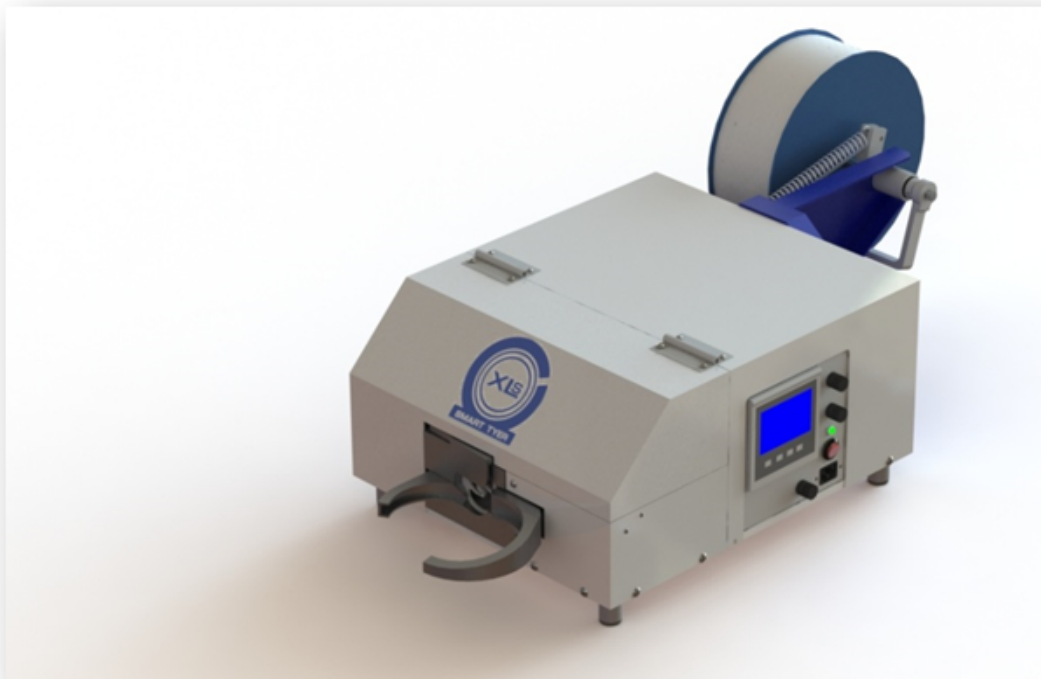




**OPERATING MANUAL**

**FOR THE**

***XLS* SMART TYER**



14272 Chambers Road  
Tustin, CA 92780  
TOLL-FREE: (800) 854-0137  
PHONE: (714) 542-4487  
FAX: (714) 972-2978

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<b>GENERAL INFORMATION</b>
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***Thank you for purchasing the XLS-4 SMART TYER from Plas-Ties, manufacturers of high quality twist-tying equipment.***

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

The Plas-Ties XLS-4 SMART TYER is a 110V 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 .5-inch diameter up to a maximum of 4-inch diameter.

### **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](mailto:info@plasties.com)  
[www.plasties.com](http://www.plasties.com)

1. Serial Number (use Name Plate)
2. # of cycles
3. Tie Material in use

Recommended Spool Material:

**(Exclusive Plas-Ties Precision Wound Twist Tie Material)**

**#449:** 2500' PL/PA ¼" Precision Wound Spools, 2-24 or 27 gauge, width 1/8" spacing double wire  
**24 & 27-gauge** (available upon request)

## SAFETY INSTRUCTIONS

### **CAUTION:** **DO NOT ATTEMPT TO OPERATE YOUR XL-S4 MACHINE BEFORE READING THE OPERATING INSTRUCTIONS**

The operating procedures outlined in this manual are prepared to facilitate the XLS-4 SMART TYER machine.

1. **KEEP ALL SAFETY DEVICES IN PLACE** and in working order.
2. **KEEP WORK AREA CLEAN.** Cluttered areas invite accidents.
3. **DO NOT USE IN DANGEROUS ENVIRONMENT.** Do not use machines in a damp or wet location, or where any flammable or noxious fumes may exist. Keep work area well lighted.
4. **KEEP UNAUTHORIZED PEOPLE AWAY.** All unauthorized people should be kept out of work area and away from machine.
5. **DO NOT FORCE MACHINE.** It will do the job better and safer at the rate for which it was designed.
6. **USE THE RIGHT MACHINE.** Do not force machine to do a job it is not designed to do.
7. **DO NOT USE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.**
8. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry, which may get caught in moving parts. Wear protective hair covering to contain long hair.
9. **MAINTAIN MACHINE WITH CARE.** Keep machine clean for best and safest performance. Follow instructions for lubricating and keeping machine free of lint.
10. **DISCONNECT MACHINE BEFORE SERVICING AND WHEN CHANGING SPOOL.**
11. **CHECK DAMAGED PARTS.** Before further use of the machine, any part that is damaged should be carefully checked to determine that it would operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A part that is damaged should be properly repaired or replaced.
12. **NEVER LEAVE MACHINE RUNNING UNATTENDED.** Turn the power off, and do not leave machine until it comes to a complete stop.
13. **NEVER ALLOW UNTRAINED USERS TO RUN THIS MACHINE.**
14. **IF YOU ARE UNSURE OF THE INTENDED OPERATION, STOP USING THE MACHINE.**

<b>WARRANTY</b>
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Purchaser acknowledges that there are no warranties, expressed or implied, made by **PLAS-TIES**, its distributors or sales representatives related to the XLS-4 machine except the manufacturer's warranty against defective materials and workmanship as follows:

**PLAS-TIES** warrants the XLS-4 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 or 150,000 cycles (whichever comes first based on machine counter). **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 XLS-4 machine that has been subject to negligence, accident, misuse, failure to use the equipment as instructed in the manual, or that has been modified from standard format.

This warranty is void if the XLS-4 machine is used with anything other than specified genuine **PLAS-TIES** twist-tie material.

**IMPORTANT:** If your XLS-4 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.

## SPECIFICATIONS

### Model Designation

This manual covers the model XLS-4 SMART TYER.

### Performance

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

### Specifications

Capacity	Self-adjusting from ½ inch to 4 inches
Recommended Spool	Recommended spool 2500' PI/Pa ¼" width 1/8" spacing double wire. (Part # 449B)
Electric Power	110V (5 AMPS)
Weight	85 lbs / 38.56 kg (unit only – without spool material in place)
Ring Options	Maximum 4" diameter tying capacity ring at introduction

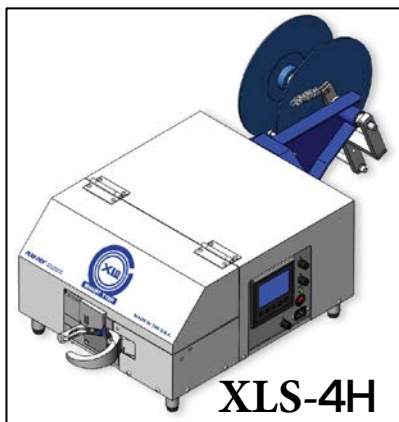
Physical Specifications	Depth	Depth (with ring & spool brake)	Width	Height	Clearance height (to accommodate cover)
	19.0 in / 48.26 cm	37.5 in / 95.25 cm	16.0 in / 40.64 cm	10 in / 25.40 cm	23.0 in / 58.42 cm
Vertical Brake	19 in	36.8 in	18.5 in	12 in	23 in
Horizontal Brake	19 in	36.8 in	18.1 in	14.25 in	23 in

### Spool Specification

Part# 449B                      Plas-Ties Exclusive  
24 & 27 Gauge              Available upon Request

### Options

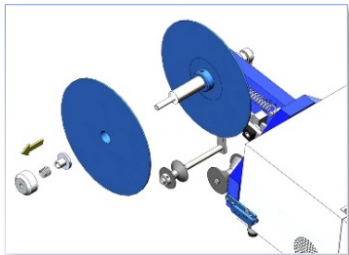

## HORIZONTAL CONFIGURATION



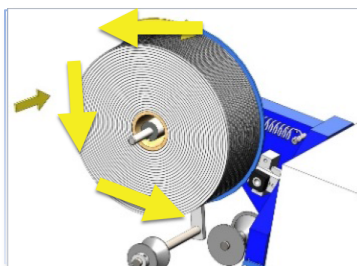
## SPOOL LOADING

1) Turn off XL-S

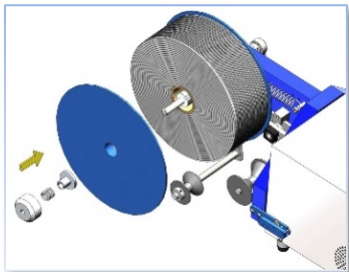
2) Remove side plate components



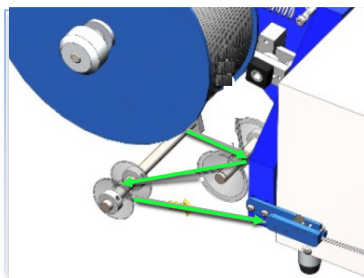
3) Ensure Material Travels Counter Clockwise



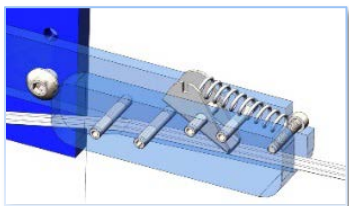
4) Replace side plate components, tighten down knurled hand nut until firmly seated



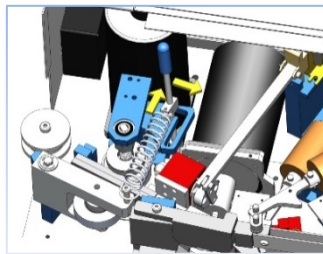
5) **Ribbon Path:** Ensure material starts from top-down and lays flat with no kinks or twists occurring.



