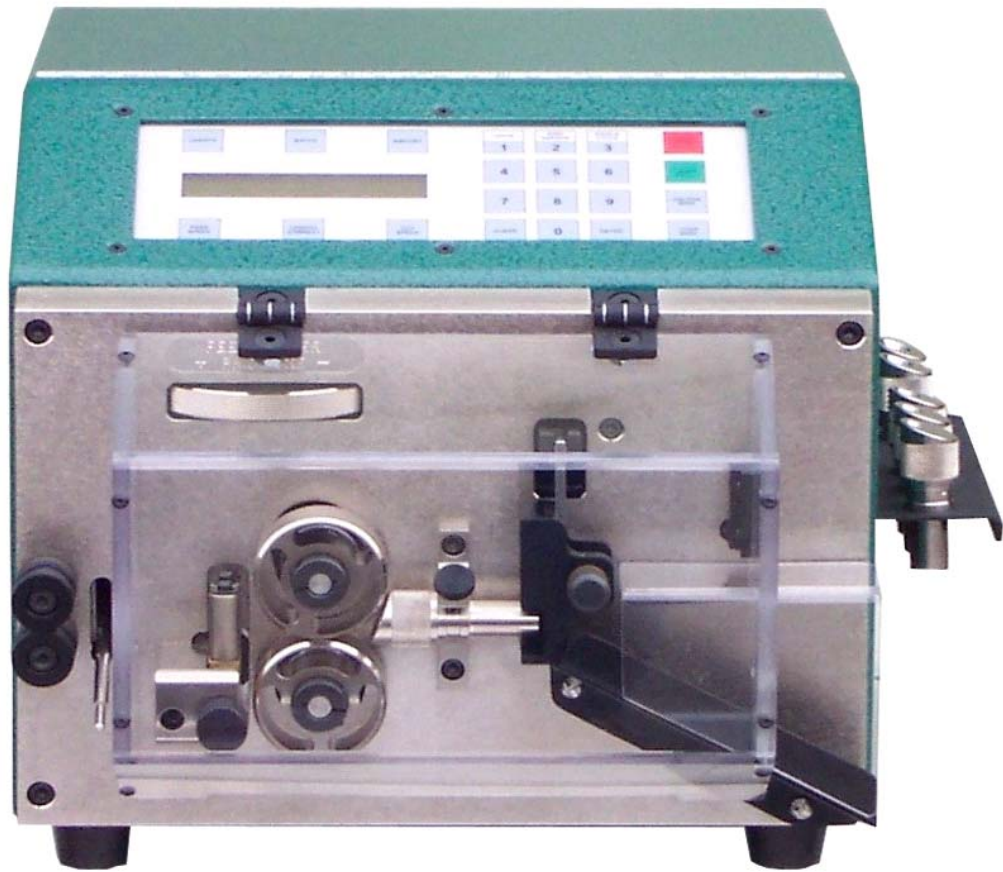




110 Fairgrounds Drive • P.O. Box 188 • Manlius, NY 13104-0188 USA • 315.682.9176 • FAX: 315.682.9160

# OPERATOR'S MANUAL



## Model 33 Compu-Cut<sup>®</sup> Wire & Tubing Cutter

PRODUCTION WIRE PROCESSING EQUIPMENT

# CARPENTER MODEL 33 COMPU-CUT

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# CARPENTER MODEL 33 COMPU-CUT

## INTRODUCTION

Thank you for choosing Carpenter Mfg. Co. Inc. Wire Processing Equipment.  
For over 50 years Carpenter has been a leader in  
Wire Processing Technology and Service.  
Our desire has always been to bring you reliable products.  
We look forward to a long healthy relationship with you and our company.

The Model 33 can process a wide range of cables as referenced on the following page.

These processing specifications are based upon the  
most commonly manufactured cables.

Special applications may arise with cables that are  
within the specification limits of the machine but are very difficult  
or unsuccessful to process.

Likewise, cables that exceed the specified limits  
of the machine can sometimes be processed.

Because there are many variables involved in Wire Processing  
we strongly recommend a free Wire Evaluation at our factory  
followed by a demonstration from a Carpenter representative  
to insure the ultimate success of your Wire Processing Application.

This operating manual explains how to operate  
the Model 33 as well as some troubleshooting tips.

