Tube Removal





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2	One-Revolution Tube Cutter		•	•	•						•	•	
4	PTTC Series Tube Cutter		•	•	•		•				•		
5	PTTC Series Tube Cutter Spares & Accessories												
6	376 / 396 Series Boiler Tube Cutter		•	•									
7	Recommended Cutting Speeds												
8	SpeedCut				•	•							
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12	Cyclgrip Semi-Continuous Tube Puller				•								
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17	Stub Tugger		•	•	•		•				•		
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20	Stub Tugger and Manual Tube Puller Spares & Accessories												
23	Pneumatic Hammer		•	•	•	•					•		
24	Pneumatic Hammer Spares & Accessories												

25 26 Jumbo Tube Buster

Jumbo Tube Buster Spares & Accessories

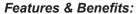
One-Revolution Tube Cutter

Tube Size

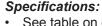
• 0.500" to 2.500" (12.7 to 63.5mm) OD

Elliott's 9060 Series One-Revolution Tube Cutters cut tubes quickly in both heat exchangers and boilers. *Recommended for hand use only* with the employment of a ratchet or wrench, these Tube Cutters are ideal for puncturing tubes prior to tube plugging. This tool is intended for use on all non-ferrous tube materials and some steel tubes. See Tube Plug catalog for more information on Elliott's tube plug offering.

The standard One-Revolution Tube Cutters have a 6" (152.4mm) reach. The Cutting Blades are manufactured from premium quality tool steel. For longer reach cutters, contact Customer Service for details.



- Quick set-up and use greater productivity.
- Hex head drive lower capital investment for drive motor.



See table on opposite page for specifications.

How To Order:

- 1. Specify tube size(s) to be cut. See table on opposite page.
- 2. Choose spares & accessories.

Each 9060 One-Revolution Series Tube Cutter includes:

- · Cutter Blade
- Cutter Pin

- Cutter Blade: Recommend quantity of 1 per 100 brass or copper tube cuts or 1 per 50 tube cuts of other materials.
- Cutter Pin: Recommend quantity of 1 pin for every 2 cutter blades.

