WIRE WIZARD® WELDING PRODUCTS

NON STOP® WIRE DISPENSING

INSTALLATION & OPERATION MANUAL

Installation, Maintenance and Warranty Information

Models

NSW-20.4F-18B-2
NSW-20.4F-18B-4
NSW-SC24-18B-2
NSW-SC24-18B-4

SHIP DATE _____ **SERIAL #** _____

ELCo ENTERPRISES, INC.
5750 Marathon Drive • Jackson, Michigan 49201
517.782.8040 • *sales@wire-wizard.com*
wire-wizard.com

TABLE OF CONTENTS

1.0 INTRODUCTION

This guide is designed to assist the user whose primary responsibility is to operate and maintain the Non-Stop® Wire Dispensing System. This manual provides specific information on installation, safety, basic operation, and maintenance. **Please read, understand and follow all safety procedures.**

The Non-Stop® Wire Dispensing System utilizes a unique process that joins the end wire from an empty drum with the start wire of the next full drum, eliminating costly downtime for wire changeover and optimizing production time. A smooth operating wire guide arm handles the wire transfer during the automatic change, with no manual operator action required. With our easy-to-use Butt Welder, both butt-welding and flash removal operations take only seconds and the two wire ends may even be joined during the welding cycle. The Non-Stop® Wire Dispensing System works with either one or two station robotic cells (2 or 4 drums). A convenient Docking Station that holds the Butt Welder and a deburring tool is also available for this package. Made in the U.S.A..

1.1 WARRANTY

ELCo Enterprises, Inc. (hereinafter "ELCo") shall warrant the Non-Stop® Wire Dispensing System to be free of defects in material and/or workmanship for one (1) Year from the date of shipment to the Buyer. The warranty shall cover 100% of all parts and labor with the exception of misuse, abuse, neglect and typical consumables as determined by ELCo. ELCo will at its option, repair, replace or issue a credit for the value of the defective Non-Stop Wire System.

Buyer accepts all responsibility for compliance with any/all local, State and Federal laws or regulations including regulations of foreign governments.

No equipment shall be returned to ELCo without a Return Authorization Number from ELCo. Upon evaluation and determination of warranty, replacements or repairs will be sent to the Buyer. If a replacement is needed immediately, a purchase order is required to cover the cost of the product until the warranty status is determined.

ELCo's warranty is limited to replacing any goods that are proved to be defective and in no event shall ELCo have any liability for paying incidental or consequential damages including and without limitation, damages resulting in personal or bodily injury or death, or damages to, or loss of use of any property. Notwithstanding any of these terms and conditions, the warranties set forth shall apply in connection with any sales of goods, services or design by ELCo and are in lieu of all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose.

1.2 PRODUCT REGISTRATION

Please register this product online or by phone within 14 days after receipt.

Register this product online by going to ***wire-wizard.com/register*** or scanning the QR code on the right, or you may call 517.782.8040 to register by phone. Registering this product will allow us to provide firmware and software updates via email, as well as expedited service should there be any problems potentially covered by this warranty in the future.

Please record the following information for this product and retain for your records:

Model #: _____ Lot #: _____ Shipment Date: _____

1.3 SAFETY

The Non-Stop® Wire Dispensing System is designed to be safe to operate, provided the user reads, understands and adheres to the safety precautions listed below. Failure to adhere to these precautions may result in personal injury and/or damage to the equipment.

WARNING: WEAR EYE PROTECTION

When butt welding the wire ends together or deburring the wire after butt welding, always wear eye protection.

WARNING: WEAR PROTECTIVE GLOVES

When butt welding the wire ends together or deburring the wire after butt welding, always wear protective gloves.

WARNING: ELECTRIC SHOCK HAZARD

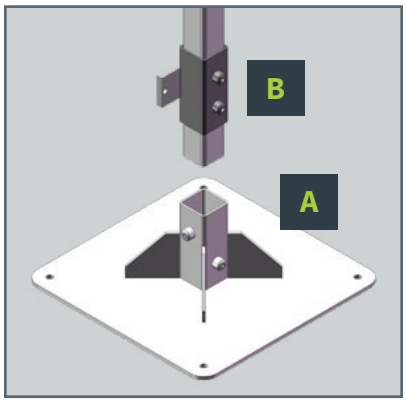
Operators should always wear dry welding gloves and protective clothing when welding. Do not contact electrically live parts. Keep welding guns and other welding equipment away from moisture and water. Ensure ground connections are secure and compatible with the required electric current. When welding under wet conditions or where perspiration is a factor, the use of automatic controls for reducing the no load voltage is recommended to reduce the risk of electric shock. Accidental contact must be prevented with open circuit voltage exceeding 80 volts AC, or 100 volts DC by using insulation or other means. When welding gun is not in use, turn off power supply to prevent any accidental contact.