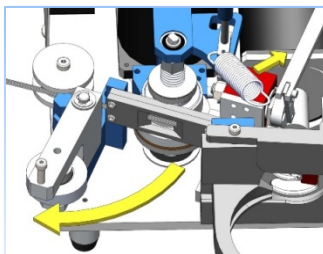
6) Insert material through No-Back



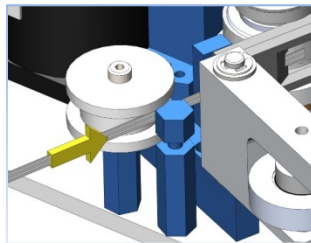
7) **Idler Lever Tension Spring unloading:** Push Idler Lever Spring Arm back, move to right and slowly release tension on Spring forward



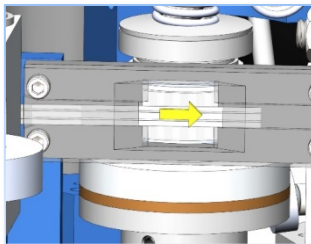
8) **Idler Lever Opening:** Unhook Spring from Idler Lever & swing Idler Lever 90 degrees outward



9) **Material insertion into machine:** Insert material between Material Roller & blue Material Guide Post



10) **Material Feed through Ribbon Guide:** Feed material approximately 1/2" through Ribbon Guide (*Ribbon Guide is transparent in diagram below*)



11) **Close Idler Lever:** Reverse steps 7 and 8

12) Turn "ON" XL-S

13) Push "RIBBON SETUP" on the HOME Menu

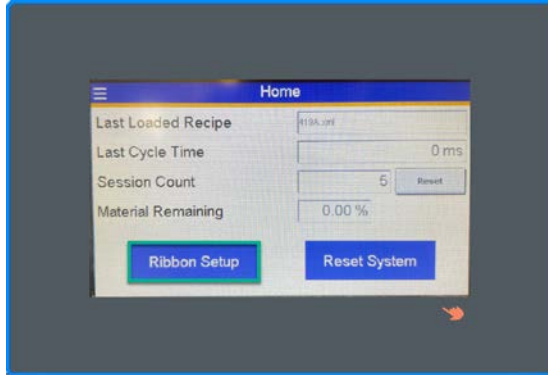
14) Remove excess piece of material generated by the "RIBBON SETUP" features

15) Now you are ready to begin tying

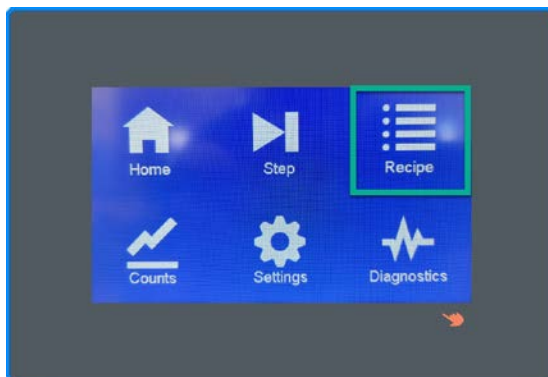
## XLS Smart-Tyer

### How to Create a Recipe

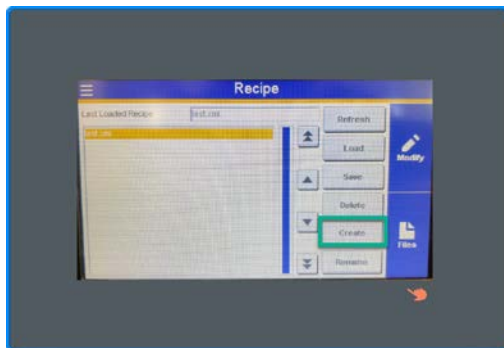
1) Turn on XLS. Startup page below appears. Select “Ribbon Setup” if feeding new material. Click on orange home button.



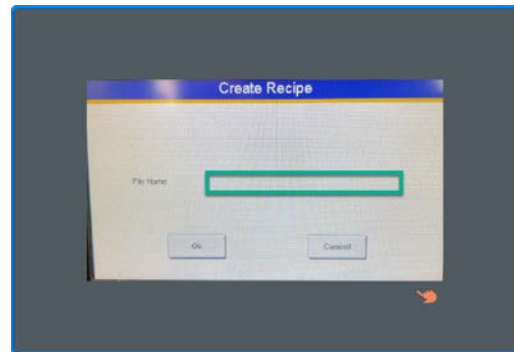
2) Orange hand icon can be selected at any point to return to homepage shown below. To modify recipe press on “Recipe”



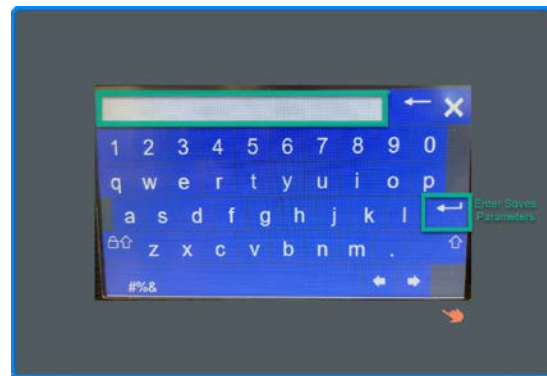
3) Highlight recipe in which you want to modify. Then press “Create”



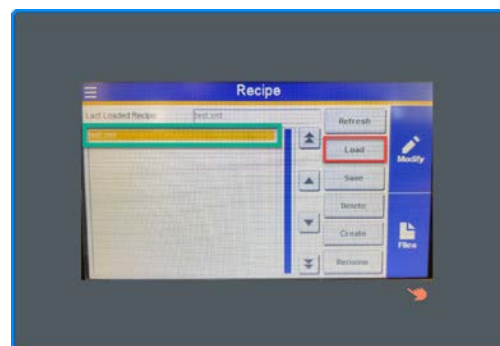
4) Create your file name.



5) Select the top bar and create your file name. ‘Enter’ will save your name and bring you to the create recipe page (shown above) Press “OK” to return to recipe page.



6) Last loaded recipe will show current recipe loaded. To select a new recipe, highlight the new modified recipe and press load. If recipe already loaded, then press home button to return to homepage.

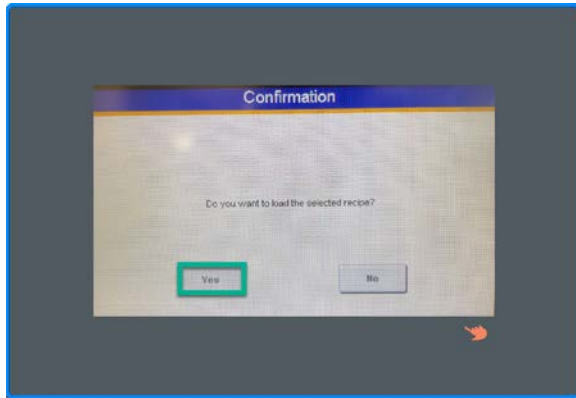




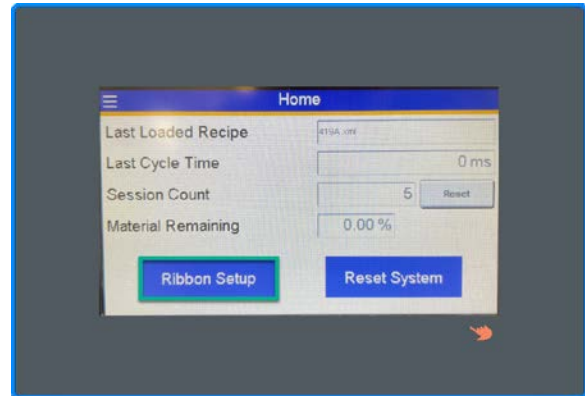
## XLS Smart-Tyer

### How to Create a Recipe

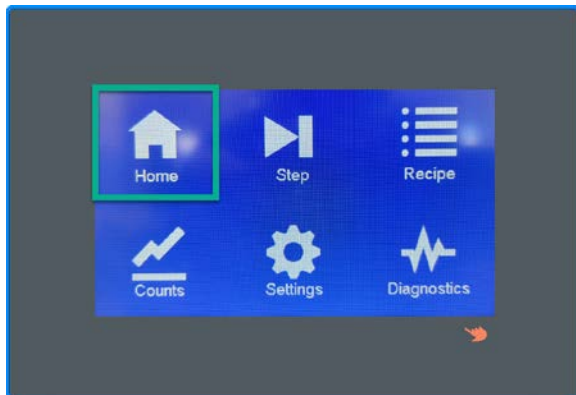
7) If loading new recipe, then confirm your selected recipe.