One-Revolution Tube Cutter

			9060N1500-1 9060P3																									
_	Size cutte			7/8" Hex					10906			£	£ 4	# 7**	# 7 ***********************************	H 4.	Т г "	H 4.	# - # = # - # - # - # - # - # - # - # -	H 4.	Ε - ¹ - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3	± − ± € − ± − ± − ± − ± − ± − ± − ± − ±						
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Body OD	E E	30.9	32.0	33.3	33.9	35.0	36.9	38.3	40.3		41.0																	
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\neg	5 Ma ———	10-11	12-13	14-15	16-17	18-19	10-11	12-14	15-16		17-18	17-18	17-18															
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Drive Charles Diedo		9060-100 9060N625-1	9060-108 9060N625-4	ODEONIESE 3		0060N625 2		9060-139				1/2" Hex	1/2" Hex	1/2" Hex Hex	1/2" Hex Hex 9060N1000-1 9060P2 5/8"	1/2" Hex 9060N1000-1 9060P2 5/8"	1/2" Hex Hex 9060N1000-1 9060P2 5/8"	1/2" Hex Hex 9060N1000-1 9060P2	1/2" Hex 9060N1000-1 9060P2 5/8"	1/2" Hex 9060N1000-1 9060P2 5/8" Hex 3/4"	1/2" Hex Hex 9060N1000-1 9060P2 5/8" Hex Hex Hex Hex	1/2" Hex 9060N1000-1 9060P2 5/8" Hex Hex Hex	1/2" Hex 9060N1000-1 9060P2 5/8" Hex Hex 9060N1000-2 9060P3	1/2" Hex 9060N1000-1 9060P2 5/8" Hex Hex 9060N1000-2 9060P3	1/2" Hex Hex 9060N1000-1 9060P2 3/4" Hex Hex 9060N1000-2 9060P3	1/2" Hex Hex 9060N1000-1 9060P2 3/4" Hex 9060N1000-2 9060P3	1,12" Hex	1/2" Hex
Drive Charle	Size Cutter Diable Cutter FIII			ODEONIE SE	3/8" Hex	0060N625	Z-070NI0006				1/2"	9060-151 1/2" 9060-153 Hex	9060-151 1/2" Hex 9060-163	9060N750-2 9060-153 Hex 9060-163 9060-174	9060N750-2 9060-151 9060-163 9060-174 9060N1000-1 9060P2	9060-151	9060-151	9060-151	9060-151	9060-151	9060-151	9060-151 Hex 9060N750-2 Hex 9060-153 Hex 9060-163 Hex 9060-174 9060-190 Hex 9060-193 9060-205 9060-205 Hex 9060-215 Hex 9060-215 Hex 9060-223	9060-151 1/2" 9060N750-2 9060-153 Hex 9060N1000-1 9060-174 9060-184 9060N1000-1 9060-190 Hex 9060-190 9060-193 Hex 9060-215 9060-215 Hex 9060-215 9060-223 Hex 9060N1000-2 9060-232 9060N1000-2 9060P3	9060-151 9060-153 9060-163 9060-174 9060-184 9060-190 9060-193 9060-205 9060-210 9060-210 9060-223 9060-245 9060-245	9060-151	9060-151	9060-151 9060-153 9060-163 9060-163 9060-184 9060-190 9060-193 9060-205 9060-210 9060-223 9060-245 9060-245 9060-264 9060-264 9060-264 9060-264 9060-264 9060-264 9060-264 9060-264 9060-264	9060-151 1/2" 9060N750-2 9060-163 Hex 9060-163 Hex 9060-184 5/8" 9060-190 Hex 9060-193 Hex 9060-210 3/4" 9060-225 Hex 9060-245 Hex 9060-255 Hex 9060-264 Hex 9060-274 Hex
Drive Charles Diedo	Size Size Cutter Diduct	0.394 10.0 9060-100	9060-108	9060-113	3/8" 9060-119 Hex	9060-123	9060-131	9060-139	14.5 9060-145		15.1 9060-151	15.3 9060-153 Hex	15.3 9060-153 Hex 16.3 9060-163	0.692 15.3 9060-163 Hex 9060N750-2 0.642 16.3 9060-163 Hex 9060N750-2 0.685 17.4 9060-174	0.594 15.1 9060-151 1/2" 9060N750-2 0.602 15.3 9060-153 Hex 0.685 17.4 9060-174 9060N1000-1 0.724 18.4 9060-184 5/8"	0.594 15.1 9060-153 Hex 0.642 16.3 9060-163 Hex 0.685 17.4 9060-184 5/8" 9060N1000-1 0.724 18.4 9060-184 5/8" 9060N1000-1 0.724 19.0 9060-190 Hex	0.594 15.1 9060-151 1/2" 9060N750-2 0.602 15.3 9060-163 Hex 9060N1000-2 0.642 16.3 9060-174 9060-174 0.724 18.4 9060-184 5/8" 0.748 19.0 9060-190 Hex 0.760 19.3 9060-193 Hex	0.594 15.1 9060-153 Hex 9060N750-2 0.602 15.3 9060-163 Hex 9060-174 0.642 16.3 9060-163 Hex 9060-174 0.724 18.4 9060-184 5.8" Hex 9060-193 Hex 9060N1000-1 0.726 19.3 9060-193 Hex 9060N1000-1	0.594 15.1 9060-151 Hex 9060N750-2 0.602 15.3 9060-163 Hex 9060-103	0.594 15.1 9060-153 Hex 9060N750-2 0.602 15.3 9060-153 Hex 9060-163 0.642 16.3 9060-163 Hex 9060-174 0.724 18.4 9060-184 5/8" Hex 9060-190 0.760 19.3 9060-193 Hex 9060-193 0.760 19.3 9060-193 34"	0.594 15.1 9060-151 Hex 9060N750-2 0.602 15.3 9060-163 Hex 9060-163 0.642 16.3 9060-163 Hex 9060-174 0.724 18.4 9060-184 5/8" Hex 0.760 19.3 9060-193 0.760 19.3 9060-193 0.807 20.5 9060-215 Hex 0.84 21.5 9060-215 Hex	0.594 15.1 9060-151 Hex 9060N750-2 0.602 15.3 9060-163 Hex 9060N1000-1 0.642 16.3 9060-163 Hex 9060-174 0.724 18.4 9060-184 5/8" Hex 0.748 19.0 9060-193 Hex 9060-193 0.760 19.3 9060-193 Hex 9060-210 0.807 20.5 9060-210 Hex Hex 0.846 21.5 9060-215 Hex 0.878 22.3 9060-223 Hex	0.594 15.1 9060-151 Hex 9060N750-2 0.602 15.3 9060-163 Hex 9060N150-2 0.642 16.3 9060-174 Hex 9060-174 0.724 18.4 9060-184 5/8" Hex 0.760 19.3 9060-193 Hex 0.760 19.3 9060-193 Hex 0.807 20.5 9060-216 Hex 0.846 21.5 9060-215 Hex 0.878 22.3 9060-223 Hex 0.913 23.2 9060-232 9060N1000-2	0.594 15.1 9060-15.1 Hex 0.692 15.3 9060-15.3 Hex 0.692 16.3 9060-16.3 Hex 0.642 16.3 9060-16.3 Hex 0.642 16.3 9060-16.3 Hex 0.685 17.4 9060-17.4 9060-18.4 5/8" Hex 0.724 18.4 9060-18.4 5/8" Hex 0.760 19.3 9060-19.3 Hex 0.860 19.3 9060-19.3 Hex 0.860 19.3 9060-19.3 Hex 0.860 19.3 9060-19.3 Hex 0.860 19.3 9060-20.5 9060-20.5 Hex 0.846 21.5 9060-21.5 Hex 0.846 22.3 9060-21.5 Hex 0.878 22.3 9060-22.3 9060-24.5 9060N1000-2 906	0.594 15.1 9060N750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.642 16.3 9060-174 9060-174 0.724 18.4 9060-184 5/8" 0.748 19.0 9060-193 Hex 0.760 19.3 9060-193 Hex 0.807 20.5 9060-210 3/4" 0.846 21.5 9060-215 Hex 0.878 22.3 9060-223 9060-232 0.913 23.2 9060-232 9060-245 0.965 24.5 9060-245 9060-245 1.004 25.5 9060-255 9060-255	0.692 15.3 9060-153 Hex 9060N750-2 0.692 15.3 9060-163 Hex 9060-174 Solden 19.3 9060-193 Hex 9060N1000-1 0.724 18.4 9060-193 Hex 9060-193 Hex 9060-193 Solden 19.3 9060-215 Hex 9060-215 Hex 9060-223 9060-223 9060-245 Hex 9060N1000-2 9060P3 9060N1000-2 9060N1000-2 9060P3 9060N1000-2 9060N10000-2 9060N1000-2 9060N1000-2 9060N1000-2 9060N1000-2 9060N1000-2 9060N10000-2 9060N1000-2 9060N	0.642 16.3 9060-153 Hex 0.642 16.3 9060-154 Hex 0.642 16.3 9060-163 Hex 0.642 16.3 9060-163 Hex 0.642 16.3 9060-163 Hex 0.642 16.3 9060-163 Hex 0.642 18.4 9060-184 5/8" Hex 0.724 18.4 9060-184 5/8" Hex 0.760 19.3 9060-193 0.760 19.3 9060-205 Hex 0.878 22.3 9060-215 Hex 0.878 22.3 9060-223 0.913 23.2 9060-245 1.004 25.5 9060-245 Hex Hex 0.965 24.5 9060-264 Hex Hex 0.965 24.5 9060-264 Hex Hex 0.965 24.5 9060-264 Hex Hex 0.966 26.4 9060-264 Hex	0.594 15.1 9060-153 Hex 0.692 15.3 9060-163 Hex 0.602 15.3 9060-163 Hex 0.602 15.3 9060-163 Hex 0.602 15.3 9060-163 Hex 0.748 19.0 9060-174 Hex 0.748 19.0 9060-193 Hex 0.750 19.3 9060-193 Hex 0.807 20.5 9060-193 Hex 0.807 20.5 9060-210 Hex 0.807 20.5 9060-210 Hex 0.807 20.5 9060-215 Hex 0.846 21.5 9060-215 Hex 0.913 23.2 9060-225 Hex 0.965 24.5 9060-245 Hex 0.965 24.5 9060-255 1.004 25.5 9060-254 Hex 1.039 26.4 9060-254 Hex 1.079 27.4 9060-274
Drive Charle	Inch mm Size cutter blade cutter fill	10.0 9060-100	10.8 9060-108	11.3 9060-113	11.9 9060-119 3/8" Hex	12.3 9060-123	13.1 9060-131	13.9 9060-139	0.571 14.5 9060-145		0.594 15.1 9060-151 1/2"	0.602 15.3 9060-153 Hex	0.594 15.1 9060-151 1/2" Hex 0.602 15.3 9060-163	0.594 15.1 9060-153 Hex 0.642 16.3 9060-163 Hex 0.685 17.4 9060-163	0.594 15.1 9060-151 1/2" 9060N750-2 0.602 15.3 9060-153 Hex 0.685 17.4 9060-174 9060N1000-1 0.724 18.4 9060-184 5/8"	0.594 15.1 9060-151 1/2" 9060N750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.685 17.4 9060-174 9060-184 0.724 18.4 9060-184 5/8" 0.748 19.0 9060-190 Hex	0.594 15.1 9060N750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.724 18.4 9060-194 9060N1000-1 0.748 19.0 9060-193 Hex	0.594 15.1 9060-151 Hex 9060N750-2 0.602 15.3 9060-153 Hex 9060N1000-1 9060N700-1 9060N700-1 9060N1000-1 9060N1000	0.594 15.1 9060-151 Hex 9060N750-2 0.594 15.1 9060-153 Hex 9060N750-2 15.3 9060-163 Hex 9060-163 0.642 16.3 9060-163 Hex 9060-174 9060-174 9060-193 Hex 9060N1000-1 9060P2 0.748 19.0 9060-193 Hex 9060-193 Hex 9060N1000-1 9060P2 0.760 19.3 9060-193 Hex 9060N1000-1 9060-193 PHEX 9060-	0.594 15.1 9060-153 Hex 9060163 Hex 9060N1000-1 9060N750-2 O.642 16.3 9060-163 Hex 9060-163 O.724 18.4 9060-184 5/8" Hex 0.724 18.4 9060-193 Hex 0.760 19.3 9060-193 Hex 0.807 20.5 9060-205 3.44"	0.594 15.1 9060-151 1/2" 9060N750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.642 16.3 9060-174 9060-174 0.724 18.4 9060-184 5/8" 0.760 19.3 9060-193 0.807 20.5 9060-210 0.846 21.5 9060-210 16.846 21.5 9060-215 16.846 21.5 9060-216	0.594 15.1 90601750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.685 17.4 9060-174 9060174 0.724 18.4 9060-184 5/8" 0.748 19.0 9060-193 Hex 0.760 19.3 9060-193 Hex 0.807 20.5 9060-210 3/4" 0.846 21.5 9060-213 Hex 0.878 22.3 9060-223 Hex	0.594 15.1 9060-151 Hex 9060N750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.642 16.3 9060-174 9060-174 0.724 18.4 9060-184 5/8" 0.760 19.3 9060-193 0.760 19.3 9060-205 0.807 20.5 9060-216 0.846 21.5 9060-216 0.878 22.3 9060-223 0.913 23.2 9060-232 0.913 23.2 9060-232	0.594 15.1 90601750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.724 18.4 9060-174 9060170 0.760 19.3 9060-193 Hex 0.760 19.3 9060-193 Hex 0.827 21.0 9060-210 3/4" 0.846 21.5 9060-223 Hex 0.913 23.2 9060-232 9060-245 0.965 24.5 9060-245 9060-043	0.594 15.1 9060N750-2 0.602 15.3 9060-153 Hex 0.642 16.3 9060-163 Hex 0.724 18.4 9060-174 9060N1000-1 0.748 19.0 9060-193 Hex 0.760 19.3 9060-193 Hex 0.827 21.0 9060-215 Hex 0.846 21.5 9060-215 Hex 0.913 23.2 9060-232 9060-245 0.965 24.5 9060-245 9060-245 1.004 25.5 9060-255	0.594 15.1 9060-153 Hex 9060N50-2 0.602 15.3 9060-153 Hex 9060-163 0.642 16.3 9060-163 Hex 9060-174 0.724 18.4 9060-184 5/8" Hex 9060-193 0.760 19.3 9060-193 0.807 20.5 9060-215 Hex 9060N1000-2 0.807 20.5 9060-225 Hex 9060N1000-2 0.905 24.5 9060-245 1.004 25.5 9060-245	0.594 15.1 9060-151 1/2" 9060N750-2 0.602 15.3 9060-163 Hex 9060N150-2 0.642 16.3 9060-163 Hex 9060-174 0.724 18.4 9060-184 5/8" 9060N1000-1 0.760 19.3 9060-193 Hex 0.760 19.3 9060-205 Hex 0.87 20.5 9060-215 Hex 0.878 22.3 9060-223 Hex 0.913 23.2 9060-245 Hex 0.965 24.5 9060-245 9060-245 1.004 25.5 9060-264 7/8" 1.004 25.5 9060-264 7/8"	0.594 15.1 9060N750-2 0.602 15.3 9060-153 0.642 16.3 9060-163 0.642 16.3 9060-163 0.724 18.4 9060-184 0.748 19.0 9060-190 0.760 19.3 9060-193 0.807 20.5 9060-210 0.846 21.5 9060-215 0.948 22.3 9060-223 0.965 24.5 9060-245 1.004 25.5 9060-255 1.004 25.5 9060-265 1.079 27.4 9060-274
Body OD Drive	Inch mm Size cutter blade cutter fill	18-19 0.394 10.0 9060-100	0.425 10.8 9060-108	0.445 11.3 9060-113	0.469 11.9 9060-119 Hex	0.484 12.3 9060-123	0.516 13.1 9060-131	0.547 13.9 9060-139		9060-145	14-15 0.571 14.5 9060-145 16 0.594 15.1 9060-151	0.571 14.5 9060-145 0.594 15.1 9060-151 0.602 15.3 9060-153	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-151 Hex 17-18 0.602 15.3 9060-153 Hex 19-20 0.642 16.3 9060-163 Hex	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-163 Percentages 14-15 0.685 17.4 9060-174 Percentages	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-151 1/2" Hex 17-18 0.602 15.3 9060-153 Hex 19-20 0.642 16.3 9060-163 14-15 0.685 17.4 9060-174 16-17 0.724 18.4 9060-184 5/8" 9060N1000-1 9060P2	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-163 Pex 14-15 0.685 17.4 9060-174 Pex 16-17 0.724 18.4 9060-184 Pex 18 0.748 19.0 9060-190 Hex	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 9060N750-2 17-18 0.602 15.3 9060-163 Hex 9060-163 19-20 0.642 16.3 9060-174 9060-174 9060-174 16-17 0.724 18.4 9060-184 5/8" Hex 9060-190 18-20 0.760 19.3 9060-193 Hex 9060-193	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-174 9060-174 14-15 0.685 17.4 9060-174 9060-184 5/8" 16-17 0.724 18.4 9060-184 F/8" Hex 18 0.760 19.3 9060-193 Hex 12-13 0.760 19.3 9060-193 Hex	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 9060N750-2 17-18 0.602 15.3 9060-163 Hex 9060-163 19-20 0.642 16.3 9060-174 9060-174 9060-174 16-17 0.724 18.4 9060-184 5/8" Hex 18-20 0.760 19.3 9060-193 Hex 12-13 0.760 19.3 9060-193 Hex 14 0.807 20.5 9060-205 9060-205	14-15 0.571 14.5 9060-145 9060N750-2 9060N750-2 16 0.594 15.1 9060-151 Hex 9060N750-2 17-18 0.602 15.3 9060-163 Hex 9060-163 19-20 0.642 16.3 9060-174 Hex 9060-174 16-17 0.724 18.4 9060-184 F/8" Hex Hex 16-17 0.748 19.0 9060-190 Hex Hex 12-13 9060-193 Hex 12-13 0.760 19.3 9060-193 Hex 14 0.807 20.5 9060-205 344" 15 0.827 21.0 9060-210 344" 344" 344"	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-174 9060-174 14-15 0.685 17.4 9060-184 5/8" 16-17 0.724 18.4 9060-184 5/8" 18 0.748 19.0 9060-193 Hex 19-20 0.760 19.3 9060-193 Hex 14 0.807 20.5 9060-210 3/4" 16-17 0.846 21.0 9060-210 3/4"	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-163 Hex 14-15 0.685 17.4 9060-174 9060-184 5/8" 16-17 0.724 18.4 9060-190 Hex Hex 19-20 0.760 19.3 9060-193 Hex 12-13 12-13 0.760 19.3 9060-193 Hex Hex 15 0.827 21.0 9060-210 3/4" 16-17 0.846 21.5 9060-215 Hex 18-21 0.878 22.3 9060-223 Hex	14-15 0.571 14.5 9060-145 9060N750-2 <	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-174 9060-174 14-15 0.685 17.4 9060-184 5/8" Hex 16-17 0.748 19.0 9060-190 Hex Hex 19-20 0.760 19.3 9060-193 Hex 12-13 9060-193 12-13 0.760 19.3 9060-193 Hex Hex 14-15 9060-205 14-16-17 9060-205 14-16-17 9060-205 3/4" 16-17 9060-215 Hex 16-17 9060-223 9060-223 16-17 9060-133 9060-232 9060-245 9060-140 9060-140 9060-140 9060-140 90600-140 90600-140 90600-140 90600-140 90600-140 90600-140 90600-140 90600-140 90600-140 90600-140 90600-140 90600-140 <td< td=""><td>14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-163 Hex 14-15 0.685 17.4 9060-184 5/8" Hex 16-17 0.724 18.4 9060-190 Hex Hex 19-20 0.760 19.3 9060-193 Hex 12-13 0.760 19.3 9060-193 Hex 14 0.807 20.5 9060-210 3/4" 16-17 0.846 21.5 9060-215 Hex 16-17 0.878 22.3 9060-223 Hex 16-17 0.978 22.3 9060-232 Hex 10-11 0.965 24.5 9060-245 9060-245 10-11 0.965 24.5 9060-255 9060-255</td><td>14-15 0.571 14.5 9060-145 9060N750-2 9060N750-2 16 0.594 15.1 9060-151 Hex 9060N750-2 19-20 0.642 16.3 9060-163 Hex 9060-163 19-20 0.642 16.3 9060-174 Pex 9060-184 9060-184 Pex 14-15 0.685 17.4 9060-184 Pex Pex 9060-184 Pex 16-17 0.748 19.0 9060-193 Pex Pex Pex 19-20 0.760 19.3 9060-193 Pex Pex Pex 19-21 0.760 19.3 9060-210 Pex Pex Pex 16-17 0.846 21.5 9060-215 Pex Pex Pex 16-17 0.878 22.3 9060-232 Pex 9060-215 Pex 10-11 0.965 24.5 9060-255 Pex 9060-10 9060-10 10-11 0.965 24.5</td><td>14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-163 Hex 14-15 0.685 17.4 9060-174 9060-184 5/8" 16-17 0.724 18.4 9060-193 Hex 9060-193 15-20 0.760 19.3 9060-193 Hex 9060-193 15-13 0.760 19.3 9060-205 Hex 9060-215 16-17 0.846 21.5 9060-223 Hex 9060-193 16-17 0.878 22.3 9060-223 Hex 9060-N 16-17 0.878 22.3 9060-223 Hex 9060-N 10-11 0.965 24.5 9060-245 9060-245 9060-245 12-14 1.039 26.4 9060-264 778" Hex</td><td>19.1 0.594 15.1 9060-151 1/2" 9060N750-2 16 0.594 15.1 9060-151 1/2" 9060N750-2 15-20 0.642 16.3 9060-153 Hex 9060N1000-1 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0.685 17.4 9060-184 Pex Pex 9060-184 Pex 16-17 0.748 19.0 9060-193 Pex Pex Pex 19-20 0.760 19.3 9060-193 Pex Pex Pex 19-21 0.760 19.3 9060-210 Pex Pex Pex 16-17 0.846 21.5 9060-215 Pex Pex Pex 16-17 0.878 22.3 9060-232 Pex 9060-215 Pex 10-11 0.965 24.5 9060-255 Pex 9060-10 9060-10 10-11 0.965 24.5	14-15 0.571 14.5 9060-145 9060N750-2 16 0.594 15.1 9060-153 Hex 17-18 0.602 15.3 9060-163 Hex 19-20 0.642 16.3 9060-163 Hex 14-15 0.685 17.4 9060-174 9060-184 5/8" 16-17 0.724 18.4 9060-193 Hex 9060-193 15-20 0.760 19.3 9060-193 Hex 9060-193 15-13 0.760 19.3 9060-205 Hex 9060-215 16-17 0.846 21.5 9060-223 Hex 9060-193 16-17 0.878 22.3 9060-223 Hex 9060-N 16-17 0.878 22.3 9060-223 Hex 9060-N 10-11 0.965 24.5 9060-245 9060-245 9060-245 12-14 1.039 26.4 9060-264 778" Hex	19.1 0.594 15.1 9060-151 1/2" 9060N750-2 16 0.594 15.1 9060-151 1/2" 9060N750-2 15-20 0.642 16.3 9060-153 Hex 9060N1000-1 19-20 0.642 16.3 9060-174 5/8" Hex 14-15 0.685 17.4 9060-190 Hex 9060N1000-1 16-17 0.724 18.4 9060-190 Hex Hex 19-20 0.760 19.3 9060-193 Hex 9060N1000-1 19-21 0.760 19.3 9060-210 3/4" Hex 15-13 0.760 19.3 9060-210 3/4" Hex 16-17 0.876 21.0 9060-213 3/4" Hex 16-17 0.876 24.5 9060-232 9060-232 9060-245 12 1.004 25.5 9060-265 7/8" Hex 13-14 1.039 26.4 9060-264 7/8"