To ensure the best performance of your machine,  
read this manual carefully until you familiarize yourself  
thoroughly with its operation and features.

After you have read through the manual, keep it available for reference.

Use this manual as a quick and handy reference  
tool for clarifying any questions that may arise.

If you have any questions about this  
machine or service please let us know.

Our phone number is 315.682.9176, fax number 315.682.9160.

Carefully unpack the Carpenter Model 33.

We recommend that you keep the original box and packaging  
as it will protect the machine for future transportation if necessary.

## **IMPORTANT NOTICE**

The products in this shipment left our facility in good working condition. Their safe delivery is the responsibility of the carrier that delivered this shipment to you.

Our stated shipping terms are F.O.B. our facility at 110 Fairgrounds Drive, Manlius, NY 13104.

According to applicable laws, the responsibility for this shipment was transferred to you as soon as the carrier accepted the goods at our warehouse.

If concealed damage is discovered after unpacking this shipment, you must submit a damaged freight claim with the carrier.

Carpenter Mfg. Co., Inc. cannot submit your claim for you.

In order for you to collect for concealed damage, the carrier must be notified with 5 days of the date you receive this shipment.

You must leave the damaged items and packing material as is (i.e. return all merchandise and all packing material to the shipping container) until the claim has been inspected by the carrier.

Also, the carrier will not accept a claim if the goods have been moved from the point of the carriers delivery to another street address.

If you have any questions or problems, please give us a call at (315) 682-9176.

# **CAUTION**

**This equipment comes equipped with a LEXAN Safety Guard, containing a safety interlock switch. The machine will not operate unless the guard is in the closed position.**

## **\*\*IMPORTANT\*\***

**Do not attempt to defeat the function or purpose of the safety interlock switch. Serious injury to the operators' eyes, fingers or other body parts may result from attempts to operate this equipment with the safety guard in the raised position.**

