Black Flux 1/2 lb.

## **Post Braze Cleaner**

Used to clean the assembly after brazing. Once the silver braze alloy has solidified, immediately immerse into the braze cleaner solution. The cleaner combined with the sudden change in temperature removes the flux from the assembly. Braze cleaner does not provide corrosion protection.

Available in sizes 2 1/2 lb. and 5 lb. jars. When ordering simply denote quantity after Braze Cleaner.



BRAZE-2.5-BPD Braze Cleaner 2 1/2 lb.
BRAZE-5-BPD Braze Cleaner 5 lb.



Rolo-Flair® Repair Parts
We do not repair the flaring tool-however, we do offer repair parts-stock available in Otsego, Michigan, only.

### Rolo-Flair® for 45° Flare 945TH-BPD

DRAWING ITEM NUMBER	PARKER PART NUMBER	PART DESCRIPTION	NUMBER PIECES REQUIRED
1	642685	Wing Nut	1
2	642694	Hex Bolt	1
2-A	642696	Jam Nut	1
3	642759	Clamping Yoke	1
4	642693	Hex Head Bolt (1/4-28-7/16 Head)	1
4-A	642698	Jam Nut	1
6	642764	Handle	1
6-A	642716	Handle Grip	1
7	642689	Spacer	2
8	642681	Hex Stud	2
9	2603-00006	Spacer	1
12	2600-03001	Top Plate	1
13	2600-03004	Flaring Die Sub-Assy.	1
13-A	2600-03002A	Cross Yoke Sub-Assy.	1
22-B	642680	Burnishing Cone	1

