



Operating Manual

Please Read Before Operating Unit



Model C100S Rotary Head Wire Stripper and Twister

Please Call for Service or Spare Parts

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IR8190
WIRE GUIDE SET



ADJUSTING
RINGS



Model C100S

SPECIFICATIONS

Stripping Head:

Maximum wire diameter over insulation .. 0.228"
(5.79mmø)

Minimum wire diameter over insulation ... 0.031"
(0.079mmø) depending on rigidity of wire

Maximum strip length 1-1/2" (38mm)

Minimum strip length:

With the standard strip length stop, minimum strip length varies from 3/16" (4.7mm) on a 28AWG (0.33mmø) wire to 5/16" (7.9mm) for a 14AWG (1.63mmø) wire.

Decibel Rating 52 dB(A)

Power..... IEC Connected, 115V, 60 Hz

Size 13" x 5 3/4" x 7 1/4"
(330mm x 146mm x 184mm)

Weight..... 10 lbs. (4.5 Kg)

Blades..... Tungsten Carbide

ORDERING INFORMATION

AR2171 (C100S) Single blade centrifugal rotary wire stripper 115V 60Hz

Wire guides..... Order as required from Wire Guide Table

IR8190 Complete set CWG guide 1-37 in plastic box

IR4655 Standard 50° blade with pivot pin

IR4660 Tungsten Carbide 70° blade with pivot pin for applications where insulation wall thickness is very thin, almost a film of insulation

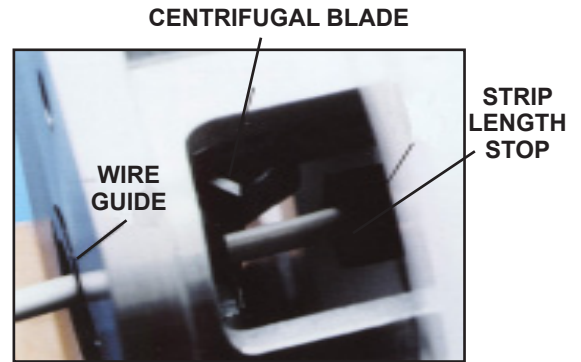
IR7978 Special short blade for very fine fragile wires

TR2106 Replacement nylon adjusting ring

IR0018 Replacement blade pivot pin

Single Blade Wire Stripper and Twister

WIRE GUIDE SELECTION TABLE			
Order #	Part #	Wire Size (inches)	Wire Size (mm)
IR8701	CWG1	0.233-0.216	5.92-5.49
IR8702	CWG2	0.215-0.208	5.46-5.28
IR8704	CWG4	0.203-0.201	5.16-5.11
IR8705	CWG5	0.200-0.196	5.08-4.98
IR8706	CWG6	0.195-0.191	4.95-4.85
IR8707	CWG7	0.190-0.186	4.83-4.72
IR8709	CWG9	0.180-0.175	4.57-4.45
IR8710	CWG10	0.174-0.168	4.42-4.27
IR8711	CWG11	0.167-0.164	4.24-4.17
IR8712	CWG12	0.163-0.156	4.14-3.96
IR8713	CWG13	0.155-0.151	3.94-3.84
IR8714	CWG14	0.150-0.144	3.81-3.66
IR8715	CWG15	0.143-0.139	3.63-3.53
IR8716	CWG16	0.138-0.135	3.51-3.43
IR8717	CWG17	0.134-0.131	3.40-3.33
IR8718	CWG18	0.130-0.120	3.30-3.05
IR8719	CWG19	0.119-0.115	3.02-2.92
IR8720	CWG20	0.114-0.111	2.90-2.82
IR8721	CWG21	0.110-0.106	2.79-2.69
IR8722	CWG22	0.105-0.101	2.67-2.57
IR8723	CWG23	0.100-0.096	2.54-2.44
IR8724	CWG24	0.095-0.091	2.41-2.31
IR8725	CWG25	0.090-0.084	2.29-2.13
IR8726	CWG26	0.083-0.077	2.11-1.96
IR8727	CWG27	0.076-0.073	1.93-1.85
IR8728	CWG28	0.072-0.068	1.83-1.73
IR8729	CWG29	0.067-0.062	1.70-1.57
IR8730	CWG30	0.061-0.057	1.55-1.45
IR8731	CWG31	0.056-0.050	1.42-1.27
IR8732	CWG32	0.049-0.041	1.24-1.04
IR8733	CWG33	0.040-0.037	1.02-0.94
IR8734	CWG34	0.036-0.034	0.91-0.86
IR8735	CWG35	0.033-0.030	0.84-0.76
IR8736	CWG36	0.029-0.026	0.74-0.66
IR8737	CWG37	0.025-0.020	0.64-0.51