**CARPENTER MODEL 33 COMPU-CUT**

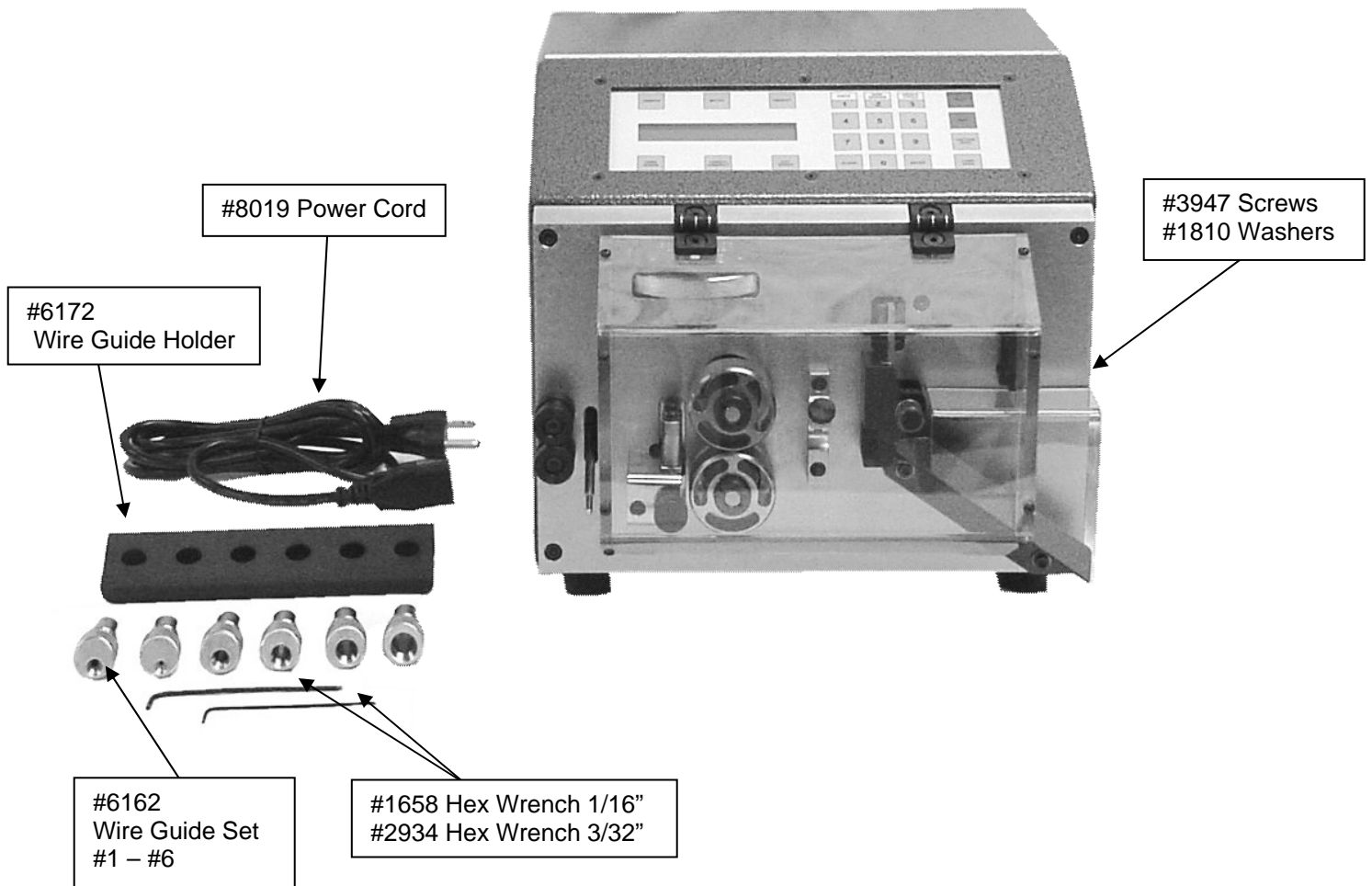
# MACHINE CONTENTS

## CONTENTS

Machine comes complete with the following:

- 1pc. **#8019** Power Cord
- 6pcs. **#6162** Wire Guide Set #1- #6
- 1pc. **#6172** Wire Guide Holder
- 1pc. **#1658** 1/16" Hex Wrench
- 1pc. **#2934** 3/32" Hex Wrench
- 1pc. Operators Manual

**PLEASE REFER TO PAGE 6 FOR INSTALLATION PROCEDURES**



## CARPENTER MODEL 33 COMPU-CUT

# INSTALLATION INSTRUCTIONS

## SAFETY GUARDING

The Model 33 comes equipped with a LEXAN guard containing a safety interlock switch. The machine will not run unless the #6175 Safety Guard is in the CLOSED position. **\*\*IMPORTANT\*\* DO NOT ATTEMPT TO DEFEAT THE FUNCTION OR PURPOSE OF THE SAFETY INTERLOCK SWITCH. SERIOUS INJURY TO THE OPERATORS EYES, FINGERS OR OTHER BODY PARTS MAY RESULT FROM ATTEMPTS TO OPERATE THE MODEL 33 WITH THE SAFETY GUARD IN THE RAISED POSITION.**

## WIRE GUIDE HOLDER

The Model 33 comes equipped with #6172 Wire Guide Holder. Install holder to the right side of the cabinet with (2) #3947 Screws and (2) #1810 Washers. After installation place the Wire Guides into the holes.

## CARPENTER MODEL 33 COMPU-CUT

**\*\*IMPORTANT\*\***

**PLEASE READ ENTIRE INSTRUCTIONS BEFORE OPERATING MACHINE**

**APPLICATIONS**

The Model 33 COMPU-CUT is designed to measure and cut solid wire, stranded wire, multi conductor cable, flat cable and plastic tubing.

NOTE: A motorized Prefeed, Carpenter Model 56A or 58A, may be necessary to assist the Model 33.

**SPECIFICATIONS**

ELECTRICAL CONNECTION	85-264 VAC, 47-63 Hz Automatic Switching
MAIN FUSES	2 - 5 x 20mm 5AMP Fast Action
MAXIMUM CABLE DIAMETER	.375"
FLAT CABLE	.375"
CUT LENGTH	0.01 through 9,999.99inches or 0.2 through 253,999mm
QUANTITY	1 to 999,999 pcs.
UNIT OF MEASURE	mm or Inches User selectable
TRANSPORT SPEEDS	4 Programmable
BLADE SPEEDS	4 Programmable
PROGRAM BATCHING	999 Programs
DIMENSIONS	10.5"W x 10.0"H x 14.0"D (including safety guard)
WEIGHT	35 lbs. or 16 kg.

