

# OPERATING MANUAL FOR XL8 AIR RING TYER



14272 Chambers Road Tustin, CA 92780

TOLL FREE: (800) 854-0137 PHONE: (714) 542-4487 FAX: (714) 972-2978

EMAIL: <u>info@plasties.com</u> WEBSITE: <u>www.plasties.com</u>

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#### **Table of Contents**

GENERAL INFORMATION	3
Supplies and Service	. 3
WARRANTY	4
SPECIFICATIONS	5
Model Designation	. 5
Performance	. 5
Air Requirements	. 5
Dimensions/Weight	. 5
Spool Specification	. 5
OPERATION	6
Major Component Description & Adjustments	. 6
Machine Set-Up and Initiation	. 6
Regulator Settings	. 6
OPERATIONAL SEQUENCE	7
Care of Machine	. 7
TROUBLE SHOOTING	8
REFERENCE FIGURES / ILLUSTRATIONS	9

#### **GENERAL INFORMATION**

# Thank you for purchasing the XL-8 Air Ring Tyer from Plas-Ties, manufacturers of high quality twist-tying equipment.

Please familiarize yourself and/or any person operating this machine with all functions by carefully reading this manual.

The Plas-Ties XL-8 Air Ring Tyer is an all-pneumatic machine that twist-ties products inserted into the ring shaped tying area. The machine can be adjusted to tie almost any product gathered into a round or nearly round shape from 1-inch diameter up to a maximum of 4, 6 or 8-inch diameter (dependent upon final ring size selection).

Model designation is located on the serial plate on the machine. It is important that you have the correct model for your input source.

#### Supplies and Service

PLAS-TIES twist-tie material and service should be ordered from:

PLAS-TIES				
14272 Chambers Road				
Tustin, CA 92780				
Telephone:	(714) 542-4487			
	(800) 854-0137			
Fax:	(714) 972-2978			
Email:	info@plasties.com			
	www.plasties.com			

When ordering, please provide the following:

- 1. Part Number or description
- 2. Model Number and Serial Number (use Name Plate)
- 3. Tie Material in use

#### WARRANTY

#### <u>CAUTION:</u> DO NOT ATTEMPT TO OPERATE YOUR XL-8 MACHINE BEFORE READING THE OPERATING INSTRUCTIONS.

Purchaser acknowledges that there are no warranties, expressed or implied, made by **PLAS-TIES**, its distributors or sales representatives related to the XL-8 machine except the manufacturer's warranty against defective materials and workmanship as follows:

**PLAS-TIES** warrants the XL-8 machine to be free from defects in materials and workmanship at time of delivery. Liability under this warranty is limited to the repair or exchange of any defective part or parts of the unit providing the same is returned to **PLAS-TIES**, transportation prepaid, within 90 days. THE WARRANTY BEGINS FROM THE DATE OF INSTALLATION AT CUSTOMER SITE AND NOT DATE OF PURCHASE. IN ORDER TO ACTIVATE THE WARRANTY, THE NAME, CITY/STATE, AND SERIAL NUMBER MUST BE REGISTERED ON-LINE AT WWW.PLASTIES. COM. FAILURE TO DO SO WILL RESULT IN LIMITATION OF THE FULL WARRANTY. THIS IS TO INSURE TOTAL QUALITY ASSURANCE AND 800 TOLL FREE TECHNICAL SUPPORT.

The warranty is void on any XL-8 machine that has been subject to negligence, accident, misuse, failure to use the equipment as instructed in the manual, or that has been tampered with.

This warranty is void if the XL-8 machine is used with anything other than specified genuine *PLAS-TIES* twist-tie material.

IMPORTANT: If your XL-8 machine does not operate properly, please bring it to the attention of *PLAS-TIES*, or the dealer or distributor from whom it was purchased. If repairs are needed, the dealer, distributor or other representative of *PLAS-TIES* will arrange to repair or replace parts within the terms of the warranty.

