Eastwood®

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Part #32489

VARIABLE SPEED 6" ORBITAL BUFFER/POLISHER

INSTRUCTIONS

The **EASTWOOD VARIABLE SPEED 6" ORBITAL BUFFER/POLISHER** 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.

Compact and well balanced for fatigue free use with a choice of handle types for maximum user comfort. Features a soft-start response to minimize polish spatter and an accurate, electronic variable speed control to help avoid paint surface damage or burn-through. The spindle accepts all 6" accessory pads with 5/16"-24 male threads.

INCLUDES

- **(1)** Orbital Buffer/Polisher Tool
- **(1)** Auxiliary Side Handle
- **(1)** "D" Handle
- **(1)** 6" Hook and Loop Backing Pad
- **(1)** 6" Hook and Loop Foam Polishing Pad
- **(2)** M8 Socket Head Screws
- **(1)** 5mm Hex Key
- **(1)** Arbor Flat Wrench
- **(2)** Replacement Motor Brushes

SPECIFICATIONS

Power Requirements:	120 Volts AC, 60Hz, 7.5 Amps
Arbor Size:	5/16"-24 female thread
Replacement Buffing/Polishing Disk Size & Type:	6" Hook & Loop [152mm], min. 6,400 RPM rating, 5/16"-24 male thread
Soft-Start Motor Startup	
Motor Speed; Variable:	2000 to 6400 RPM
Orbit Size:	9mm
Power Cord:	18 Ga., Length = 10'

SAFETY INFORMATION

⚠ 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.

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.

ADDITIONAL SAFETY INFORMATION

⚠ READ INSTRUCTIONS

- Thoroughly read and understand these product instructions before using the Sander/Polisher.
- Keep these product instructions for future reference.

⚠ WARNING SHOCK HAZARD!

- Never operate or store Sander/Polisher in damp or wet conditions.
- Plug into a minimum 15 amp properly grounded circuit. If using an extension cord, it must be AWG 14 or greater, no longer than 25'.

ADDITIONAL SAFETY INFORMATION

⚠ CAUTION HEALTH HAZARDS!

- The dust and fine particulate matter generated during the Buffing or Polishing 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 Buffer/Polisher.
- This Buffer/Polisher will eject particles, dust and buffing materials at high velocity during operation. Wear approved eye and skin protection at all times while operating.
- Buffing and polishing can generate excessive noise. Wear appropriate hearing protection while using.

⚠ CAUTION INJURY HAZARDS!

- The rotating pad of this Buffer/Polisher can quickly catch loose clothing, long hair or jewelry causing serious personal injury. Keep all loose clothing, long hair and jewelry away from operating Buffer/Polisher.
- This Buffer/Polisher 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 pads or discs.
- Rotating Buffing/Polishing discs can quickly abrade skin. Keep hands and fingers away from rotating pad and always wear protective work gloves while sanding.
- This Buffer/Polisher can quickly and violently kick back or twist while operating causing severe hand and or wrist injury. Do not apply excessive force tool while in use. Use only on broad, open spaces using care to avoid edges and corners. If smaller objects are being polished, be sure they are securely mounted or anchored before beginning.
- Incorrectly rated pads and discs can disintegrate at high RPM causing serious personal injury. Always use replacement 6” pads and discs rated for 6400 RPM operation or greater.
- Damaged pads or disks 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 backing pad, disk and tool for damage. Do not resume use until resolution is found.
- If using to sand, this Buffer/Polisher can eject a trail of sparks at high speed which can ignite flammable materials or injure others nearby. Do not operate in the vicinity of flammable materials and keep all persons and pets away from the work area.
- Always make sure the workpiece being buffed/polished is securely clamped or anchored to allow two handed operation of the tool.

