



# Operating Manual

Please Read Before Operating Unit



## BTS1 Thermal Wire Stripper

Please Call for Service or Spare Parts

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# BTS1 THERMAL WIRE STRIPPER



## ORDERING INFORMATION

AR0111 ..... 120V 60Hz

### Optional Parts/Accessories

IR1474 ..... One Pair Small Die Element Set  
16AWG, 12AWG, 10AWG  
(1.30mmø, 2.06mmø, 2.59mmø)

IR1475 ..... One Pair Large Die Element Set  
8AWG, 7AWG, 6AWG  
(3.25mmø, 3.66mmø, 4.11mmø)

IR1479 ..... Right Angle Adaptor Kit

IR1491 ..... Foot Switch Assembly

AA0020 ..... Coarse Eraser Brush to Clean Elements

### Replacement Parts

IR1473 ..... One Pair Standard

### Replacement Element Set

PG0920 ..... Replacement Fuse, 110V

## SPECIFICATIONS

Wire Size ..... 36 AWG - 1/2" (0.13mmø-12.70mmø)  
or up 1/2" OD (12.7mmø) over insulation

Strip Length ..... Up to 1½" (38.1mmø) or  
unlimited with optional 90° Element Adaptors

Operation of element depth control assembly:  
By hand or with optional electric footswitch

Power ..... Input via fused IEC Connector,  
variable temperature control,  
120V 60Hz

Size ..... 7-9/16" H x 5-5/16" W x 14-1/8" D  
(192mm x 135mm x 359 mm)

Weight ..... 12.2 lbs. (5.55 Kg)

## IMPORTANT SAFETY INSTRUCTIONS

**IMPORTANT! DO NOT OPERATE MACHINE UNTIL YOU HAVE READ THOROUGHLY, AND UNDERSTAND COMPLETELY, ALL PRECAUTIONS, INSTRUCTIONS AND INFORMATION ON THESE PAGES. THIS MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INSTRUCTIONS. IT SHOULD BE RETAINED WITH THE MACHINE FOR FUTURE REFERENCE.**

### SAFETY PRECAUTIONS - MECHANICAL

**! DO NOT OPERATE UNIT WITHOUT GUARDS IN PLACE OR WITH DAMAGED GUARDS.**

**! DO NOT DEFEAT ANY OF THE SAFETY FEATURES.**

**! DO NOT PLACE FINGERS OR APPENDAGES NEAR MOVING PARTS OR IN OR NEAR OPENINGS IN GUARDS.**

# Model BTS1 Thermal Wire Stripper

## IMPORTANT SAFETY INSTRUCTIONS

### SAFETY PRECAUTIONS - ELECTRICAL

**! ALWAYS UNPLUG UNIT FROM POWER SUPPLY PRIOR TO ANY MAINTENANCE.**

**! DO NOT RUN UNIT WITH INCORRECT LINE VOLTAGE.**

**! NEVER RUN MACHINE WITH DAMAGED OR WORN POWER CORD.**

**! NEVER MODIFY THE PLUG PROVIDED. IF IT WILL NOT FIT INTO THE OUTLET, HAVE THE PROPER OUTLET INSTALLED BY A QUALIFIED ELECTRICIAN.**

**GROUNDING INSTRUCTIONS.** Grounding provides a common return path for electric current to reduce the risk of electric shock. This machine is supplied with an electric cord with an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a licensed electrician if in doubt as to whether the machine is properly grounded.

### SAFETY FIRST - USE BEST PRACTICES

**ALWAYS USE SAFETY GLASSES.** Everyday eyeglasses only have impact resistant lenses; they are NOT safety glasses. Also use face or dust mask if cutting operation is dusty.

**REMOVE ADJUSTING KEYS AND WRENCHES.** Form a habit of checking to see that keys and adjusting wrenches are removed from machine before turning it on.

**KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Always leave at least 12" (305 mm) of space around all sides and top of unit.

**DON'T USE IN DANGEROUS ENVIRONMENTS.** Do not use or locate machine in high-humidity environments, or expose to rain. Keep work areas well lighted.

**WEAR PROPER APPAREL.** Do not wear loose clothing, such as gloves, neckties, rings, bracelets, necklaces or any other clothing or jewelry that might get caught in moving parts. This is not an all-inclusive list. Wear protective hair covering to contain long hair. Non-slip footwear is recommended.

**DON'T OVERREACH.** Maintain proper footing and balance at all times.

**MAINTAIN BLADES WITH CARE.** Keep blades sharp

and clean for optimal performance. Follow instructions for lubricating and changing blades and all accessories.

