

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

OPERATOR'S MANUAL



Model 42C Compu-Cut® Flat Cable, Wire & Tubing Cutter

PRODUCTION WIRE PROCESSING EQUIPMENT

IMPORTANT

THIS MACHINE CONTAINS PNEUMATIC COMPONENTS.

IT IS EXTREMELY IMPORTANT THIS MACHINE IS CONNECTED TO A CLEAN, FILTERED AND LUBRICATED AIR SUPPLY.

Please refer to Page 22 (Maintenance Procedures) of this manual for specifications regarding the use of an automatic inline oilier.

CONTAMINATED AIR MAY CAUSE THE MACHINE TO MALFUNTION.

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Phone: 315-682-9176 Fax: 315-682-9160
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INTRODUCTION

Thank you for choosing Carpenter Mfg. Co. Inc. Wire Processing Equipment. For over 55 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 42C 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 42C 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,

Website: www.carpentermfg.com, E-mail: wire@carpentermfg.com.

Carefully unpack the Carpenter Model 42C.

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.

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CAUTION

This equipment comes equipped with a LEXAN safety guard and a safety Exit Chute; each containing a safety interlock switch.

The machine will not operate unless the safety guard is in the closed position and the Exit Chute is attached to the Model 42C.

IMPORTANT

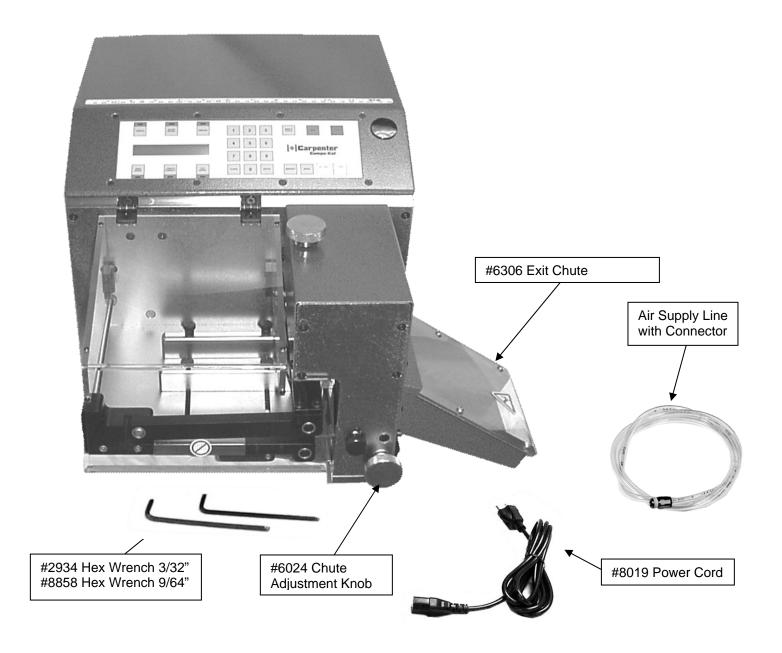
Do not attempt to defeat the function or purpose of these safety interlock switches. Serious injury to the operators' eyes, fingers or other body parts may result from attempts to operate this equipment with the safety guard in the raised position.

MACHINE CONTENTS

Machine supplied complete with the following:

1pc. Operators Manual
1pc. #8019 Power Cord
1pc. #2934 3/32" Hex Wrench
1pc. #8858 9/64" Hex Wrench
1pc. #6306 Exit Chute Assembly
1pc. #6024 Chute Adjustment Knob
1pc. Air Supply Line with Connector

PLEASE REFER TO PAGE 7 FOR INSTALLATION PROCEDURES



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SAFETY GUARDING INSTALLATION

SAFETY GUARDING

The Model 42C comes equipped with LEXAN guarding containing safety interlock switches. The machine will not run unless the guards are in the closed/proper positions. **IMPORTANT** DO NOT ATTEMPT TO DEFEAT THE FUNCTION OR PURPOSE OF THE SAFETY INTERLOCK SWITCHES. SERIOUS INJURY TO THE OPERATOR'S EYES, FINGERS OR OTHER BODY PARTS MAY RESULT FROM ATTEMPTS TO OPERATE THE MODEL 42C WITH THE SAFETY GUARD(S) IN THE RAISED/IMPROPER POSITION(S).