Welding equipment should be installed and maintained in accordance with National Electrical Code (NFPA 70) and in compliance with local codes. Equipment should only be serviced by qualified or trained personnel only. Do not disassemble torch or change welding consumables with the power supply on.

WARNING: ALWAYS SECURE WIRE DRUMS

Ensure all wire drums are firmly secured to the Non-Stop Wire System with the provided wratchet straps to avoid roll away hazards.

2.0 ASSEMBLY INSTRUCTIONS



1. Insert the Bottom Post (B) into the Base (A) and tighten the two set screws to secure in place. It is highly recommended the base is secured to the floor for better stability (floor bolts not included).

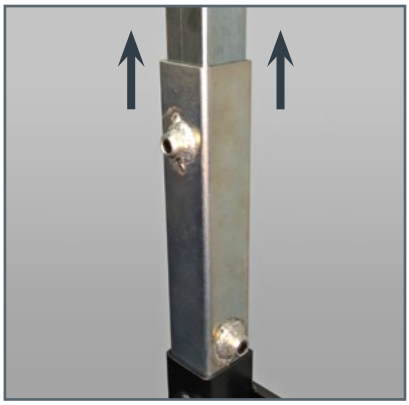
2. Slide the Wire Bridge Assembly (C) onto the Bottom Post (B) and secure in place by tightening the two set screws.

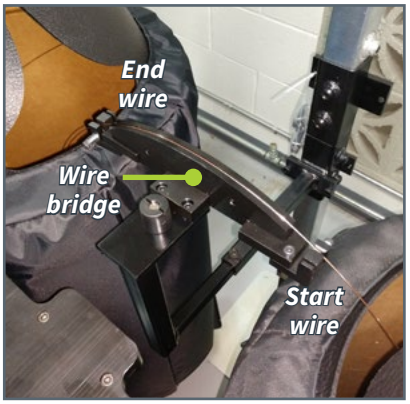
3. Insert the Top Post (D) into the Bottom Post (B) and tighten the set screws to secure in place. The height of the stand may be adjusted later by loosening these set screws and sliding the Top Post (D) up or down.

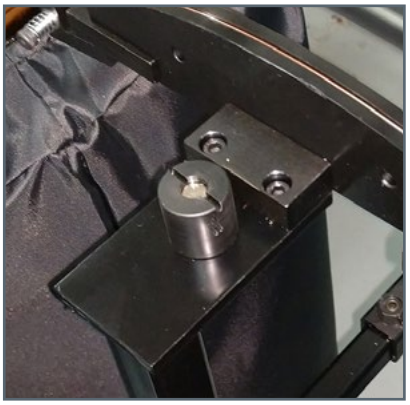
4. Slide the Guide Arm Assembly (E) onto the Top Post (D) and tighten all set screws on the two sleeves to secure in place. Finished Post and Guide Arm Assembly should appear as shown.

5. Install the included Non-Stop® Wire System Drum Hoods on the first two drums of wire that will be used with the system.

6. Insert the two wire drums or boxes into place on the left and right side of the Wire Bridge. If needed, adjust the height of the top arm assembly by loosening the two set screws. Raise arm assembly to the correct height and tighten bolts. Height should be adjusted so that the transfer arm swings freely between the two drums, with the liner going into each slot in the drum covers. The drum covers should face each other as shown:







End wire staging magnet

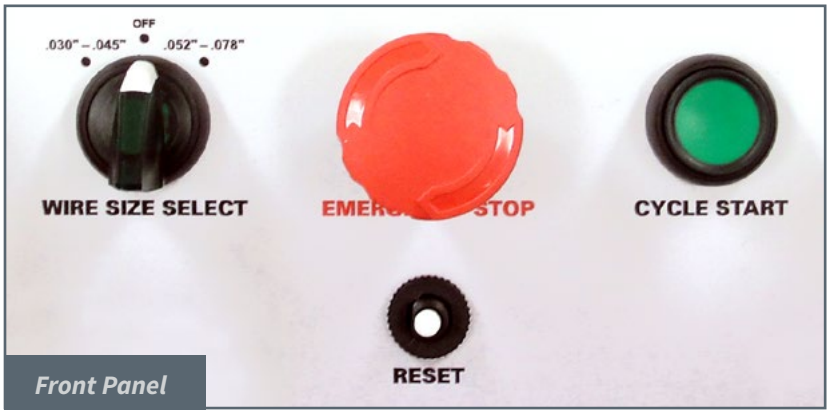
7. Secure the two wire drums or boxes in place by activating the brake on your drum dolly (if applicable).