### **DISCONNECT MACHINE FROM POWER SUPPLY.**

Unplug the unit before servicing and when changing accessories.

**DO NOT EXCEED THE UNIT'S MAXIMUM MATERIAL SPECIFICATIONS.** Eraser's warranty will be null and void if machine has been used in any manner that is contrary to these instructions.

**CHECK FOR DAMAGED PARTS.** Before continued use of the machine, the guard and all moving parts should be carefully inspected to ensure that nothing is damaged.

Ensure proper alignment of moving parts. Check for any binding of moving parts, breakage of parts, and any other condition(s) that may affect operation. Any damaged part(s) should be properly repaired or replaced prior to any continued use of the machine.

### **ONLY ALLOW TRAINED AND QUALIFIED**

**PERSONNEL TO OPERATE UNIT.** Always keep these instructions within reach of the machine.

**USE RECOMMENDED ACCESSORIES ONLY.** Consult this operating manual for recommended accessories. Use only parts supplied by The Eraser Company, Inc. Use of improper accessories will void Eraser's warranty and may increase risk of injury.

### **ALL REPAIRS SHOULD BE PERFORMED BY AN ERASER COMPANY REPRESENTATIVE ONLY.**

Unauthorized disassembly of machines will void Eraser's warranty.

**WHEN USING MACHINERY, ALL SAFETY PRECAUTIONS – INCLUDING, BUT NOT LIMITED TO, THOSE LISTED ABOVE - SHOULD BE FOLLOWED TO REDUCE THE RISKS OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, AND DEATH.**

**IMPORTANT: NO LIABILITY WILL BE INCURRED BY THE ERASER CO. FOR INJURY, DEATH, OR PROPERTY DAMAGE CAUSED BY A PRODUCT WHICH HAS BEEN SET UP, OPERATED, AND/OR INSTALLED CONTRARY TO ERASER'S WRITTEN OPERATING MANUAL, OR WHICH HAS BEEN SUBJECTED TO MISUSE, NEGLIGENCE, OR ACCIDENT, OR WHICH HAS BEEN REPAIRED OR ALTERED BY ANYONE OTHER THAN THE ERASER COMPANY, OR WHICH HAS BEEN USED IN A MANNER OR FOR A PURPOSE FOR WHICH THE PRODUCT WAS NOT DESIGNED.**

# Model BTS1 Thermal Wire Stripper

## **SET UP:**

Place the BTS1 on a surface at a comfortable work height. Set the temperature control to zero and the on/off switch to "off" on front panel, then plug the power cord into the I.E.C. outlet in the rear of the unit and the other end into an appropriate power outlet. The unit has a self-contained fume extraction system. Do not place unit directly against a wall.

**Strip Length Setting** - Set strip length by rotating the black knurled knob located along the left side of the lower element assembly (*see Figure 1*). Adjust the length stop plate until the desired strip length is achieved.

**Temperature Setting** - With the temperature setting knob (located on the control panel ) set at "0" slowly increase the temperature until the elements soften and penetrate the insulation. Ideally, the temperature control should be set at the minimum temperature required to slit through the insulation, for example, Teflon insulation strips at approximately an 80% setting where as PVC insulation might strip with as low as a 30% setting. Once the temperature is set for a given insulation, the temperature setting will have the same effect for all similar insulation materials.

**! CAUTION: Excessive temperature causes greater oxidation of the elements and can create excess fumes from burning insulation.**

**Element Depth Setting** - Set the element depth with the element depth control knob. Loosen the set screw located on the front of the upper element assembly block (*see Figure 1*). Set the element depth by rotating the element depth control knob. The element depth should be set so the element penetrates through the insulation, but clears the conductor. Once the element depth is determined, lock the elements by retightening the set screw located on the front of the upper element assembly block. For elements with specified wire sizes (optional factory die elements), simply adjust the element depth knob so that the upper and lower elements meet. Once the element depth setting is adjusted, it should not require further adjustment until a new wire diameter is introduced.

## **OPERATION:**

Switch the unit on using the on/off switch on the front panel. After determining the best stripping temperature, insert wire between elements to the length stop plate, press down on a ball knob located on either side of the upper element assembly (optionally, depress footswitch). Rotate the wire in the elements to penetrate the entire circumference of insulation. Remove wire and manually remove the insulation slug.