Special Purpose Stripping Blades

The standard 50° stripping blade will strip most wires, however, special blades are available for unique applications or problem wires. Just send us 3 feet (1M) of your wire and we will test it in our laboratory and make a recommendation as to the most suitable type of stripping blade.

Wire Guide Ordering

To select wire guides, measure the outside diameter (∅) of wire to be stripped, then select nearest wire guide inside diameter from the size chart.

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 C100S Wire Stripper and Twister

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.

MODEL C100S Wire Stripper and Twister

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.

OPERATING INSTRUCTIONS

SET-UP:

The Model C100S is shipped with four mounting pads attached to the base. It is recommended that the unit be bolted to the work surface. Remove the four mounting pads before securing to the work surface. Failure to do so may cause the housing to crack. A 6" (152mm) wide bolt pattern using two 5/16" bolts may be used to mount the unit to the work surface.

! CAUTION: Environmental conditions for proper operation should be 50° F to 104° F (10° C to 40° C) and 30-75% relative humidity. The unit should be operated in an open, well ventilated work area. This unit may be affected by outside environmental disturbances. Should power be cut off, the C100S will not start until the I/O (on/off) switch is reset and turned on. The unit is rated for continuous use and is protected with a circuit breaker located in the on/off switch.

First, check that the wire guide purchased is the proper size for the wire to be stripped. The unstripped wire should slide freely through the wire guide, but be held snugly by the guide.

Insert the wire guide into the faceplate of the unit, aligning the half moon cut in the wire guide with the locking screw in the faceplate. Press the wire guide

flush with the faceplate and secure it by turning the locking screw with a screwdriver.

The C100S may be run in either a clockwise or counter-clockwise direction to accommodate wires with right-hand or left-hand lay stranded conductors. Most lead wires will require counter-clockwise rotation of the unit. Motor rotation is noted on the reversing switch located at the rear of the housing.

Plug the unit into the appropriate power supply. The plug is for use on 110/120V, 60 Hz mains supply. The power cord should be plugged into the IEC receptacle at the rear of the unit. Use a properly grounded mains supply.

OPERATION:

IMPORTANT: SAFETY GLASSES OR OTHER SUITABLE EYE PROTECTION SHOULD BE WORN WHEN USING THIS UNIT.

Set the reversing switch on the back of the unit to the desired rotation. Switch unit on by pressing the I/O switch located on the side of the unit. The unit may now be adjusted for strip length and blade depth.

IMPORTANT: The strip length and blade depth adjustments may ONLY be made WITH THE UNIT RUNNING. Attempts to make these adjustments with the unit off, will cause damage to the adjusting rings.

With the unit running, note the two adjustment knobs on the front of the unit. The left knob controls the blade depth, and the right knob controls the strip length stop. Turning these knobs will cause the two adjusting rings to move forward or backward, depending on the direction the knob is turned.

To set-up the unit, first turn the blade depth adjusting knob counter clockwise to make the ring move backwards on the head, until it is about 3/4" away from the front faceplate. Leave the strip length knob alone for the moment.

Insert the wire to be stripped, through the wire guide until it butts up against the strip length stop. Withdraw the wire slowly and smoothly, and maintain a gentle grip on the wire as it strips. If the blade does not strip the wire, adjust the left-hand blade depth knob to move the blade ring forward a

MODEL C100S Wire Stripper and Twister

little, which lowers the blade. Then try again. Repeat this process, WITH THE UNIT RUNNING, until the desired strip is achieved. Then adjust the right-hand strip length knob for a longer or shorter strip length, as desired. Once these two adjustments have been made, turn back the two knobs slightly to allow the block pins to run freely between the sides of the nylon rings. This will prevent excessive ring wear.