SET-UP

- Note that The Eastwood 6" Buffer/ Polisher is supplied with a choice of 2 handle mounting options:
  - **1st Option; Side Handle:** Thread the Side Handle into one of the threaded holes at the side of the Buffer Head **(FIG 1)**. Hand Tighten securely. **NOTE:** Attach to the left side for right-handed users and to the right side for left-handed users .
  - **2nd Option; "D" Handle:** Place mounting holes over the threaded holes at the side of the Buffer Head and fasten with the supplied M8 Socket Head Cap Screws **(FIG 2)**. **NOTE:** The Handle of the Buffer/Polisher has an array of round, raised features at the Mounting Flange area while the Buffer Head has an array of corresponding depressions **(FIG 3**). This allows for positive indexing of the Handle when the screws are tightened.
- Slide the Spindle Flat Wrench over the Hex of the Spindle **(FIG 4)**.
- Thread the Backing Pad post into the Arbor and hold the Arbor Flat Wrench until it is securely tightened.
- Withdraw the Arbor Flat Wrench.
- Apply the appropriate work pad (Buffing Pad, Sanding Disc etc.) for the job.
- Plug into a minimum 15-amp circuit. If using an extension cord, it must be AWG 14 or greater, no longer than 25'.


FIG. 1

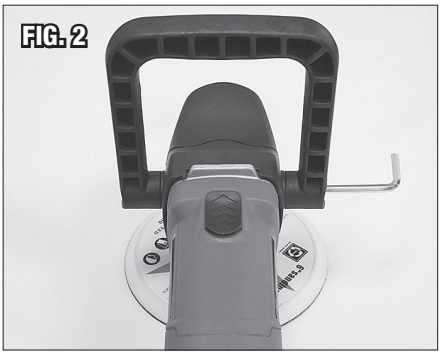


FIG. 2

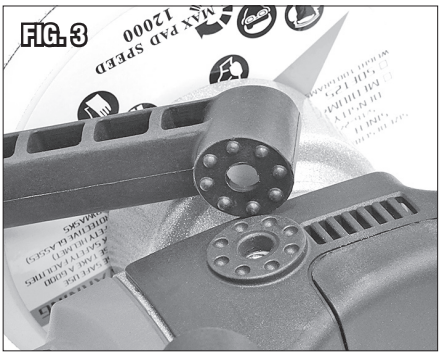
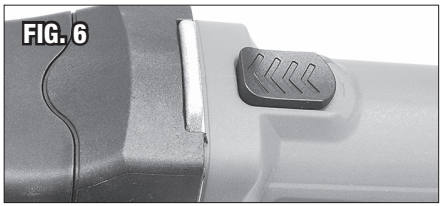


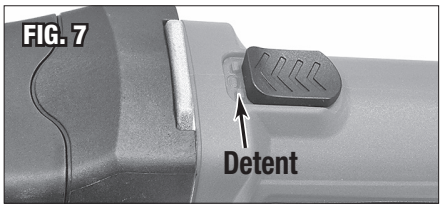
FIG. 3


FIG. 4

GENERAL USE OF BUFFER/POLISHER

- Set the Speed Control on the desired speed **(FIG 5)**. (See charts in appropriate sections).
- While holding the Buffer/Polisher securely in two hands, move the ON-OFF switch to the forward, “ON” position. **NOTE:** The built-in Soft-Start feature will cause a slight delay in motor starting and gradually increase in speed. This feature is designed to minimize splattering and flinging of polishing compound.
- To stop, release the Switch and it will spring back to the “OFF” Position.
- The Switch has a “Lock ON” feature. To engage, move the Switch forward past the detent into the “Locked ON” position **(FIG 6)**.
- To release the “Lock ON”, move the Switch back past the detent to the “OFF” position **(FIG 7)**.





THUMBWHEEL SPEED NUMBER / RPM EQUIVALENCY

⚠ NOTICE

The Thumbwheel Speed Control is infinitely variable and actual RPM will vary widely based on the actual position of the Thumbwheel and numerous factors such as actual current input to tool, rotating mass weight of pad and disk, ambient operating temperature and degree of tool wear. As a result, the following figures are only approximate:

1 = 2000 RPM
2 = 2700 RPM
3 = 3500 RPM
4 = 4800 RPM
5 = 5900 RPM
6 = 6400RPM

SANDING/CLEANING

- Set the Thumbwheel Speed Control on the desired speed. The chart below will help determine the best setting for general conditions. Individual requirements may vary.