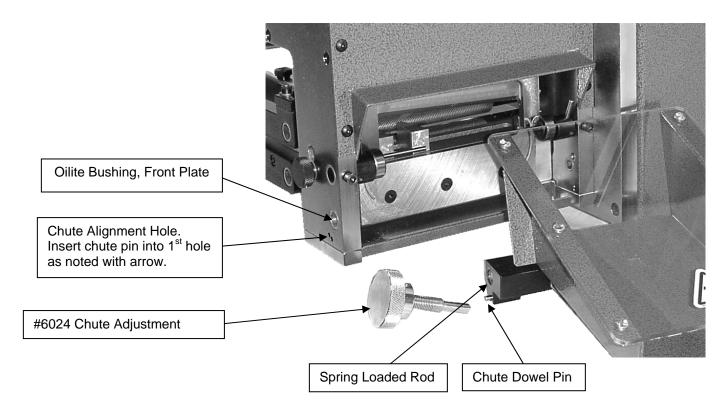
SAFETY GUARD

The Model 42C comes equipped with a LEXAN guard covering the Material Feed Platform. This guard contains a safety interlock switch. The machine will not run unless the **#6075** Safety Guard is in the CLOSED position.

EXIT CHUTE

The Model 42C comes equipped with an Exit Chute Safety Guard. This Chute activates a safety interlock switch. The machine will not operate without the Chute in place. To install the Exit Chute insert the Chute Dowel Pin into the 1st hole located on the Front Plate. Insert #6024 Chute Adjustment Knob into the Oilite Bushing above the dowel pin holes. Push the Knob and the Chute toward the Face Plate. This will engage the Spring Loaded Rod under the Chute. Line up rod with Oilite Bushing on the Back Plate. Push and turn Knob clockwise until the threads catch, then lock into position.

NOTE: NEVER PICK UP MACHINE BY USING THE EXIT CHUTE AS A HANDLE



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IMPORTANT

PLEASE READ ENTIRE INSTRUCTIONS BEFORE OPERATING MACHINE

The Model 42C COMPU-CUT is designed to measure and cut to length solid wire, stranded wire, multi conductor cable, flat cable, plastic and shrink tubing.

NOTE: A motorized Prefeed, Carpenter Model 56A or 58B, may be necessary to assist the Model 42C.

SPECIFICATIONS

ELECTRICAL CONNECTION 85-264 VAC, 47-63 Hz Automatic Switching

MAIN FUSES 2 - 5 x 20mm 5AMP Fast Action

MAXIMUM CABLE DIAMETER 1" or 25.4mm FLAT CABLE 4" or 101.6mm

CUT LENGTH 0.01 to 9,999.99 inches or 0.2 through 99,999.9mm(longer lengths obtainable in inches)

QUANTITY 1 to 999,999 pcs.

UNIT OF MEASURE mm or Inches User selectable

TRANSPORT SPEEDS 5 Programmable **MEMORY** 850 Programs PROGRAM STACKING 5 Programs 999 Programs PROGRAM BATCHING User Programmable PASSWORD PROTECTION

13.75"W x 11"H x 20.5"D (without Exit Chute) **DIMENSIONS**

WEIGHT 64 lbs. or 29 kg.

AIR SUPPLY 80-100 PSI or 5.4-6.2 BAR **CLEAN, FILTERED AND LUBRICATED AIR ONLY**

INLINE OILIER See Page 22 for specifications

MAXIMUM PRODUCTION RATES

LENGTH	CUT
1/2"	14760 pcs./hr.
1"	13140 pcs./hr.
2"	11280 pcs./hr.
4"	8880 pcs./hr.
6"	7440 pcs./hr.
8"	6360 pcs./hr.
10"	5520 pcs./hr.
20"	3360 pcs./hr.
40"	1920 pcs./hr.
60"	1320 pcs./hr.
80"	1020 pcs./hr.
100"	780 pcs./hr.
These are approximate results with an air setting of 80 PSI	

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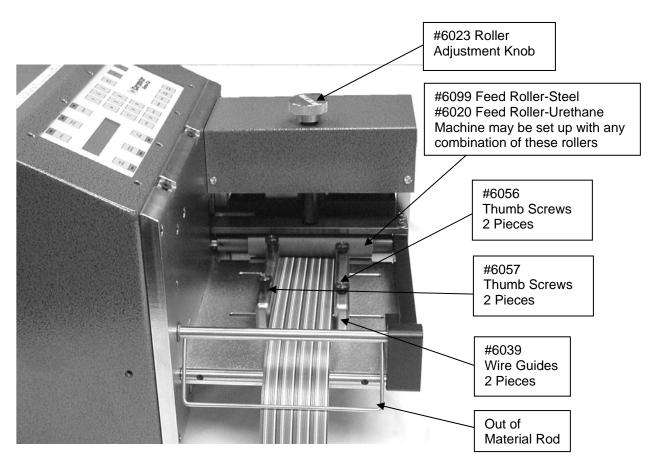
SET UP

MACHINE SET UP

Insert air line into the straight connector located on the back panel of the machine. Connect opposite end to air supply. Make certain the air supply is clean and filtered with an attached inline oilier (refer to Page 22 for specifications). The absence of an inline oilier may result in failure of the pneumatic cylinder that operates the Blade Mechanism. Plug female end of Power Cord into the Power Entry Module, located on left side of machine. Plug the male end into a proper electrical outlet. Turn on power switch.

