G10S Wire Twister

SPECIFICATIONS

Wire sizes:
IR8228 twisting inserts ......................... 18-24 AWG (1.02-0.51mmØ)
IR8227 twisting inserts ......................... 22-26 AWG (0.64-0.41mmØ)
IR8229 twisting inserts ......................... 12-18 AWG (2.06-1.02mmØ)

Twist length........................................ Up to 1” (25.4mm)
Twisted pairs......not to exceed 2 18AWG (1.02mmØ)

Three size spacers:
TR8223............................................ 1/2” (12.7mm) thick
TR8224............................................ 1/4” (6.35mm) thick
TR8225............................................ 1/8” (3.18mm) thick

Decibel rating........................................... 45 dB(A)

Power .................................................. IEC Connected
1/20HP, 115V, 60Hz

Size...................................................... 11” x 6” x 7-1/4”
(219mm x 152mm x 184mm)

Weight .................................................. 8 lbs. (3.6 Kg)

OPERATION

WIRE GUIDE

SPACERS TO ADJUST TWIST
FOR TWIST LENGTH, LENGTH
DEPENDENT ON SIZE AND NUMBER
OF SPACERS. MAXIMUM TWIST
LENGTH 1” (2.54MM).

Always Moving Forward®
WARNING: DO NOT OPERATE TOOL UNTIL YOU HAVE READ THOROUGHLY, AND UNDERSTAND COMPLETELY, ALL INSTRUCTIONS, RULES, ETC. ON THIS PAGE, AND IN THE OPERATING MANUAL. WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE RISK OF FIRE, ELECTRIC SHOCK, AND PERSONAL INJURY, INCLUDING THE FOLLOWING:

GROUNDING INSTRUCTIONS
In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having 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.

Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The green conductor with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug. Repair or replace damaged or worn cord immediately.

GENERAL INSTRUCTIONS

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

KEEP WORK AREA CLEAN Cluttered areas and benches invite accidents.

DON'T USE IN DANGEROUS ENVIRONMENTS Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.

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.

WEAR PROPER APPAREL Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that might get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.

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

MAINTAIN TOOLS WITH CARE Keep tools sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories.

DISCONNECT TOOL before servicing; when changing accessories, such as blades, wheels, cutters, and like.

USE RECOMMENDED ACCESSORIES Consult the operating manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.

CHECK DAMAGED PARTS Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

DO NOT EXCEED THE MAXIMUM MATERIAL SPECIFICATIONS.

DO NOT OPERATED UNIT WITHOUT GUARDS IN PLACE OR GUARDS NOT IN WORKING ORDER.

DO NOT PERFORM MAINTENANCE OR ADJUSTMENTS WITH POWER ON.

DO NOT PLACE FINGERS OR APPENDAGES IN OR NEAR OPENINGS IN GUARDS.

DO NOT RUN UNIT WITH INCORRECT LINE VOLTAGE. REFER TO LABEL PLACED OVER I/O SWITCH.

DO NOT ALLOW UNTRAINED OR UNQUALIFIED PERSONNEL TO OPERATE UNIT.

DO NOT DEFEAT ANY OF THE SAFETY FEATURES DESIGNED INTO THE UNIT.

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 Eraser's written instruction 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.
**SET-UP:**
The appropriate twisting inserts and twist spacers must be ordered for use with the G10S Wire Twister.

The G10S is shipped with four mounting pads located on the base. In heavy applications it may be necessary to bolt the base to a work surface. Remove the four mounting pads before attaching to a work surface. Failure to remove the pads may cause the housing to crack. A 6" (152mm) wide bolt pattern using two 5/16"OD (8mmø) bolts may be used to permanently mount the unit to a work surface.

The twisting head should be set up as shown in the diagram in this manual. The wire guide and twist length spacers are predrilled for wires with conductor diameters smaller than .040" (1.02mmø). If you need to twist a larger size wire, the wire guide may be drilled out to the correct size. The hole size required in the wire guide is determined by the diameter of both the strands of wire to be twisted including the insulation. The guide should be drilled so that the insulation portion of the wire will not enter the body of the guide (see diagram).

