

Elliott offers a complete line of precision tube tools, including:



**tube
expanders**

Boiler Expanders
Heat Exchanger Expanders
Condenser Expanders
Refinery Expanders

**tube rolling motors
& torque controls**

Electric
Pneumatic

**tube
cleaners**

Air & Water Driven Motors
(Internal/External Drives)

Jiffy Guns
("Shoot-Thru" Devices)

Roto-Jet
(Rotating Flex Shaft)

**additional
products**

Tube and Joint Testers

Tube Plugs
(High & Low Pressure)

**retubing
tools**

Tube Gauges
Tube Cutters
Manual Tools
Spear Type Tube Pullers
Collet-Type Tube Pullers
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Grooving Tools
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Back Chamfering Tools
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Mechanical Joining Tools
Roller Burnishing Tools
Single Blade Reamers

**“JUMBO TUBE BUSTER”
For 5/8” – 2-1/2” Tube OD**

Model #430D



Operating and Maintenance Instructions

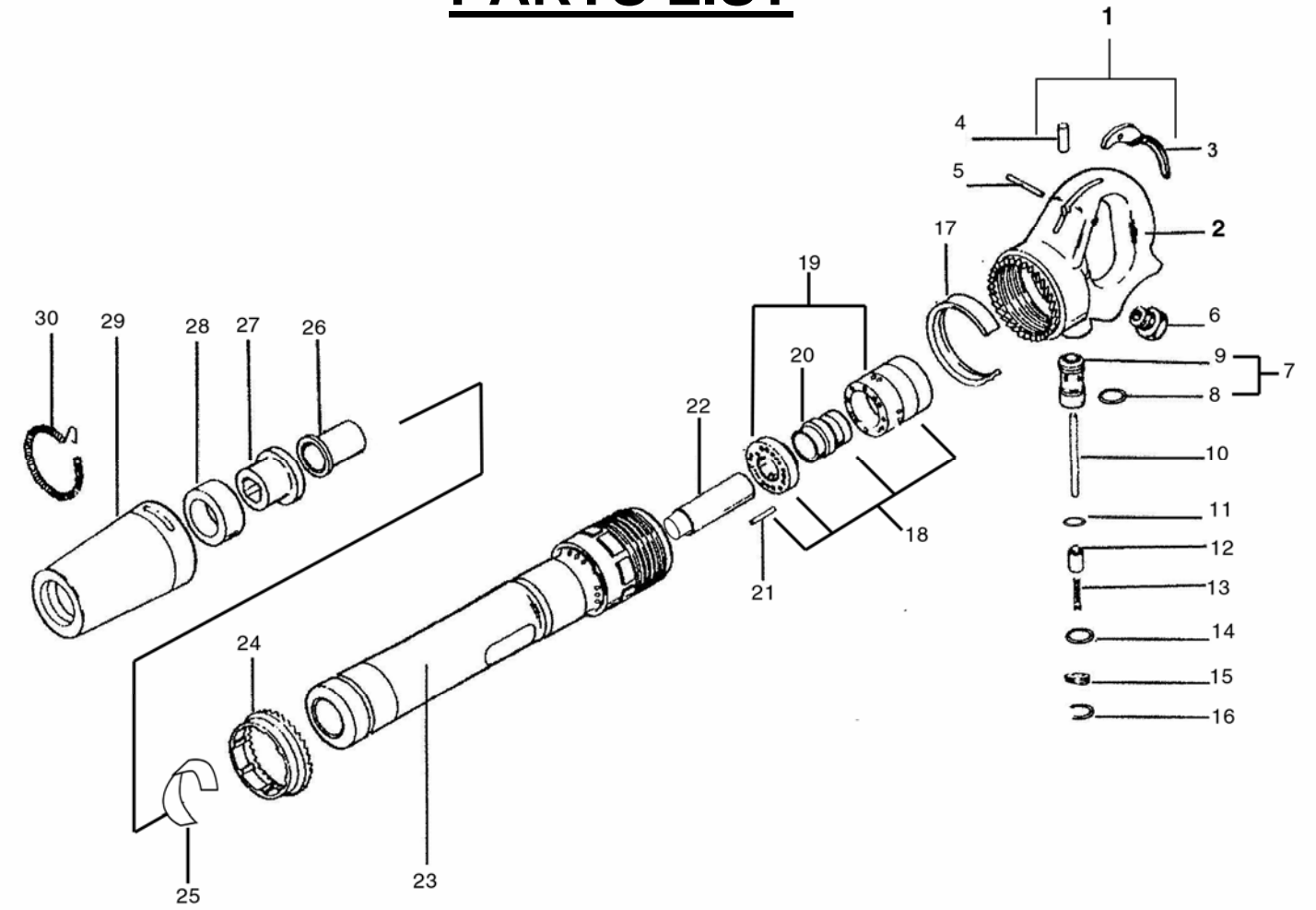
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PARTS LIST