9) [Optional] Press home to confirm your “Last Loaded Recipe” and then select ‘Ribbon Setup’



8) Return to homepage and select ‘Home’

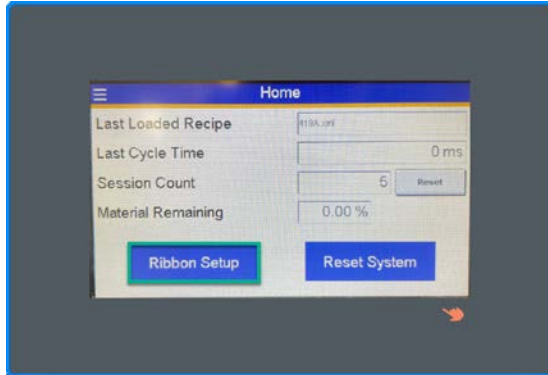


10) You are now ready to begin tying

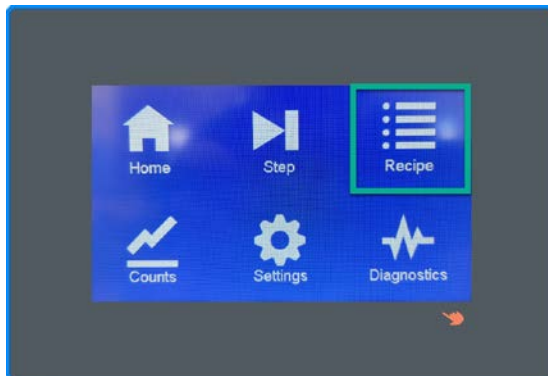
## XLS Smart-Tyer

### How to Modify a recipe

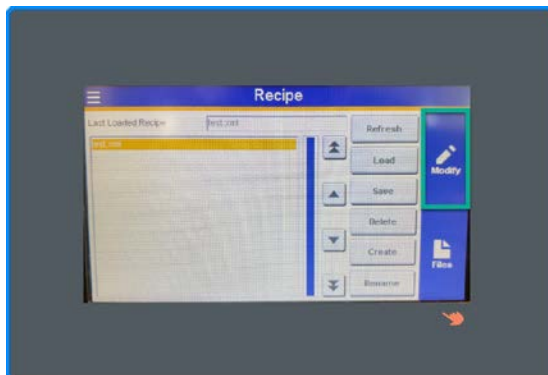
1) Turn on XLS. Startup page below appears. Select “Ribbon Setup” if feeding new material. Click on orange home button.



2) Orange hand icon can be selected at any point to return to homepage shown below. To modify recipe press on “Recipe”



3) Highlight recipe in which you want to modify. Then press “Modify”



4) This screen allows you to select and change each parameter for your recipe. Select field in which you want to change.



#### Typical Settings for 4” Ring

Feed Forward: [Typical Setting 20.10 inches]

Feed Reverse: [Typical Setting 15.14 inches]

Twists: [Typical Range 3 -5] More twists equals tighter bundle.

Untwist: [Typical Range .4 -.8] Do not exceed “1” Untwist is to ease release of Product from twister.

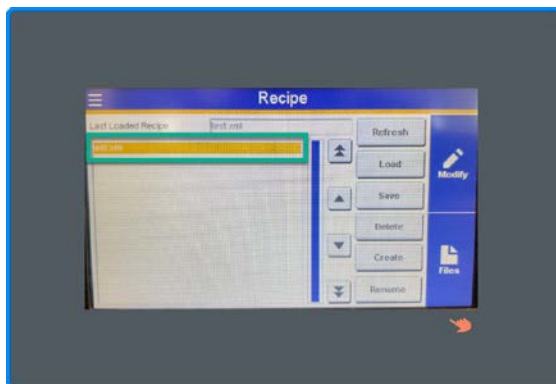
## XLS Smart-Tyer

### How to Modify a recipe

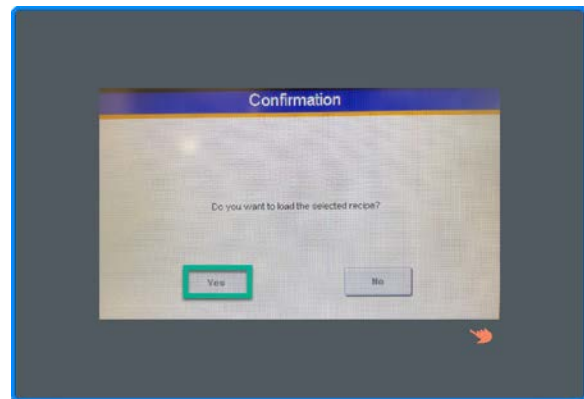
5) Select and change your parameters on the top bar according to suggested values above. 'Enter' will save your modified values and return you to the modify recipe page. Press "Back" to return to recipe page.



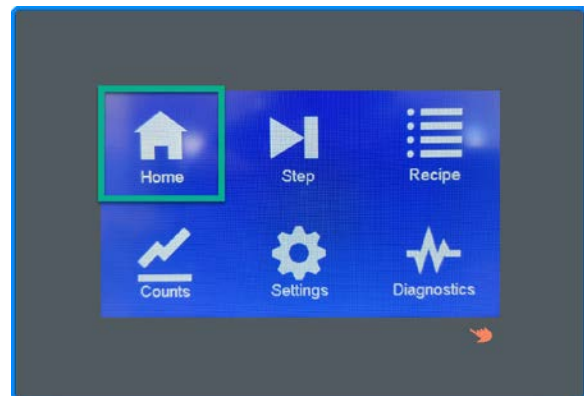
6) Last loaded recipe will show current recipe loaded. To select a new recipe, highlight the new modified recipe and press load. If recipe already loaded, then press home button to return to homepage.



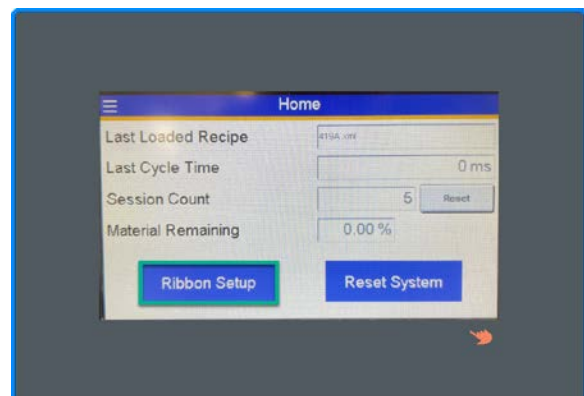
7) If loading new recipe, then confirm your selected recipe.



8) Return to homepage and select 'Home'



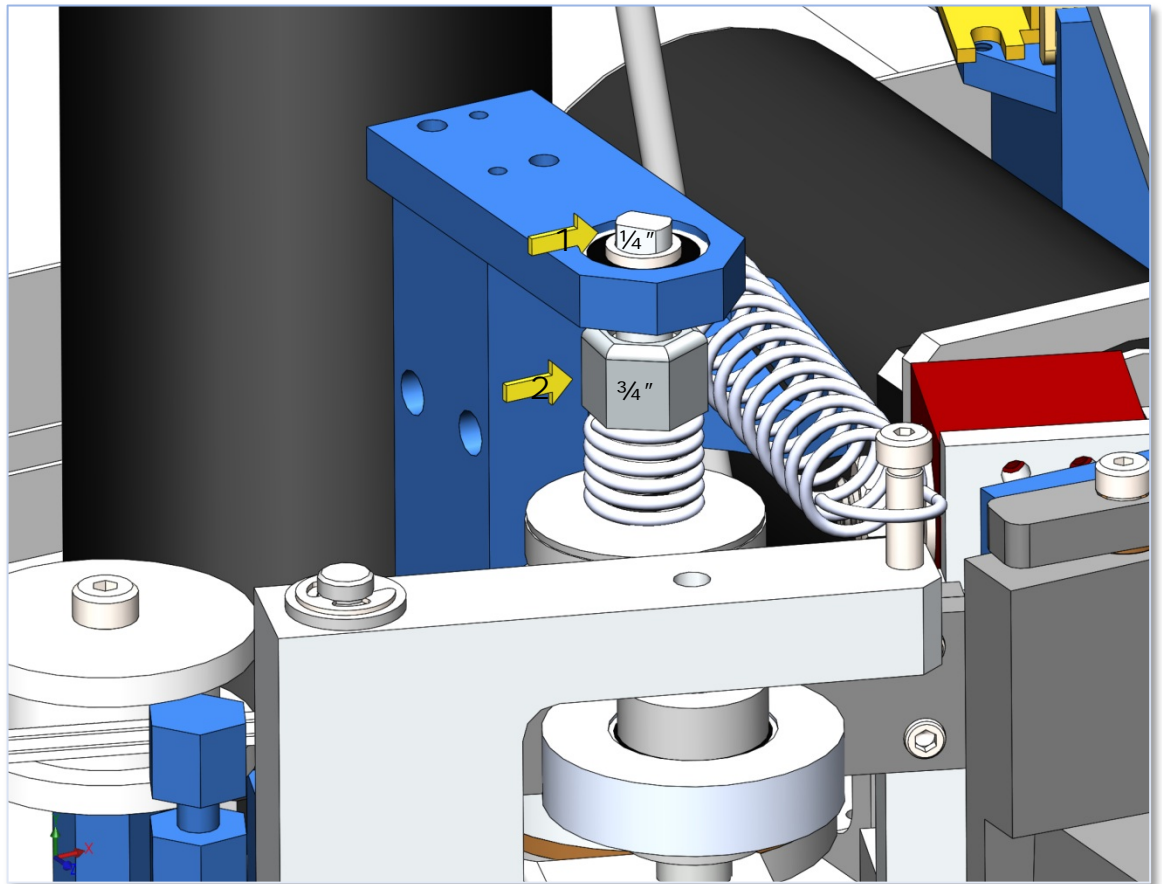
9) [Optional] Press home to confirm your "Last Loaded Recipe" and then select 'Ribbon Setup' You are now ready to begin tying.