The length of a stranded wire to be twisted is determined by the distance from the point of entry of the wire into the wire guide to the point where the end strands of the wire contact the twisting inserts.

The appropriate number of spacers should be used in the head (as shown in the diagram) to achieve the desired twist length. If there is no combination of twist length spacers that will give exactly the correct twist length, open space may be left between the wire guide and the twisting inserts or spacers, etc. For correct twisting, however, any open space left between the wire guide and the twist length spacers, or between the twist length spacers and the twisting inserts, should not exceed 1/8" (3mm) in total. The twist length spacers should be drilled with an appropriate clearance hole for the wire to be twisted. In many cases this may be the maximum diameter that is required for the machine to twist. In critical applications, to eliminate buckling, etc., the clearance hole in the twist length spacers should be the minimum possible to allow the wire to be easily inserted into the twisting head.

There is no further set-up required. The unit may be connected to the proper power supply. The power cord should be plugged into the I.E.C. receptacle at the rear of the machine. Use a properly grounded mains supply when using any unit that uses electricity.

! **CAUTION:** Environmental conditions for proper operation should be 50°F - 104°F (10°C - 40°C) and 30-75% relative humidity. The operation of the G10S should be in an open well-ventilated work space. These tools may be affected by outside environmental disturbances. Should power be removed, the G10S will not start until the I/O (on/off) switch is reset and turned on. This machine is rated for continuous usage and is protected with a circuit breaker located in the I/O switch.

**OPERATION:**
Be sure that the guard furnished with the unit is fitted as required, and switch the machine on in the direction of the twist desired. Insert the wire into the hole in the wire guide until the insulation on the wire contacts the wire guide, then remove the wire. The strands of the wire will be neatly twisted together. Some "trial and error" may be necessary to obtain the desired result by adjusting the number of twist length spacers and the free distance within the wire guide unoccupied by twist length spacers.

**MAINTENANCE:**
No routine maintenance is required. Keep the machine in a clean condition and replace any worn parts as required.

**TROUBLE SHOOTING:**

**PROBLEM:** Wire will not twist.
**SOLUTIONS:**
1) Check that the correct twist length spacers are being utilized and that the wire guide is properly adjusted.
2) Check that the twisting inserts are correctly positioned in the head assembly.
3) Check that the correct type twisting inserts are being used.

**PROBLEM:** Wire will not enter twisting head.
**SOLUTION:** Make sure that the wire guide and twist length spacers are drilled correctly to accommodate the wire to be twisted.

**PROBLEM:** Wire kinks, knots, or buckles.
**SOLUTIONS:**
1) Check that the correct number of twist length spacers are being utilized.
2) Check that the wire guide is correctly adjusted for the twist length being used.
3) Check the clearance holes in the twist length spacers. Oversize clearance holes in twist length spacers will tend to increase the possibility of kinking, knotting, etc.
4) Check the entrance hole in wire guide is not permitting the insulated portion of the wire to be pushed into the head of the machine.
**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.

**IMPORTANT:** No liability will be incurred by the Eraser Company for injury, death, or property damage caused by a product that has been set up, operated, and/or installed contrary to Eraser’s written instruction 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.
Model G10S Set-Up and Head Assembly Diagrams

1. IR8220 Wire guide with screw
2. IR0673 Insert head
3. TR8223 Spacer, 1/2" (12.7mm)
4. TR8224 Spacer, 1/4" (6.3mm)
5. TR8225 Spacer, 1/8" (3.2mm)
6. IR8228 Insert 18-24 AWG (1.02-0.51mm)
   IR8227 Insert 22-26 AWG (0.64-0.41mm)
   IR8229 Insert 12-18 AWG (2.06-1.02mm)
7. TG3017 Screw
8. TG3028 Allen wrench 5/64"