WIRE GUIDES

The Model 42C comes equipped with two #6039 Wire Guides. These Wire Guides are intended to assist in the guidance of the material along the feed platform. Make sure the guides are not to snug against the material allowing free movement. To adjust the Wire Guides simply loosen #6056 & #6057 Thumb Screws. After adjustment securely retighten the Thumb Screws.



PLEASE NOTE THE MODEL 42C IS PICTURED WITHOUT THE SAFETY GUARD FOR DEMONSTRATION PURPOSES ONLY.

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SET UP

cont.

MATERIAL SET UP

Open the Safety Guard. Loosen and separate the Wire Guides. Open the Feed Rollers, using **#6023** Roller Adjustment Knob, to a position larger than the diameter of the material being processed. Place wire underneath Out of Material Rod and through the Wire Guides, making sure that the memory or curvature is against the Feed Platform. Feed material through the Feed Rollers and blade opening. Close the Feed Rollers, using **#6023** Roller Adjustment Knob, until the material is just snug. Adjust the Wire Guides to the material allowing approximately 1/64" clearance on both sides of the material. **NOTE**: It is very important to check the clearance on the Exit Chute side of the Wire Guides. Some materials (ex. shrink tubing) may collapse slightly from the pressure of the Feed Rollers and reduce the clearance on this end of the guides. This may result in a material jam during processing. If necessary readjust Wire Guides just enough to allow for proper clearance.

NOTE: FOR MAXIMUM BLADE EFFICIENCY LOAD THE MATERIAL THROUGH THE CENTER OF THE BLADES.

MATERIAL SUPPORT ROD

The Model 42C comes equipped with an adjustable **#6523** Material Support Rod. This feature is designed to aid in the tracking of smaller diameter materials from 32AWG to .375"diameter. Use of the Material Support Rod is recommended due to excessive curvature or memory associated with processing smaller diameter materials. The Material Support Rod will keep the material against the Feed Platform and avoid it from curling back onto the rollers and causing a jam.

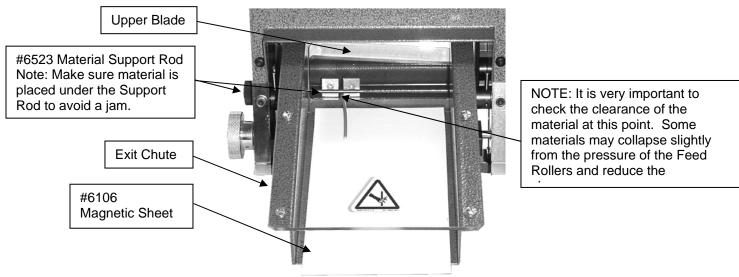
When using this feature make sure the threaded portion of the knob is threaded into the captured nut. Feed the material under the rod and adjust the assembly accordingly to keep material against the Feed Platform. Tighten into place.

When processing larger material, simply unthread the assembly and remove.

MAGNETIC SHEET

The Model 42C is supplied with a **#6106** Magnetic Sheet. This can be used when processing material 3/8" or shorter. Installation of the sheet covers the gap between the Exit Chute the Lower Blade. This allows the cut material to slide down the Exit Chute instead of falling between the chute and the blades.

Install the Magnetic Sheet by sliding it into the open end of the Exit Chute until it touches the Lower Blade. Run a Single Cycle. If the Upper Blade makes contact with the sheet, pull the sheet slightly away from the Lower Blade.

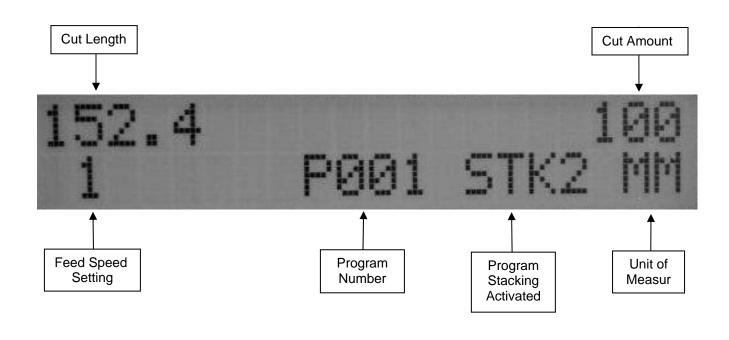


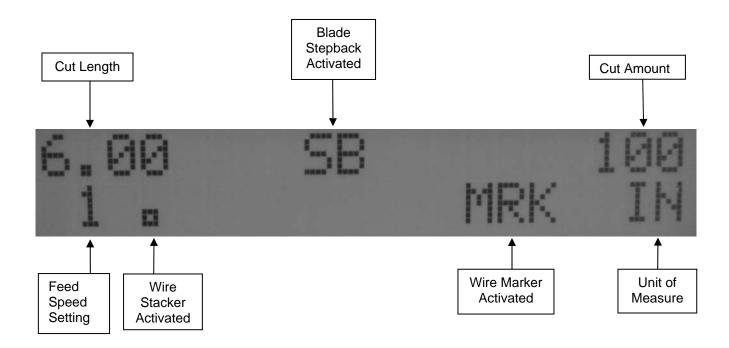
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LCD DISPLAY

