

Eastwood[®]

DO THE JOB RIGHT.[®]

Item #20286

4.5" ANGLE GRINDER

INSTRUCTIONS



The **EASTWOOD 4-1/2" ANGLE GRINDER** is built to high quality standards to provide long life and smooth operation to serve the demands of the avid hobbyist and seasoned professional alike.

Features a heavy-gauge Wheel Guard and a Multi-Position Auxiliary Handle for maximum safety. Designed with replaceable Motor Brushes for maximum Motor life. The standard 5/8" Spindle accepts all 4-1/2" grinding wheels, 1/4" or less in thickness.

INCLUDES

- (1) Angle Grinder
- (1) Auxiliary Handle
- (1) Spanner Pin Wrench
- (2) Motor Brush Assemblies



SPECIFICATIONS

- **RPM:** 10,000 maximum free speed
- **Power Requirements:** 120 Volts AC, 60Hz, 6.4 Amps
- **Spindle Size:** 5/8"
- **Spindle Arbor Thread:** 5/8"-11
- **Wheel Size:** 4-1/2" x 1/4" thick (or less)

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 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.

2) ELECTRICAL SAFETY

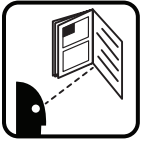
- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, 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.

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.



⚠ READ INSTRUCTIONS

- Thoroughly read and understand these product instructions before using the Angle Grinder.
- Keep these product instructions for future reference.



⚠ WARNING SHOCK HAZARD!

- Never use the Angle Grinder in damp or wet conditions.
- Plug into a minimum 15 amp properly grounded circuit. If using an extension cord, it must be AWG 16 or greater, no longer than 25'.



⚠ CAUTION HEALTH HAZARDS!

- The dust and fine particulate matter generated during the grinding process can contain toxic substances such as lead, silica and solvents. Breathing this dust and fine particulate matter can cause serious respiratory health conditions. Always use NIOSH approved respiratory protection while using this Angle Grinder.
- This Angle Grinder will eject particles, dust and buffing materials at high velocity during operation. Wear approved eye and skin protection at all times while operating.
- Grinding can generate excessive noise. Wear appropriate hearing protection while using this tool.
- This tool vibrates during use. Long-term exposure to vibrating machinery can cause temporary or permanent injury to the hands, arms and shoulders. DO NOT use this tool for extended periods of time. Wear suitable gloves to reduce the effects of vibration.



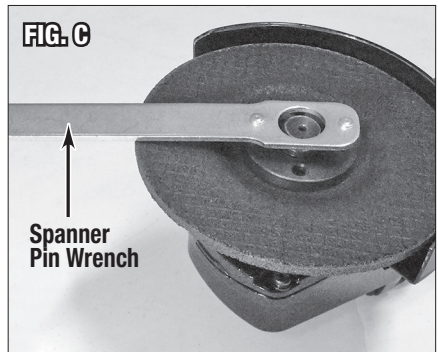
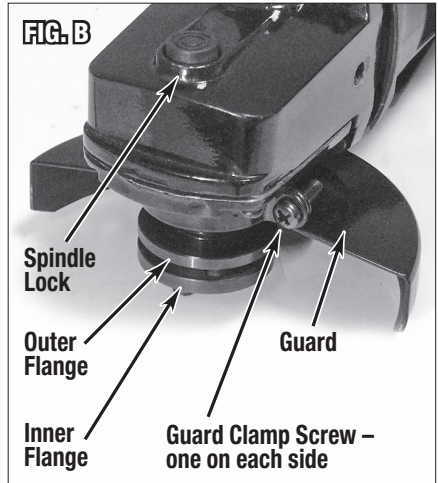
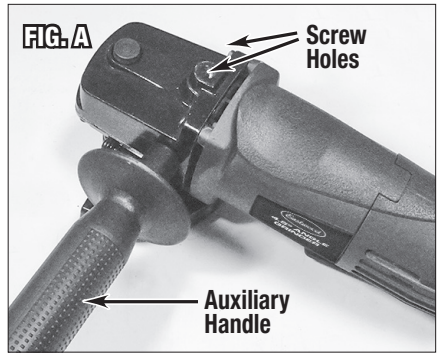


⚠ CAUTION INJURY HAZARDS!