**PRODUCTION RATES**

<b>18 AWG Stranded Copper Wire</b>	
<b><u>LENGTH</u></b>	<b><u>CUT ONLY</u></b>
1/2"	15840 Pcs./Hr.
1"	14040 Pcs./Hr.
4"	9000 Pcs./Hr.
10"	6240 Pcs./Hr.
24"	3360 Pcs./Hr.

**CARPENTER MODEL 33 COMPU-CUT**



## SET-UP

### MACHINE SET-UP

Plug the female end of the Power Cord into the Power Entry Module, located on the left side of machine. Plug the male end into a proper electrical outlet. Turn on power switch.

### WIRE GUIDE SELECTION

The Model 33 comes equipped with six different **#6162** Wire Guides, **#1** - .064", **#2** - .125", **#3** - .188", **#4** - .250", **#5** - .312", **#6** - .377". Select the Wire Guide with the smallest inside diameter that slips freely over the outside diameter of the material to be processed. To change a Wire Guide simply loosen **#5459** Thumb Screw and remove guide. To replace, align the hole on the Wire Guide with the pin on the Guide Holder and retighten the Thumb Screw.

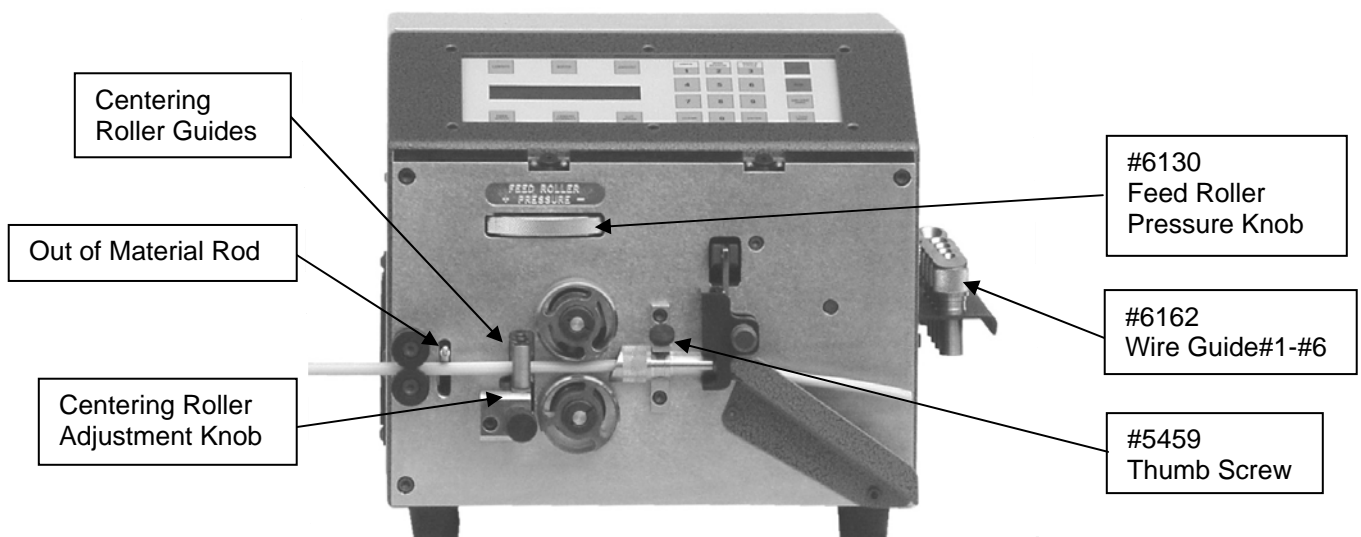
### LOADING MATERIAL

LOAD  
WIRE

Open the Feed Rollers far enough to allow the material to pass through freely. Feed the material underneath the Out of Material Rod, through the Centering Roller Guides and adjust the rollers up to the material but not touching the material. Continue to feed the material through the Feed Rollers and up to the entrance of the Wire Guide. Adjust the Feed Rollers until they make contact with the material. Select **LOAD WIRE** key and keep it pressed down until the material has been fed through the machine. Once the material has exited, release the switch. The machine is now ready to process your material.

### FEED ROLLER PRESSURE

Turn Feed Roller Pressure Knob **#6130** Clockwise (+) to apply roller pressure or Counter Clockwise (-) to release Feed Roller pressure. Do not apply excessive Feed Roller pressure. Feed Rollers only need to be snug to the material.