When changing from one wire size to another, be sure to move the blade ring backwards to raise the blade fully before inserting a different wire guide. This will help insure against damage to the blade caused by an incorrect adjustment.

The stripped wires should have a neat edge and no nicked conductors if the adjustments have been properly made. The strands of a stranded wire will be neatly twisted together by the action of the spinning slug. The operator will soon develop the proper "feel" for the wires to be stripped.

To maintain very tight tolerances on the strip length and/or blade depth, the settings may be locked in place once set. To do this, unplug the unit and remove the clear plastic guard. The forward jam nut on the adjusting screw should be tightened against the front of the casting near the adjusting knob, and the rear jam nut should be tightened against the adjusting block.

MAINTENANCE:

The Model C100S is equipped with a standard 50° carbide stripping blade. This blade works well with most normal to thick insulations. For very fine wires or thin insulations, the optional 70° blade may work better. In instances of very flimsy wires which do not have enough rigidity to swing the blade away from the wire guide, the special optional short blades may be used.

The stripping blade is carbide and has a long life. However, it will be necessary to change blades from time to time. To replace the stripping blade, first remove the plastic guard. Then remove the faceplate assembly from the unit. The blade is mounted on the blade holder by a 1/16" diameter blade pivot pin. Remove the pin by cutting off one end and pushing the other end out with a stiff wire. Install the new blade on a new pivot pin, ensuring that the bevel on the blade faces the BACK of the

machine. Crimp the pin ends with pliers to prevent it from falling out while the machine is running. Check that the blade can swing freely, and replace the faceplate assembly and guard.

Located below the stripping head is a round opening that allows the slugs to fall to the table or work surface. It may be necessary to remove these slugs periodically. An opening may be placed in the work surface to collect the slugs in a waste container or other similar device.

The adjusting rings may loosen over time. Use the socket head set screws located around the sides of the rings to tighten them when necessary.

Be sure all adjustments are made properly and carefully. On some wires, the insulation is so tight to the conductors that the slug will not pull off easily after severing. These wires may not strip well on the Model C100S. On other wires, the insulation thickness may vary along the course of the conductors, affecting the quality of stripping. Assuming that all adjustments to the unit have been properly made, most variations in stripping results can be traced to the wire itself.

IMPORTANT: Never adjust the blade depth and strip length stops unless the machine is running. Attempts to move the rings when the machine is off will result in broken rings.

MODEL C100S Wire Stripper and Twister

TROUBLESHOOTING:

PROBLEM: Wire twists.

SOLUTIONS:

- 1) Check wire guide for proper fit to conductor being stripped.
- 2) Lower blade depth.
- 3) Check that wire does not push past stop button.
- 4) Check that blade is not dull.
- 5) Check that motor rotation is same as lay of wire being stripped.

PROBLEM: Wire cuts off.

SOLUTIONS:

- 1) Check that wire does not push past stop button.
- 2) Raise blade depth.
- 3) Lower blade depth.
- 4) Check that motor rotation is same as lay of strands in wire being stripped.
- 5) Try 70° optional blade.

PROBLEM: Wire does not strip.

SOLUTIONS:

- 1) Lower blade depth.
- 2) Check blade is not dull.
- 3) Check that blade is properly installed, see "Maintenance."
- 4) Check that blade is near or on center line when fully lowered.
- 5) Try 70° optional blade.

SYMBOLS:

GROUND LOCATION:



This protective Earth Ground Label is located inside the housing beside the ground wire. This wire is connected to the Power Supply Cable and is wired back through the Mains supply to ground.

CAUTION LABEL:



Refer to operating instructions before using this unit. High voltage is inside this unit and power must be disconnected before servicing.

ON/OFF LABEL:



This is the ON/OFF switch. Press I for on and press O for off. This switch is also the anti-start switch. In case of a power outage, this switch must be reset for the unit to operate.

ROTATION DIRECTION:



Rotation of the head may be reversed by pressing this rotation switch.