Work Surface	Abrasive/Cleaning Disc Recommendations & Machine Speed
- Removing moderate rust. - Removing old paint finish. - Rough shaping body filler.	P40 to P240 Grit 5000 to 6000 RPM (5-6 on Eastwood Buffer Dial)
- Removing light surface rust. - Removing old paint finish. - Finish shaping body filler.	P320 to P600 Grit 4000 to 5000 RPM (4-5 on Eastwood Buffer Dial)

BUFFING/POLISHING

- The ability to successfully buff out a paint finish requires a learning curve to properly master that once learned, is a highly satisfying and valuable skill to have. It is best to practice first on old body panels acquired from a salvage yard before attempting to buff out a finish you care about. Possibly a neighbor or friend will have a vehicle with paint in poor condition that they will allow you to practice on.
- Wash vehicle thoroughly with a good quality car wash solution and sponge. Be sure to remove any tar, bug or tree residue.
- Gently, dry the surface with a soft, lint free microfiber towel.
- Cleaning all painted surfaces to be buffed with a clay bar is recommended. Follow all package instructions carefully.
- Mask all windows, wheels and any black painted areas or plastic trim pieces using plastic sheeting and masking tape. Note: Flat or matte painted surfaces, vinyl graphics and plastic trim can be white-stained from the compound & polish.
- Carefully and fully read all labels of Compound and Polishes before beginning any work or irreversible finish damage can result.
- The use of Foam polishing pads is strongly recommended as they resist paint-burning heat buildup. The use of Wool pads is not recommended for beginners as they can quickly generate a high level of heat and burn through paint.
- Always maintain lower machine speed levels to avoid generating excessive heat and paint damage.
- Determine the paint condition or level of damage to be restored.
  NOTE: Always start with the mildest pad and polish combination that will do the job and work toward the next mildest combination to achieve the best results with minimum work. The chart at right will help determine the proper product combination for specific paint conditions:

Paint Condition	Product Recommendations & Machine Speed
- Deeper scratches in clear coat. - Mild abrasions (not through clear coat or to primer). - Acid rain or chemical etching. - Bird dropping stains. - Paint overspray. - Weathering dullness. - Light orange peel. - Follow-up to wet-sanding.	Foam Cutting Pads and heavier Cutting Compound 2500 to 3000 RPM (2 to 3 on Eastwood Buffer Dial)
- Follow-up for Cutting Pad & compound swirls. - Minor clear coat scratches & abrasions. - Water spots. - Surface haze. - Minor staining.	Foam Polishing Pads and lighter Polishing Compound 1400 to 1600 RPM (1 on Eastwood Buffer Dial)
- Swirl Removing. - Wax/Polish Application.	Mild Foam Finessing Pads and Abrasive-free Wax or Polish 1400 to 1500 RPM (1 on Eastwood Buffer Dial)

- Never push down on or apply pressure to the Buffer while running. Let the spinning pad do the work.
- Apply a several inch-long bead of polishing compound to work surface or to face of pad. **NOTE:** Be sure to follow the buffing compound manufacturer's bottle instructions carefully! With the switch off, spread the compound around the work surface with the pad.
- Try (if possible) to work in a 2' x 1' area and move in long, overlapping rows. Never stop the machine in one spot or pad overheating could occur.
- Generally, when the compound dries and disappears, stop the machine, wipe the residue off with a clean microfiber cloth and check your progress. Be sure to follow the buffing compound manufacturer's bottle instructions.

BRUSH REPLACEMENT

If motor performance is noticeably degraded or fails to start as trigger is depressed, the Motor Brushes are likely worn and need to be replaced. To do so:

- First unplug machine.
- Remove the Motor Vent Panels (one each side) by removing the screws with a Phillips screwdriver **(FIGS 8 & 9)**.
- Remove the Motor End Housing by removing two additional Phillips screws adjacent to the Speed Control Wheel **(FIGS 10 & 11)**.