## **MAINTENANCE:**

**IMPORTANT NOTE:** Always turn the unit off, disconnect the power cord, and wait until the elements have cool down before servicing the unit. Clean insulation build-up from

stripping elements periodically with an AA0020 Coarse Eraser Brush. Ensure the element retaining screws are always tight to ensure good electrical contact with the electrode bars. Also, periodically, clean the contact area of the electrode bars and the elements of any oxidation build-up with the Coarse Eraser Brush.

**Installing Optional Element Activation Footswitch** - Place the footswitch on the floor, then plug it into the outlet in the rear of the unit. The footswitch when depressed activates the closing of the elements around the wire.

**Installing the Optional 90 Degree Adaptors** - Turn the unit off and disconnect the power cord. (Always wait until the two elements have cooled down before servicing the unit). Remove the elements from the ends of the electrode bars by removing the four retaining screws. Remove the clear guard by first removing the element depth control knob, remove the knob by loosening the set screw located on the collar of the knob then pulling it off the threaded shaft. Remove the three button head screws securing the clear guard. Adjust the length stop plate so that its position is as far back as it will go. All the adaptors' pieces are identical, fasten the adaptors to the four elements creating two adaptor assemblies (*see Figure 2*). Fasten the adaptor assemblies to the vertically tapped holes near the ends of the electrode bars using the screws and washers provided. Fasten one assembly to the top of the upper left element electrodes and one to the bottom of the lower right element electrodes.

## **TROUBLESHOOTING:**

**PROBLEM:** Unequal heating of elements.

### **SOLUTIONS:**

- 1) Remove elements and clean oxide from contact points.
- 2) Reinstall element set and ensure screws are tightened completely.

**PROBLEM:** Poor stripping results.

### **SOLUTIONS:**

- 1) Check element for wear or corrosion.
- 2) Clean or replace as needed.
- 3) Adjust temperature and element depth until desired results are achieved.

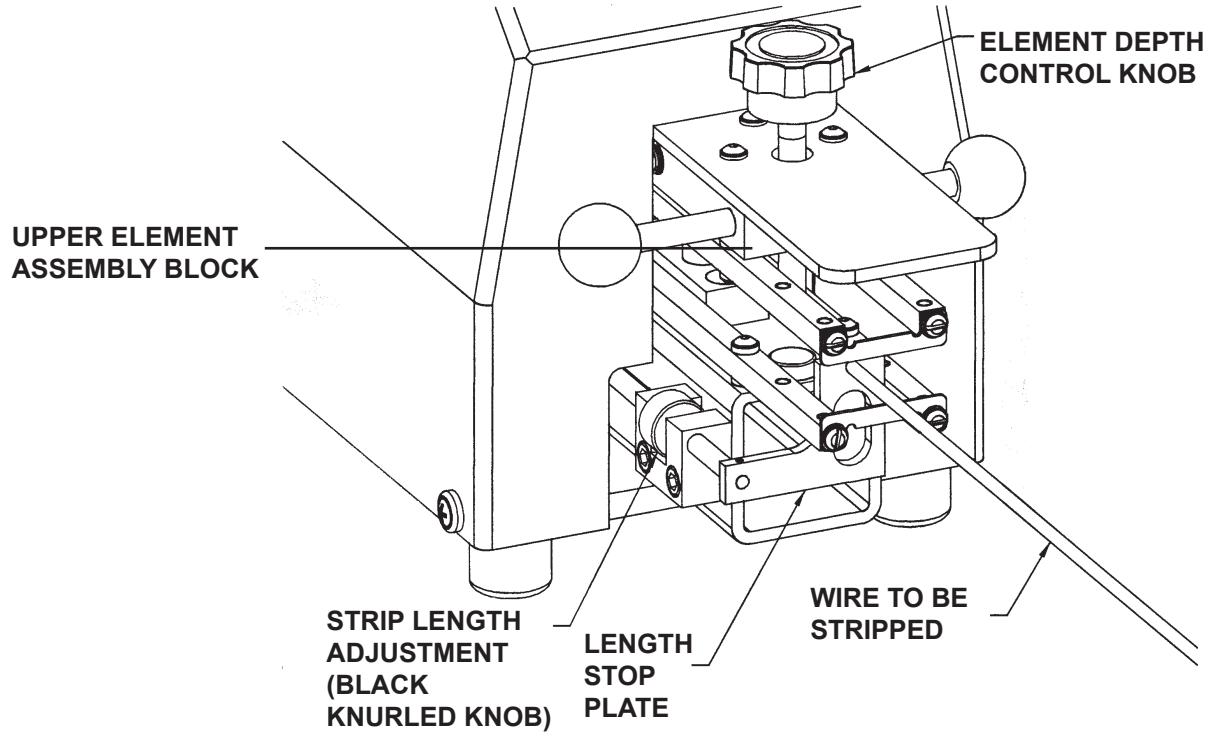
**PROBLEM:** Unit does not operate.