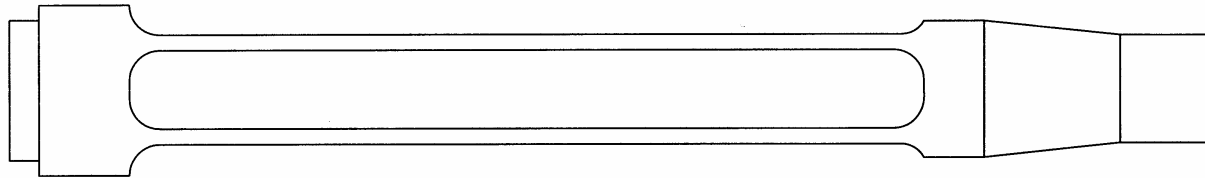


Item #	Part #	Description
1	24TX13301	Handle Complete
2	24TX13302	Bare Handle
3	24TX13303	Lever
4	24TX13304	Throttle Lever Pin Busing
5	24TX13305	Lever Pin
6	24TX13306	Inlet Bushing
7	24TX13307	Throttle Valve Bushing Assembly
8	24TX13308	T.V. Bushing O-Ring
9	24TX13309	Throttle Valve Bushing
10	24TX13310	Throttle Valve Pin
11	24TX13311	Throttle Valve O-Ring
12	24TX13312	Throttle Valve
13	24TX13313	Throttle Valve Spring
14	24TX13314	Retainer Cap O-Ring
15	24TX13315	Retainer Cap

Item #	Part #	Description
16	24TX13316	Retainer Clip
17	24TX13317	Lock Ring Cover
18	24TX13318	Valve Assembly Complete
19	24TX13319	Front and Rear Valve
20	24TX13320	Main Valve
21	24TX13321	Valve Pin
22	24TX13322	Piston
23	24TX13323	Barrel
24	24TX13324	Lock Ring
25	24TX13325	Exhaust Deflector
26	430D3	Upper Sleeve
27	430D4	Lower Sleeve
28	430D5	Rubber Bumper
29	430D2	Retainer
30	430D6	Lock Spring

TOOL SELECTION GUIDE

Knockout Tool Dimension Listing



Tooling Listing	Tube Size	Standard Reach	Approximate O.A.L.
8777-10(ga)	5/8" Knockout Tool	8" Reach	13.5"
8777-12(ga)	3/4" Knockout Tool	8" Reach	13.5"
8777-14(ga)	7/8" Knockout Tool	8" Reach	13.5"
8777-16(ga)	1" Knockout Tool	8" Reach	13.5"
8777-20(ga)	1-1/4" Knockout Tool	8" Reach	13.5"
8777-24(ga)	1-1/2" Knockout Tool	8" Reach	13.5"
8777-28(ga)	1-3/4" Knockout Tool	8" Reach	13.5"
8777-32(ga)	2" Knockout Tool	8" Reach	13.5"
8777-40(ga)	2-1/2" Knockout Tool	8" Reach	13.5"