PTTC Series Tube Cutter

Tube Size

0.625" to 2.500" (15.9 to 63.5mm) OD

Elliott's PTTC (Push Type Tube Cutter) Series Cutters accommodate heat exchangers and boilers with tube OD sizes 0.625" to 2.500" (15.9 to 63.5mm) with tube sheets up to 5" (127.0mm) thick. The adjustable collar allows tubes to be cut or scored just beyond the tube sheet. The cutting blades are specially coated to increase longevity. Elliott offers two blade styles for Non-Ferrous Steel and Stainless Steel to achieve optimum cutting efficiency.

Each PTTC Tube Cutter Assembly is supplied with an installed blade, complete pilot set, and Allen wrenches. The ½" hex drive shank on cutters up to 1" OD allows the use of common Jacobs drill chucks for driver connection. 1-1/4" to 2-1/2" OD cutters require a ¾" square drive and adapter.



- Quick set-up and use greater productivity.
- Includes complete pilot set for wide range of gauges lower tooling expense.
- Hex head drive on cutters up to 1" OD lower capital investment for drive motor.

How To Order:

- 1. Specify tube size(s) to be cut. See table on opposite page for quantity supplied.
- 2. Choose spares & accessories.

Each PTTC Series Tube Cutter includes:

- Tube Cutter
- (1-2) Cutter Blades with Pin See table on opposite page for quantity supplied.
- (3-5) Tube Cutter Pilots See table on opposite page for quantity supplied.

Spares & Accessories:

- Non-Ferrous / Steel Cutter Blades: For tube ODs less than 7/8" (22.2mm) OD recommend quantity of 3 blades per 100 tubes. For tube ODs greater than 7/8" (22.2mm) OD recommend quantity of 4 blades per 100 tubes.
- Stainless Steel Cutter Blades: For tube ODs less than 7/8" (22.2mm) OD recommend quantity of 3 blades per 100 tubes. For tube ODs greater than 7/8" (22.2mm) OD recommend quantity of 4 blades per 100 tubes.
- Cutter Pins: Recommend quantity of 1 pin for every 2 cutter blades.
- Cutter Lubricant: P8790A for 4 oz (0.118 liter) or P8790B for 1.000 gallon (3.785 liter).
 Recommended to maximize cutter blade life when applied to blade.
- Electric and Pneumatic Tube Cutter Drive Motors: See opposite page.
 - Morse Taper Adapter: Included with Electric Drive Motor
 - Drive Socket: Included with Electric Drive Motor
 - · Jacobs Chuck



Specifications:

See table on opposite page for specifications.

PTTC Series Tube Cutter Spares & Accessories

Tube OD	Cutter Kit # (Includes Pilot Set)	Drive Shank Size	Non-Ferrous / Steel Blade with Pin #	Stainless Steel Blade with Pin #	# of Blades	*Cutter Pin #	Number of Pilots in a Set	Tube Gauge Sizes for Pilot
5/8" (15.9mm)	PTTC625K	1/2"Hex	PTTC25186	PTTC25186S1	1	PTTC625CP	3	16-17, 18-19, 20-22
3/4" (19.1mm)	PTTC750K	1/2" Hex	PTTC25186-1	PTTC25186S2	1	PTTC750CP	4	14-15, 16-17, 18-19, 20-22
7/8" (22.2mm)	PTTC875K	1/2" Hex	PTTC25194	PTTC25194S1	1	PTTC875CP	5	12-13, 14-15, 16-17, 18-19, 20-22
1" (25.4mm)	PTTC1000K	1/2" Hex	PTTC25199	PTTC25199S1	2	PTTC1000CP	5	12-13, 14-15, 16-17, 18-19, 20-22
1-1/4" (31.8mm)	PTTC1250K	3/4" Sq	PTTC25206	PTTC25206S1	2	PTTC1250CP	4	12-13, 14-15, 16-17, 18-19
1-1/2" (38.1mm)	PTTC1500K	3/4" Sq	PTTC25206-1	PTTC25206S2	2	PTTC1500CP	4	10-11, 12-13, 14-15, 16-17
2" (50.8mm)	PTTC2000K	3/4" Sq	PTTC25221	PTTC25221S1	2	PTTC2000CP	5	10, 11, 12, 13, 14
2-1/2" (63.5mm)	PTTC2500K	3/4" Sq	PTTC25223	PTTC25223S1	2	PTTC2500CP	5	10, 11, 12, 13, 14

*Note: Included with cutter blade but can be purchased separately.

PTTC Series Tube Cutter Drive Motors

Elliott's Tube Cutter Drive Motors are used to power the PTTC Series Tube Cutter. They are available in both electric and pneumatic models to suit your application needs.

Specifications (Electric):

- 447000: 5/8" 2-1/2" OD
 - 110V, 50/60Hz, 16 Amp
 - 2 Speed variable motor
 - 60-140 RPM
 - 200-470 RPM
 - Weight: 16 lbs. (7.3 Kg.)
- 447000-220: 5/8" 2-1/2" OD
 - 220V, 50/60Hz, 8 Amp
 - 2 Speed variable motor
 - 60-140 RPM
 - 200-470 RPM
 - Weight: 16 lbs. (7.3 Kg.)

Specifications (Pneumatic):

- P5154: 5/8" 1" OD
 - 23 CFM @ 90 PSI (6.2 bar)
 - 325 RPM
 - 1/4" NPTF 5/16" (8.0mm) ID Air Supply Hose
 - Weight: 5.5 lbs. (2.5 Kg.)
- 445L1753-190: 1 1/4" OD & larger
 - 70 CFM @ 90 PSI (6.2 bar)
 - 190 RPM
 - 3/4" (19.1mm) ID Air Supply Hose
 - Weight: 13 lbs. (5.8 Kg.)

apply Hose

How To Order:

- 1. Specify Tube Cutter Drive Motor(s) required.
- 2. Choose spares & accessories.

The 447000 (110V) and 447000-220 (220V) electric motors include:

- 5/8" (15.9mm) Jacobs Chuck
- 3/4" (19.1mm) Square Female Socket Adapter
- Morse Taper Adapter

The P5154 (325 RPM) and P5476C (100 RPM) pneumatic motors include:

• 1/2" (12.7mm) Jacobs Chuck

- 830-12-3-075 Morse Taper Adapter
- 71S0C 3/4" (19.1mm) Square Female Socket Adapter
- 4470JA Jacobs Chuck for the 447000 and 447000-220 electric motors
- P5476CH Jacobs Chuck for the P5154 and P5476C pneumatic motors

376 / 396 Series Boiler Tube Cutter

Tube Size

2.000" to 3.000" (50.8 to 76.2mm) OD

Elliott's 376 / 396 Series Boiler Tube Cutters are power driven to cut those tubes in firetube and watertube boilers. The Series' primary purpose is to cut tubes to length on the common end of a firetube boiler. It is extremely important to cut tubes to a uniform length prior to beading the tubes when using a roll beading expander.

The 376 / 396 Boiler Tube Cutters have a 1" (25.4mm) male square drive that is easily adapted to tube rolling motors that are 150 RPM or less. The cutters may also be employed with a ratchet for applications in space restricted areas.

The wheel style boiler cutters are designed to have a long tool life, giving you years of trouble-free service.



- 1. Specify tube size(s) to be cut. See table on the right.
- 2. Choose spares & accessories.

Each 376 / 396 Series Boiler Tube Cutter includes:

- Cutter Wheel
- Cutter Pin
- Feed Wedge
- Feed Rod

Spares & Accessories:

- Cutter Blade: Recommend quantity of 1 per 100 tube cuts.
- 37419P20000 Cutter Pin: Recommend quantity of 1 pin for every 2 cutter wheels.
- Feed Wedge See table on the right.
- 374170-20000 Feed Rod
- Pneumatic Motors: Are highly recommended over electric motors for use with boiler tube cutters. See previous page.
- Drive Socket required for use with Drive Motor. See Installation Catalog for more information.



Specifications:

 See table on opposite page for recommended cutting speed specifications.

Features & Benefits:

- Rugged tool design long tool life.
- Places tube to length before rolling reduces operator error
- · Creates a non-abrasive cut which:
 - Eliminates prep time less labor costs.
 - Operator can easily insert new tubes less labor costs
- Cuts tubes chip-free so no need to clean out vessel less labor costs.

Tube	OD		Tube	Weight			
Inch	mm	BWG	Cutter Part #	Lbs.	Kg.		
2"	50.8	10-16	376-00-20000	15	6.8		
2-1/2"	63.5	10-16	376-00-20102	18	8.2		
3"	76.2	10-16	396-00-30000	40	18.2		

Tube	OD		0	Food Wodgo			
Inch	mm	BWG	Cutter Wheel	Feed Wedge			
2"	50.8	10-16	374190-20000	374180-20000			
2-1/2"	63.5	10-16	374190-20104	374160-20000			
3"	76.2	10-16	374190-20104	375FW30000			

Recommended Cutting Speed Specifications

Revolutions Per Minute

To obtain maximum cutting performance and cutter blade life, refer to the table below for the recommended cutting RPM. A slower RPM is recommended when the optimum cannot be obtained to maximize cutter blade life.