Warranty coverage is limited to the Continental US, Alaska, Hawaii, Puerto Rico, and Canada.

#### **S**PECIFICATIONS

#### **Model Designation**

This manual covers the model 530 XL-8 Air Ring Tyer.

#### Performance

Production speeds vary depending on tying diameter, ring size, air pressure, tightness of tie, operator and processing/production requirements.

#### **Air Requirements**

Machine will operate on clean, dry air from 90 PSI to 110 PSI

#### **Dimensions/Weight**

Capacity	Self-Adjusting from 1" to 8"
Recommended Spool	Exclusive Plas-Ties 4000' all plastic 1/4" width 24 gauge double wire centered
Air Power	90 to 100 PSI
Weight (with Stand)	200 lbs
Cabinet Depth Cabinet Width Cabinet Height Width (on stand)	19" 10-1/4" 24" 25-1/2"
Depth (on stand) Height (on stand)	29" 51-1/4" (max)
Clearance depth without table Clearance depth with table Clearance width to open door	Approximately 34" Approximately 40" Approximately 36"
Ring Options	Maximum 4", 6" 8" Diameter Rings

#### **Spool Specification**

Part# 419B Plas-Ties Exclusive 1/4" Plastic – White 4000' - 24-Gauge Double Wire (Center Spacing)

#### **O**PERATION

#### **Major Component Description & Adjustments**

This machine has 8 air-cylinders, 9 air pilot valves, 6 toggle valves, 2 one-shot valves, 4 pressure regulators, 4 pressure gauges, two flow regulators, a foot-switch or front trigger switch, a line pressure on-off switch, and a pilot/feed roller on-off switch.

The XL8 Air Ring Tyer, Model 530 is shipped on its stand and is ready to run. Just plug in air. This unit can be easily adjusted up or down on pipe stand.

#### Machine Set-Up and Initiation

The XL-8 Air Ring Tyer is factory tested and ready to run.

- (1) Connect to a clean, dry air supply.
- (2) Open the left door and check that the <u>Cam-Stop</u> is in place (See Figure 8)
- (3) Turn on the ribbon feed cylinder pressure switch (Toggle Switch on front lower left side).
- (4) Press foot switch or front trigger switch and note that unit cycles.
- (5) Turn off the <u>ribbon feed toggle switch</u>.
- (6) Load the ribbon spool on the <u>ribbon pre-feed</u> per (Figure 1).
- (7) Note that the ribbon brake is set per (Figure 1).
- (8) Pull approximately <u>12 inches of ribbon up through the No-back</u>.
- (9) Feed the ribbon up through the guide until it is visible just below the twister as per (Figure 2).
- (10) Note that the approved ribbon for this unit is <u>1/4 inch, 24 gauge double wire-centered</u> or separated.
- (11) The unit is ready to run place object to be tied in front of open ring and press the foot-switch. (Note that the ribbon length is correct per Figure 7).

#### Applying or removing air pressure from the valve pilot connectors operates pilot air valves. (See Figure 3)

For Air connections from the valves to the air cylinders see (Figure 4).

#### **Regulator Settings**

- (1) The <u>inlet regulator</u> (R1) is set just below the lowest line supply pressure- (90-110 PSI).
- (2) The <u>2 Gripper regulators</u> R3 and R4 are set at 20-25 PSI. (If the product to be tied is soft like a collapsible bag etc. these pressures may be raised slightly).
- (3) The Ribbon feed pressure regulator R5 is set at 20-25 PSI.

#### **OPERATIONAL SEQUENCE**

See Figure 5 for the operational sequence.