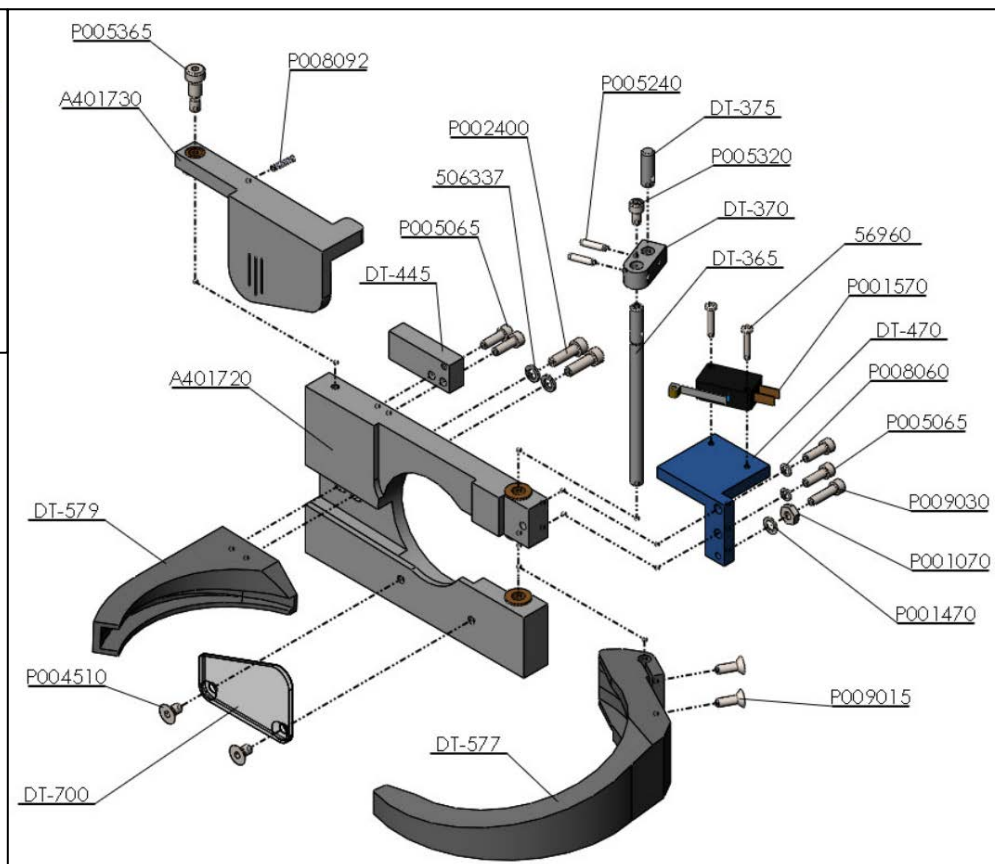
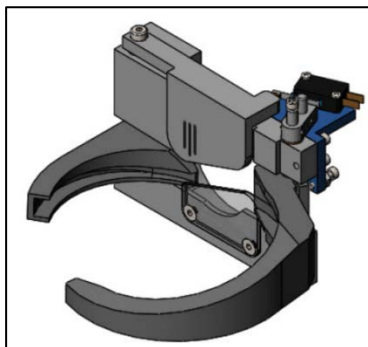
## ADJUSTMENTS

### 1. Slip Clutch Adjustment

- 1) Use  $\frac{1}{4}$ " wrench to stabilize shaft
- 2) Use  $\frac{3}{4}$ " wrench to adjust clutch to preferred tension
  - a. Clockwise will increase tension
  - b. Counter clockwise will reduce tension



## 4 INCH RING (A901030)

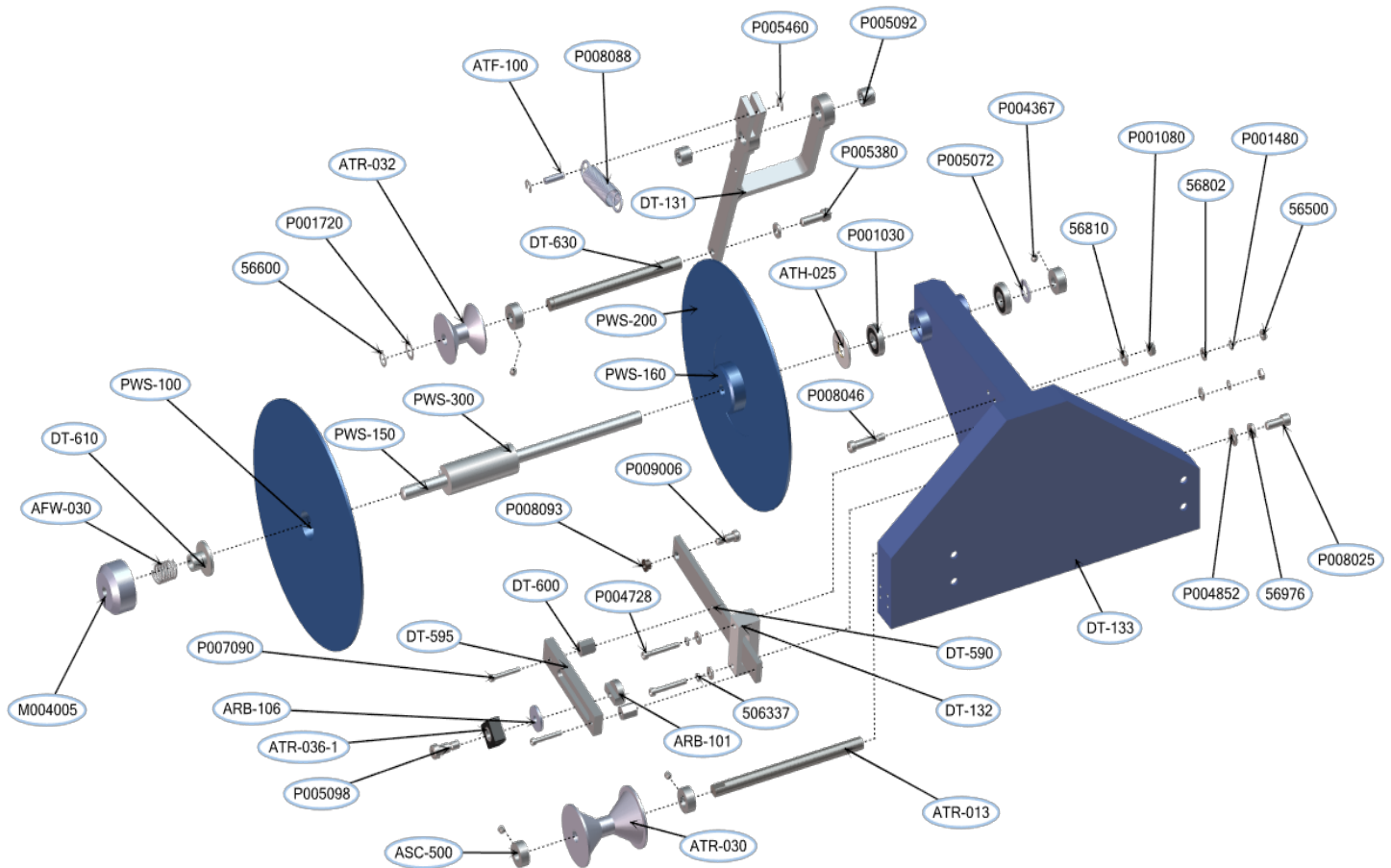


Part No.	Description	Qty
506337	#10 Split Lockwasher	2
56960	Screw 4-40 X 5/8 w/ Washer	2
A401720	XLS Base Ring Assembly	1
A401730	XLS Safety Trigger	1
DT-365	Shaft Ring	1
DT-370	Off-Set Bar Ring Open	1
DT-375	Off-Set Shaft Ring	1
DT-445	Stop- Trigger	1
DT-470	Base-Trigger Switch	1
DT-577	4" Top Ring Smart Tyer	1
DT-579	4" Bottom Ring Smart Tyer	1
P001070	8-32 Hex Nut	1