Tube OD	Inconel 10 SFM	Hastelloy 20 SFM	300 Series Stainless Steel 30 SFM	Monel 40 SFM	400 Series Stainless Steel 50 SFM	Titanium 60 SFM	Carbon Steel 80 SFM	Copper 90 SFM	Copper Nickel 100 SFM	Red Brass 200 SFM	Admiralty Brass 225 SFM	Aluminum 250 SFM
1/4"	153	306	458	611	764	917	1222	1376	1528	3056	3438	3818
5/16"	122	244	367	489	611	733	978	1100	1222	2445	2750	3055
3/8"	102	204	306	408	509	611	815	916	1018	2037	2292	2545
7/16"	87	175	262	349	437	524	699	786	874	1746	1964	2182
1/2"	76	153	229	306	382	459	611	688	764	1528	1719	1909
9/16"	68	137	204	272	340	407	543	611	679	1358	1528	1697
5/8"	61	122	184	245	306	367	489	552	612	1222	1375	1527
11/16"	55	112	167	222	278	333	444	500	555	1111	1250	1388
3/4"	51	102	153	203	254	306	408	458	508	1019	1146	1273
13/16"	47	95	142	190	237	284	379	427	474	940	1058	1175
7/8"	44	87	131	175	219	262	349	392	438	873	982	1091
1"	38	76	115	153	191	229	306	344	382	764	859	955
1-1/8"	34	68	102	136	170	204	272	306	340	679	764	848
1-1/4"	31	61	92	123	153	183	245	274	306	611	688	764
1-3/8"	28	56	83	111	139	167	222	250	278	556	625	694
1-1/2"	25	51	76	102	127	153	204	230	254	509	573	636
1-3/4"	22	44	66	88	109	131	175	196	218	437	491	545
2"	19	38	57	76	96	115	153	172	191	382	430	477
2-1/2"	15	31	46	61	76	92	122	137	153	305	344	382
3"	13	25	38	51	64	76	102	115	127	255	286	318
4"	10	19	29	38	48	57	76	86	95	191	215	239

Cut tough jobs down to size.

Equipped with a rugged Baldor® Motor and the highly productive Automatic Cutting Force Control, Elliott's SpeedCut is a quick and cost effective way to cut through tube bundles in a single pass. It features a heavy-duty frame and powerful drivetrain to withstand the rigors of a production environment. Safe and efficient operation is possible without the need for a constant attendant.

The unit offers Automatic Cutting Force Control as a standard feature. The cutting cross section of the vessel is smaller at the top and bottom rows because there are fewer tubes per row. During larger portions of the cutting cycle the saw feed automatically pauses while maintaining constant cutting force. The result is that overall cutting time is reduced without sacrificing blade life.

Set-up is easy. Simply position and secure the tube bundle (an optional Support Table with Binding Straps is available). If necessary the operator can adjust the blade tension with a simple torque wrench. Minimal attendance by the operator of the unit is enabled by three control systems that constantly monitor the cutting cycle. Should the blade break or stall, the system automatically stops the blade.



An MQL Mist Lubrication System is a standard feature on the SpeedCut. A very thin film of lubricant is spread on the teeth of the blade just before the blade contacts the tube. As the heat from the cut is absorbed by the lubricant, the liquid is dissipated from the blade and the resulting chip. Environmental hazards and disposal costs are minimized, the cutting speed is increased, and the blade life is prolonged.



Control Panel

How To Order:

- 1. Review the Specifications to ensure the unit meets your vessel size and workspace needs.
- 2. Specify power requirement: Specify 3 Phase voltage.
- Choose spares & accessories.

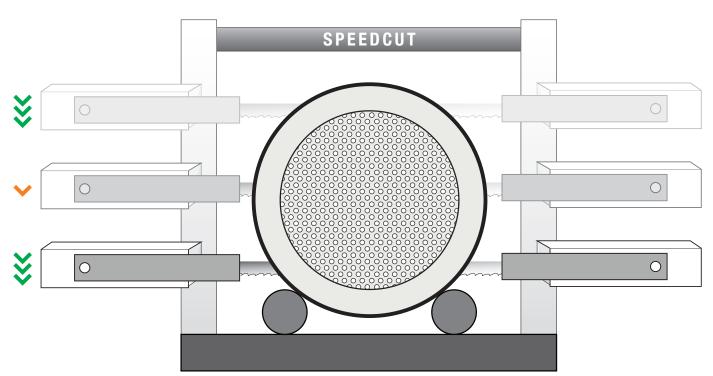
Features & Benefits:

- The Hydraulic Feed Rate Control combined with the Automatic Cutting Force Control optimizes saw feed while maintaining consistent cutting force.
- Powerful 7.5 or 10 HP Baldor® Blade Drive Motor quickly cuts through a wide variety of tough materials.
- Heavy Duty Cone Drive® gearbox with powerful "Double Enveloping"® gearset for increased torque.
- Low voltage operator controls front mounted and easily accessible to operator.
- Remote Pedestal Control Console for added safety and convenience.
- · Convenient digital bandspeed display.
- Control Legend Plates in English or Spanish (other languages available upon request).
- Includes Machine Leveling Bolts.
- Three control systems and Blade Break/Stall Proximity Switch features enable safe unattended operation.
- · Overload and under voltage protection.
- Maintenance Lockout for operator safety and protection during maintenance.

- MQL Mist Lubrication System to minimize disposal costs and prolong blade life.
- Long-life, high quality Bi-Metal Bandsaw Blade included.
- Rotary Blade Brush cleans and extends blade life.

Spares & Accessories:

- Bi-Metal Bandsaw Blade: Long-life, high-quality blade for most materials, including copper, stainless steel and exotic materials.
- Hour Meter: Allows for more precisely scheduled preventative maintenance which lowers operating costs.
- Bundle Support Table & Binding Straps: Helps to secure the bundle during cutting operation.
- Hydraulic Sheet Clamp: Allows for improved stability of the tube sheet during the sawing process and an added measure of safety for the crew and the machine. As the sheet rests on the tube sheet supports, the clamp provides downward clamping pressure to secure the tube sheet.
- Safety Fencing: Enables safe unattended operation.
- Recommended Spares Kit: Includes spare maintenance parts for quick replacement and no down time.



Automatic Cutting Force Control:

During larger sections of the vessel, the saw feed automatically pauses while maintaining consistent cutting force to increase productivity without sacrificing blade life.

SpeedCut

	SpeedCut 78	SpeedCut 98						
	Power	opoodout oo						
Blade Motor	7.5 HP (5.6kW)	10 HP (7.5kW)						
Hydraulic Motor	1 HP (.75kW)						
Hydraulic Capacity	10	gal						
Power Requirement	3 Phase - 50/60 Hz (Se	3 Phase - 50/60 Hz (Select from 208V - 600V)						
	Cutting							
Cutting Capacity (round)	78.5" (2,000mm)	98.5" (2,500mm)						
Cutting Capacity	78.5" (2,000mm) height	98.5" (2,500mm) height						
(rectangular)	85" (2,160mm) width	98.5" (2,500mm) width						
Cutting Depth/ Throat	33.75" (857mm)						
Blade Speed (typical speed)	50 - 275 FPM Infinitely	Variable (15 - 84 mpm)						
Blade Size	1.5" x .05" x 375" (38mm x 1mm x 9,779mm)	1.5" x .05" x 402" (38mm x 1mm x 10,211mm)						
Typical Bundle Cutting Time	20 - 60	minutes						
	Dimensions & We	eight						
	168" (4,267mm) height	213" (5,410mm) height						
Working Area	178" (4,521mm) width	192" (4,877mm) width						
	87" (2,210	mm) depth						
Minimum Height	117" (2,972mm)	134" (3,404mm)						
Bandwheels	36" (914mr	m) cast iron						
Weight	6,000 lbs. (2,722Kg)	6,600 lbs. (2,994Kg)						
	130" (3,302mm) height	143" (3,632mm) height						
Shipping Dimen- sions (Crated)	186" (4,724mm) width	199" (5,054mm) width						
,	100" (2,540	Omm) depth						
Shipping Weight (Crated)	7,400 lbs. (3,357Kg)	10,600 lbs. (4,808Kg)						
	20.25" (514	mm) height						
Bundle Support Table	56" (1,422	mm) width						
	21.5" (546	mm) depth						
Support Table Weight	1,000lbs	(454Kg)						
Spares & Accessories								
Bi-Metal Bandsaw Blade	SCT78B1	SCT98B1						
Lubricant	SCT100	318-028						
Bundle Support Table	sc	ТВТ						
Hydraulic Sheet Clamp	SCT78HC	SCT98HC						
Recommended Spares Kit	SCT1	55291						







Cutting Speed



Heavy Duty Gearbox



Safety Shutoff Sensor



Bundle Support Table (optional)

0.625" to 1.000" (15.9 to 25.4mm) OD

Elliott's Model B10552-00 Collet Style Tube Tugger was designed especially for fast and efficient tube removal in condensers, chiller, and other heat exchangers.

With its 6 Ton pulling capacity, the Collet Style Tube Tugger automatically grips, pulls, and releases the tube in a matter of seconds. The puller's compact design allows access to confined work areas. Additionally, the 360° Positioning Handle enables access to those hard-to-reach tubes that are near channel plates and water box conditions.

The Collet Style Tube Tugger can quickly and successfully pull over 100 tube stubs in less than an hour! To allow for even faster tube pulling, use Elliott's Cyclgrip Semi-Continuous Tube Puller – the perfect partner for the Collet Style Tube Tugger.

How To Order:

- 1. Specify tube size(s) to be cut.
- 2. Choose spares & accessories.

The B10552-00 Collet Style Tube Tugger kit includes:

- B10552 Collet Style Tube Tugger Assembly
- B10552D5-750 Collet Retainer for 5/8" (15.9mm) and 3/4" (19.1mm) tube ODs
- B10552D7-750 Pull Rod for 5/8" (15.9mm) and 3/4" (19.1mm) tube ODs
- B10552D5-1000 Collet Retainer for 7/8" (22.2mm) and 1" (25.4mm) tube ODs
- B10552D7-1000 Pull Rod for 7/8" (22.2mm) and 1" (25.4mm) tube ODs
- B10552D20 15 ft. (4.6M) Hydraulic Hose Assembly

Spares & Accessories:

- M5783-00 110V Electric Hydraulic Pump:
 - You must have this pump in order to properly operate the Collet Style Tube Tugger.
- M5783-00-220 220V Electric Hydraulic Pump:
 - You must either purchase or already have this pump on order to properly operate the Collet Style Tube Tugger.
- Tool Kit: Consists of (1) Collet Set, (1) Draw Bar, and (1) Nose Piece.
 - Recommend quantity of 1 for each tube puller purchased.
- Collet Set: Consists of (1) Collet, (1) Flat Spring, and (1) O-ring.
 Recommend quantity of 2 per 1,000 tubes to be pulled.
- Draw Bar: Recommend quantity of 1 per 1,000 tubes to be pulled.
- Nose Piece: Recommend quantity of 1 per 10,000 tubes to be pulled.
- TCB20-33 Counter Balance.

J	Tube OD	BWG	*Tool Kit	**Collet Set	Draw Bar	Nose Piece	Flat Spring	0-Ring
	5/8"	18-20	B10552-625KIT	B10552D3-625	B10552D2-625	B10552D4-625	B10552D31-62	P8309-8A
	3/4"	16-20	B10552-750KIT	B10552D3-750	B10552D2-750	B10552D4-750	B10552D31-62	P8309-8A
	7/8"	16-20	B10552-875KIT	B10552D3-875	B10552D2-1000	B10552D4-875	B10552D31-87	P8309-11
	1"	16-20	B10552-1000KIT	B10552D3-1000	B10552D2-1000	B10552D4-1000	B10552D31-100	P8309-11



Specifications:

- · Pulling capacity: 6 Ton
- Stroke: 3" (76.0mm) Pulling Stroke 2.25" (57.2mm)
- Weight: 25 Lbs. (11 Kg)
- · Overall Length:
 - Retracted: 20.5" (520.7mm)
 - Extended: 21.75" (552.6mm)

Features & Benefits:

- · Quick stroke cylinder increases productivity.
- Light weight pulling ram reduces operator fatigue.
- Wide gripping range less tooling expense.
- 360 degree positioning handle more access to tubes.