Tooling Listing	Tube Size	Optional Reach	Approximate O.A.L.
8777-10(ga)-16	5/8" Knockout Tool	16" Reach	21.5"
8777-12(ga)-16	3/4" Knockout Tool	16" Reach	21.5"
8777-14(ga)-16	7/8" Knockout Tool	16" Reach	21.5"
8777-16(ga)-16	1" Knockout Tool	16" Reach	21.5"
8777-20(ga)-16	1-1/4" Knockout Tool	16" Reach	21.5"
8777-24(ga)-16	1-1/2" Knockout Tool	16" Reach	21.5"
8777-28(ga)-16	1-3/4" Knockout Tool	16" Reach	21.5"
8777-32(ga)-16	2" Knockout Tool	16" Reach	21.5"
8777-40(ga)-16	2-1/2" Knockout Tool	16" Reach	21.5"

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INTRODUCTION

Thank you for purchasing this Elliott product. The design and manufacture of this machine, represents the highest standard of quality, value and durability. Elliott tools have proven themselves in thousands of hours of trouble free field operation.

If this is your first Elliott purchase, welcome to our company; our products are our ambassadors. If this is a repeat purchase, you can rest assured that the same value you have received in the past will continue with all of your purchases, now and in the future.

The Elliott Jumbo Tube Buster is a pneumatic percussion hammer used to remove tubes from boilers and heat exchangers. It is especially effective at knocking out tube stubs in thick tube sheets, and in knocking out fire tube boiler tubes.

We at Elliott would like you to be completely satisfied with this machine and therefore recommend that this instruction manual be thoroughly read prior to use.

This machine has been designed and manufactured to the highest standards, using the latest in materials and technology. If the guidelines and maintenance schedules in this manual are followed, the Elliott Jumbo Tube Buster will provide many years of trouble free operation.

Elliott Tool Technologies Ltd shall not be liable for errors contained herein or for incidental or consequential damage in connection with the furnishing, performance, or use of this material.

OPERATION

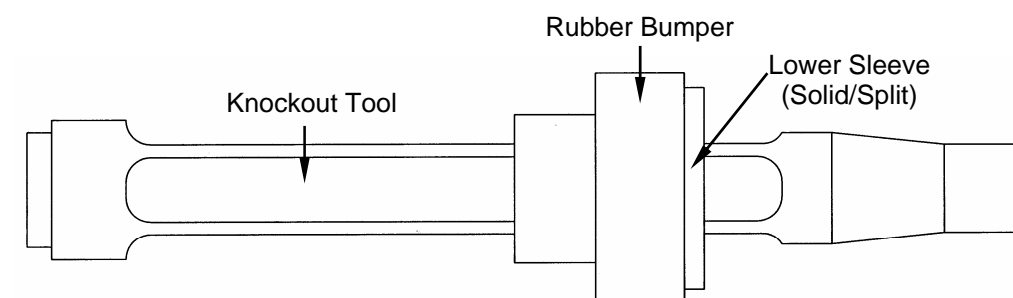
1. Determine and install the proper Elliott knockout tool for the tube size (OD and Gauge) that you are removing.
2. Regulate the air pressure to 25 psi as a starting pressure to the Jumbo Tube Buster.
3. Secure the tube sheet so that it cannot move during the tube removal process.
4. Insert the knockout tool into the tube, keeping the centerline of the knockout tool on the same centerline as the tube being removed. Depress the throttle lever to activate the Jumbo Tube Buster.
5. If the tube does not release, increase the air pressure in 10 psi increments until the proper air pressure is achieved.

Note: Securely hold onto the Jumbo Tube Buster while in operation as the sudden release of the tube could cause the operator to suddenly move forward into the stationary tube sheet.

