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

OPERATOR'S MANUAL



Model 77E Pneumatic Cable Stripper

PRODUCTION WIRE PROCESSING EQUIPMENT

IMPORTANT

THIS MACHINE CONTAINS PNEUMATIC COMPONENTS.

IT IS <u>EXTREMELY</u> IMPORTANT THIS MACHINE BE CONNECTED TO A <u>CLEAN DRY AND FILTERED AIR</u> <u>SUPPLY</u>.

A SEPARATE REGULATOR AND FILTER MUST BE INSTALLED DIRECTLY AT THE MACHINE CONNECTION.

CONTAMINATED AIR MAY CAUSE THE MACHINE TO MALFUNTION.

FAILURE TO FOLLOW THESE INSTALLATION INSTRUCTIONS MAY RESULT IN DAMAGE TO THE MACHINE THAT WILL NOT BE COVERED UNDER WARRANTY

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 77E can process a wide range of wires as referenced on the following page.

These processing specifications are based upon the most commonly manufactured wires. Special applications may arise with wires that are within the specification limits of the machine but are very difficult or unsuccessful to process. Likewise, wires 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 77E.

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 77E.

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 within 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.
The machine will not operate unless the Safety Guard is installed on the Model 77E.

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 without the Safety Guard installed.

IMPORTANT

PLEASE READ ENTIRE INSTRUCTIONS BEFORE OPERATING MACHINE

The Model 77E V-Blade or Form Blade Pneumatic Cable Stripper is designed to strip cables with extruded insulation's like those on high voltage, welding, multi-conductor and battery cables.

SPECIFICATIONS

AIR SUPPLY 80-100 PSI or 5.5-6.8 BAR **CLEAN, DRY AND FILTERED AIR ONLY**

MAXIMUM WIRE DIAMETER 1.00" or 25.4mm

STRIP LENGTH 4" or less - longer strips may be achieved by utilizing multiple

machine cycles. Note: Longer lengths are dependant on cable type.

MINIMUM WIRE LENGTH 6.00" or 152.4mm plus strip length

CYCLE TIME Approximately 2-3 seconds

DIMENSIONS 8"W x 8"H x 34"L or 203.2mm W x 203.2mm H x 863.6mm L

WEIGHT 54 lbs. or 24.5 kg.

SAFETY GUARDING

The Model 77E comes equipped with a LEXAN Safety Guard that engages a Safety Interlock Switch. The machine will not operate unless the Safety Guard is installed. **IMPORTANT** DO NOT ATTEMPT TO DEFEAT THE FUNCTION OR PURPOSE OF THE SAFETY INTERLOCK SWITCH. SERIOUS INJURY TO THE OPERATOR'S EYES, FINGERS OR OTHER BODY PARTS MAY RESULT FROM ATTEMPTS TO OPERATE THE MODEL 77E WITHOUT THE SAFETY GUARD INSTALLED.

AIR SUPPLY

80 - 100 P.S.I., CLEAN DRY AND FILTERED AIR ONLY.

IT IS <u>EXTREMELY</u> IMPORTANT THIS MACHINE BE CONNECTED TO A CLEAN DRY AND FILTERED AIR SUPPLY

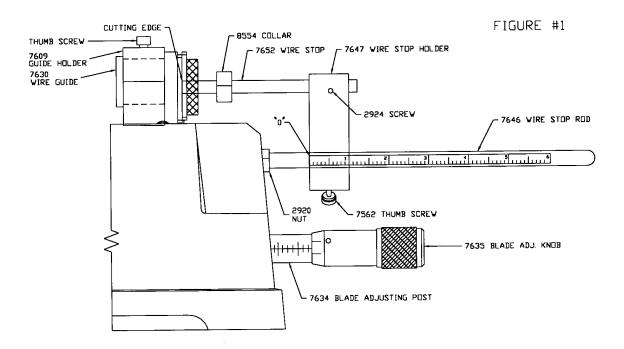
A SEPARATE REGULATOR AND FILTER <u>MUST</u> BE INSTALLED <u>DIRECTLY AT THE MACHINE</u> CONNECTION.

CONTAMINATED AIR MAY CAUSE THE MACHINE TO MALFUNTION. FAILURE TO FOLLOW THESE INSTALLATION INSTRUCTIONS MAY RESULT IN DAMAGE TO THE MACHINE THAT WILL NOT BE COVERED UNDER WARRANTY

MACHINE SET-UP

Install the ¼" air line, provided, into the **#3413** Fitting located on the back of the machine. Connect air line assembly to a Filter and Regulator assembly which will provide the Model 77E with a CLEAN, DRY AND FILTERED air source.

Install the Wire Stop Assembly into the front of machine. Screw the Wire Stop Rod **#7646** into the threaded hole above and to the right of the Blade Adjusting Knob. Tighten the rod until the etched scale can be easily read by the operator; secure in place with Nut **#2920**. The Wire Stop Assembly must now be calibrated. To calibrate refer to **Figure #1** and loosen Thumb Screw **#7562** then slide Wire Stop Holder **#7647** over to the "0" measurement on the Wire Stop Rod **#7646**. Secure in place with Thumb Screw **#7562**. Now loosen Screw **#2924** and slide Wire Stop **#7652** just to the cutting edge of the blade. Tighten Screw **#2924** to secure rod and calibration is now complete.