FIG. 8

FIG. 9

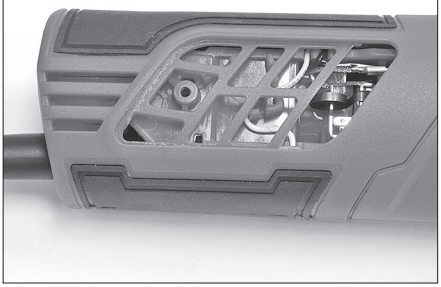
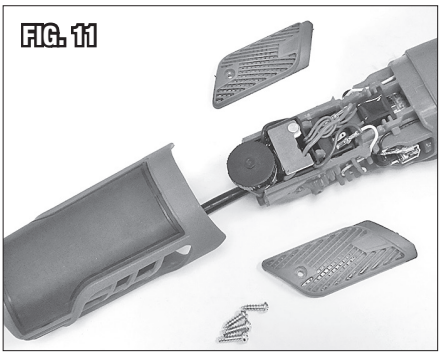


FIG. 10

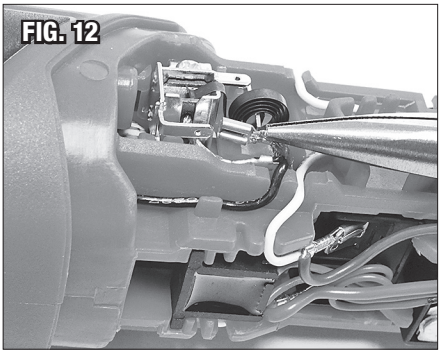
FIG. 11

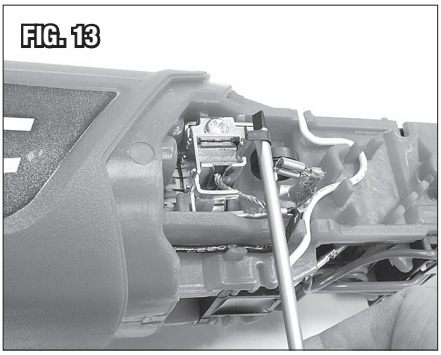


- Remove the spade connector at the end of the braided brush lead from the terminal by gripping with needle nose pliers and pulling outward **(FIG 12)**.

> **⚠ NOTICE**
> **The Brush Retaining Tab portion of the wound-spring MUST be held in place while the Brush is removed! DO NOT allow the spring to release. If the Brush Retaining Tab is accidentally released, it will wind around and stop against the outer edge of the motor housing. To retrieve the Brush Retaining Tab and rotate it to the proper position, a hooking tool must be fabricated with a paper clip, slipped into the Spring Hook and rotated back up to the proper position.**

- Placing a small straight-blade screwdriver under the wound-spring tab, lift up and out to release spring tension from brush and pull straight out of shell **(FIG 13)**.
- Inspect Brush.
  NOTE: Brushes are considered worn if less than 1/8" of carbon is remaining.
- Replace with new brush.
  NOTE: The carbon contact goes in first and is keyed to the rectangular socket. Release spring tension and carefully allow spring tab to exert pressure on the top of the brush.
- Repeat above procedure for opposite brush.
- Replace the Motor End Housing and the Motor Vent Panels and tighten screws.





NOTES

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Does Not Run When Switch Is Depressed	No electrical power to Buffer/Polisher	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 14 gauge or larger cord.
		Limit length to 25'.
	Motor Brushes worn	Replace Motor Brushes as described in this manual.
Excessive Noise and/or Vibration	Backing Disk loose on threaded Arbor	Tighten Backing Disk onto Arbor.
	Backing Disk cracked or damaged	Replace Backing Disk as described in this manual.
Motor Overheats	Excessive pressure being applied to Buffing/ Polishing/ Sanding Pad	Allow Pad to cut by rotation alone. Do Not Force.
	Full face of Buffing/ Polishing/ Sanding Pad being applied to surface	Work only on 12:00 to 3:00 quadrant of pad at a 10°-15° angle.
	Dirt and debris buildup in motor cooling air slot	Use a brush or compressed air to remove debris.

ADDITIONAL ITEMS

#16230 Chemical Guys Hex-Logic Orange 6.5" Medium-Heavy Cutting Pad
#12019 Norton Liquid Ice Polishing Compound
#16135 Griot's Complete Polish
#32071 Chemical Guys Workhorse Towels
#16143 True Power 8PC Microfiber Towel Set

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
The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA
800.343.9353 eastwood.com