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Part #20644

THROATLESS ELECTRIC METAL SHEAR INSTRUCTIONS



The **THROATLESS ELECTRIC METAL SHEAR** is a heavy-duty professional quality tool ruggedly designed for many years of reliable service. It features a high-performance, high-torque, ball bearing motor design with a replaceable blades and brushes for efficient operation and long life. Easily cuts up to 22 ga. stainless steel, 18 ga. steel, and 16 ga. aluminum. Throatless design allows tight curves to be cut with ease.

CONTENTS

- (1) Throatless Electric Shear
- (1) Hex Key
- (1) Spare Motor Brush set



SPECIFICATIONS

Maximum Material Thickness:	22 ga. Stainless, 18 ga. Mild Steel, 16 ga. Aluminum
Strokes per minute:	1800
Minimum Cutting Radius:	1.5"
Blade Material:	Tungsten Carbide
Power Requirements:	120V AC~60Hz, 3.5 amps
Motor Construction:	Fan cooled, ball bearings, replaceable brushes

IMPORTANT SAFETY INFORMATION

The following explanations are displayed in this manual, on the labeling, and on all other information provided with this product:

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

GENERAL SAFETY RULES

WARNING

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

1) WORK AREA SAFETY

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

GENERAL SAFETY RULES

2) ELECTRICAL SAFETY

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

3) PERSONAL SAFETY

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.

GENERAL SAFETY RULES

4) POWER TOOL USE AND CARE

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5) SERVICE

- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

ADDITIONAL SAFETY INFORMATION



⚠ READ INSTRUCTIONS

- Thoroughly read and understand this manual before using.
- Save for future reference.



⚠ WARNING SHOCK HAZARD

- Never operate or store the Throatless Electric Shears in damp or wet conditions.
- Plug into a minimum 15 amp circuit. If using an extension cord, it must be AWG 16 or greater, no longer than 25'.



⚠ WARNING HEALTH AND INJURY HAZARD

- This tool may eject particles and metal shards at high velocity during operation. Wear ANSI approved eye protection and heavy duty work gloves at all times while operating.
- Cutting can generate excessive noise. Wear appropriate hearing protection while operating.
- The oscillating blades of this tool can quickly catch loose clothing, long hair or jewelry causing serious personal injury. Keep all loose clothing, long hair and jewelry away from operating tool.
- This tool can quickly start up when handling causing serious personal injury. Always unplug the tool from the electrical supply before changing blades or servicing.
- Sharp cutting blades can quickly pinch and cut. Keep hands and fingers away from oscillating components and always wear protective work gloves while operating shears. When possible, two-handed operation is recommended.
- This tool can quickly and violently twist while operating causing hand and or wrist injury. Do not apply excessive force tool while in use. If smaller objects are being cut, be sure they are securely mounted or anchored before beginning.
- Keep power cord away from cutting blades and sharp metal edges to prevent damage and possible electric shock.

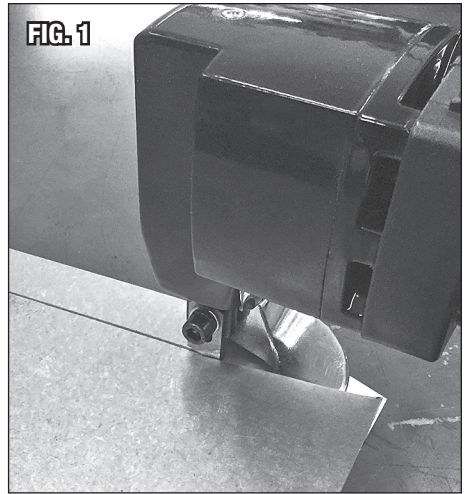


OPERATION

- Plug tool into appropriate power supply.
- Ensuring that the tool is in a safe location away from the user and any other objects, slide the power switch located at the top of the tool forward to turn the tool on. The upper blade will begin to oscillate.
- Align blades on the line to be cut and apply pressure to begin cutting (**FIG 1**). Only moderate pressure is required for tool to cleanly cut through metal. Do not force. When possible, it is recommended to use two hands to control tool.

NOTE: To help ensure cut quality, test shears on a piece of scrap material that is the same thickness as the project material.

- To make a curved cut, apply pressure in the direction needed to follow the curve. If the tool begins to bind **STOP IMMEDIATELY**. Do not force tool. Remove all excess material before attempting to continue the curved cut.