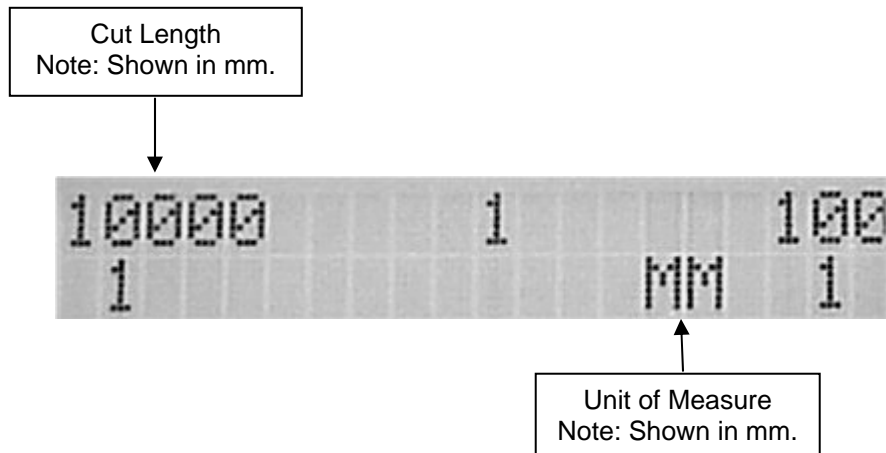
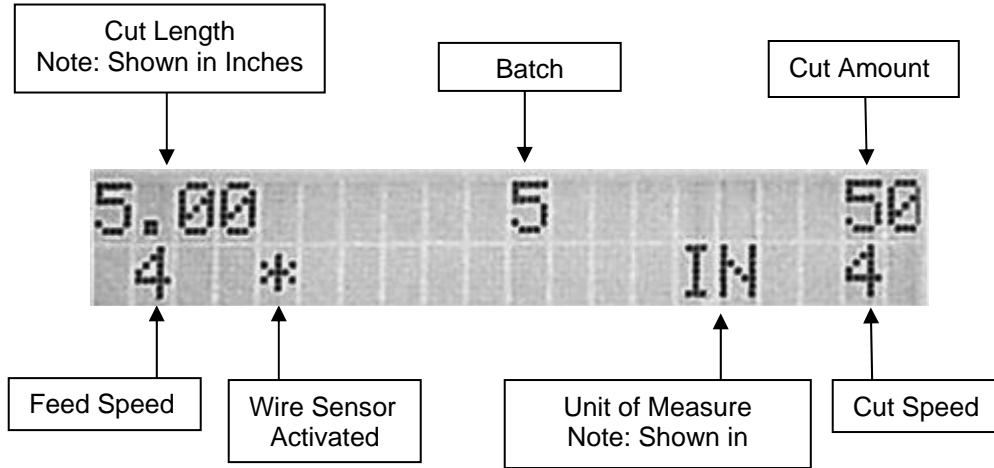
PLEASE NOTE THE MODEL 33 IS PICTURED WITHOUT THE SAFETY GUARD FOR DEMONSTRATION PURPOSES ONLY.

### CARPENTER MODEL 33 COMPU-CUT

# PROGRAMMING

## LCD DISPLAY

### SAMPLE DISPLAYS



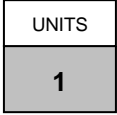
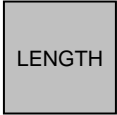




## CARPENTER MODEL 33 COMPU-CUT

# PROGRAMMING

cont.

