



PUSH TYPE INTERNAL TUBE CUTTER OPERATING MANUAL



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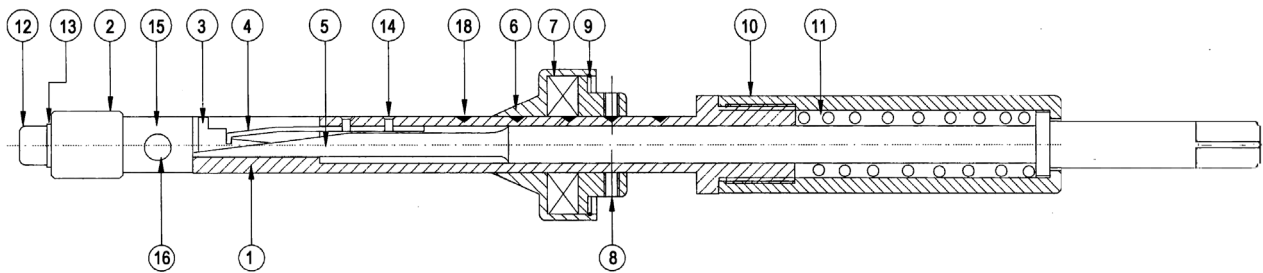


PUSH TYPE INTERNAL TUBE CUTTER OPERATING INSTRUCTIONS

FEATURES:

- “Push Type” Internal Tube Cutter quickly cuts through the walls of ferrous tubes in Condensers and other Heat Exchangers as a step in their removal from tube sheet.
- A full set of three turning pilots allows use with several tube gauges. The adjustable ball bearing thrust collar, suitable for reaching in to tubes of various distances. The Internal Tube Cutter is equipped with 3/8”sq. to fit in to chuck.
- Quality tool steel bit is replaceable.

PARTS:



Sr.	Part Name	5/8”	3/4”	7/8”	1”	1-1/4”	1-1/2”
1.	Body	621	751	871	1001	1251	1501
2.	Pilot	-	752-xx	872-xx	1002-xx	1252-xx	1502-xx
3.	Tool ¹ Bit	623	753	873	873	1253	1253
4.	Tool Bit Spring	-	754	874	874	1254	1254
5.	Mandrel	625	755	875	1005	1255	1055
6.	Collar	626	756	876	1006	1256	1506
7.	Thrust Bearing	51102	51102	51104	51104	51106	51106
8.	Thrust Nut	628	758	878	1008	1258	1508
9.	Bearing Lock	629	759	879	1009	1259	1509
10.	Spring Housing	-	7510	8710	8710	12510	12510
11.	Compression Spring	6211	7511	8711	8711	12511	12511
12.	Cap Screw	-	7512	8712	8712	8712	8712
13.	Washer	-	7513	7513	7513	7513	7513
14.	Socket Flat Cap Screw	-	7513	7513	7513	7513	7513
15.	Body Cap	-	7514	7514	7514	7514	7514
16.	Body Cap Hole	-	-	-	-	-	-
17.	Pin Punch	-	-	-	-	-	-
18.	Counter	-	-	-	-	-	-

Note: xx is gauge



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OPERATION:

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- A full set of three turning pilots allows for use with several tube gauges. The adjustable ball bearing thrust collar, suitable for reaching in to tubes of various distances. The Internal Tube Cutter is equipped with 3/8”sq. to fit into chuck.
- Quality tool steel bit is replaceable.
 - a. Select the I.T.C.P. (Internal Tube Cutter Push Type) & **Pilot** (2) (guide bush) as per the tube size & its gauge.
 - b. Mount the **Pilot** nose on the front side of I.T.C.P. and tighten it with the help of **Cap Screw** (12).
 - c. Set the **Thrust Collar** (6) at the required reach (min. 6mm - max. 76mm) with the help of counter provided on the I.T.C.P. body & then tighten it with the grub screw.
 - d. Select the appropriate electric or pneumatic drive with appropriate Quick Change Chuck.
 - e. Hold the square end of the I.T.C.P. in the Quick Change Chuck.
 - f. Insert the I.T.C.P. into the tube and rest the **Thrust Collar** on the tube face.
 - g. Start the drive and gently give feed to the I.T.C.P. by pushing the drive forward as it rotates.
 - h. The **Tool Bit** (3) will make contact with the ID of the tube and will continue to gradually cut the tube as you continue to push the drive forward. The **Tool Bit** will eventually cut the tube.
 - i. To remove the tool, pull the it outside the tube after the tube has been completely cut. Sometimes the tool may not come out easily due to a burr(s) on the face of the tube; if so, pull it with a greater force.
 - j. The cut tube will be on the body of the tool and can be removed from the front side of the tool.

PROCEDURE FOR REPLACING TOOL BIT:

- 1) Remove the **Body Cap** (15) by inserting the pin in the **Body Cap Hole** (16) & rotate it in an counter-clockwise direction.
- 2) Press the tool in the direction shown on the illustration to the right so that the **Compression Spring** (11) compresses.
- 3) Pull the **Tool Bit Spring** (4) with the help of **Pin Punch** (17)
- 4) Remove the tool bit and replace with another bit. Leave the **Tool Bit Spring** so that the edge of the **Tool Bit Spring** coincides with the groove on the tool bit.
- 5) Fit the **Body Cap** (15) by rotating in a clockwise direction.