Part No.	Description	Qty
P001470	Lockwasher - Internal Tooth # 8	1
P004510	10-32 X 3/8 Flat Head Cap Screw	2
P002400	10-32 X 5/8 Fine Socket Head Cap Screw	2
P005065	8-32 X 1/2 SHCS Stainless	4
P005240	1/8 X 1/2 Roll Pin	2
P005320	8-32 X 5/16 SHCS Stainless	1
P005365	1/4-3/8 Shoulder Bolt Stainless Steel	1
P008060	#8 Split Washer SS	2
P008092	Compression Spring	1
P009015	8-32 x 3/8 Flat Cap Screw	2
P009030	8/32 X 5/8 SHCS Stainless	1



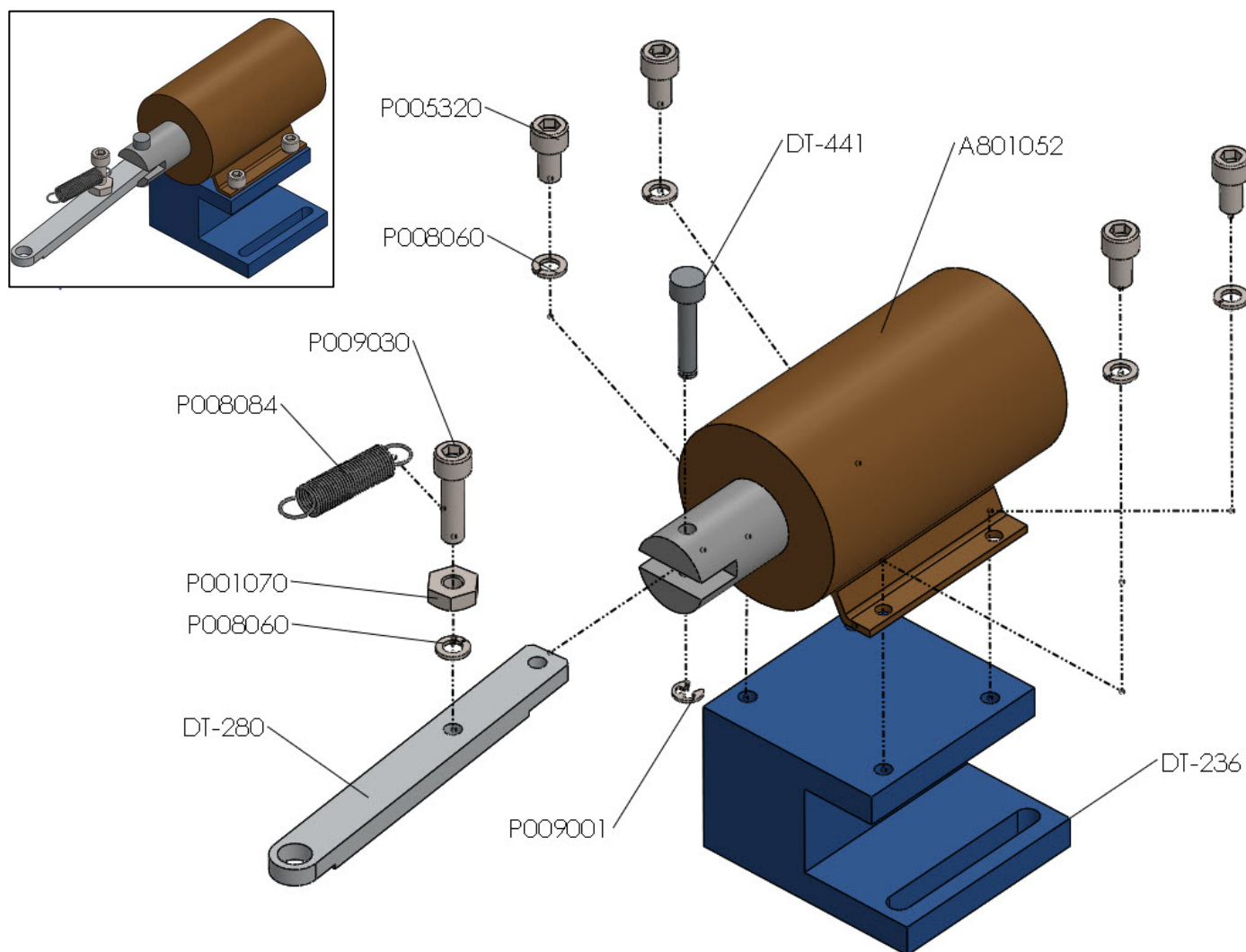
# BRAKE WITH NO BACK (A901050)



Part No.	Description	Qty
56500	10-32 Kep Nut	2
56600	1/2" External Clip Ring	1
56802	#10 Flat Washer	4
56810	1/4" Flat Washer	1
56976	5/16 Lock Washer	2
506337	#10 Split Lock Washer	2
AFW-030	Compression Spring	1
ARB-101	Brake Arm Pad Plate	1
ARB-106	Brake Washer	1
ASC-500	Retaining Coupler	4
ATF-100	Clevis Pin	1
ATH-025	Trust Washer	1
ATR-013	Brake Spooler Shaft	1
ATR-030	Roller	1
ATR-032	Small Roller	1
ATR-036-1	Precision Wound Spool Brake Pad	1
DT-131	Pivot Arm Spooler	1
DT-132	Spooler Guide	1
DT-133	Base - Spooler	1
DT-134		1
DT-590	Brake Bracket	1
DT-595	Secondary Brake Bracket	1
DT-600	Spacer	2
DT-610	Spacer	1
DT-630	Roller Shaft	1

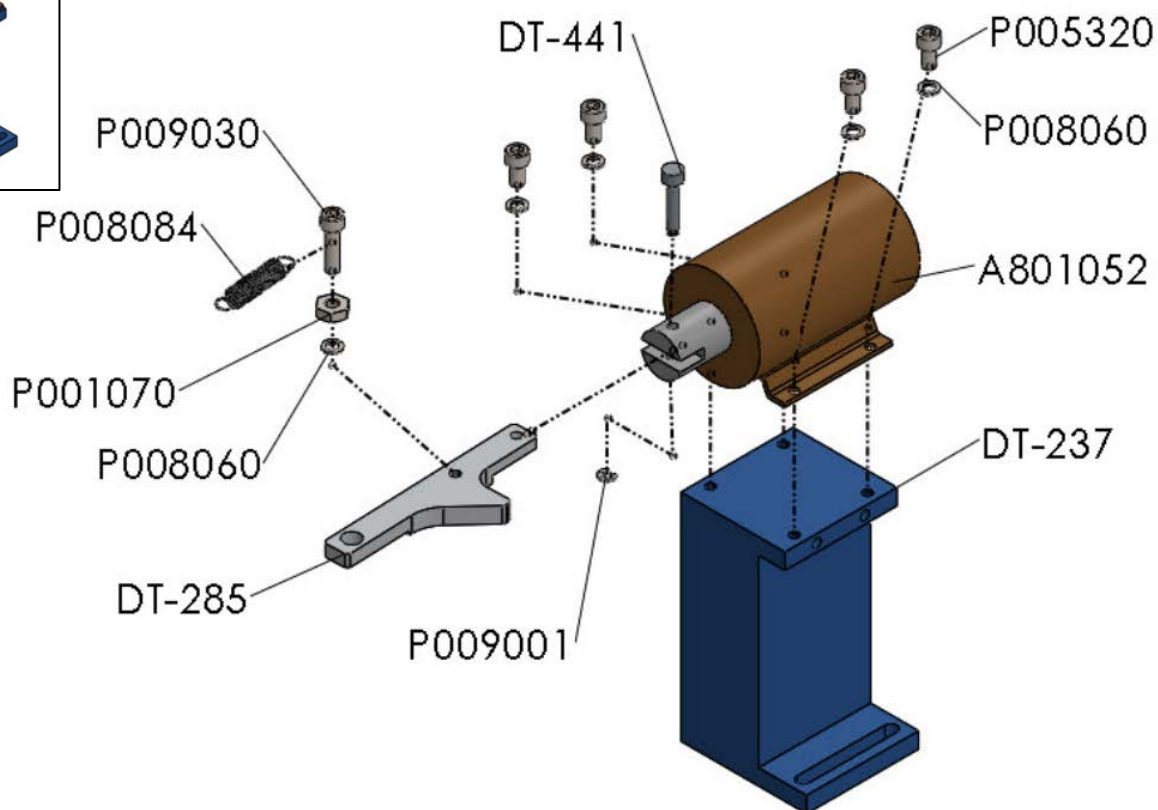
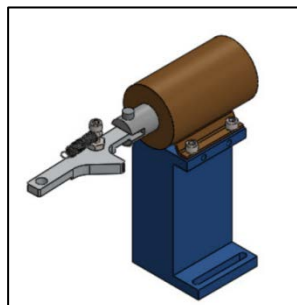
Part No.	Description	Qty
M004005	Knurled Hand Nut	1
P001030	Bearing - Brake Arm	2
P001080	1/4 - 20 Hex Nut	1
P001480	#10 Tooth Lock Washer	2
P001720	Shim	1
P004367	1/4 -20 x 1/4 Socket Set Screw	4
P004728	10-32 X 1 1/2" Socket Head Cap Screw	2
P004852	Fender Washer ZN 5/16" 5/8 OD	1
P005072	1/2" Washer	1
P005092	Roller Bearing	2
P005098	3/8 X 1/2 5/16-18 Shoulder Bolt	1
P005380	5/16-18 X 1" Socket Head Cap Screw	1
P005460	1/4" External "E" Retaining Ring	2
P007090	8-32 X 1-1/4 Socket Head Cap Screw	2
P008025	5/16-18 X 3/4 Socket Head Cap Screw	1
P008046	5/16 1/4-20 X 1" Shoulder Bolt	1
P008088	Spooler Ring	1
P008093	1/4 x 3/8 x 1/4 Flanged Bushing	1
P009006	5/16 X 1/4-20 X 3/8 Shoulder Bolt	1
PWS-100	Mounting Plate	1
PWS-150	1/4-20 Set Screw/ Pin	1
PWS-160	3/8-16 x 3/4" Set Screw	1
PWS-200	Mounting Plate	1
PWS-300	Precision Wound Spool Shaft	1