Cyclgrip Semi-Continuous Tube Puller

Tube Size

 0.500" to 1.000" (12.7 to 25.4mm) OD

Elliott's M5630-00 Cyclgrip Semi-Continuous Tube Puller is an engineered product that continuously pulls chiller, heat exchanger, and condenser tubes after the tubes have been pulled free from the tube sheet, making it the ideal companion for the Collet Style Tube Tugger. The Cyclgrip's unique design allows it to adjust to tube sizes without any additional tooling or tool adjustments. The puller's slim profile allows side tube mounting adjacent to water box and channel plates.

Additionally, the Cyclgrip easily pulls tubes that have been expanded into baffle or support plates, eliminating the use of tiresome slam hammers and accelerating the tube removal.

Features & Benefits:

- Lightweight & compact design easy to move in tight areas
- 10 ft (3.3M) per minute pulling action greater productivity.
- Simple design easy to maintain.
- · No extra tooling required lower tooling expense.

How To Order:

- 1. Choose the M5630-00 Cyclgrip Semi-Continuous Tube Puller Package.
- 2. Choose spares & accessories.

The M5630-00 Cyclgrip Semi-Continuous Tube Puller package includes:

- Extractor Unit
- 15 ft (4.6M) Hydraulic Hose
- Control Cable
- Carrying Case

Spares & Accessories:

- M5783-00 110V Electric Hydraulic Pump: You must either purchase or already have this pump on order to properly operate the Cyclgrip.
- M5783-00-220 220V Electric Hydraulic Pump: You must either purchase or already have this pump on order to properly operate the Cyclgrip.
- TCB20-33 Counter Balance.



Specifications:

- Pulled tube projection required: 3" (76.2mm)
- Face plate dimensions: 3.75" (95.3mm) wide x 2.94" (74.7mm) high
- Stroke length: 5" (127.0mm)
- Pulling rate: 10'/min. (3.3M/min.)
- Height: 10.75" (273.0mm)
- Length: 8.44" (214.4mm)
- Width: 4.13" (104.9mm)
- Weight: 16 Lbs. (7.3 Kg)

0.625" to 1.250" (15.9 to 31.8mm) OD

Elliott's Model 80-40125 Tube Tugger is a powerful continuous hydraulic tube pulling system for removing any type of tube material effortlessly from heat exchangers, chillers, and other heat transfer vessels.

With its 30 Ton pulling capacity, the Elliott Tube Tugger breaks expanded tube sheet joint bonds. The tugger then takes over and continuously pulls the tube when any obstructions are met. In many applications, tubes can be pulled from both tube sheets from one end of the heat exchanger.

The Tube Tugger's compact length of 15" (381.0mm) allows it to be used in confined space areas. For close clearance conditions or for extended reach, Nose Piece Extensions are available. Contact Customer Service for details.

Features & Benefits:

- Portable ram & pump easy to move in tight areas.
- · High production pulling action lower labor cost.
- Best value more productivity & less capital investment.

How To Order:

- 1. Specify tube size(s) to be pulled See table on page 16.
- 2. Choose spares & accessories.

The 80-40125 Tube Tugger kit includes:

- Tube Pulling Hydraulic Cylinder
- Suspension Bracket Assembly with Side Handles
- · Collet Holder Assembly
- (2) 15 ft. (4.6M) Hydraulic Hose
- Release Fork
- Set of Spanner Wrenches



Specifications:

- Capacity: 30 Ton (27.2Mt).
- Stroke: 3.000" (76.2mm).
- Tugger Diameter: 6.500" (165.1mm).
- · Lengths:
 - Collapsed: 12.940" (329.0mm).
 - Extended: 15.940" (405.0mm).
- Length Across Handles: 18.250" (464.0mm).
- Weight: 46 Lbs. (21.0Kg).

- Hydraulic Pump: M5773-00 110V Electric Pump, M5776-00 220V Electric Pump, M5775-00 Pneumatic Pump. You must either purchase or already have one of these pumps in order to properly operate the Tube Tugger.
- TCB48-66 Counter Balance
- Spear: Recommend quantity of 1 per 200 tubes pulled in light applications; 1 per 75 tubes for heavy applications. *See table on page 16.*
- Collet Set: Recommend quantity of 1 per 1,000 tubes pulled in light applications; 1 per 250 tubes for heavy applications. See table on page 16.
- Nose Piece: Recommend quantity of 1 per 10,000 tubes pulled. See table on page 16.

Super Tube Tugger

Tube Size

• 1.500" to 2.000" (38.1 to 50.8mm) OD

Elliott's Model 80-40200 Super Tube Tugger is a powerful continuous hydraulic tube pulling system for removing any type of tube material effortlessly from boilers and surface condensers.

With its 60 Ton pulling capacity, the Elliott Super Tube Tugger breaks expanded tube sheet joint bonds. The tugger then takes over and continuously pulls the tube when any obstructions are met.

The Super Tube Tugger's compact length of 18" (457.0mm) allows it to be used in confined space areas.

Features & Benefits:

- Portable ram & pump easy to maneuver in tight areas.
- · High production pulling action lower labor cost.
- · High tonnage makes difficult job easy.

How To Order:

- 1. Specify tube size(s) to be pulled See table on page 16.
- 2. Choose spares & accessories.

The 80-40200 Super Tube Tugger kit includes:

- · Tube Pulling Hydraulic Cylinder
- Suspension Bracket Assembly with Side Handles
- Collet Holder Assembly
- (2) 15 ft. (4.6M) Hydraulic Hose
- · Release Fork
- Set of Spanner Wrenches



Specifications:

- Capacity: 60 Ton (54.4Mt).
- Stroke: 4.000" (101.0mm).
- Tugger Diameter: 8.500" (215.9mm).
- Lengths:
 - Collapsed: 18.000" (457.0mm).
 - Extended: 22.000" (559.0mm).
- Length Across Handles: 18.250" (464.0mm).
- Weight: 62 Lbs. (28.0Kg).

- Hydraulic Pump: M5773-00 110V Electric Pump, M5776-00 220V Electric Pump, M5775-00 Pneumatic Pump. You must either purchase or already have one of these pumps in order to properly operate the Super Tube Tugger.
- TCB66-88 Counter Balance
- Spear: Recommend quantity of 1 per 200 tubes pulled in light applications; 1 per 75 tubes for heavy applications. *See table on page 16.*
- Collet Set: Recommend quantity of 1 per 1,000 tubes pulled in light applications; 1 per 250 tubes for heavy applications. See table on page 16.
- Nose Piece: Recommend quantity of 1 per 10,000 tubes pulled. See table on page 16.

• 0.625" to 2.000" (15.9 to 50.8mm) OD

Elliott's TT Spears are used with the Elliott Tube Tugger or Super Tube Tugger to successfully pull tubes in chillers, heat exchangers, condensers, fin fan coolers, and boilers.

Simply size the spear, apply spear lubricant on the pulling teeth, and then set the spear by employing a hand ratchet or impact wrench. To relieve pressure, back the spear off and then employ the Tube Tugger or Super Tube Tugger to successfully remove the tube.

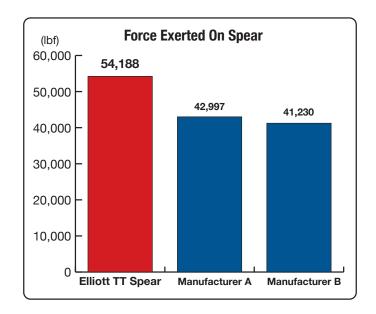


Features & Benefits:

- New, innovative design means the best tool life possible at a competitive price.
- The best value spear on the market.
- Engineered design lowers the chance that the gripping end of the spear will break off in the tube, saving time, money and hassle.

How To Order:

- 1. Specify tube size(s) to be pulled.
- 2. Choose spares & accessories.



Spares & Accessories:

• P8788 Spear Lubricant: Highly recommended for use on spear threads to greatly increase spear life.

Tube Tugger and Super Tube Tugger Spares & Accessories

Tube OD	BWG	Spear	Minimun *Diam			m Spear neter	Male Sq. Size	Nose Piece	*Collet Set with O-Ring
			Inch	mm	Inch	mm	Size		
	7	TT625-7	0.245	6.2	0.385	9.8			
	8-9	TT625-8	0.280	7.1	0.432	11.0	1		
	10-12	TT625-10	0.342	8.7	0.482	12.2	i		
5/8"(15.9mm)	13-15	TT625-13	0.425	10.8	0.545	13.8	1/2"	80-40125N062	80-40125C062
	16-18	TT625-16	0.485	12.3	0.589	15.0	1		
	19-24	TT625-19	0.531	13.5	0.615	15.6	1		
	7	TT750-7	0.370	9.4	0.528	13.4			
	8-9	TT750-8	0.405	10.3	0.576	14.6	1		
	10-12	TT750-10	0.467	11.9	0.625	15.9	1		
3/4" (19.1mm)	13-15	TT750-13	0.550	14.0	0.685	17.4	1	80-40125N075	80-40125C075
	16-18	TT750-16	0.610	15.5	0.727	18.5	1		
	19-24	TT750-19	0.656	16.7	0.750	19.1	1		
	7	TT875-7	0.495	12.6	0.653	16.6	5/8"		
	8-9	TT875-8	0.530	13.5	0.701	17.8	i		
	10-12	TT875-10	0.592	15.0	0.750	19.1	1		
7/8" (22.2mm)	13-15	TT875-13	0.675	17.1	0.810	20.6	1	80-40125N087	80-40125C087
	16-18	TT875-16	0.735	18.7	0.852	21.6	1		
	19-24	TT875-19	0.781	19.8	0.875	22.2	1		
	7	TT1000-7	0.620	15.7	0.778	19.8			
	8-9	TT1000-8	0.655	16.6	0.826	21.0	1		
	10-12	TT1000-10	0.717	18.2	0.875	22.2	1		
1" (25.4mm)	13-15	TT1000-13	0.800	20.3	0.935	23.7	3/4"	80-40125N100	80-40125C100
	16-18	TT1000-16	0.860	21.8	0.977	24.8	1		
	19-24	TT1000-19	0.906	23.0	1.000	25.4	1		
	7	TT1250-7	0.870	22.1	1.028	26.1			
	8-9	TT1250-8	0.905	23.0	1.076	27.3	i		
	10-12	TT1250-10	0.967	24.6	1.125	28.6	1		
1-1/4" (31.8mm)	13-15	TT1250-13	1.050	26.7	1.185	30.1	i	80-40125N125	80-40125C125
	16-18	TT1250-16	1.110	28.2	1.227	31.2	1		
	19-24	TT1250-19	1.156	29.4	1.250	31.8	1		
	7	TT1500-7	1.120	28.4	1.278	32.5	1		
	8-9	TT1500-8	1.155	29.3	1.326	33.7	1		
	10-12	TT1500-10	1.217	30.9	1.375	34.9	1		
1-1/2" (38.1mm)	13-15	TT1500-13	1.300	33.0	1.435	36.4	i	80-40200N150	80-40200C150
	16-18	TT1500-16	1.360	34.5	1.477	37.5	1		
	19-24	TT1500-10	1.406	35.7	1.500	38.1	1		
	7	TT1750-7	1.370	34.8	1.528	38.8	1"		
	8-9	TT1750-8	1.405	35.7	1.576	40.0	i		
	10-12	TT1750-10	1.467	37.3	1.625	41.3	1		
1-3/4" (44.5mm)	13-15	TT1750-10	1.550	39.4	1.685	42.8	1	80-40200N175	80-40200C175
	16-18	TT1750-13	1.610	40.9	1.727	43.9	1		
	19-24	TT1750-19	1.656	42.1	1.750	44.5	1		
	7	TT2000-7	1.620	41.1	1.778	45.2	1		
	8-9	TT2000-7	1.655	42.0	1.776	46.4	1		
	10-12		1.717		1.875		1		
2" (50.8mm)		TT2000-10		43.6		47.6	1	80-40200N200	80-40200C200
	13-15	TT2000-13	1.800	45.7	1.935	49.1	ļ	00-40200IN200	00-402000200
	16-18	TT2000-16	1.860	47.2	1.977	50.2	1		

Spears are also available in 48' reach. Contact customer service for details.