### **SOLUTIONS:**

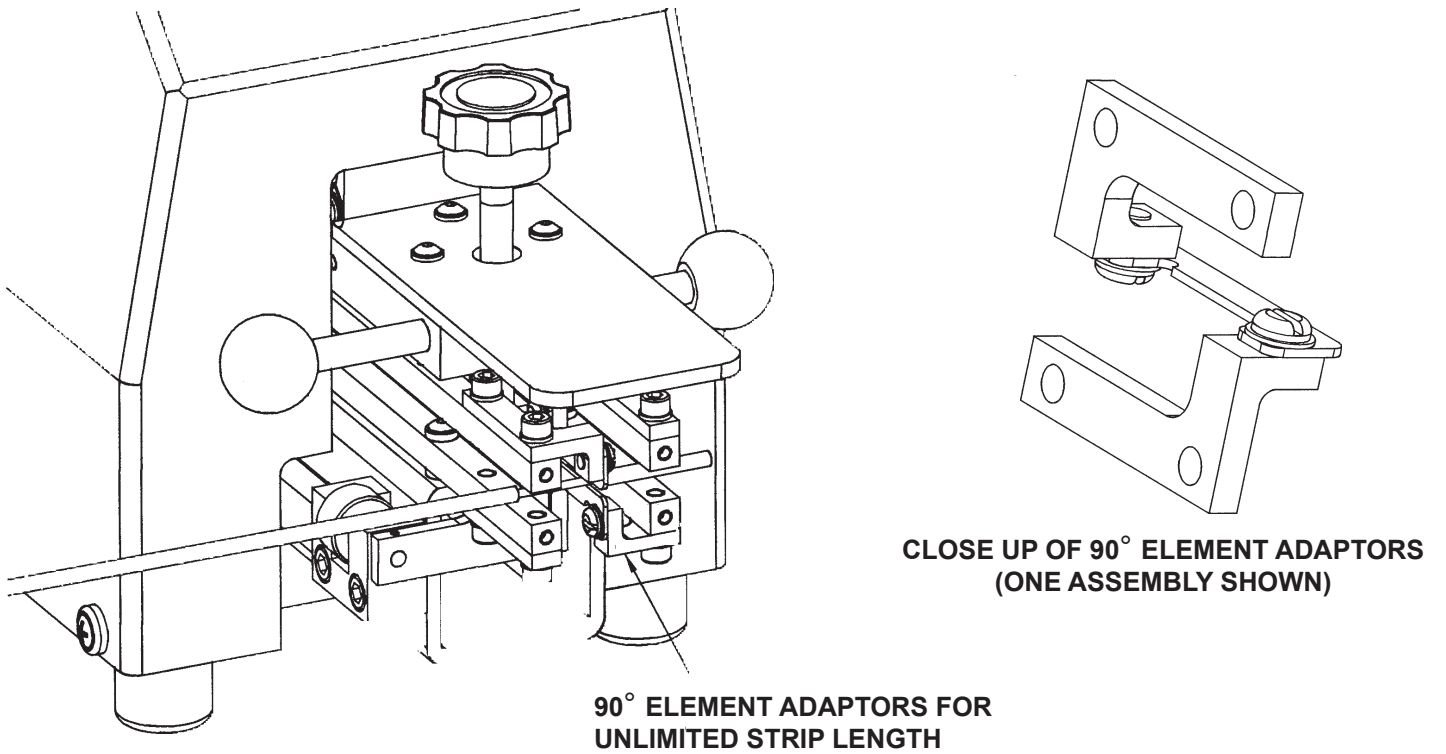
- 1) Ensure unit is plugged into appropriate power source.
- 2) Unplug power while verifying. Check fuse. Replace if blown.

**IMPORTANT: No liability will be incurred by The Eraser Company for injury, death, or property damage caused by a product which has been set up, operated, and/or installed contrary to this operating manual, or which has been subjected to misuse, negligence, or accident, or which has been repaired or altered by anyone other than Eraser, or which has been used in a manner or for a purpose for which the product was not designed.**

# FIGURE 1



# FIGURE 2



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