WIRE GUIDE SELECTION

Select Wire Guide #**7630**___ with the smallest inside diameter that slips freely over the outside diameter of the wire to be stripped. To install guide, disconnect air supply, remove Safety Guard, loosen two Thumb Screws on the Guide Holder #**7609** and place guide in holder with guide collar tight against holder, retighten Thumb Screws, replace Safety Guard, reactivate air supply. Standard Wire Guides available (inches): .152, .169, .185, .201, .218, .234, .250, .265, .297, .312, .328, .343, .359, .375, .390, .406, .421, .437, .453, .468, .484, .500, .515, .531, .562, .578, .593, .609, .625, .640, .656, .671, .687, .703, .718, .734, .750, .800, .850, .900, .950, 1.00.

BLADE DEPTH

The Model 77E comes equipped with a scaled Blade Adjusting Knob #7635 and Blade Adjusting Post #7634, these function the same as a standard micrometer. Turning the knob counterclockwise will close the blades and clockwise will open the blades. The post is scaled from 0.0" to 1.0" and the knob is scaled 0, 10, 20, 30 representing thousandths of an inch. Each full rotation of the knob is .040".

V-BLADES: Measure the outside diameter of the inner conductor of the cable to be stripped. Turn the Blade Adjusting Knob until the "0" is over the corresponding measurement on the Blade Adjusting Post and the horizontal lines match. (Example: If the inner conductor measures .50" turn the knob until the "0" is over the .50" mark on the post.) Cycle the machine one time without cable by pressing the foot pedal. Observe the blade opening; if it looks close do a trial strip. Examine stripped cable; if necessary, adjust blades accordingly to obtain a satisfactory strip.

FORM BLADES: Turn the Blade Adjusting Knob until the "0" is over the 0.0" measurement on the Blade Adjusting Post and the horizontal lines meet. This will set the Form Blades to the smallest opening possible. Adjustments to open blades can be made, if necessary, to obtain a satisfactory strip.

PLEASE NOTE: IMPROPER ADJUSTMENT CAN DAMAGE BLADES

STRIP LENGTH

To set the desired strip length move Wire Stop Holder #7647 to the appropriate mark on the Wire Stop Rod scale. The distance is measured off the side of the Wire Stop Holder that is closest to the machine.

Note: If a large surface diameter is needed for stripping small AWG wire, loosen Collar **#8554** and slide to the end of the Wire Stop **#7652**. Tighten set screw to secure

<u>WIRE ENTRY</u>

The Model 77E is manufactured so it may be used for either right or left hand operation. This allows the operator to position the machine and foot pedal activator to eliminate operator fatigue.

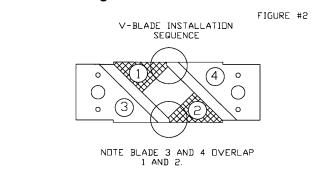
Guide cable through the top slot on the Safety Guard then between the Jam Cleats, through the Wire Guide and Blades until the end touches the Wire Stop. Grasp cable firmly then press foot pedal and hold until complete stripping cycle is performed; remove stripped cable.

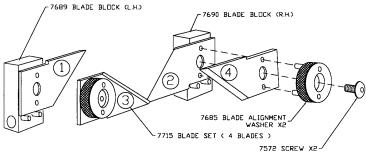
Never insert anything but insulated wire into the machine or blade damage may occur.

BLADE CHANGE

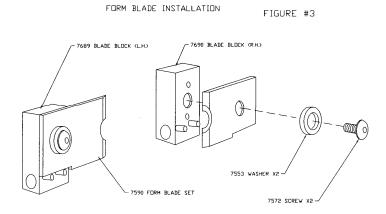
Disconnect air supply and remove guard.

V-BLADE SET #7715 (Figure 2): Remove Blade Mounting Screws # 7572 using a 7/32" hex wrench. Pull off the Blade Alignment Washer #7685 and remove the old blades. Using Figure 2 as a guide, align new blades (note: all 4 blades are identical) on one Blade Block at a time. **IMPORTANT** - Blades must be replaced in the correct sequence pictured. Improper installation will result in irreversible blade damage. Replace the Blade Alignment Washers making certain the two pins are correctly aligned through the two holes in each blade and are seated firmly into the two holes in each Blade Block. Reinstall and tighten the Blade Mounting Screws. **IMPORTANT** Before reconnecting air supply. Manually press Blade Blocks together to insure that the new blades pass freely without binding.





FORM BLADE SET #7590.xxx (Figure 3): Remove Blade Mounting Screw **#7572**, Washer **#7553** and Slug Shield **#7595** using a 7/32" hex wrench. Remove old blades. Using **Figure 3** as a guide, install new blade set then reinstall the Washers and the Shield then retighten the Blade Mounting Screws.



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.