## CLAMP SOLENOID ASSEMBLY (A401737)



PART #	DESCRIPTION	QTY
A801052	Solenoid Assembly - Wired	1
DT-236	Clamp Solenoid Bracket	1
DT-280	Clamp Link	1
DT-441	DC Solenoid Pin	1
P001070	8-32 Hex Nut	1
P005320	8-32 x 5/16" Socket Head Cap Screw Stainless	4
P008060	#8 Split Washer	5
P008084	Clamp Spring	1
P009001	1/8" External "E" retaining Ring	1
P009030	8/32 X 5/8 Socket Head Cap Screw	1

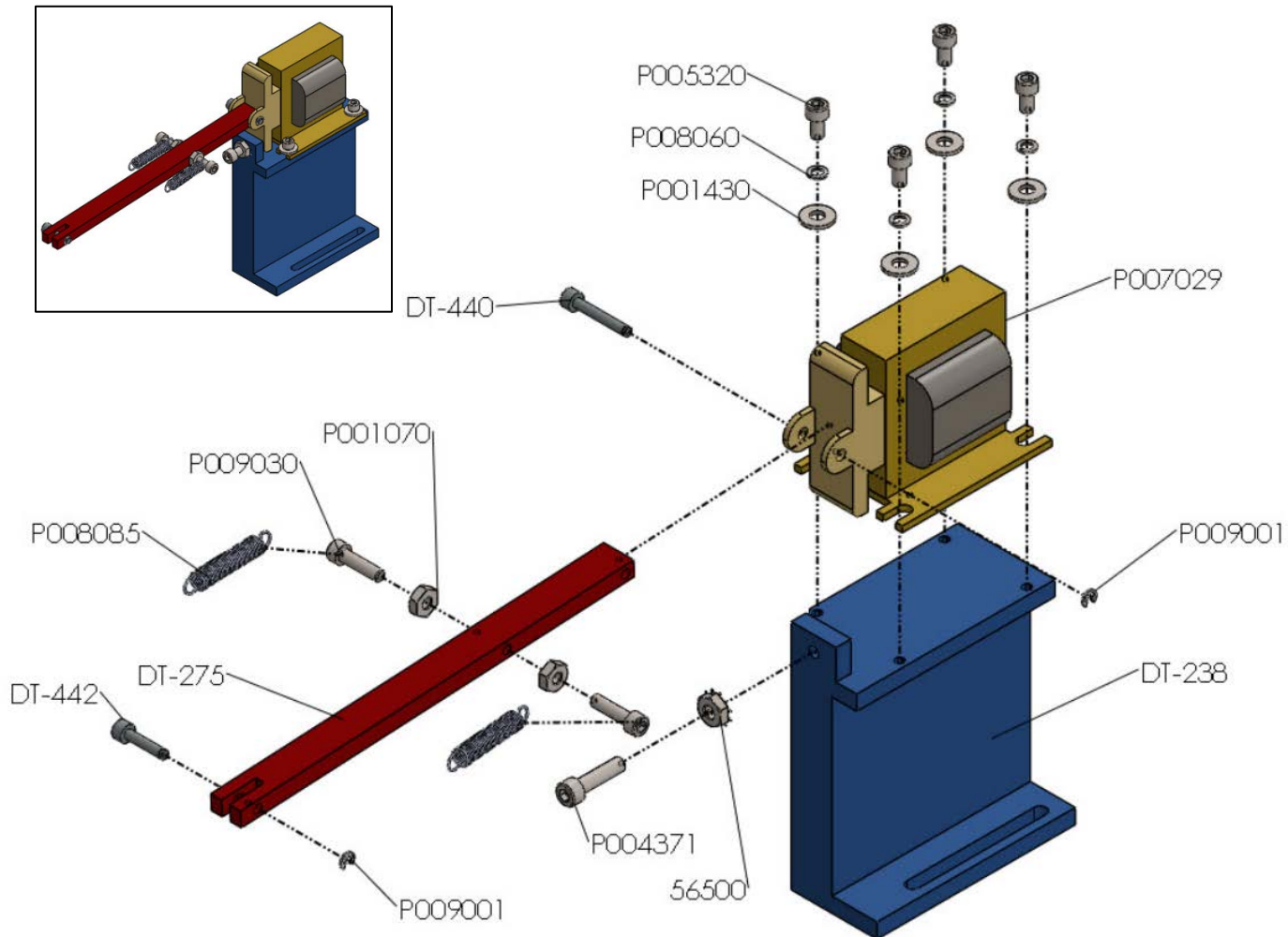
## RING SOLENOID ASSEMBLY (A401738)



PART #	DESCRIPTION	QTY.
A801052	Solenoid Assembly - Wired	1
DT-237	Ring Solenoid Bracket	1
DT-285	Ring Link	1
DT-441	DC Solenoid Pin	1
P001070	8-32 Hex Nut	1
P005320	8-32 x 5/16" Socket Head Cap Screw Stainless	4
P008060	#8 Split Washer	5
P008084	Clamp Spring	1
P009001	1/8" External "E" retaining Ring	1
P009030	8/32 X 5/8 Socket Head Cap Screw	1

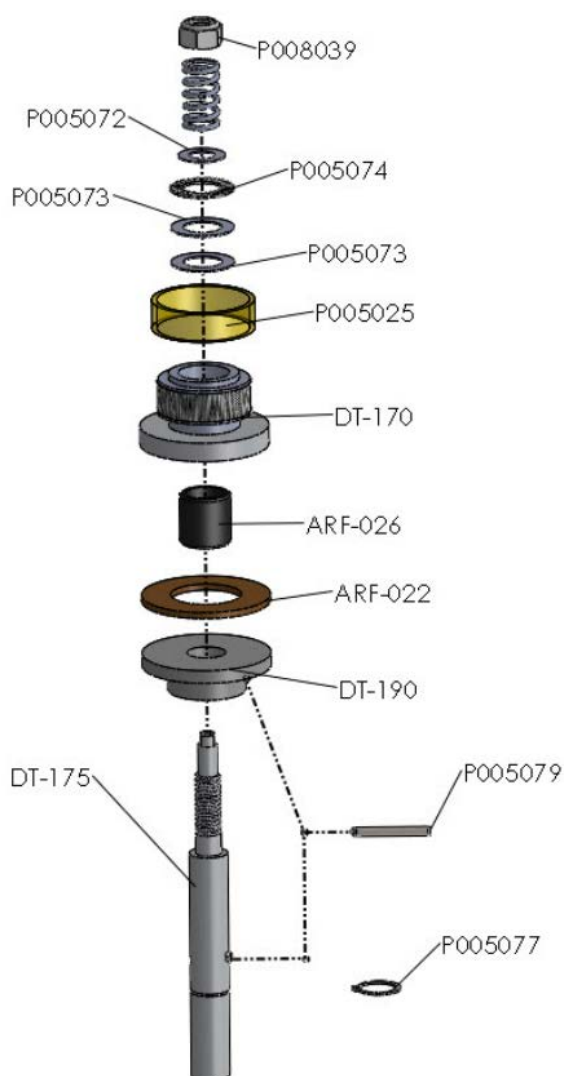
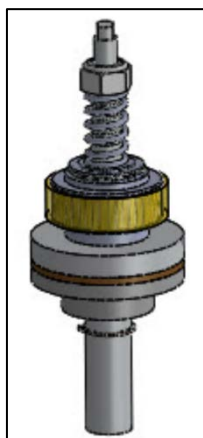