TOOL CHANGEOVER

1. Select the proper knockout tool from the tool selection guide.
2. Remove the lock spring to remove the retainer from the barrel.
3. Remove the lower sleeve and rubber bumper from the barrel.
4. Insert the #15 jumbo shank knockout tool through the center of the inner sleeve, making sure the flange is towards the rear of the barrel. (See Diagram)
5. Insert the knockout tool through the center of the retainer and reassemble to the barrel.
6. Insert the lock spring into the groove in the barrel to complete the set up.

Note: Use the solid lower sleeve for 7/8" dia. knockout tools and smaller. Use a split lower sleeve for 1" dia. knockout tools and larger. When using 1-3/4" dia. knockout tools or larger, insert the knockout tool through the retainer before installing the split lower sleeve.



SPECIFICATIONS

SAFETY



Model #430-D



Model #6070

Jumbo Tube Buster with Filter/Lubricator Hose Whip

Specifications	
Model #	430D
Weight	30 lbs.
Length	22"
Bore	1-3/16" x 8"
Stroke	8"
B.P.M.	1140
Chuck Sizes	Jumbo #15 Shank
Air Inlet (NPT)	3/8" FPT
Air Consumption	44 cfm
Lubricator Capacity	3.7 Fluid Ounces
Hose Whip Thread	3/8" MPT

Every effort has been made to ensure the operation of the Elliott **Jumbo Tube Buster** is safe, although it is impossible to remove all possibilities of accidents.

It is very important that **all operators** of this machine are fully aware of the following safety considerations.

1. If you are unfamiliar with the Elliott Jumbo Tube Buster, read this Operation Manual thoroughly before use.
2. Always wear safety glasses, protective gloves, safety shoes and protective clothing.
3. Do not allow other people in the area of the machine unless they are wearing suitable protective clothing and equipment.
4. Do not dry fire this tool. Dry firing is operating the tool with no knockout tool inserted in the barrel, or without the knockout tool being placed against a tube end to be removed. Doing so may damage the internal piston and could also result in injury to the operator or others nearby.
5. Do not operate this tool without the retainer and lock spring in place and secured. Doing so may cause the knockout tool to be shot out of the end of the barrel, injuring the operator or others nearby.
6. Ensure all hose connections are properly made and that the hoses are in good condition.
7. Always be aware of the location of the air line shut off valve.
8. Always disconnect the air supply line before changing tooling, or before disassembling the tool.
9. Do not operate the machine if there appears to be damage to the machine, if screws are missing, or if performance appears to be unsatisfactory
10. Never use the Jumbo Tube Buster, or any other power tool when under the influence of medication, drugs or alcohol that decrease concentration and impair operator control.
11. Operate this tool only at the air pressure required to remove the tube from the tube sheet. Use of excessive air pressure may lead to operator injury.

START-UP

Unpacking

The Elliott Jumbo Tube Buster is shipped in a carton, complete with all accessories listed. On arrival, check for external damage to the box. If damage is found, notify the carrier and the supplier so insurance inspectors can examine the box before it is unpacked. When opened, check the contents against the packing and parts list. Report any damage or shortage to Elliott.

Ensure that there is no packaging material left inside the openings of the machine, especially the pneumatic inlets.