Elliott highly recommends using P8788 Spear Lubricant with your spears to greatly increase spear life. Simply brush the lubricant on the spear teeth after every tube.

^{*} O-Ring number P8309-225 is supplied with all Collet Sets.

0.375" to 2.500" (9.5 to 63.5mm) OD

Elliott's Model 80-40130 Stub Tugger is a powerful hydraulic tube pulling system for removing tubes from both heat exchangers and boilers.

The Elliott Stub Tugger is compatible with other competitive spear type tube pullers and its compact length of 18" (457.0mm) allows it to be used in confined space areas.



Features & Benefits:

- Extensive OD tube range more versatility.
- Uses E-series spears lower tooling cost.

How To Order:

- 1. Specify tube size(s) to be pulled.
- 2. Choose spares & accessories.

The 80-40130 Stub Tugger kit includes:

- Tube Pulling Hydraulic Cylinder
- · Suspension Bracket Assembly with Side Handles
- · Nose Piece Adapter
- Load Cap
- · Safety Shield
- (2) 15 ft. (4.6M) Hydraulic Hose

Specifications:

- Capacity: 30 Ton (27.2Mt).
- Stroke: 6.000" (152.4mm).
- Tugger Diameter: 6.500" (152.4mm).
- Lengths:
 - Collapsed: 18.000" (457.0mm).
 - Extended: 22.000" (559.0mm).
- Length Across Handles: 18.250" (464.0mm).
- Weight: 40 Lbs. (18.0Kg).

- Hydraulic Pump: M5773-00 110V Electric Pump, M5776-00 220V Electric Pump, M5775-00 Pneumatic Pump, or 80-36102D3 Hand Pump. You must either purchase or already have one of these pumps in order to properly operate the Stub Tugger.
- TCB48-66 Counter Balance.
- Spear: Recommend quantity of 1 per 250 tubes pulled in light applications; 1 per 100 tubes for heavy applications See table on page 21.
- Spear Extension See table on page 22.
- Extension Chair See table on page 22.
- 80-3055-3-00 Spear Adapter: Recommend 1 spare always plus quantity of 1 per 500 tubes pulled in light applications; 1 per 200 tubes for heavy applications *See table on page 22*.
- 80-3055-4 Horseshoe Lock: Recommend quantity of 1 per 10,000 tubes pulled See table on page 22.

Hydraulic Pumps

Elliott's hydraulic pumps are used to power the Collet Style Tube Tugger, Cyclgrip Semi-Continuous Puller, Tube Tuggers, and Stub Tugger. The hydraulic pumps' compact design is ideal for use in confined work areas. Other key features include an integral gauge, protective roll cage, and hydraulic quick disconnect.



- 1. Determine which Elliott puller(s) you will be using since this determines which hydraulic pump you will require.
- 2. Choose your preference of hydraulic pump type: 110V electric, 220V electric, pneumatic, or hand driven.





5W W B W W W				Maximum		We	ight
Elliott Puller Used	Pump Type	Part Number	HP	Operating Pressure (psi)	Power Requirement	Lbs.	Kg.
Callet Style	110V Electric	M5783-00	1.13	5,000	25 Amps @110V	80	36.3
Collet Style	220V Electric	M5783-00-220	1.13	5,000	15 Amps @220V	80	36.3
Cycleria	110V Electric	M5783-00	1.13	5,000	25 Amps @110V	80	36.3
Cyclgrip	220V Electric	M5783-00-220	1.13	5,000	15 Amps @220V	80	36.3
	110V Electric	M5773-00	1.13	10,000	25 Amps @110V	88	39.9
Tube Tugger	220V Electric	M5776-00	1.13	10,000	15 Amps @220V	88	39.9
	Pneumatic	M5775-00	3	10,000	50 cfm @80 psi	91	41.3
	110V Electric	M5773-00	1.13	10,000	25 Amps @110V	88	39.9
Super Tube Tugger	220V Electric	M5776-00	1.13	10,000	15 Amps @220V	88	39.9
	Pneumatic	M5775-00	1.13	10,000	50 cfm @80 psi	91	41.3
	110V Electric	M5773-00	1.13	10,000	25 Amps @110V	88	39.9
Stub Tugger	220V Electric	M5776-00	1.13	10,000	15 Amps @220V	88	39.9
Stub Tugger	Pneumatic	M5775-00	3	10,000	50 cfm @80 psi	91	41.3
	Manual	80-36102D3	NA	10,000	NA	28	12.7

3/8" to 1" (9.5 to 25.4mm) OD

Elliott's Model 904500 Manual Tube Puller is ideal for pulling a limited number of tubes in heat exchangers, chillers, fin fan coolers, and surface condensers.

The Manual Tube Puller incorporates a socket and thrust bearing to allow for use with an impact wrench. Elliott's manual tube puller is a great value because the puller works on tube ODs 3/8" to 1" (9.5 to 25.4mm) - all you need to purchase is a nose piece for each tube OD. With most competitor pullers, you need to buy a separate puller for each tube size! E Series spears must be purchased separately.

The easy to use 904500 Manual Tube Puller allows you to pull tubes at a minimum tooling cost!



- One puller accommodates tube OD sizes 3/8" to 1" (9.5 to 25.4mm) only need to purchase nose piece.
- Uses standard spears lower tool cost.
- · Minimum investment lower tool cost.
- Manual tool no capital expense for pump & ram.
- · Compact easy to store.

How To Order:

- 1. Specify tube size(s) to be cut.
- 2. Choose spares & accessories.



Spear and nose pieces must be purchased separately.

Tube OD	Nose Piece
3/8"	904502-05
1/2"	904502-04
5/8"	904502-01
3/4"	904502-02
7/8"	904502-06
1"	904502-03

- Spears: Recommend quantity of 1 per 250 tubes to be pulled. See table on page 21.
- Nose Pieces: Recommend quantity of 1 per 10,000 tubes to be pulled. See table above.

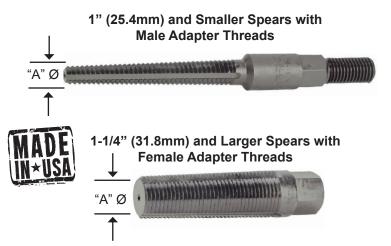
E-Series Hex Spears Stub Tugger & Manual Tube Puller Accessories

Tube Size

• 0.375" to 3.000" (9.5 to 76.2mm) OD

Elliott's E Series Hex Spears are used with the Elliott Stub Tugger or Manual Tube Puller to successfully pull tubes in chillers, heat exchangers, condensers, fin fan coolers, and boilers.

Simply size the spear, apply spear lubricant on the pulling teeth, and then set the spear by employing a hand ratchet or impact wrench. To aid in the removal of the tube stub from the spear, back the spear off and then employ the Stub Tugger or Manual Tube Puller to successfully remove the tube.



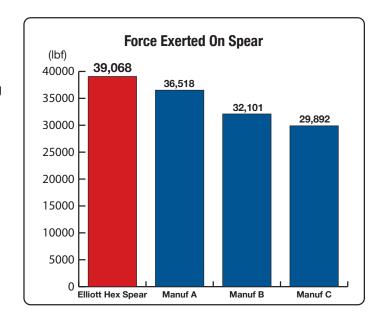
Features & Benefits:

- New, innovative design means the best tool life possible at a competitive price.
- · The best value spear on the market.
- Engineered design lowers the chance that the gripping end of the spear will break off in the tube, saving time, money and hassle.

How To Order:

- 1. Specify tube size(s) to be pulled.

 Recommend quantity of 1 per 250 tubes pulled in light applications, 1 per 100 for heavy applications.
- 2. Choose spares & accessories.



Spares & Accessories:

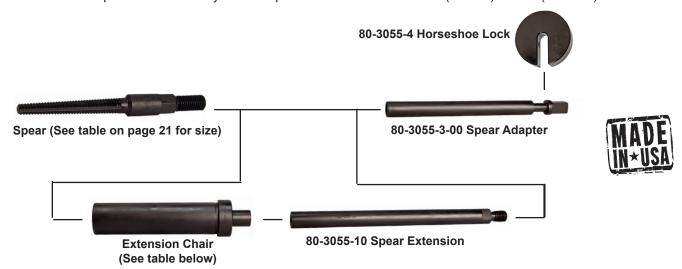
P8788 Spear Lubricant: Highly recommended for use on spear threads to greatly increase spear life.

E-Series Hex Spears Stub Tugger & Manual Tube Puller Accessories

			""	U 0'		
Tube OD	BWG	Part #	Inch	mm	Hex Size	
	16-17	E375-16	0.240	6.1		
3/8"	18-19	E375-18	0.272	6.9	5/8" Flat	
5.75	20-22	E375-20	0.295	7.5		
	16-17	E500-16	0.365	9.3		
1/2"	18-19	E500-18	0.397	10.1		
	20-22	E500-20	0.427	10.9		
	12-13	E625-12	0.402	10.2		
	14-15	E625-14	0.454	11.5		
5/8"	16-17	E625-16	0.489	12.4		
	18-19	E625-18	0.521	13.2		
	20-22	E625-20	0.545	13.8		
	8-9	E750-8	0.410	10.4		
	10-11	E750-10	0.470	11.9		
	12-13	E750-12	0.520	13.2		
3/4"	14-15	E750-14	0.579	14.7		
	16-17	E750-16	0.614	15.6		
	18-19	E750-18	0.646	16.4	7/8"	
	20-22	E750-20	0.670	17.0		
	12-13	E875-12	0.652	16.6		
	14-15	E875-14	0.699	17.8		
7/8"	16-17	E875-16	0.740	18.8		
	18-19	E875-18	0.760	19.3		
	20-22	E875-20	0.800	20.3		
	8-9	E1000-8	0.660	16.8		
	10-11	E1000-10	0.720	18.3		
	12-13	E1000-12	0.777	19.7		
1"	14-15	E1000-14	0.829	21.1		
	16-17	E1000-16	0.864	22.0		
	18-19	E1000-18	0.896	22.8		
	20-22	E1000-20	0.920	23.3		
	8-9	E1250-8	0.900	22.9		
	10-11 12-13	E1250-10	0.977	24.8		
1-1/4"		E1250-12 E1250-14	1.027	26.1	1-1/8"	
	14-15 16-17	E1250-14 E1250-16	1.079	28.3		
	18-19	E1250-16	1.115	29.1		
	8-9	E1500-8	1.145	29.6		
	10-11	E1500-10	1.103	31.2		
1-1/2"	12-13	E1500-10	1.255	31.9	1-1/4"	
1-1/2	14-15	E1500-14	1.329	33.8	1 1/4	
	16-17	E1500-16	1.365	34.7		
	10-11	E1750-10	1.462	37.1		
	12-13	E1750-12	1.512	38.4		
1-3/4"	14-15	E1750-14	1.564	39.7		
	16-17	E1750-16	1.600	40.6		
	7-9	E2000-7	1.620	41.2	4 = 405	
	10-11	E2000-10	1.710	43.4	1-5/8"	
	12-13	E2000-12	1.770	45.0		
2"	14-15	E2000-14	1.820	46.2		
	16-17	E2000-16	1.865	47.4		
	18-19	E2000-18	1.897	48.2		
	7-9	E2500-7	2.120	53.9		
0.4/0"	10-11	E2500-10	2.220	56.4	2-1/4"	
2-1/2"	12-13	E2500-12	2.270	57.7	Z-1/ 4	
	14-15	E2500-14	2.320	58.9		
	10-11	E3000-10	2.722	69.1		
3"	12-13	E3000-12	2.772	70.4	2-3/4"	
	14-15	E3000-14	2.820	71.6		

Stub Tugger & Manual Tube Puller Spares & Accessories

Spear and accessory items required for tube OD sizes 3/8" (9.5mm) thru 1" (25.4mm).