SETTING CUTTING BLADE GAP

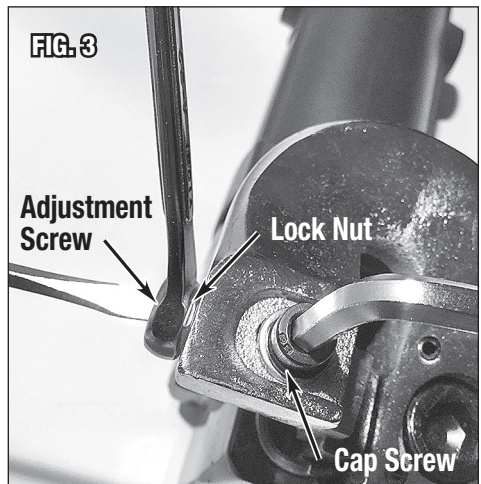
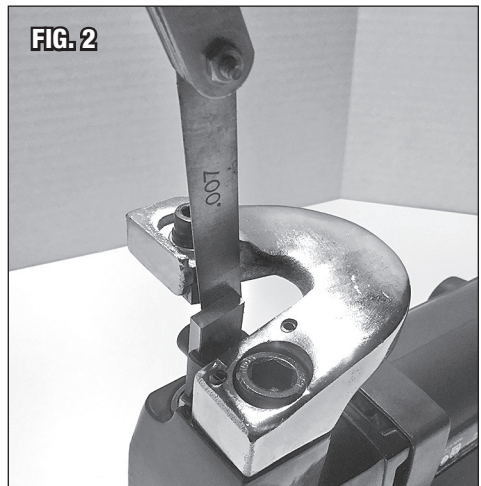
To determine the ideal blade gap for a given project, the material thickness must be considered. For optimum performance, blade gap should be adjusted whenever material type or thickness is changed. If you find the material being sheared is bending excessively, rather than shearing, it is recommended to reduce blade gap. If it is binding rather than shearing, increase blade gap. Make small adjustments and test on scrap pieces of material before cutting your work piece.

⚠ WARNING

Unplug tool before making any adjustments or repairs.

1. With the tool unplugged, apply pressure to the upper blade to move it to its highest position.
2. Measure gap between the upper and lower blades using a feeler gauge (not included) (**FIG 2**).
3. If adjustment is necessary, loosen the cap screw fastening the lower blade slightly, loosen the lock nut, and use the adjustment screw to adjust gap (**FIG 3**).
4. When desired gap is achieved tighten cap screw and lock nut ensuring the desired blade gap is maintained.

Thickness	Recommended Gap
22GA (.0312")	.006"
20 GA (.0375")	.0075"
18 GA (.050")	.010"
16 GA (.0625)	.0125"
14 GA (.078")	.016"



BLADE REPLACEMENT

⚠ WARNING

Unplug tool before making any adjustments or repairs.

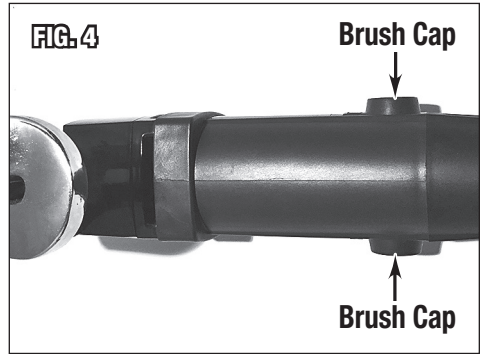
1. Note the orientation of the blade set before disassembly. The replacements must be installed in the same orientation for proper function.
2. Remove upper and lower shear blades.
3. Install new shear blades and set blade gap (See section: Setting Cutting Blade Gap).
4. Test for proper operation of shear.

BRUSH REPLACEMENT

⚠ WARNING

Unplug tool before making any adjustments or repairs.

1. Loosen and remove Brush caps located on the sides of the tool (**FIG 4**).
2. Remove old brushes and install new brushes in the same orientation.
3. Install Brush caps
4. Connect tool to appropriate power source and test for correct operation. Allow tool to run for two minutes, this will allow the new brushes to seat.



MAINTENANCE

- Apply several drops of light machine oil occasionally to moving contact surfaces.
- Add 3-4 drops of light machine oil after each use to the oil port located on the top of the Tool.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Slow Performance	Blades Damaged	Replace Blades.
	Brushes Worn	Replace Brushes.
Excessive Noise	Blades Damaged	Replace Blades.
	Metal on Metal Contact	Add light machine oil to moving contact surfaces.
Tool Is Binding on Metal	Blades Damaged	Replace Blades.
	Material is Too Thick	Ensure material thickness is within the tool's rated capacity.
	Blade Gap is Incorrect	Measure and adjust Blade Gap (See section: Setting Cutting Blade Gap).
Tool Will Not Start	Cord Not Connected	Ensure cord is connected to an appropriate power source.
	No Power at Source	Check power at outlet and ensure that the breaker is not tripped.
	Internal Damage	If internal damage exists, have a qualified technician service the tool.
	Brushes Worn	Replace Brushes.

ADDITIONAL ITEMS

- #26523 Spare Blades.
- #43120 Portable Work Stand
- #12011 Mig 135
- #28187 Bead Roller with 6 Mandrel Sets
- #11979 7pc Hammer and Dolly Set

If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department: 800.544.5118 >> email: techelp@eastwood.com

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