8. Adjust the wire bridge between the two drums so the top of the bridge is level with the bottom of the opening on each of the drum hoods. Use the two set screws on the Wire Bridge Assembly Sleeve (requires 1/4” Allen wrench) to adjust the height and the set screw at the bottom to move forwards or backwards (using a 5mm Allen wrench). When properly adjusted, the transfer arm should swing from one drum to the other staying within the slots on the drum covers.

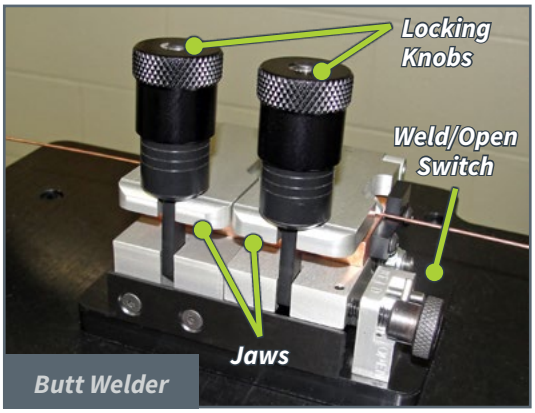
9. Follow the instructions for butt welding the two wire ends together on page 5 (or page 7 if using a portable butt welder). Insert welded wire into the wire bridge and hold into place using the wire clamps as shown. When changing wire packages, always place the joined wires back into the channel and clamps on the wire bridge. An end wire staging magnet is included for holding the end wire of the first drum if the second drum is not yet installed.

Finished Assembly
Butt Welder
Sold Separately

3.0 BUTT WELDING INSTRUCTIONS



Front Panel



Butt Welder

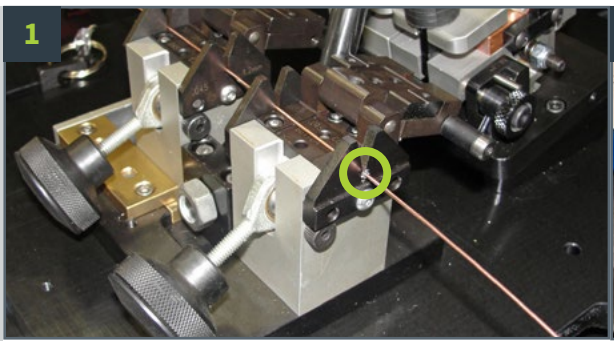
1. Ensure the Wire Size Select switch is in the OFF position(center). Connect Butt Welder to power supply.
2. Pull down both locking knobs to open wire clamps.
3. Pull and turn the Weld/Open switch to the “Open” position.
4. Snip off each end of the wire using a pair of Wire Parters (included). Insert each wire end in groove until centered in the space between the 2 jaws. Lock wire into place one side at a time by pulling the locking knobs back into place. Ensure the wire butts are flat and evenly spaced.
5. Turn the Weld/Open switch to the “Weld” position.
6. Turn switch on base unit to appropriate setting for wire size.
7. Press green Cycle Start button on the front panel to weld the wire ends together (there will be a slight delay). If the Reset is popped out, push back in to weld.
   CAUTION! Keep hands clear of butt welder components and wire when welding.
8. Open wire clamps by pulling down both locking knobs. Remove wire (may be hot!).
9. Remove the burr in the wire joint using the optional Wire Sizer (see below) or other method of creating a smooth joint. Check the joint using the Wire Gage Block to ensure smooth wire feeding.
10. Insert wire onto pathway between the two wire packages. Repeat process when replacing empty drums.