80-3055-10 Spear Extension and 80-3055-7 Extension Chair are recommended to allow the operator to work from the outside of the water box and channel plate applications.

Spear and accessory items required for tube OD sizes 1-1/4" (31.8mm) thru 2-1/2" (63.5mm).



Spear Accessories	Part #	Description
	80-3055-3-00	Spear Adapter
U	80-3055-4	Horseshoe Lock
	80-3055-5	Male X Male Spear Extension
	80-3055-10	Male X Female Spear Extension
	80-3055-7	Extension Chair 1-1/4" (31.8mm) OD
	80-36307	Extension Chair 1-1/2" thru 1-3/4" (38.1 thru 44.5mm) OD
	80-36308	Extension Chair 2" (50.8mm) OD
	80-36309	Extension Chair 2-1/4" thru 2-1/2" (57.2 thru 63.5mm) OD
	80-36311	Extension Chair 3" (76.2mm) OD

0.375" to 2.000" (9.5 to 50.8mm) OD

Elliott's 430G Pneumatic Hammer is the recommended driving tool for Elliott's Knockout Tools and Collapsing Tools to remove tube stubs in heat exchangers or beading tubes in firetube boilers.

Knockout Tools are used to punch the tubes out of the tube sheet while Collapsing Tools collapse tubes from one end of a heat exchanger and then the tube is pulled from the other end.

The 430G Pneumatic Hammer accepts Type No. 6 0.680" (17.3mm) diameter by 2-3/8" (60.3mm) long shanks.

Features & Benefits:

- Lightweight & compact design easy to move in tight areas.
- Used also for tube collapsing and flaring greater productivity.

How To Order:

- 1. Choose the 430G Pneumatic Hammer package.
- 2. Choose spares & accessories.

The 430G Pneumatic Hammer package includes:

- · Hose Whip
- · Filter-Lubricator
- · Carrying Case

Spares & Accessories:

- 6070 Filter-Lubricator: Included with the 430G Pneumatic Hammer package.
- Knockout Tools: See table on next page.
- · Collapsing Tools: See table on next page.



Specifications:

- Piston Diameter & Stroke: 1-1/8" X 2" (28.6 X 50.8mm).
- Length (Overall): 14" (355.6mm).
- Blows per minute: 2,300.
- Net Weight: 17 lbs. (7 Kg.).
- Air Requirement: 30 CFM @ 90 PSI.
- Hose Diameter: 1/2" (12.7mm).

Pneumatic Hammer Spares & Accessories

Elliott's Knockout Tools, also known as tube drifts, are used to punch the tubes out of a tube sheet with the 430G Pneumatic Hammer.

The Type No. 6 Shank 0.680 (17.3mm) diameter by 2-3/8" (60.3mm) long with retainer is the standard shank supplied with these tools. Other style shanks are available. Contact Customer Service for details.



Elliott's Collapsing Tools are used to collapse one end of the tube; then the tube is pulled from the other end of the heat exchanger. Collapsing tools may either be used by hand or with the 430G Pneumatic Hammer.

The Collapsing Tool with the 430G Pneumatic Hammer can also be used as a tube ripper. Simply place the ripping edge of the chisel into one of the flutes of the tube pulling spear and press the trigger, then run the chisel down the spear's flute to the end. The tube can then be easily removed from the spear by hand.

The Type No. 6 Shank 0.680 (17.3mm) diameter by 2-3/8" (60.3mm) long with retainer is the standard shank supplied with these tools. Other style shanks are available. Contact Customer Service for details.

Tube OD	BWG	Part #
	15	8496-29T6
	16	8496-30T6
1/2"	15 8496-1 16 8496-1 17 8496-1 18 8496-1 19 8496-1 20 8496-1 10 8496-1 11 8496-1 12 8496-1 15 8496-1 16 8496-1 17 8496-1 18 8496-1 19 8496-1 20 8496-1 10 8496-1 11 8496-1 11 8496-1 11 8496-1 11 8496-1 11 8496-1 11 8496-1 11 8496-1 11 8496-1 11 8496-1	8496-31T6
(12.7mm)	18	8496-32T6
	19	8496-33T6
	20	8496-34T6
	10	8496-45T6
	11	8496-46T6
	12	8496-47T6
	13	8496-48T6
	14	8496-49T6
5/8" (15.9mm)	15	8496-50T6
(10.0)	16	8496-51T6
	17	8496-52T6
	18	8496-53T6
	19	8496-54T6
	20	8496-55T6
	8	8496-67T6
	9	8496-68T6
	10	8496-69T6
	11	8496-70T6
3/4" (19.1mm)	12	8496-71T6
(13.111111)	13	8496-72T6
	14	8496-73T6
	15	8496-74T6
	16	8496-75T6

Tube OD	BWG	Part #
	17	8496-76T6
3/4"	18	8496-77T6
(19.1mm)	19	8496-78T6
	20	8496-79T6
	10	8496-87T6
	11	8496-88T6
	12	8496-89T6
	13	8496-90T6
	14	8496-91T6
	15	8496-92T6
7/8" (22.2mm)	16	8496-93T6
(22.211111)	17	8496-94T6
	18	8496-95T6
	19	8496-96T6
	20	8496-97T6
	21	8496-98T6
	22	8496-99T6
	10	8496-102T6
	11	8496-103T6
	12	8496-104T6
	13	8496-105T6
1" (25.4mm)	14	8496-106T6
(23. 4 11111)	15	8496-107T6
	16	8496-108T6
	17	8496-109T6
	18	8496-110T6

Tube OD	Part #	Maximum Sheet
3/8"	8637-6T6	1-3/4"
1/2"	8637-8T6	2-1/2"
5/8"	8637-10T6	2-1/2"
3/4"	8637-12T6	2-5/8"
7/8"	8637-14T6	2-3/4"
1"	8637-16T6	3"
1-1/8"	8637-18T6	3-1/4"

Tube OD	Part #	Maximum Sheet			
1-1/4"	8637-20T6	3-1/4"			
1-3/8"	8637-22T6	3-1/4"			
1-1/2"	8637-24T6	3-1/4"			
1-5/8"	8637-26T6	3-3/8"			
1-3/4"	8637-28T6	3-1/2"			
1-7/8"	8637-30T6	4"			
2"	8637-32T6	4-1/4"			



 0.625" to 2.500" (15.9 to 63.5mm) OD

Elliott's 430D Jumbo Tube Buster is the recommended driving tool for Elliott's Jumbo Knockout Tools to remove tube stubs in heat exchangers, firetube boilers, and watertube boilers.

Jumbo Knockout Tools are used to punch the tubes out of the tube sheet and are available in either 8" (203.0mm) or 16" (406.0mm) reach. The tools are piloted to prevent damage to the tube sheet.

The 430D Jumbo Tube Buster uses a number 15 shank. The tool features a barrel design that captures the compression piston and the inside trigger feature permits throttle control of the tool.



- Lightweight & compact design easy to move in tight areas.
- Uses retainers on tools improved operator safety.
- Used also for tube collapsing, belling, and flaring greater productivity.

How To Order:

- 1. Choose the 430D Jumbo Tube Buster package.
- 2. Choose spares & accessories.

The 430D Jumbo Tube Buster package includes:

- Hose Whip
- Filter-Lubricator
- Carrying Case

Spares & Accessories:

- 6070 Filter-Lubricator: Included with the 430D Jumbo Tube Buster package.
- Knockout Tools: Available with 8" (203.0mm) or 16" (406.0mm) reaches. See table on next page.



Specifications:

- Piston Diameter & Stroke: 1-3/16" X 8"
- (30.2 X 203.2mm).
- Net Weight: 30 lbs. (13.6 Kg.).
- · Air Requirement: 42 CFM @ 90 PSI.
- Hose Diameter: 1/2" (12.7mm) NPT.

Jumbo Tube Buster Spares & Accessories

Elliott's Jumbo Knockout Tools, also known as tube drifts, are used to punch the tubes out of a tube sheet with the 430D Jumbo Tube Buster.

The 430D Jumbo Tube Buster uses shank number 15. The Jumbo Knockout Tools are available in reaches of both 8" (203.2mm) and 16" (406.4mm).



8" (203.2mm) Reach Jumbo Knockout Tools (Tube Drifts)													
Tube OD	Gauges Gauges Gauges Gauges Gauges Gauges 10-11 12-13 14-15 16-17 18-												
5/8" (15.9mm)	8777-1010	8777-1012	8777-1014	8777-1016	8777-1018								
3/4" (19.1mm)	8777-1210	8777-1212	8777-1214	8777-1216	8777-1218								
7/8" (22.2mm)	8777-1410	8777-1412	8777-1414	8777-1416	8777-1418								
1" (25.4mm)	8777-1610	8777-1612	8777-1614	8777-1616	8777-1618								
1-1/4" (31.8mm)	8777-2010	8777-2012	8777-2014	8777-2016	8777-2018								
1-1/2" (38.1mm)	8777-2410	8777-2412	8777-2414	8777-2416	8777-2418								
1-3/4" (44.5mm)	8777-2810	8777-2812	8777-2814	8777-2816	8777-2818								
2" (50.8mm)	8777-3210	8777-3212	8777-3214	8777-3216	8777-3218								
2-1/2" (63.5mm)	8777-4010	8777-4012	8777-4014	8777-4016	8777-4018								

16" (406.4mm) Reach Jumbo Knockout Tools (Tube Drifts)												
Tube OD	Gauges Gauges<											
5/8" (15.9mm)	8777-1010-16	8777-1012-16	8777-1014-16	8777-1016-16	8777-1018-16							
3/4" (19.1mm)	8777-1210-16	8777-1212-16	8777-1214-16	8777-1216-16	8777-1218-16							
7/8" (22.2mm)	8777-1410-16	8777-1412-16	8777-1414-16	8777-1416-16	8777-1418-16							
1" (25.4mm)	8777-1610-16	8777-1612-16	8777-1614-16	8777-1616-16	8777-1618-16							
1-1/4" (31.8mm)	8777-2010-16	8777-2012-16	8777-2014-16	8777-2016-16	8777-2018-16							
1-1/2" (38.1mm)	8777-2410-16	8777-2412-16	8777-2414-16	8777-2416-16	8777-2418-16							
1-3/4" (44.5mm)	8777-2810-16	8777-2812-16	8777-2814-16	8777-2816-16	8777-2818-16							
2" (50.8mm)	8777-3210-16	8777-3212-16	8777-3214-16	8777-3216-16	8777-3218-16							
2-1/2" (63.5mm)	8777-4010-16	8777-4012-16	8777-4014-16	8777-4016-16	8777-4018-16							
Note: Split Sleeve 430D1 is	required for operating 1" (2	25.4mm) and larger Jumbo	Knockout Tools.	*	*							