- DO NOT operate this Grinder without Guard in place! Only use wheels and accessories that fit within the Guard. The Guard must be securely fastened to the Grinder and positioned so that it is between the operator and the rotating accessory. This helps protect the operator from debris and fragments in event of accessory failure.
- The rotating wheel of this Grinder can quickly catch loose clothing, long hair or jewelry causing serious personal injury. Keep all loose clothing, long hair and jewelry away from operating Grinder.
- This Grinder can quickly start up when handling while plugged in to electrical supply causing serious personal injury. Always unplug the tool from the electrical supply before changing wheels or discs.
- Rotating Grinding wheels can quickly abrade skin. Keep hands and fingers away from rotating wheel and always wear protective work gloves while grinding.
- This Grinder can quickly and violently kick back or twist while operating causing severe hand and or wrist injury. Use only on broad, open spaces using care to avoid edges and corners.
- DO NOT apply excessive force tool while in use. This can cause the wheel to shatter or disintegrate seriously injuring the operator and bystanders.
- Incorrectly rated wheels and discs can disintegrate at high RPM causing serious personal injury. Always use replacement 4-1/2" diameter grinding wheels rated for 10,000 RPM or greater use.
- Damaged wheels can disintegrate at high speed causing personal injury or property damage. If excessive vibration is felt, discontinue use immediately and disconnect tool from electrical supply. Inspect grinding wheel and tool for damage. Do not resume use until resolution is found.
- Always make sure the workpiece being ground is securely clamped or anchored to allow two handed operation of the tool.
- DO NOT set the tool down until the wheel has come to a complete stop.
- DO NOT start the Grinder with the Spanner Pin Wrench engaged in the Spindle Nut. It could be ejected at great speed seriously injuring the operator and bystanders.

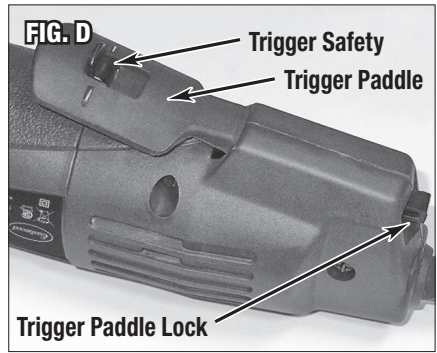
GRINDER SET-UP

- Thread the Auxiliary Handle into one of the threaded holes in the Angle Grinder Head (**FIG A**). Hand-tighten securely.
NOTE: Attach to left side of Head for right-handed users and to right side of Head for left-handed users (**FIG B**).
- Be sure the Grinder is unplugged. Remove the Spindle Nut. Place Grinding Wheel onto the spindle. Thread the Spindle Nut onto the Spindle, and while depressing the Spindle Lock Button on the top of the Grinder Head, tighten the Spindle Nut securely, using the Spanner Pin Wrench (included) (**FIG C**).
- Plug into a minimum 15 amp circuit. If using an extension cord, it must be AWG 16 or greater, no longer than 25'.



OPERATION

- While holding the Angle Grinder securely, pull back on the Trigger Safety and depress the Trigger (**FIG D**).
- For extended use, the Trigger can be locked in the On position. To lock the Trigger Paddle in the On position, depress the Trigger fully then push in the Trigger Lock Button located behind the Trigger, just below the Power Cord Inlet. To Release: Fully depress and release the Trigger to disengage the Trigger Lock.