- (1) Pressing the <u>foot switch or front trigger switch</u> actuates <u>Valve 1</u> (closes <u>Cylinder 1</u>) and the ring closes.
- (2) When the ring is closed, toggle valve A1 actuates Valve 9 (engages cylinder 2) that feeds the ribbon.
- (3) At the end of the ribbon feed, <u>Toggle Valve A</u> is actuated which engages:
  - A. <u>Valve 2</u> (power up <u>Toggle B</u>.
  - B. <u>Valve 4</u> (engage <u>right Gripper-cylinder3</u>).
  - C. <u>Valve 9</u> (reverses <u>Ribbon Feed-cylinder</u> 2).
- (4) When Valve 9 returns to the, top it actuates <u>Toggle Valve B</u>, which:
  - A. Engages <u>Valve 5</u> (left Gripper-cylinder 4).
  - B. Engages <u>Valve 6</u> (Cutter-cylinder 5)
- (5) Cutter cylinder then engages <u>Toggle Valve C</u>, which engages:
  - A. <u>Valve 8</u> (Turns <u>Twister</u>).
  - B. <u>Valve 7</u> (Disengage <u>Cam Lock</u>-cylinder 6).
  - C. <u>Valve 2</u> (Drop pressure to <u>Toggle B</u>).
  - D. <u>Valve 6 (retract Cutter</u> (cylinder 5).
- (6) When (Cylinder 7, Twister is extended it engages <u>Toggle Valve</u> D which:
  - A. Retracts <u>Valve 1</u>, which opens ring- (cylinder 1).
  - B. Extends <u>Valve 4</u>, which opens <u>right Gripper</u>- (cylinder 3).
  - C. Extends <u>Valve 5</u>, which opens <u>left Gripper</u>- (cylinder 4).
  - D. Extends <u>Valve 7</u>, which re-engages <u>Cam Stop</u>- (cylinder 6).
- (7) When cylinder 6 (Cam-Lock is home), <u>Toggle Valve E</u> is engaged which:
  - A. Returns <u>Valve 8</u> (Twister-<u>cylinder 7</u>) that completes the cycle.

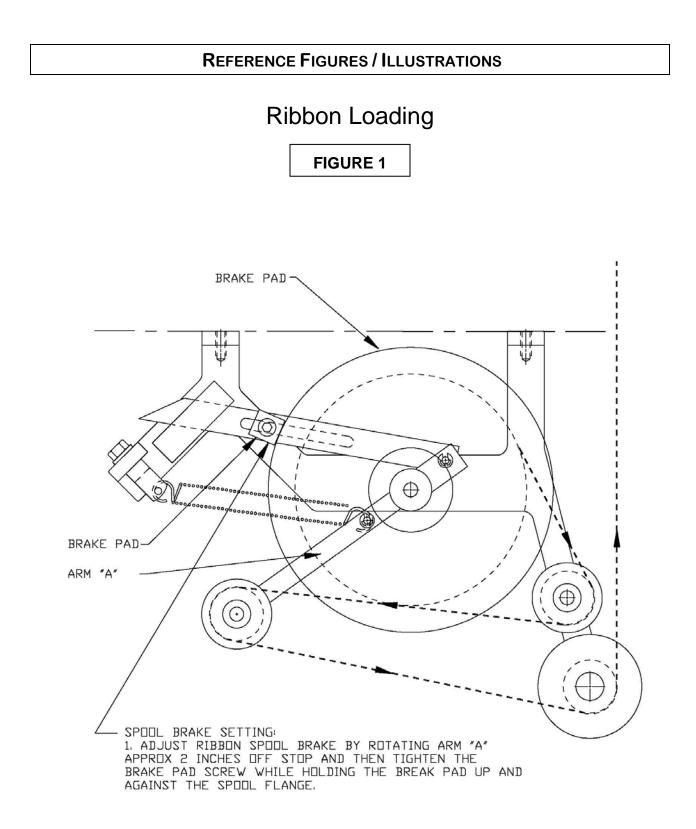
#### **Care of Machine**

- 1) Put a little grease on the rack gears, as needed. Avoid grease on the clutches, brake disc, or the draw wheel.
- 2) It is very important that the machine runs on CLEAN, DRY AIR. Check the water trap, and make sure it is draining properly. Make sure your air dryer is working properly.