SAMPLE DISPLAYS





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PROGRAMMING

IMPORTANT

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

LCD DISPLAY PROMPT	ACTION REQUIRED
COMPU-CUT 42C PLEASE PRESS ENTER	Press ENTER.
LENGTH	Press LENGTH key. This value is the length of the pieces being processed.
ENTER LENGTH TO CUT	Enter dimension. Press ENTER.
AMOUNT	Press AMOUNT key. This value is the number of wires to be processed. Also allows access to Multiple Batch Processing mode.
ENTER CURRENT AMOUNT	Enter number of pieces to process. Press ENTER.
BATCHES TO RUN 1	The machine will default to one batch. To process total amount in multiple batches, enter number of batches to process (up to 999) using numerical keypad. Press ENTER
AMOUNT PER BATCH	This screen will appear only if a number greater than one was entered above. Enter amount of pieces to process per batch. Press ENTER . 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.
FEED SPEED	Press FEED SPEED key. This value determines the speed of the material passing through the machine.
ENTER FEED SPEED FEED SPEED(1-5)=	Select 1-slow, 2-slow/medium, 3-medium, 4-medium/fast, 5-fast. Press ENTER.

The Model 42C is now programmed to measure and cut to length your material. You are now ready to run a sample piece and check for initial setup quality. The following will assist you in processing your sample.

SINGLE CYCLE



Select SINGLE CYCLE key to produce a sample piece to check for accuracy. This feature will cut off the end that is protruding through the blades from the setup then measure and cut a single piece. If corrections are necessary proceed to Length Correction for adjustments.

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PROGRAMMING

cont.

LENGTH CORRECTION



The Model 42C 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 wire was not the correct length select the **LENGTH CORRECTION** key for adjustments.

LCD DISPLAY PROMPT	ACTION REQUIRED
ENTER LENGTH CORRECT CORRECT=	Measure the length of the sample piece produced; enter this value for length. Press ENTER . The Model 42C will automatically calculate the correction necessary. The next sample should be the exact length you programmed.

The possible range of correction is +/- 10% of the overall wire length. If a value outside of this range is entered an error message will appear.

The length correct value may be changed multiple times but typically a single entry is all that is required if the sample wire was measured accurately and the data entered correctly.

RUN PROGRAM



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

STOP PROGRAM



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

UNIT OF MEASURE



The Model 42C can be programmed in either Millimeter or Inches by pressing the UNITS key.

LCD DISPLAY PROMPT	ACTION REQUIRED
CLEAR SELECTS UNITS	Press CLEAR key to select the unit of measure desired.
	Press ENTER.

RELOADING WIRE



The Model 42C has a load wire feature used to aid in the reloading of material during processing. Use this feature if you run out of material during processing and need to reload the machine using the current program. Make sure the material path is clear. Load the material under the Out of Material Rod, through the Wire Guides and up against the Feed Rollers. Press the LOAD key until the material has exited the machine. Press SINGLE CYCLE key to check your first piece or RUN key to continue processing.

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PROGRAMMING

cont.

UNLOADING WIRE



Unload material by pressing the UNLOAD key. Wire will automatically feed backwards through the machine. Press this key until the material has exited the Feed Rollers.

STORING PROGRAMS



The Model 42C will store up to 850 programs. You may access this function by pressing the **MEMORY** key.

LCD DISPLAY PROMPT	ACTION REQUIRED
PRESS 1 TO STORE PRESS 2 TO RECALL	Press 1 on numerical keypad.
ENTER MEMO	Enter up to any 3 digit program number. Press ENTER. The Model 42C will display DRY NUMBER program # and confirmed stored. Press ENTER . NOTE: If
you enter a # already	stored, the Model 42C will ask you to PRESS 1 TO OVERWRITE
OR PRESS CLEAR.	Enter 1 to overwrite the previously stored program or press CLEAR to keep
the	previously stored program. Press ENTER.

RECALLING PROGRAMS



You may access this function by pressing the **MEMORY** key.

LCD DISPLAY PROMPT	ACTION REQUIRED
PRESS 1 TO STORE PRESS 2 TO RECALL	Press 2 on numerical keypad.
ENTER MEMORY NUMBER	Enter the 3 digit stored program number. Press ENTER.