**\*\*IMPORTANT\*\***

**DO NOT USE SHARP OBJECTS ON KEYBOARD SWITCHES. FINGER TIP PRESSURE IS SUFFICIENT.**

LCD DISPLAY PROMPT	ACTION REQUIRED
<b>COMPU-CUT 33 PLEASE PRESS ENTER</b>	Press <b>ENTER</b> .
	Press <b>UNITS</b> key to select the unit of measure desired. The Model 33 can be programmed in either Inches or Millimeters.
	Press <b>LENGTH</b> key. This value is the length of the pieces being processed. A small box will flash on the LCD screen indicating current setting. Enter dimension. Press <b>ENTER</b> .
	Press <b>AMOUNT</b> key. This value is the number of pieces to be processed. A small box will flash on the LCD screen indicating current setting. Enter number of pieces to process. Press <b>ENTER</b> . Note: To process your material in multiple batches follow the instructions for <b>BATCH</b> key.
	The batch feature allows you to process required pieces in a single or multiple batch(es). To select this feature press <b>BATCH</b> key.
<b>NUMBER OF BATCHES 1</b>	The machine will default to one batch. To accept this value Press <b>ENTER</b> . To process total amount in multiple batches, enter number of batches to process (up to 999) using the numerical keypad. Press <b>BATCH</b> .
<b>AMOUNT PER BATCH</b>	This screen will appear only if a number greater than one was entered above. Enter amount of pieces to process per batch. Press <b>ENTER</b> . NOTE: The Batching mode will override the original amount entered, therefore the number of pieces per batch times the number of batches does not need to total the original amount entered.
	Press <b>FEED SPEED</b> key. This value determines the speed of the material passing through the machine A small box will flash on the LCD screen indicating current setting. Select 1-slow, 2-slow/medium, 3-medium, 4 -fast. Press <b>ENTER</b> .
	Press <b>CUT SPEED</b> key. This value determines the speed of the blade cutting through the material. A small box will flash on the LCD screen indicating current setting. Select 1 slow, 2-3 medium, 4 fast Press <b>ENTER</b>

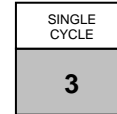
The Model 33 is now programmed to measure and cut to length your material. You are now ready to run a sample piece and check for initial set up quality. The following will assist you in processing your sample.

## CARPENTER MODEL 33 COMPU-CUT

# PROGRAMMING

cont.

## SINGLE CYCLE



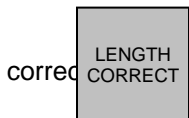
Select **SINGLE CYCLE** key to produce one complete sample piece to check for accuracy. If corrections are necessary for anything but overall length, then select the corresponding key on the Control Panel and make your adjustments. If length corrections are necessary then proceed to **LENGTH CORRECTION**.

## LENGTH CORRECTION

The Model 33 has a Length Correct feature that allows the operator to make adjustments from the preprogrammed length versus the actual sample length. Small variations are normal due to differences in material, tension, friction, wire diameter etc. If the sample material was not the correct length then select the **LENGTH CORRECT** key for adjustments. Note: You can only access this function by selecting **SINGLE CYCLE** or **RUN** first.

### LCD DISPLAY PROMPT

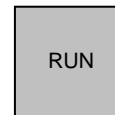
### ACTION REQUIRED



Press **LENGTH CORRECT** key. Measure the length of the sample piece produced; enter this value. Press **ENTER**. The Model 33 will automatically calculate the necessary. Run another Single Cycle, this sample should be the exact length you originally programmed. Note: This feature can only be used one time per program. If you find it necessary to utilize this feature more than once you must re-enter your length amount, press the **SINGLE CYCLE** or **RUN** key and then re-enter the **LENGTH CORRECT** amount.

Note: After you have made your corrections the Length Correct amount will not display on the LCD screen. To view this figure Press the **LENGTH** key. This will display the programmed amount and the **LENGTH CORRECT** amount. To exit this screen without changing your data Press **ENTER**.

## RUN PROGRAM



After you have produced a satisfactory sample piece and all settings are correct press **RUN**. This will process your current program.

## STOP PROGRAM



If at any time you need to stop your processing press **STOP**.

## UNLOADING MATERIAL



Unload material by pressing the **UNLOAD WIRE** key. Material will automatically feed backwards through machine as long as the switch is depressed.

## CARPENTER MODEL 33 COMPU-CUT

# PROGRAMMING

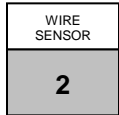
cont.

## WIRE SENSOR

The Model 33 comes with a Wire Sensor/Out of Material switch. You may find it necessary to turn the sensor off when processing light gauge/weight material that can not support the Out of Material Rod. If the sensor is activated the Model 33 will automatically shut off when it runs out of material. If the sensor is not activated the machine will continue to run and finish the current program until programmed amount reaches zero. You may choose to turn this option on or off.

### LCD DISPLAY PROMPT

### ACTION REQUIRED



Press **WIRE SENSOR** key to activate or deactivate.  
When the Wire Sensor function is ON an \* will display on LCD screen.

# CARPENTER MODEL 33 COMPU-CUT

## **MAINTENANCE PROCEDURES**

### **SLUG REMOVAL**

To remove slugs from the blades and surrounding areas it is suggested to use a small bristle brush.