## CUTTER SOLENOID ASSEMBLY (A401739)



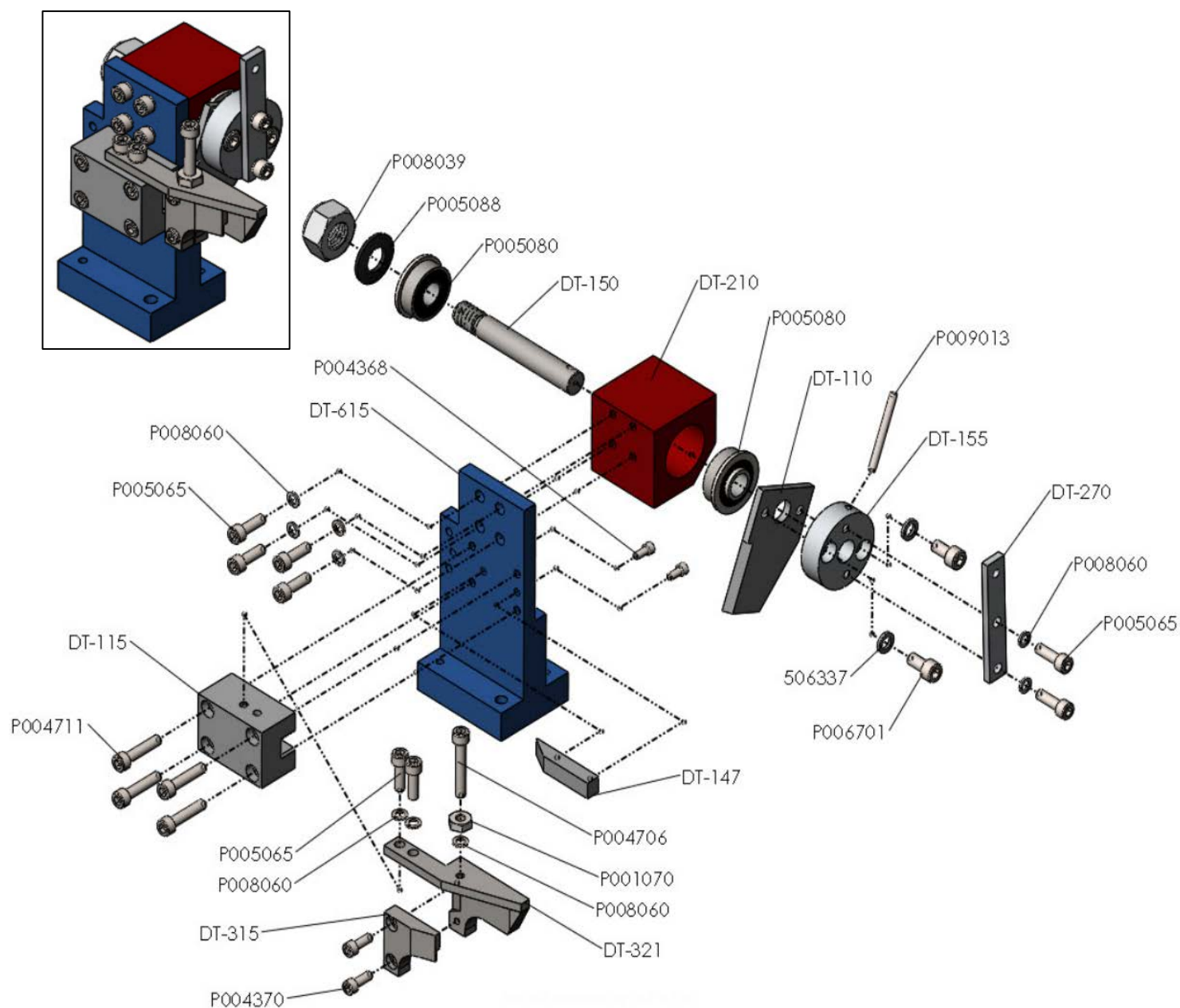
PART #	DESCRIPTION	QTY
DT-238	Knife Solenoid Bracket	1
P007029	AC Solenoid 120V	1
P001430	#8 Flat Washer	4
P008060	#8 Split Washer	4
P004371	10-32 X 3/4 Socket Head Cap Screw	1
56500	10-32 Kep Nut	1
DT-275	Cutter Link	1
DT-440	Cutter Link Pin	1
P001070	8-32 Hex Nut	2
P009030	8/32 X 5/8 Socket Head Cap Screw	2
P008085	Cutter Spring	2
P009001	1/8" External "E" retaining Ring	2
DT-442	Cutter Pin	1
P005320	8-32 x 5/16" Socket Head Cap Screw Stainless	4

## CLUTCH ASSEMBLY (A801050)



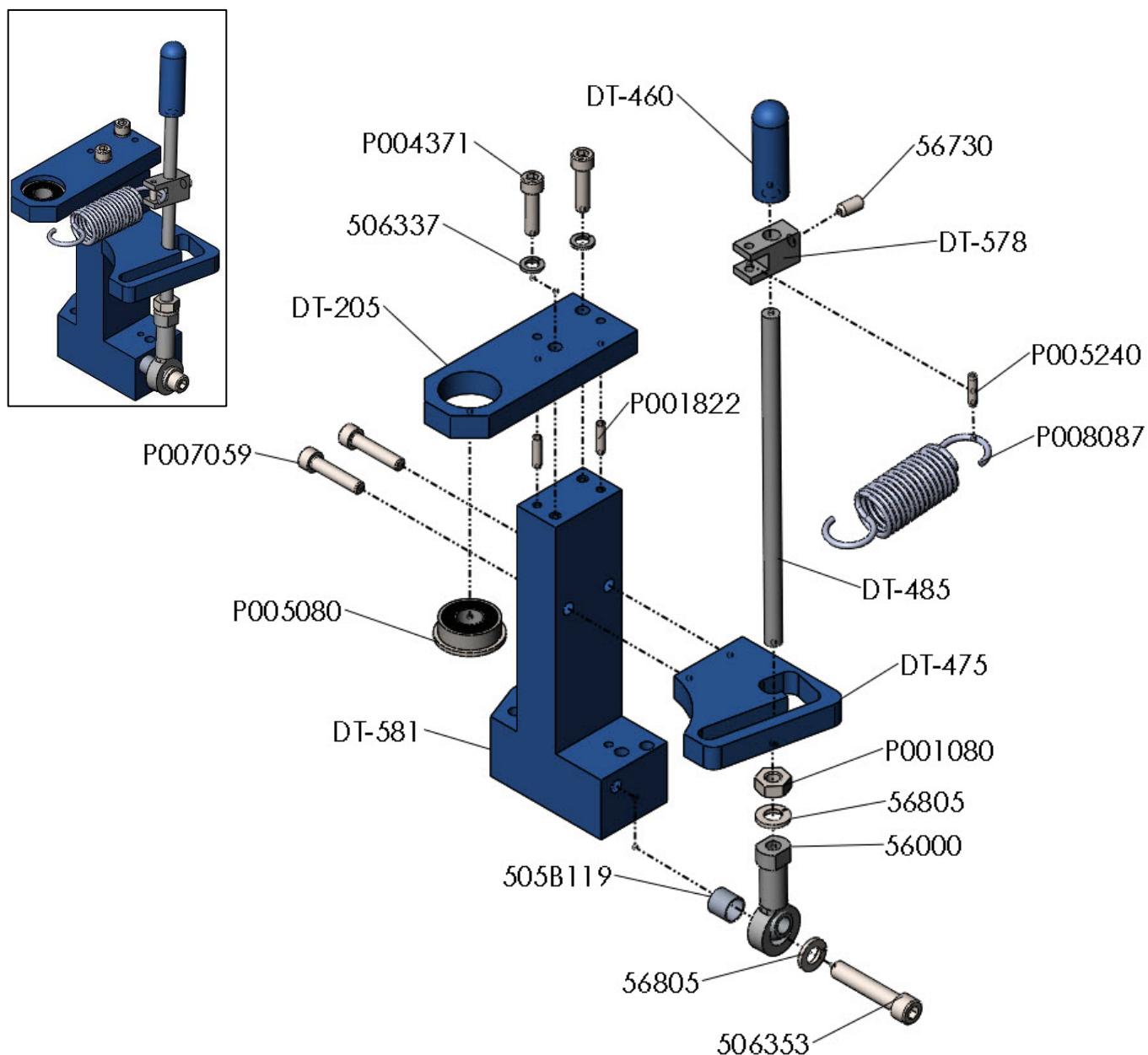
PART #	DESCRIPTION	QTY
ARF-022	Slip Clutch Washer	1
ARF-026	1 Way Clutch Bearing	1
DT-170	Material Drive Wheel	1
DT-175	Clutch Shaft	1
DT-190	Brake Bracket	1
P005025	Urethane Drive Wheel	1
P005072	1/2" Washer	1
P005073	3/4" Washer	2
P005074	3/4" Thrust Roller Bearing	1
P005076	0.20 X 1/2" X 3/4 Shim	1
P005077	3/4" Retaining Ring	1
P005079	3/16 X 1-1/2 Roll Pin	1
P005081	Clutch Spring	1
P008039	Esna Nut 1/2-20	1