UNUSED PANEL KEYS



There is one unused key (GUIDE SETUP) on the Front Panel of the Model 42C. If this key is pressed at any time the following display will appear: NO DATA REQUIRED PLEASE PRESS ENTER. Press ENTER to exit this display.

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SPECIAL FEATURES



To access these features press the MENU key. Continue to press MENU to scroll through the options. To select a feature Press **ENTER** and follow appropriate instructions.

STEPBACK ON CUT

This feature allows the material being cut to move back away from the cutting blades after the cut has been completed. This feature may be needed when processing large diameter or thick material that may drag on the upper blade as it retracts.

LCD DISPLAY PROMPT	ACTION REQUIRED
CLEAR SELECTS ON/OFF WIRE STEPBACK:	Press CLEAR key to select ON or OFF. Press ENTER.

WIRE MARKER

Factory installed option. See page 18 for programming instructions after installation.

WIRE STACKER

Factory installed option. See page 20 for programming instructions after installation.

PROGRAM STACKING

The Model 42C offers a program stacking feature allowing you to stack up to 5 different programs for the same cable. This feature will only function on programs that are stored in memory

LCD DISPLAY PROMPT	ACTION REQUIRED
CLEAR SELECTS ON/OFF STACKING	Press CLEAR key to select mode. Press ENTER.
PLEASE ENTER FIRST PROGRAM NUMBER:	Enter first program number to stack. You may enter/stack up to 5 programs. Press ENTER.
ENTER AMOUNT	Enter amount to process. Press ENTER.

The Model 42C will repeat the above sequence for up to 5 program screens. On the screens you do not need to enter zero values for the prompts.

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SPECIAL FEATURES

PROGRAM STACKING CHANGOVER – MANUAL

This option will stop the machine and require the operator to press the **RUN** key at the completion of each program. When using this feature in conjunction with a Wire Marker the RUN key will need to be pressed twice. The first time will activate the Marker Initialization Cycle to set the Marker for the next stacked program. The second time will start processing your program.

LCD DISPLAY PROMPT	ACTION REQUIRED
PAUSE MODE: CLEAR TOGGLES CHOICE	Press CLEAR key to select MANUAL. Press ENTER. Press RUN to start 1 st program. Stacking appears on display as STK
ENTER RUNS NEXT OR CLEAR TO QUIT	Press ENTER to continue with the next program. Or Press CLEAR to quit. When you are ready to resume this stacking sequence the Model 42C will start up where it left off. At that time Press RUN .

The machine will stop at the end of the stacking sequence. You may also stop it at anytime by pressing **STOP**.

PROGRAM STACKING CHANGOVER – AUTOMATIC

This option will automatically process all stacked programs without operator assistance. When using this feature in conjunction with a Wire Marker, the Marker Initialization Cycle will automatically run after each stacked program. The Pause Time controls when the Initialization Cycle will occur at the completion of each stacked program. Once the Marker Initialization Cycle is complete the operator must press the RUN key to start processing the next stacked program.

LCD DISPLAY PROMPT	ACTION REQUIRED
PAUSE MODE: CLEAR TOGGLES CHOICE	Press CLEAR key to select AUTO. Press ENTER . Stacking appears on display as STK
PAUSE TIME: SEC ENTER PAUSE TIME	Enter a time value between 1-240 seconds. Press ENTER . Pause time between programs is the same for all programs. Press RUN .

The machine will stop at the end of the stacking sequence. You may also stop it at anytime by pressing STOP.

NOTE: When the stacked programs have finished running the LCD will read PROCESSING COMPLETE PLEASE PRESS ENTER. After pressing the ENTER key the LCD screen will read STK0 and AMOUNT 0. If you wish to rerun the exact same stacked programs again, press the RUN key. This will process the exact same stacked programs again.

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SPECIAL FEATURES

cont.

PASSWORD ON/OFF

The Model 42C comes equipped with a Password feature. When the password is activated the ability to change program data is prohibited.

LCD DISPLAY PROMPT	ACTION REQUIRED
CLEAR SELECTS ON/OFF PASSWORD:	Press CLEAR key to select mode. Note: If you select off menu will clear. Press ENTER .
ENTER PASSWORD	Enter factory set password "123". Press ENTER.

STORE NEW PASSWORD

This option will allow you to change the password at your discretion.

LCD DISPLAY PROMPT	ACTION REQUIRED	
ENTER OLD PASSWORD	Enter old password. Press ENTER.	
ENTER NEW PASSWORD	Enter desired password number up to 6 digits. Press ENTER.	

WIRE SENSOR

This key allows access to turn wire sensor (Out of Material Switch) ON/OFF. 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.

LCD DISPLAY PROMPT	ACTION REQUIRED
WIRE SENSOR ON/OFF	Press ENTER.
CLEAR SELECTS ON/OFF WIRE SENSOR: ON	Press the CLEAR key to select on or off function. Press ENTER.