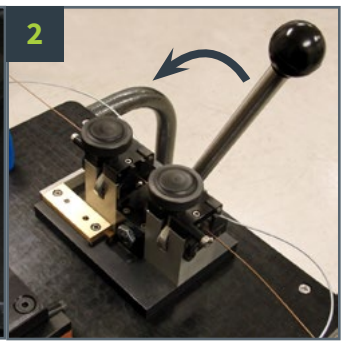
IMPORTANT!
Ensure wire ends are evenly aligned prior to butt welding.

Butt Welder Docking Station with Wire Sizer option

BURR REMOVAL FROM WIRE JOINT USING THE WIRE SIZER

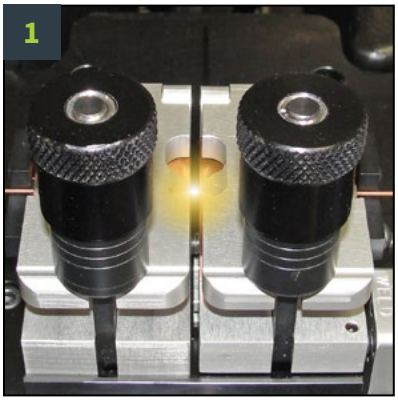
To remove the burr in the wire joint, open clamps on the wire sizer and position wire as shown in step 1. The wire joint should be positioned outside of the cutting plate (circled). Close and tighten clamps. Pull the handle firmly to the right to remove the burr. Unlock the clamps and remove wire.





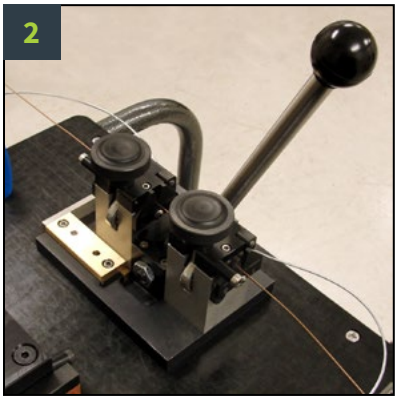
4.0 OPERATION

1



Join the end wire from drum 1 with the start wire from drum 2 using the Butt Welder. Follow butt welding instructions on page 5.

2



Remove the burr in the wire joint using the Wire Sizer (recommended accessory). Alternatively, you may remove the burr in the wire using a rotary tool with a stone bit.

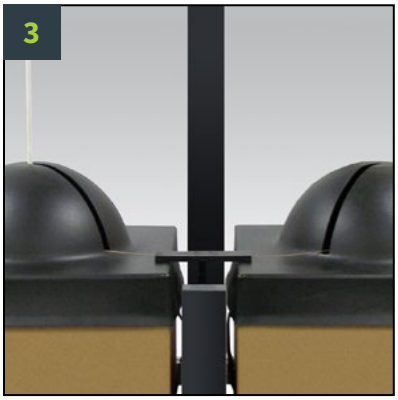
DRUM SETUP

Wire Clamp

If using with wire over 0.052 (1.3 mm), disassemble and flip the clamping block around to the textured side for better gripping

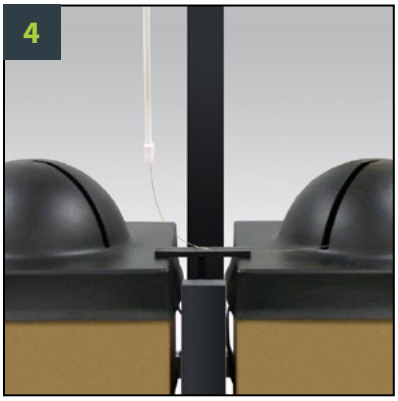
Wire Pilot™ Feed Assist option

3



Adjust wire bridge so it is in the proper position (see page 5). Push in spring clamp on the wire bridge and insert wire along the groove between the two drums. Release spring clamp to hold wire in place.

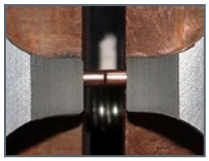
4



When wire from drum 1 runs out, the transfer arm will switch over to drum 2. Simply replace empty drum and repeat steps 1-3. Flip the wire bridge when changing drums so the spring clamp side is always opposite the side of the active drum.