## CUTTER MOUNTING ASSEMBLY (A901035)



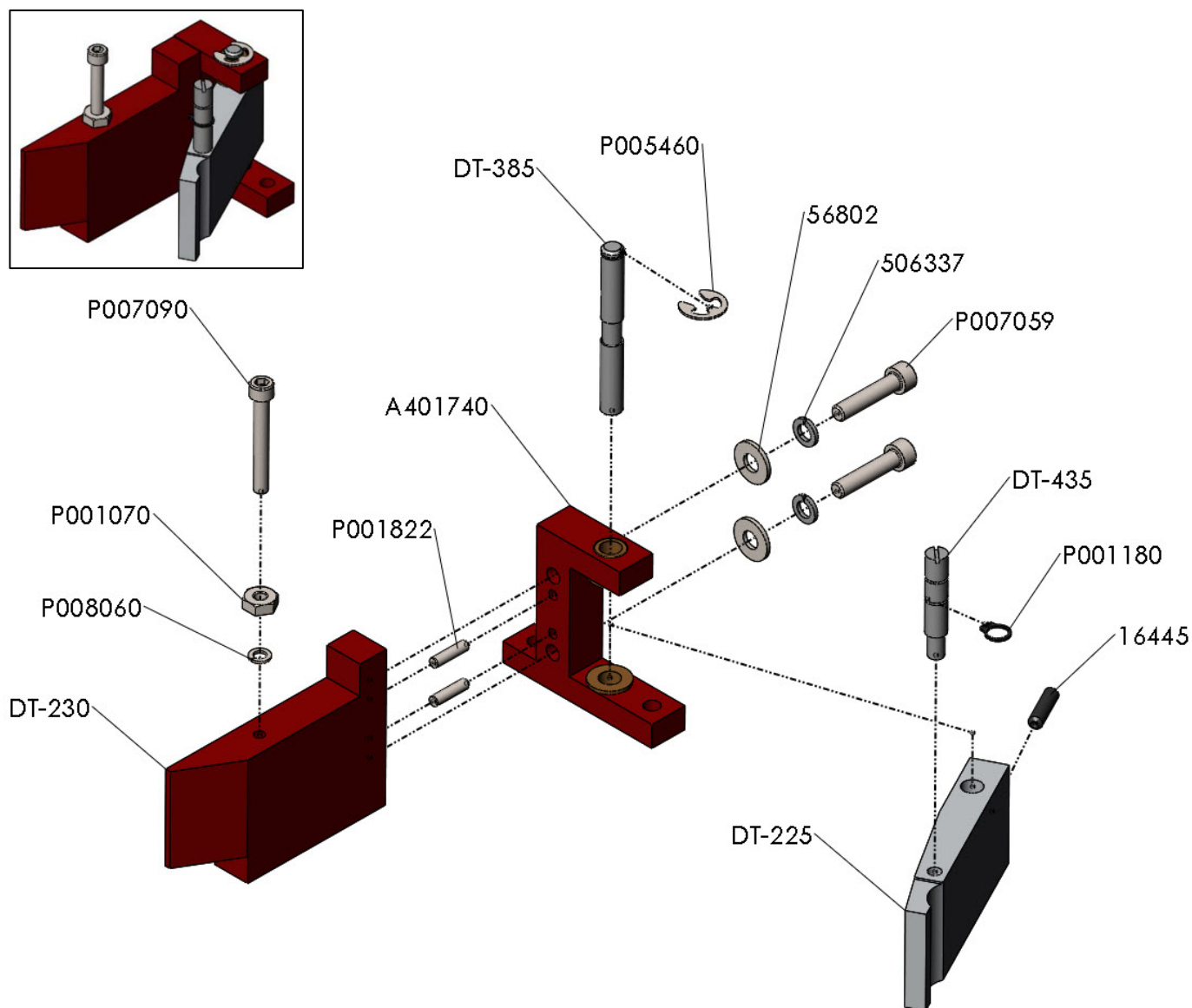
PART #	DESCRIPTION	QTY	PART #	DESCRIPTION	QTY
506337	#10 Split Lock Washer	2	P004368	4-40 X 1/4 Socket Head Cap Screw	2
DT-110	Rotary Cutter	1	P004370	6-32 X 3/8 Socket Head Cap Screw	2
DT-115	Rotary Anvil Cutter	1	P004706	8-32 X 1"Socket Head Cap Screw	1
DT-147	Inner Anvil Guide	1	P004711	8-32 X 3/4 Socket Head Cap Screw	4
DT-150	Cutter Shaft	1	P005065	8-32 X 1/2" Socket Head Cap Screw	8
DT-155	Pivot Cutter Block	1	P005080	Small Flanged Bearing	2
DT-210	Cutter Block	1	P005088	Disc Spring	1
DT-270	Pivot Cutter	1	P006701	10-32 X 3/8 Socket Head Cap Screw	2
DT-315	Front Exit Guide	1	P008039	3/8-16 Nylon Insert Hex Nut	1
DT-321	Exit Guide Bracket	1	P008060	#8 Split Washer	9

## CLUTCH LEVER MOUNT ASSEMBLY (A901040)



PART #	DESCRIPTION	QTY	PART #	DESCRIPTION	QTY
505B119	Spacer	1	DT-578	Idler Spring Mount	1
56000	Bearing Rod End	1	DT-581	Riser block	1
56730	10-32 X 3/8 HEX SOCKET	1	P001080	1/4 - 20 Hex Nut	1
56805	1/4 Split Lock Washer	2	P001822	1/8 X 1/2 Dowel Pin	2
506337	#10 Split Lock Washer	2	P004371	10-32 X 3/4 Socket Head Cap Screw	2
506353	1/4-20 X 1 1/4 Socket Hex	1	P005080	Small Flanged Bearing	1
DT-205	Upper Bearing Plate	1	P005240	1/8 X 1/2 Roll Pin	1
DT-460	Idler Pivot Lever	1	P007059	10-32 X 7/8 Socket Head Cap Screw	2
DT-475	Pivot Lever Guide	1	P008087	Wire Drive Spring	1
DT-485	Tension Spring Lever	1			

## CLAMP ASSEMBLY (A901065)



PART #	DESCRIPTION	QTY	PART #	DESCRIPTION	QTY
16445	8-32 x 5/8" Set Screw	1	P001070	8-32 Hex Nut	1
56802	#10 Flat Washer	2	P001180	1/4 External Retaining Ring	1
506337	#10 Split Lock Washer	2	P001822	1/8 X 1/2 Dowel Pin	2
A401740	Pivot Clamp Bracket w/ A	1	P005460	1/4" External "E" Retaining Ring	1
DT-225	Clamp Pivot	1	P007059	10-32 X 7/8 Socket Head Cap Screw	2
DT-230	Base Clamp	1	P007090	8-32 X 1-1/4 Socket Head Cap Screw	1
DT-385	Clamp Shaft	1	P008060	#8 Split Washer	1
DT-435	Post Clamp	1			

## TROUBLE SHOOTING

### Technicians and Web Based Support Available:

**7:00am to 3:00pm** (Pacific Standard Time)

**Please call Plas-Ties Technical Support at**

**(800) 854-0137 ext. 248**

**Or email: [Techsupport@plasties.com](mailto:Techsupport@plasties.com)**

Plas-Ties provides video chat options via Apple and Android Smartphone devices or Skype.

#### 7. What material can I use?

- **Extra Light**      Single 27 Gauge Plastic or Paper Material provides a softer tie  
(Example: Fiber Optic Wire)
- **Light**              Single 24 Gauge Plastic or Paper Material
- **Medium Heavy**   Split 24 Gauge Paper Material provides a more rigid tie (50 ft Power Cord)
- **Heavy**              Split 24 Gauge Paper Material provides a more rigid tie (50 ft Power Cord)

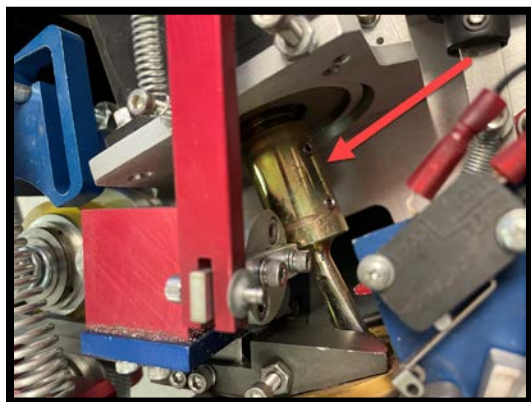


## Clearing Jams on your XLS

1) You will need a pair of needle-nose pliers and wire cutters to clear a jam.



2) For your safety, please turn off the machine. The twister head rotates freely in both off and on position (See image below pointing to the twister head)



3) Use the needle-nose pliers to pull the jammed material out of machine. With machine off, rotate twister to free up jammed material. Twister will index to home position upon actuation of next tie cycle.



4) Turn on machine and test. With additional help with jamming, please contact tech support.