REPRESENTATIVES

Factory use only.

<u>RESERVED</u> Factory use only.

BLADE CHANGE

See Page 21 for instructions.

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OPTIONAL FEATURES

WIRE MARKER

The Model 42C is capable of interfacing with various manufacturers of Hot Stamp Wire Marking units.

IMPORTANT

Wire

Wire Marker

Plug

Stacker Plug

Please read their operators manual before proceeding.

MACHINE SET-UP

- To activate interface between the Model 42C and Wire Marker, install exterior cable between both units. Plug receptacle on Model 42C is located on the back of the cabinet.
- To access Wire Marking program set-up press the **MENU** key.
- After Wire Marking mode is activated MRK will appear on the right side of the LCD display.
- All dimensions entered during set-up will correspond with the unit of measure that is programmed into the machine.

LCD DISPLAY PROMPT	ACTION REQUIRED	
WIRE MARKING	Press ENTER.	
CLEAR SELECTS ON/OFF WIRE MARKER:	Press clear key to select ON or OFF. Press ENTER.	
ENTER DWELL TIME SECONDS	**Refer to Wire Marker manufacturers operating manual for suggested settings. Enter dwell time using numeric keys. Press ENTER.	
ENTER MARKER OFFSET 0.00	With a tape measure, measure the distance from the center of the marking disc to the center of the blades on the Model 42C. Once measurement is made enter that amount using the numeric keys. Press ENTER.	
ENTER LEAD END MARK 0.00	This measurement is the distance from the leading end (right end) of the wire to the center of the mark on the wire. Enter distance amount using numeric keys. Maximum distance is (Wire Length/2). Press ENTER.	
ENTER TRAIL END MARK 0.00	This measurement is the distance from the trailing end (left end) of the wire to the center of the mark on the wire. Enter distance amount using numeric keys. Maximum distance is((Wire Length/2)20). Press ENTER.	
ENTER MARK SPACING 0.00	The Model 42C/Wire Marker system allows you to program continuous marking along the wire in addition to the end marking. To choose this option enter the distance between each marking along the wire. Minimum distance is 0.50" or 0.00"(off). Enter "0" to bypass this option. Press ENTER.	
RUN SINGLE CYCLE	Press either key to activate Marker Initialization Cycle. At this point the Model 42C and the attached marker will go into a setup cycle. The two units are now automatically synchronized to apply the marks in the locations along the wire as previously programmed. Run a test piece.	

Carefully measure the distance from the Leading End of the test piece to the center of the mark. If the measured dimension is not equal to the programmed Leading End Mark dimension, proceed to LEADING END MARK DISTANCE CORRECTION.

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OPTIONAL FEATURES

cont.

LEADING END MARK DISTANCE CORRECTION

BEFORE MAKING ANY LEADING END MARK CORRECTIONS MAKE SURE YOUR OVERALL LENGTH IS CORRECT FIRST; REFER TO PAGE 13, LENGTH CORRECTION.

- The MEASURED LEAD MARK screen will not display until after a sample piece has been run using the SINGLE CYCLE or RUN key.
- To access this screen press the MENU key and scroll through to WIRE MARKING. Press ENTER.
- Scroll through WIRE MARKING options pressing the ENTER key until the following is displayed, MEASURED LEAD
- Carefully measure from the Leading End of the cut piece to the center of the mark. If the measured dimension is different than the programmed Leading End Mark distance, proceed to instructions below.

LCD DISPLAY PROMPT	ACTION REQUIRED	
MEASURE LEAD MARK	Carefully, measure from the Leading End of the cut piece to the center of the mark. Enter this measured dimension. Press ENTER.	
RUN SINGLE CYCLE	Press either key to activate the Marker Initialization Cycle. When this cycle is complete the marks will have been shifted to their correct locations and normal processing may begin.	

NOTES:

A Marker Correction Value can only be entered once. If after running a second test piece you find the Marker Correction Value you entered is incorrect you must clear the previously entered correction value. To clear this value, run the following procedure. Press the Menu key and select Wire Marking. Scroll through the Wire Marking options until you come to the Measured Lead Mark screen. Press the CLEAR key, then the ENTER key. This will reset the correction value back to its original setting. Press the SINGLE CYCLE key, this will rerun the Marker Initialization cycle. When completed, press the **SINGLE CYCLE** key again. This will produce a test piece using the original programmed settings. On this test piece, carefully measure the distance from the leading end to the center of the mark and repeat the LCD Display Prompt Instructions above.

To turn marker option off, press MENU and WIRE MARKER will appear on screen. Press CLEAR key under OFF and Press **ENTER.** Marker option is now turned off.

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OPTIONAL FEATURES

cont.