### **ROLLER CHANGE OR REMOVAL**

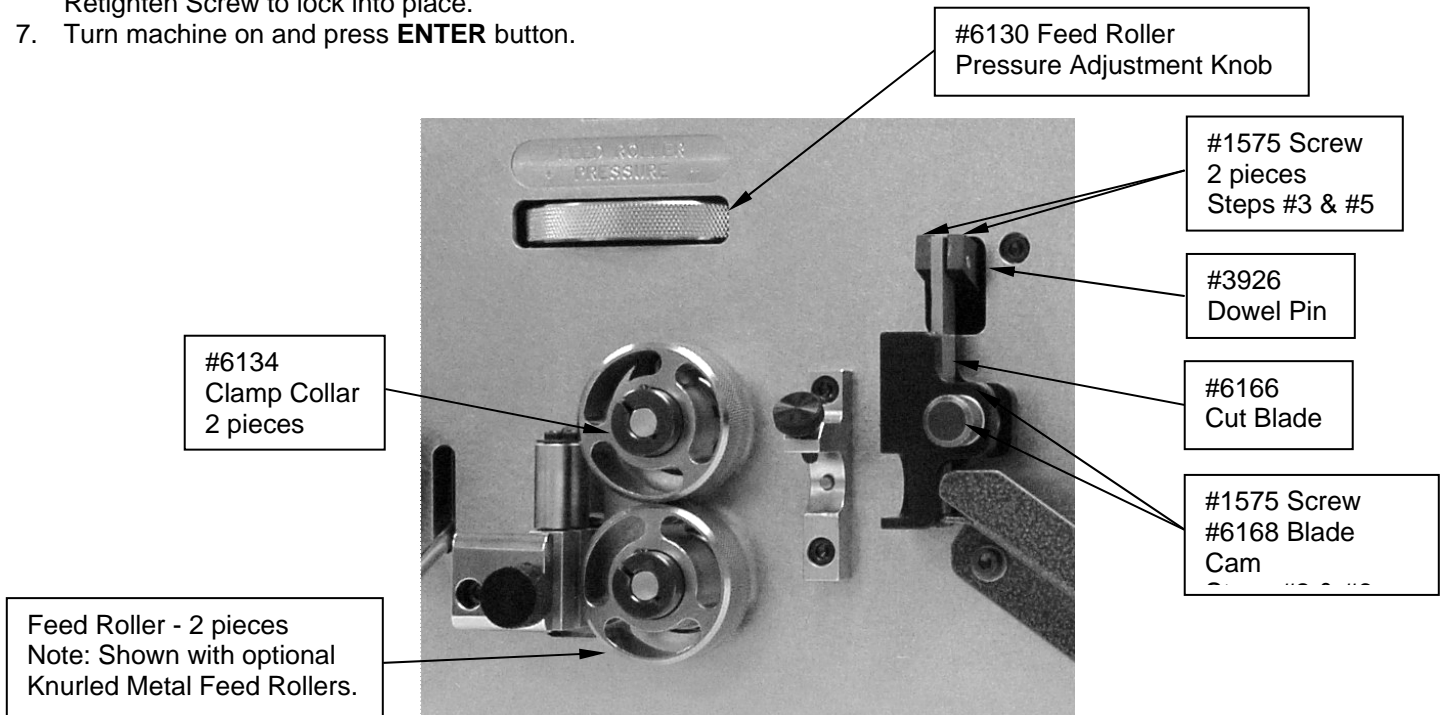
1. Turn machine off and unplug.
  2. Separate Rollers via the **#6130** Feed Roller Pressure Adjustment Knob.
  3. Use **#2934** 3/32" Hex Wrench to remove **#6134** Clamp Collar and then remove Feed Rollers.
- Reverse procedure to reinstall

### **BLADE LUBRICATION**

THE BLADES ON THE MODEL 33 WILL REQUIRE PERIODIC LUBRICATION. To reduce the chance of premature wear on the blades, it is recommended to remove, clean and relubricate them as needed. Application of a Teflon Impregnated Grease is recommended to the contact areas of each blade. Please refer to BLADE CHANGE below for removal / installation instructions.