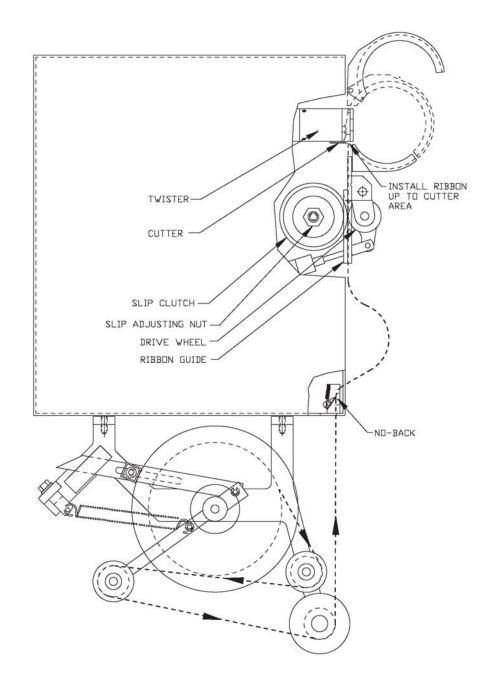
### **TROUBLE SHOOTING**

Your XL-8 Ring Tyer is a very reliable machine, but should you experience any of the following situations, please refer to this handy guide for assistance.

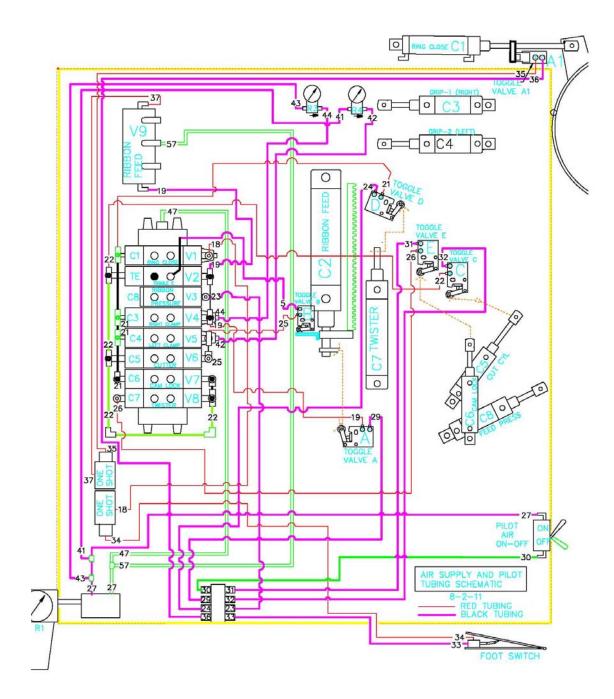
Problem	Cause	Resolution	
Wire Jamming	Ribbon length is too long. The ribbon feeds too long, which causes a kink at the inlet guide and then the ribbon will not retract	Adjust the length slightly shorter (See Figure 6).	
Ribbon Breaking	Slip-Clutch being too tight	Adjust the slip clutch nut ¼ turn CCW (See Figure 2).	
Not Tying = Ribbon too short	One of the Grippers pressure may be too high, but unlikely if their pressures are 20-25 PSI.	Check Gripper pressure and adjust accordingly. Adjust the length slightly longer per (Figure 6).	
For other problems call Plas-Ties service at 714-542-4487			