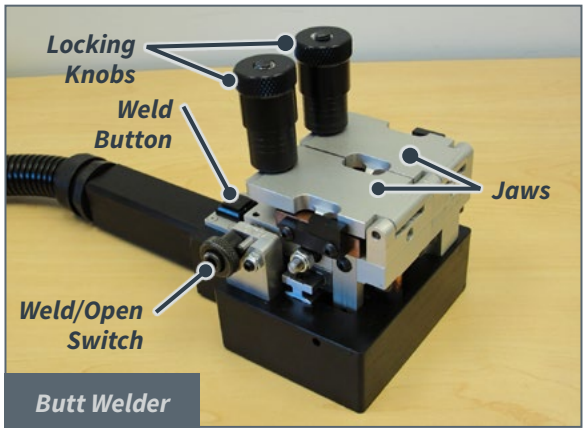
5.0 PORTABLE BUTT WELDER INSTRUCTIONS

1. Ensure the Wire Size Select switch is in the OFF position (center). Connect Butt Welder to power supply.
2. Pull down both locking knobs to open wire clamps.
3. Pull and turn the Weld/Open switch to the “Open” position.
4. Snip off each end of the wire using a pair of Wire Parters (included). Insert each wire end in grooves until centered in the space between the 2 jaws. Lock wire into place one side at a time by pulling the locking knobs back into place. Ensure the wire butts are flat and evenly spaced.

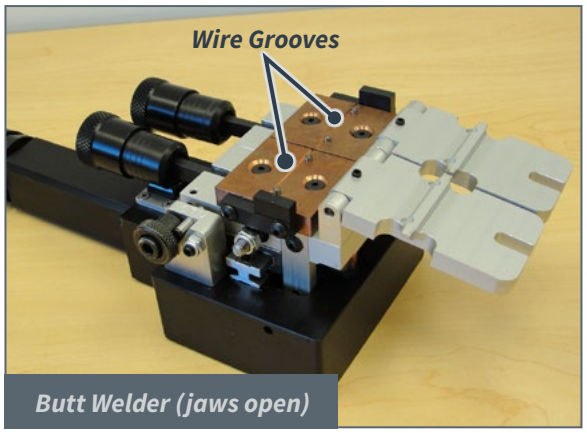


IMPORTANT!
Ensure wire ends are evenly aligned prior to butt welding.

5. Turn the Weld/Open switch to the “Weld” position.
6. Turn switch on base unit to appropriate setting for wire size.
7. Press black weld button on the handle to weld the wire ends together (there will be a slight delay). If the Reset is popped out, push back in to weld. **CAUTION! Keep hands clear of butt welder components and wire when welding.**
8. Open wire clamps by pulling down both locking knobs. Remove wire **(may be hot!)**.
9. Remove the burr in the wire joint using the optional Wire Sizer (see below) or other method of creating a smooth joint. It is recommended to check the joint using a Wire Gage Block to ensure smooth wire feeding.
10. If using with the Non-Stop Wire Dispensing System, insert wire onto pathway between the two wire packages. Repeat process when replacing empty drums



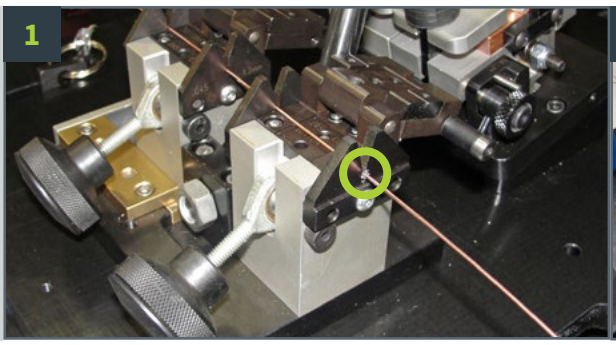
Butt Welder

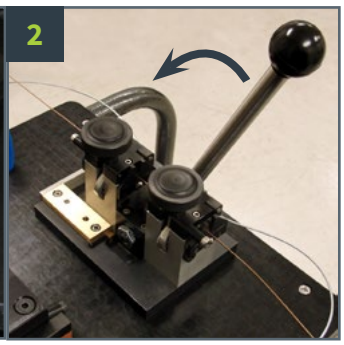


Butt Welder (jaws open)

BURR REMOVAL FROM WIRE JOINT USING THE WIRE SIZER

To remove the burr in the wire joint, open clamps on the wire sizer and position wire as shown in step 1. The wire joint should be positioned outside of the cutting plate (circled). Close and tighten clamps. Pull the handle firmly to the right to remove the burr. Unlock the clamps and remove wire.





ELCo Enterprises, Inc. • Jackson, Michigan USA
Service & Support: 517.782.8040
wire-wizard.com