### **BLADE CHANGE**

1. Turn machine off and unplug.
2. Use **#1658** 1/16" Hex Wrench to loosen **#1575** Screw. Turn **#6168** Blade Cam clockwise to remove pressure on the blade.
3. Use **#1658** 1/16" Hex Wrench to loosen 2 pieces **#1575** Screw, then remove **#3926** Dowel Pin. Remove **#6166** Cut Blade.
4. Brush all components clean. Apply a light coating of a general purpose grease to the flat side of the new blade.
5. Slide new blade into position with the flat side facing the left side of the machine. Insert Dowel Pin and tighten 2 Screws.
6. Turn the Blade Cam counterclockwise to apply light pressure to the blade. Pressure should be just snug not to tight. Retighten Screw to lock into place.
7. Turn machine on and press **ENTER** button.



# CARPENTER MODEL 33 COMPU-CUT

## TROUBLE SHOOTING

### KEY ELEMENTS FOR TROUBLE FREE OPERATION

Make certain:

- Unit is plugged into a proper electrical outlet.
- Unit is turned on.
- Roller Pressure is adjusted properly.
- Correct Wire Guide is being used.
- Data entered is correct and accurate.
- Prefeed is being used if required.

#### **COMMON PROBLEMS**

#### **SOLUTIONS**

---

Display reads: *** <b>BLADE ERROR</b> *** <b>PLEASE PRESS ENTER</b>	<ol style="list-style-type: none"><li>1. Check blade speed and select a slower cut speed.</li><li>2. May have exceeded cutting limits of machine.</li></ol>
Length Inaccuracies	<ol style="list-style-type: none"><li>1. Check feed speed.</li><li>2. Check Roller pressure. Excessive Roller pressure will cause the material to serpentine and the overall lengths will be long. Marginal Roller pressure will cause the material to slip and overall lengths will be short.</li><li>3. Verify length setting.</li><li>4. Motorized Prefeed required?</li></ol>
Material Jams	<ol style="list-style-type: none"><li>1. Check for proper Wire Guide.</li><li>2. Check Roller pressure.</li><li>3. Check feed speed.</li><li>4. Check for possible material splice</li><li>5. Check for foreign material / debris.</li></ol>
Can Not Load or Feed Material	<ol style="list-style-type: none"><li>1. Check Wire Guide.</li><li>2. Check for excessive roller pressure.</li><li>3. Check feed speed.</li></ol>

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# CARPENTER MODEL 33 COMPU-CUT

## RECOMMENDED SPARE PARTS

2ea. **#6147** Urethane Feed Roller  
1ea. **#6166** Cut Blade  
1ea. **#6167** Fixed Blade

## OPTIONAL EQUIPMENT

**#6149** Knurled Metal Feed Rollers  
**#8393** Single Plane Wire Straightener  
**#8836** Wire Straightener Mounting Bracket



## CARPENTER MODEL 33 COMPU-CUT

### **WARRANTY**

Carpenter Mfg. Co., Inc. manufactures its products to be free from defects in materials and workmanship. Should any defect occur within 1 year after shipment, Carpenter Mfg. Co., Inc. will at its option, exchange or repair the defective device.

Repairs or adjustments to equipment under warranty can be performed at our factory or at the customer location, at the option of Carpenter Mfg. Co., Inc. In most cases a 1-2 day turn around time will be necessary to repair equipment at our facility. When equipment is returned to our factory for repair or replacement, freight charges will be borne by the customer. Repaired or replaced equipment will be returned at Carpenter's expense via U.P.S. ground service. If alternate shipping is requested by the customer, the difference in shipping charges will be billed to the customer.

This is a limited warranty and is in lieu of all other representations and expressed and implied warranties (including the implied warranties of merchantability and fitness for use.) Under no circumstances shall Carpenter Mfg. Co., Inc. be liable for any incidental or consequential property damages or losses subsequent to misuse or improper maintenance of this equipment.

#### **Not covered by this warranty are:**

- Consumable parts (blades, Rollers, guides, springs, inserts, stripping wheels, etc.)
- Cosmetic problems (nicks, scratches, etc.)
- Damages caused by any repairs or modifications by unauthorized personnel
- Abuse
- Damage caused by shipping
- Damage caused by environmental and/or atmospheric conditions.

#### **This warranty covers the following machine:**

Model #: \_\_\_\_\_

Shipping Date: \_\_\_\_\_

Software Version: \_\_\_\_\_