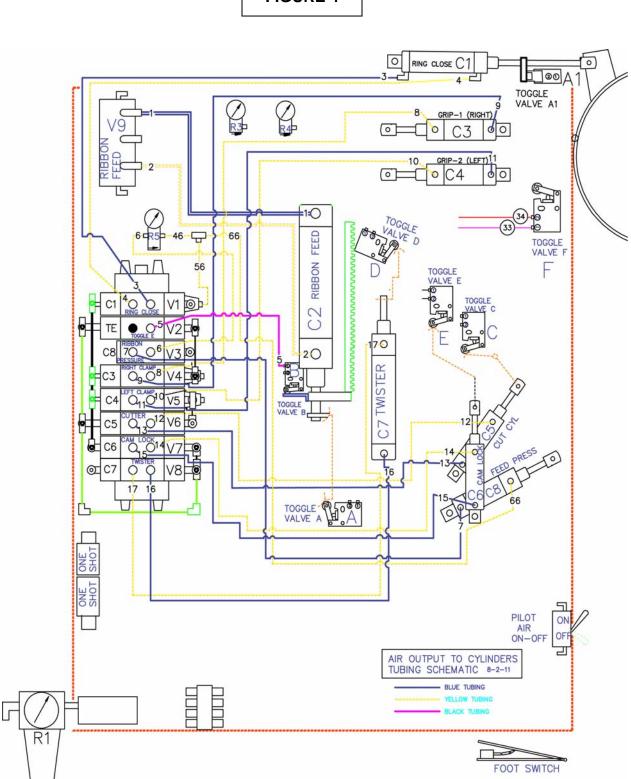
# **Ribbon Loading**



## Air Supply and Pilot Tubing

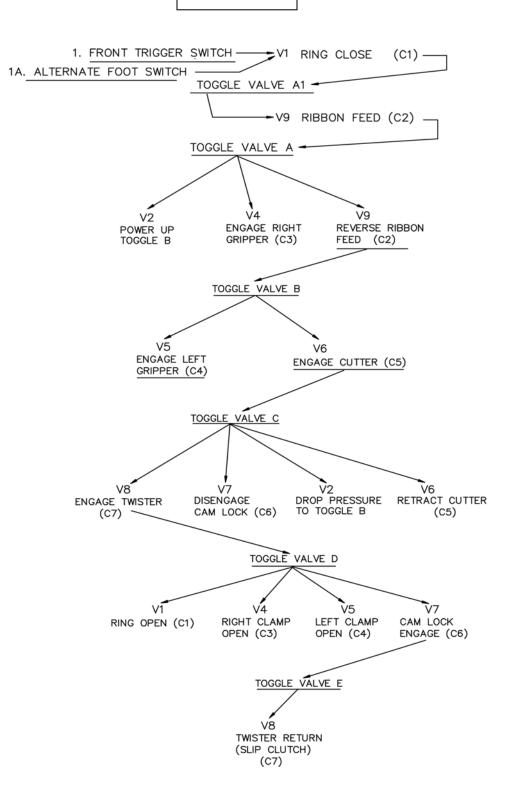


## Air Output to Cylinder Tubing



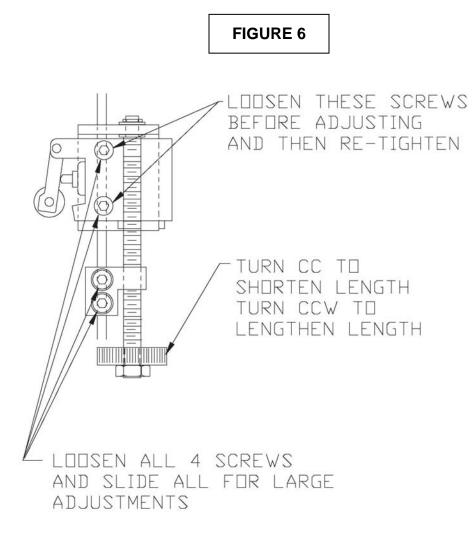
### **XL-8 OPERATIONAL SEQUENCE**



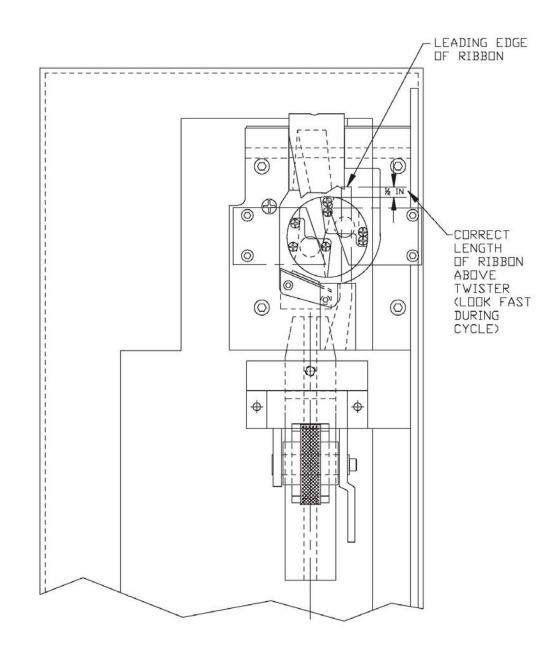