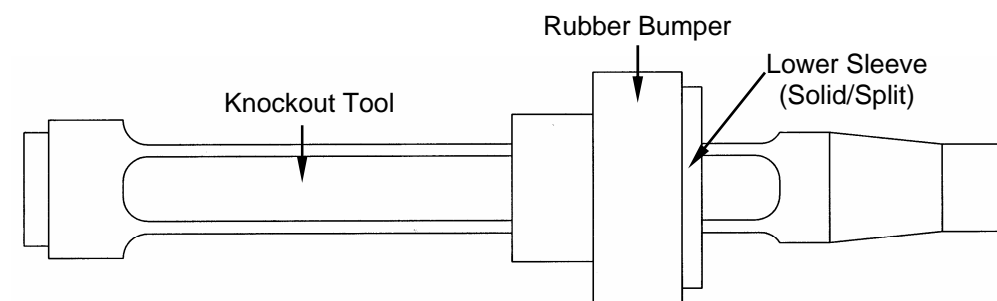
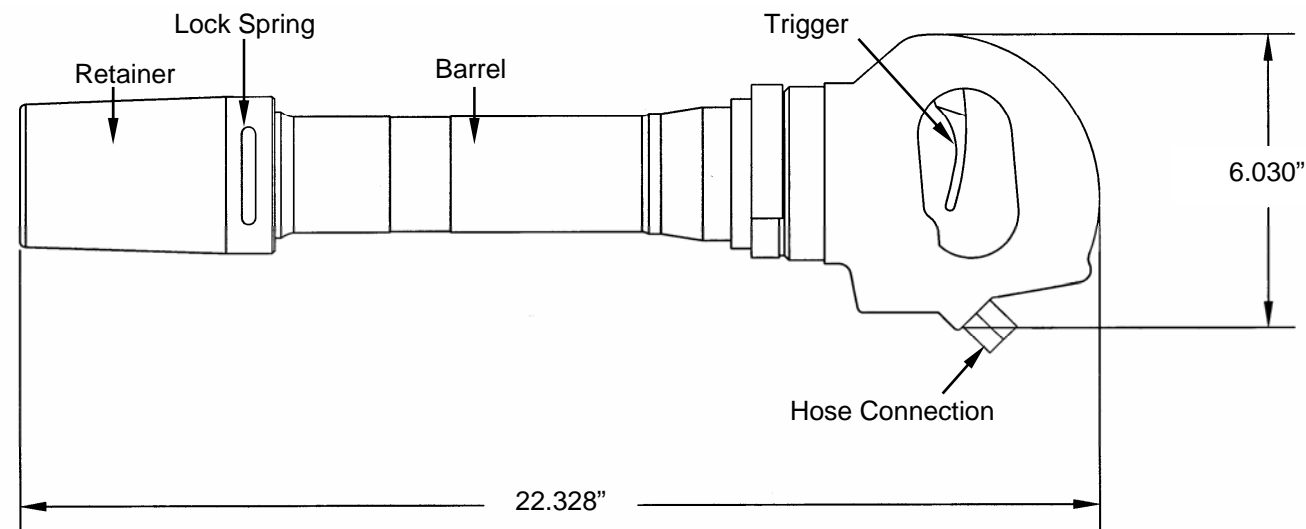
Connecting the Filter/Lube/Hose Pac and the Knockout Tool

1. Connect the filter/lube/hose pac assembly to the Jumbo Tube Buster by threading the male metallic hose connection into the handle of the hammer.
2. Fill the lubricator with 10-weight machine oil or equivalent.
3. Determine the knockout tool required from the tool selection chart enclosed.
4. Remove the lock spring to remove the retainer from the barrel.
5. Remove the lower sleeve and rubber bumper from the barrel.
6. Insert the #15 jumbo shank knockout tool through the center of the lower sleeve, making sure the flange is towards the rear of the barrel. (See Quick Reference Diagram).
7. Insert the knockout tool through the center of the retainer and reassemble to the barrel.
8. Insert the lock spring into the groove in the barrel to complete the set up.

Note: Use the solid lower sleeve for 7/8" dia. knockout tools and smaller. Use a split lower sleeve for 1" dia. knockout tools and larger. When using 1-3/4" dia. knockout tools or larger, insert the knockout tool through the retainer before installing the split lower sleeve.

QUICK REFERENCE DIAGRAM

Jumbo Tube Buster



Part Number	Description	Comments
430D	Jumbo Tube Buster	Pneumatic Rivet Buster Assembly
430D2	Retainer	
430D4	Lower Sleeve - Solid	For 7/8" Dia. Knockout Tools and Smaller
430D1	Lower Sleeve - Split	For 1" Dia. Knockout Tools and Larger
430D5	Rubber Bumper	
430D6	Lock Spring	
6070	Filter/Lube/Hose Pac	Not Shown