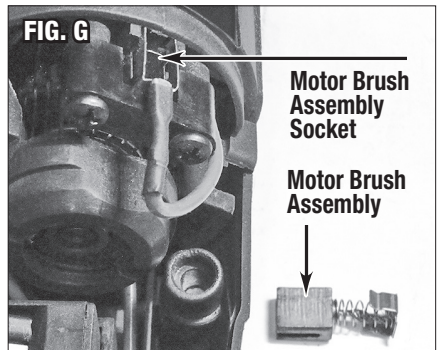
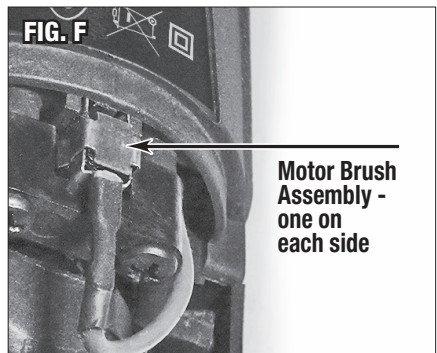
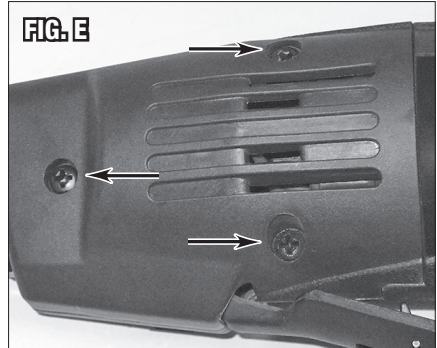


MOTOR BRUSH REPLACEMENT

If motor fails to start as trigger is depressed after extensive use, the Motor Brushes likely need to be replaced.

⚠ WARNING SHOCK HAZARD!
Unplug tool before beginning the brush replacement procedure. Do Not plug in the tool until procedure is completed, the housing has been closed and the fasteners tightened.

1. Remove the three screws retaining the two halves of the Angle Grinder Rear Housing (**FIG E**).
2. Remove the Motor Brush Assembly from socket. Using a small screwdriver, carefully lift the Motor Brush Assembly from its socket (**FIG F**).
3. Inspect Brushes. NOTE: Brushes are considered worn if less than 1/8" of carbon is remaining (**FIG G**).
4. Replace the Motor Brush Assembly. **NOTE:** The carbon contact goes in first and is keyed to the rectangular socket.
5. Replace Angle Grinder Rear Housing and tighten fasteners.



TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Does Not Run When Trigger is Depressed	No electrical power to Grinder	Check 120 VAC input plug connection.
		Check for tripped circuit breaker.
	Motor Brushes worn	Replace Motor Brushes as described in this manual.
Motor Runs Too Slow/ Develops Low Power	Undersized or too long of an extension cord	Use only 16 gauge or larger cord.
		Limit length to 25'.
	Motor Brushes worn	Replace Motor Brushes as described in this manual.
Excessive Noise and/or Vibration	Grinding wheel loose on threaded Arbor	Tighten grinding wheel onto Arbor.
	Grinding wheel cracked or damaged	Replace grinding wheel as described in this manual.
Motor Overheats	Excessive pressure being applied to grinding wheel	Allow Grinder to cut by rotation alone. Do Not Force.
	Full face of grinding wheel being applied to surface	Work only on 12:00 to 3:00 quadrant of wheel at a 10°-15° angle.
	Dirt and debris buildup in motor cooling air slots	Use a brush or compressed air to remove debris.

OPTIONAL ITEMS

- #31112 4-1/2" Cleaning / Stripping Disc System
- #31073 Backing Pad 4-1/2", 5/8"x 11 Shaft
- #31094 Cleaning Disc, 4-1/2", Produces 80 Grit Finish
- #31086A Stripping Disc, 4-1/2", Produces 320 Grit Finish
- #13199 Bristle Disc, 4-1/2", White, 120 Grit
- #13198 Bristle Disc, 4-1/2", Yellow, 80 Grit
- #31128 Bristle Disc, 4-1/2", Green, 50 Grit
- #54224 Precision Abrasives Zirconia Flap Disc 4.5" x 7/8 - 40 Grit
- #54225 Precision Abrasives Zirconia Flap Disc 4.5" x 7/8 - 60 Grit
- #54226 Precision Abrasives Zirconia Flap Disc 4.5" x 7/8 - 80 Grit
- #13395 Poly-X, Paint & Rust Removal Disc, 4", Cup Style

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

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: tech@eastwood.com

PDF version of this manual is available at eastwood.com

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