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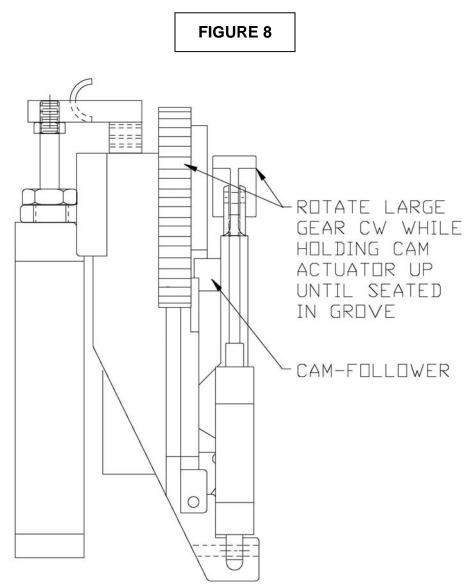
### **RIBBON LENGTH FINE ADJUSTMENT**



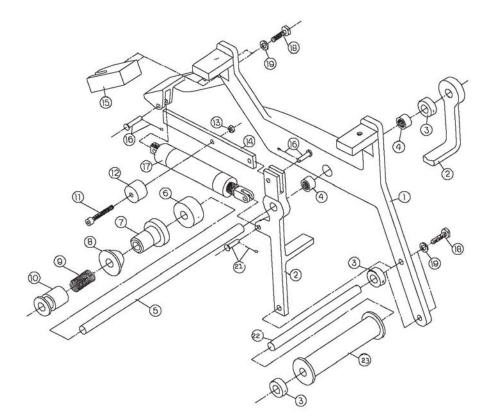
### FRONT VIEW SHOWING RIBBON PATH & CORRECT LENGTH



### SET CAM-STOP TIMING BY HAND



### **PRE-FEED**



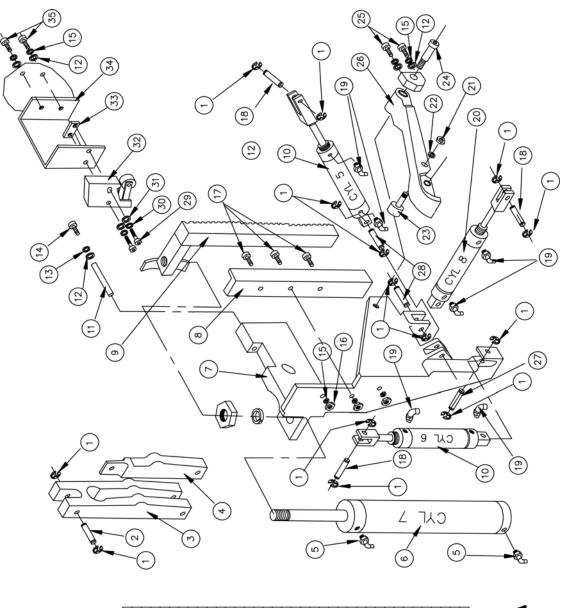


FIGURE A