WIRE STACKER

The Model 42C offers the capability to add on a Wire Stacker to collect longer wire lengths. The electrical interface necessary to add this equipment must be purchased separately and installed at the factory.

IMPORTANT

Wire

Wire Marker

Plug

Stacker Plug

Please read their operators manual before proceeding.

MACHINE SET-UP

- To activate interface between the Model 42C and Wire Stacker, install exterior cable between both units. Plug receptacle on Model 42C is located on the back of the cabinet.
- To access Wire Stacking program set-up press the **MENU** key.
- After Wire Stacking mode is activated a small square will appear on the lower left side of the LCD display.
- All dimensions entered during set-up will correspond with the unit of measure that is programmed into the machine.

LCD DISPLAY PROMPT	ACTION REQUIRED	
WIRE STACKER	Press ENTER.	
CLEAR SELECTS ON/OFF WIRE STACKER:	Press CLEAR key to select ON. Press ENTER.	
STACKER DWELL TIME 0.00 SECONDS	Enter the Stacker dwell time. This time is determined by the time it takes the Stacker to complete it's cycle for the current wire being processed. The dwell time range is from 0 to 2.50 seconds. Enter selected time and press ENTER .	

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MAINTENANCE PROCEDURES **SLUG REMOVAL**

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

BLADE CHANGE

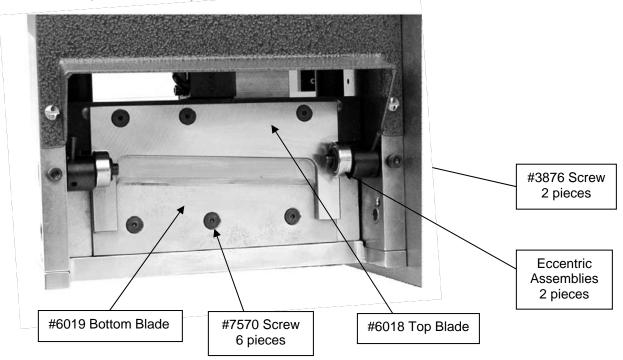


This procedure is accessed through the **MENU** key. Press this key until the following display is reached.

LCD DISPLAY PROMPT	ACTION REQUIRED
BLADE CHANGE	Press ENTER key.
REMOVE AIR, TURN OFF POWER, CHANGE BLADE	IMPORTANT: This procedure must be performed in the order stated. This will position the blades properly for removal.

- 1. Disconnect air from source, turn off machine, unplug Power Cord.
- 2. Remove Exit Chute Assembly. Refer to Page 6 for instructions.
- Loosen (2) #3876 Screws and remove both Ecentric Assemblies from unit.
- 4. Remove (6) #7570 Screws from Upper and Lower Blades. Remove blades.
- 5. Clean all surface areas with a soft bristle brush.
- 6. Install #6019 Bottom Blade. Reinstall screws and tighten.
- 7. Install #6018 Top Blade. Note: Before Top Blade installation please read and follow lubrication instructions on Page 22. Reinstall screws and tighten.
- 8. Reinstall Ecentric Assemblies, one at a time. Adjust pressure until the roller will not spin and the dowel pin is in the upright position. Retighten #3687 Screws.
- Reinstall Exit Chute Assembly.
- 10. Plug in Power Cord. Reconnect air source
- 11. Turn machine ON and press ENTER key.

Revised 5/11/12



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MAINTENANCE PROCEDURES

MACHINE LUBRICATION

The Model 42C does require some lubrication maintenance both daily/operational and monthly/periodic.

DAILY / OPERATIONAL

It is very important to lubricate the Pneumatic Cylinder that operates the Blade Mechanism. This is done by using an automatic inline oilier filled with standard pneumatic tool oil. The automatic inline oilier should be set so the Model 42C receives approximately 1 drop of pneumatic tool oil every 10-12 minutes of continuous cutting at 80 PSI. Operating the machine without an oilier may result in damage to the cylinder.

MONTHLY / PERIODIC

It is recommended that the Model 42C receive the following lubrication on a monthly basis. This schedule can be increased or decreased depending upon usage.

There are two areas of the machine that require lubrication; the back side of the Top Blade and the Blade Mechanism Guide Rods.

TOP BLADE LUBRICATION

The Top Blade must be removed to access the back side. Follow the instructions for Blade Change on Page 21 until step #4 and remove only the Top Blade. Place the blade flat side up and apply a thin coat of grease to the 2 outside "fingers". Note: The "fingers" are the portion of the blade that contact and slide against the Bottom Blade. Proceed with steps #7 through #11 for Blade Change to reinstall.