Conversion Tables

Chart to Determine Inside Diameter of Tubes*

											Out	side D	iame <u>te</u>	r Tub <u>es</u>	S								
3.W.G.		lall kness	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	11/4"	11/2"	13/4"	2"	21/4"	21/2"	23/4"	3"	31/4"	31/2"	33/4"	4"	41/4"	41/2"
	Inic	Kness	6.35	9.52	12.70	15.87	19.05	22.22	25.40	31.75	38.10	44.45	50.80	57.15	63.50	69.85	76.20	82.55	88.90	95.25	101.60	107.95	114.30
	inch	0.380	0.00	0.0_		.0.0.	.0.00	0.115	0.240	0.490	0.740	0.990	1.240	1.490	1.740	1.990	2.240	2.490		2.990	3.240	3.490	3.740
00	mm	9.65						2.92	6.10	12.45	18.80	25.15	31.50	37.85	44.20	50.55	56.90	63.25	69.60	75.95	82.30	88.65	95.00
	inch	0.340					0.070	0.195	0.320	0.570	0.820	1.070	1.320	1.570	1.820	2.070	2.320	2.570	2.820	3.070	3.320	3.570	3.820
0	mm	8.64					1.78	4.95	8.13	14.48	20.83	27.18	33.53	39.88	46.23	52.58	58.93	65.28	71.63	77.98	84.33	90.68	97.03
_	inch	0.300				0.025	0.150	0.275	0.400	0.650	0.900	1.150	1.400	1.650	1.900	2.150	2.400	2.650	2.900	3.150	3.400	3.650	3.900
1	mm	7.62				0.64	3.81	6.99	10.16	16.51	22.86	29.21	35.56	41.91	48.26	54.61	60.96	67.31	73.66	80.01	86.36	92.71	99.06
2	inch	0.284				0.057	0.182	0.307	0.432	0.682	0.932	1.182	1.432	1.682	1.932	2.182	2.432	2.682	2.932	3.182	3.432	3.682	3.932
	mm	7.21				1.45	4.62	7.80	10.97	17.32	23.67	30.02	36.37	42.72	49.07	55.42	61.77	68.12	74.47	80.82	87.17	93.52	99.87
3	inch	0.259				0.107	0.232	0.357	0.482	0.732	0.982	1.232	1.482	1.732	1.982	2.232	2.482	2.732	2.982	3.232	3.482	3.732	3.982
3	mm	6.58				2.72	5.89	9.07	12.24	18.59	24.94	31.29	37.64	43.99	50.34	56.69	63.04	69.39	75.74	82.09	88.44	94.79	101.14
4	inch	0.238			0.024	0.149	0.274	0.399	0.524	0.774	1.024	1.274	1.524	1.774	2.024	2.274	2.524	2.774	3.024	3.274	3.524	3.774	4.024
4	mm	6.05			0.61	3.78	6.96	10.13	13.31	19.66	26.01	32.36	38.71	45.06	51.41	57.76	64.11	70.46	76.81	83.16	89.51	95.86	102.21
5	inch	0.220			0.060	0.185	0.310	0.435	0.560	0.810	1.060	1.310	1.560	1.810	2.050	2.310	2.560	2.810	3.060	3.310	3.560	3.810	4.060
υ	mm	5.59			1.52	4.70	7.87	11.05	14.22	20.57	26.92	33.27	39.62	45.97	52.07	58.67	65.02	71.37	77.72	84.07	90.42	96.77	103.12
6	inch	0.203			0.094	0.219	0.344	0.469	0.594	0.844	1.094	1.344	1.594	1.844	2.094	2.344	2.594	2.844	3.094	3.344	3.594	3.844	4.094
U	mm	5.16			2.39	5.56	8.74	11.91	15.09	21.44	27.79	34.14	40.49	46.84	53.19	59.54	65.89	72.24	78.59	84.94	91.29	97.64	103.99
7	inch	0.180			0.140	0.265	0.390	0.515	0.640	0.890	1.140	1.390	1.640	1.890	2.140	2.390	2.640	2.890	3.140	3.390	3.640	3.890	4.140
- /	mm	4.57			3.56	6.73	9.91	13.08	16.26	22.61	28.96	35.31	41.66	48.01	54.36	60.71	67.06	73.41	79.76	86.11	92.46	98.81	105.16
8	inch	0.165		0.045	0.170	0.295	0.420	0.545	0.670	0.920	1.170	1.420	1.670	1.920	2.170	2.420	2.670	2.920	3.170	3.420	3.670	3.920	4.170
0	mm	4.19		1.14	4.32	7.49	10.67	13.84	17.02	23.37	29.72	36.07	42.42	48.77	55.12	61.47	67.82	74.17	80.52	86.87	93.22	99.57	105.92
9	inch	0.148		0.079	0.204	0.329	0.454	0.579	0.704	0.954	1.204	1.454	1.704	1.954	2.204	2.454	2.704	2.954	3.204	3.454	3.704	3.954	4.204
9	mm	3.76		2.01	5.18	8.36	11.53	14.71	17.88	24.23	30.58	36.93	43.28	49.63	55.98	62.33	68.68	75.03	81.38	87.73	94.08	100.43	106.78
10	inch	0.134		0.107	0.232	0.357	0.482	0.607	0.732	0.982	1.232	1.482	1.732	1.982	2.232	2.482	2.732	2.982	3.232	3.482	3.732	3.982	4.232
10	mm	3.40		2.72	5.89	9.07	12.24	15.42	18.59	24.94	31.29	37.64	43.99	50.34	56.69	63.04	69.39	75.74	82.09	88.44	94.79	101.14	107.49
	inch	0.120		0.135	0.260	0.385	0.510	0.635	0.760	1.010	1.260	1.510	1.760	2.010	2.260	2.510	2.760	3.010	3.260	3.510	3.760	4.010	4.260
11	mm	3.05		3.43	6.60	9.78	12.95	16.13	19.30	25.65	32.00	38.35	44.70	51.05	57.40	63.75	70.10	76.45	82.80	89.15	95.50	101.85	108.20
40	inch	0.109	0.032	0.157	0.282	0.407	0.532	0.657	0.782	1.032	1.282	1.532	1.782	2.032	2.282	2.532	2.782	3.032	3.282	3.532	3.782	4.032	4.282
12	mm	2.77	0.81	3.99	7.16	10.34	13.51	16.69	19.86	26.21	32.56	38.91	45.26	51.61	57.96	64.31	70.66	77.01	83.36	89.71	96.06	102.41	108.76
40	inch	0.095	0.060	0.185	0.310	0.435	0.560	0.685	0.810	1.060	1.310	1.560	1.810	2.060	2.310	2.560	2.810	3.060	3.310	3.560	3.810	4.060	4.310
13	mm	2.41	1.52	4.70	7.87	11.05	14.22	17.40	20.57	26.92	33.27	39.62	45.97	52.32	58.67	65.02	71.37	77.72	84.07	90.42	96.77	103.12	109.47
14	inch	0.083	0.084	0.209	0.334	0.459	0.584	0.709	0.834	1.084	1.334	1.584	1.834	2.084	2.334	2.584	2.834	3.084	3.334	3.584	3.834	4.084	4.334
14	mm	2.11	2.13	5.31	8.48	11.66	14.83	18.01	21.18	27.53	33.88	40.23	46.58	52.93	59.28	65.63	71.98	78.33	84.68	91.03	97.38	103.73	110.08
45	inch	0.072	0.106	0.231	0.356	0.481	0.606	0.731	0.856	1.106	1.356	1.606	1.856	2.106	2.356	2.606	2.856	3.106	3.356	3.606	3.856	4.106	4.356
15	mm	1.83	2.69	5.87	9.04	12.22	15.39	18.57	21.74	28.09	34.44	40.79	47.14	53.49	59.84	66.19	72.54	78.89	85.24	91.59	97.94	104.29	110.64
16	inch	0.065	0.120	0.245	0.370	0.495	0.620	0.745	0.870	1.120	1.370	1.620	1.870	2.120	2.370	2.620	2.870	3.120	3.370	3.620	3.870	4.120	4.370
16	mm	1.65	3.05	6.22	9.40	12.57	15.75	18.92	22.10	28.45	34.80	41.15	47.50	53.85	60.20	66.55	72.90	79.25	85.60	91.95	98.30	104.65	111.00
17	inch	0.058	0.134	0.259	0.384	0.509	0.634	0.759	0.884	1.134	1.384	1.634	1.884	2.134	2.384	2.634	2.884	3.134	3.384	3.634	3.884	4.134	4.384
17	mm	1.47	3.40	6.58	9.75	12.93	16.10	19.28	22.45	28.80	35.15	41.50	47.85	54.20	60.55	66.90	73.25	79.60	85.95	92.30	98.65	105.00	111.35
18	inch	0.049	0.152	0.277	0.402	0.527	0.652	0.777	0.902	1.152	1.402	1.652	1.902	2.152	2.402	2.652	2.902	3.152	3.402	3.652	3.902	4.152	4.402
10	mm	1.24	3.86	7.04	10.21	13.39	16.56	19.74	22.91	29.26	35.61	41.96	48.31	54.66	61.01	67.36	73.71	80.06	86.41	92.76	99.11	105.46	111.81
19	inch	0.042	0.166	0.291	0.416	0.541	0.666	0.791	0.916	1.166	1.416	1.666	1.916										
18	mm	1.07	4.22	7.39	10.57	13.74	16.92	20.09	23.27	29.62	35.97	42.32	48.67										
20	inch	0.035	0.180	0.305	0.430	0.555	0.680	0.805	0.930	1.180	1.430	1.680	1.930										
20	mm	0.89	4.57	7.75	10.92	14.10	17.27	20.45	23.62	29.97	36.32	42.67	49.02										
21	inch	0.032	0.186	0.311	0.436	0.561	0.686	0.811	0.936	1.186	1.436	1.686	1.935										
41	mm	0.81	4.72	7.90	11.07	14.25	17.42	20.60	23.77	30.12	36.47	42.82	49.15										
22	inch	0.028	0.194	0.319	0.444	0.569	0.694	0.819	0.944	1.194	1.444	1.694	1.944										
22	mm	0.71	4.93	8.10	11.28	14.45	17.63	20.80	23.98	30.33	36.68	43.03	49.38										
23	inch	0.025	0.200	0.325	0.450	0.575	0.700	0.825	0.950	1.200	1.450	1.700	1.950										
23	mm	0.64	5.08	8.26	11.43	14.61	17.78	20.96	24.13	30.48	36.83	43.18	49.53										
	inch	0.022	0.206	0.331	0.456	0.581	0.706	0.831	0.956	1.206	1.456	1.706	1.956										
24			5.23	8.41	11.58	14.76	17.93	21.11	24.28	30.63	36.98	43.33	49.68										

Table to Determine Pipe Size and Schedule Number

Nominal Pipe Size (in.)	0.D. (in.)		Sc	chedule N	umber for	Pipe Sizes	Wall Thick	ness / Ins	side Diameter (Inches)
,	0.2. (,	40	ID	80	ID	120	ID	160	ID
1/8	.405	.068	.269	.095	.215				
1/4	.540	.088	.364	.119	.302				
3.8	.675	.091	.493	.126	.423				
1/2	.840	.109	.622	.147	.546			.187	.466
3/4	1.050	.113	.824	.154	.742			.218	.614
1	1.315	.133	1.049	.179	.957			.250	.815
1-1/4	1.660	.140	1.380	.191	1.278			.250	1.160
1-1/2	1.900	.145	1.610	.200	1.500			.281	1.338
2	2.375	.154	2.067	.218	1.939			.343	1.689
2-1/2	2.875	.203	2.469	.276	2.323			.375	2.125
3	3.500	.216	3.068	.300	2.900			.437	2.626
3-1/2	4.000	.226	3.548	.318	3.364				
4	4.500	.237	4.026	.337	3.826	.437	3.626	.531	3.438
5	5.563	.258	5.047	.375	4.813	.500	4.563	.625	4.313
6	6.625	.280	6.065	.432	5.761	.562	5.501	.718	5.189
8	8.625	.322	7.981	.500	7.625	.718	7.189	.906	6.813
10	10.750	.365	10.020	.593	9.564	.843	9.064	1.125	8.500
12	12.750	.406	11.938	.687	11.376	1.000	10.750	1.312	10.126





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