GUIDE ROD LUBRICATION

It is recommended to lubricate the Blade Mechanism Guide Rods with several drops of a general purpose oil (ex. 3 in 1

The 2 Blade Mechanism Guide Rods are the rods that the Top Blade Block slides up and down on. This service can be performed from the Feed Roller side of the Blade Mechanism, while the blades are in the BLADE CHANGE position and the machine has been powered off and unplugged.

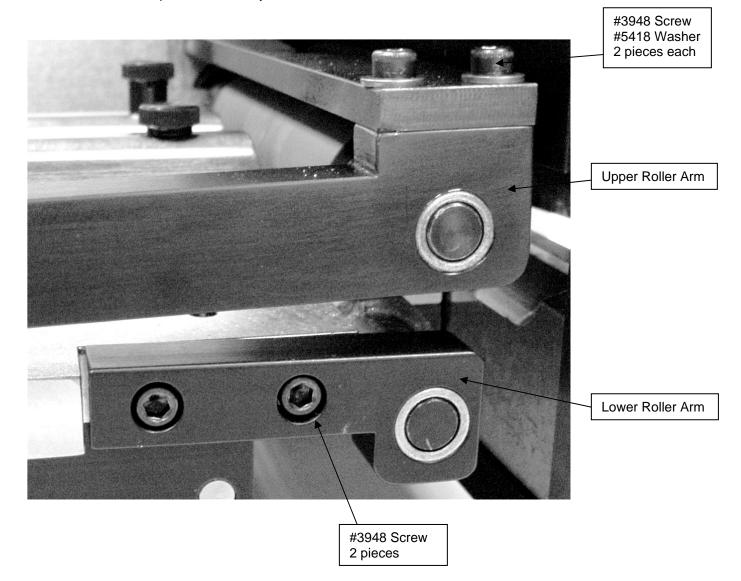
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MAINTENANCE PROCEDURES

cont.

ROLLER CHANGE OR REMOVAL

- 1. Turn machine off. Unplug Power Cord.
- Disconnect Air Source.
- 3. Remove (2) #3948 Screws and (2) #5418 Washers with #8858 Hex Wrench from the Upper Roller Arm. Slide off arm and Upper Roller together. NOTE: Roller is spring loaded.
- 4. Remove (2) #3948 Screws from Lower Roller Arm. Slide off arm and Lower Roller together. NOTE: Roller is spring loaded.
- Install Lower Feed Roller by aligning the slots in the roller with the pinned Drive Shafts. Hold roller into place and 5. reinstall Lower Roller Arm. Reinstall and tighten screws. Repeat procedure for Upper Feed Roller.
- 6. Check roller alignment by pressing down on the Upper Roller Arm until Feed Rollers make contact with each other. Check for any gaps between the Upper and Lower Rollers. If adjustment is necessary, loosen the #3948 Screws on the Lower Roller Arm. Press the Upper Feed Roller against the Lower Feed Roller and retighten the 2 screws.
- 7. Plug in Power Cord. Reconnect Air Source.
- 8. Turn machine ON and press ENTER key.



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TROUBLE SHOOTING

KEY ELEMENTS FOR TROUBLE FREE OPERATION

Make certain:

- Unit is plugged into a proper electrical outlet.
- Air line is connected properly to machine and air source.
- Unit is turned on.
- Roller Tension is adjusted properly.
- Data entered is correct and accurate.
- Prefeed is being used if required.

COMMON PROBLEMS	SOLUTIONS
Display reads:	1. Material exceed

Display reads: *** BLADE ERROR *** PLEASE PRESS ENTER	 Material exceeds cutting limits of machine. Air pressure too low. Air line not attached properly.
Length Inaccuracies	 Check Wire Guide clearance. Check Feed Speed Check roller pressure. Verify length setting. Motorized Prefeed required?
Wire Jams	 Check Wire Guide clearance. Check roller pressure. Check Feed Speed. Check for possible material splice. Check for foreign material / debris.
Material dragging up/down with Top Blade	1. Use Stepback feature.
Material not tracking straight through the rollers	1. Check roller alignment, see Page 23.
Cuts are not square	 Check Wire Guide Clearance. Make sure the memory or curvature of the material is against the Feed Platform.
Material sticking in Exit Chute due to static charge	Apply a light coating of Talcum Powder to inside of Exit Chute and Magnetic Sheet.

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RECOMMENDED SPARE PARTS

2pcs. #6020 Feed Roller (Urethane)

1pc. **#6018** Top Blade 1pc. **#6019** Bottom Blade

OPTIONAL EQUIPMENT

#6099 Feed Roller (Steel) – 1 or 2 pcs. optional depending upon application.

#8883 Wire Marker/Wire Stacker Electronic Interface - Factory Installed

#42WG Additional Wire Guide Kit

#8925 Emergency Stop Button Assembly

#6307 Short Exit Chute Assembly



#6307 Short Exit Chute Assembly

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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, belts, 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.
- Damage caused by the use of contaminated compressed air.

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