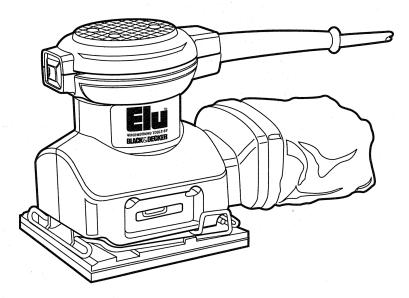


# **Instruction Manual**1/4 Sheet Finishing Sander 2714



## Thank You for Buying an ELU Finishing Sander

Your 2714 finishing sander has been carefully designed to meet the rugged standards for quality and dependability that have made ELU the most respected name in quality woodworking tools.

With the right abrasive paper you can produce satin smooth finishes that are ready for painting or varnishing. The 2714 sander features through the pad dust collecting capability and includes an easy to empty dust bag and a paper punch to make your own

special perforated paper for dust collection.

Performance, features and ELU's inherent toughness make this sander every inch the pro that you are.

Please read this informative instruction manual and pay particular attention to the safety instructions we've included for your protection.

Don't forget to send in your owner's registration card.

Thanks, again for buying an ELU finishing sander!



#### **IMPORTANT SAFETY INSTRUCTIONS**

**WARNING:** When using electric tools, basic safety precautions should always be followed to reduce risk of fire, electric shock, and personal injury, including the following:

#### **READ ALL INSTRUCTIONS**

#### **Double Insulation**

Double insulated tools are constructed throughout with two separate layers of electrical insulation or one double thickness of insulation between you and the tool's electrical system. Tools built with this insulation system are not intended to be grounded. As a result, your tool is equipped with a two prong plug which permits you to use extension cords without concern for maintaining a ground connection.

**NOTE:** Double insulation does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

**CAUTION:** WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS. Repair or replace damaged cords.

#### **Polarized Plugs**

Polarized plugs (one blade is wider than the other) are used on equipment to reduce the risk of electric shock. When provided, this plug will fit in the polarized outlet only one way. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

#### **Safety Instructions For All Tools**

- KEEP WORK AREA CLEAN. Cluttered areas and benches invite injuries.
- CONSIDER WORK AREA ENVIRONMENT. Don't expose power tools to rain. Don't use
  power tools in damp or wet locations. Keep work area well lit. Do not use tool in presence of
  flammable liquids or gases.
- **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, and refrigerator enclosures.
- **KEEP CHILDREN AWAY.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- STORE IDLE TOOLS. When not in use, tools should be stored in dry, and high or locked-up place out of reach of children.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was intended.
- USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy-duty tool.
   Don't use tool for purpose not intended.
- DRESS PROPERLY. Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors.
   Wear protective hair covering to contain long hair.
- USE SAFETY GLASSES. Also use face or dust mask if operation is dusty.
- DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle.
   Keep cord from heat, oil, and sharp edges.
- **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- DON'T OVERREACH. Keep proper footing and balance at all times.

- MAINTAIN TOOLS WITH CARE.
   Keep tools sharp and clean for
   better and safer performance.
   Follow instructions for lubricating
   and changing accessories. Inspect
   tool cords periodically and if
   damaged, have repaired by
   authorized service facility. Inspect
   extension cords periodically and
   replace if damaged. Keep handles
   dry, clean, and free from oil and
   grease.
- DISCONNECT OR LOCK OFF TOOLS when not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
- REMOVE ADJUSTING KEYS
   AND WRENCHES. Form habit of
   checking to see that keys and
   adjusting wrenches are removed
   from tool before turning it on.
- AVOID UNINTENTIONAL STARTING. Don't carry tool with finger on switch. Be sure switch is off when plugging in.
- EXTENSION CORDS. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Minimum Gage for Cord Sets						
Volts Total Length of Cord in Feet						
120V	0-25	26-50	51-100	101-150		
240V	0-50	51-100	101-200	201-300		
Ampere Rating More Not more AWG Than Than						
0 - 6	18	16	16	14		
6 - 1	0 18	16	14	12		
10 - 1	2 16	16	14	12		
12 - 1	6 14	12	Not Re	commended		

- OUTDOOR USE EXTENSION
   CORDS. When tool is used
   outdoors, use only extension cords
   intended for use outdoors and so
   marked.
- STAY ALERT. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- **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 by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.

#### Additional Safety Instructions for Sanders

- ALWAYS WEAR EYE PROTECTION.
- Clean your tool out periodically.
- CAUTION: Some wood contains preservatives such as copper chromium arsenate (CCA) which can be toxic. When sanding these materials extra care should be taken to avoid inhalation and minimize skin contact.

#### SAVE THESE INSTRUCTIONS

#### Motor

Be sure your power supply agrees with the nameplate marking. (Volts, 120 AC only)

Voltage decrease of more than 10% will cause loss of power and overheating. All ELU tools are factory tested; if this tool does not operate, check the power supply.

### SAVE THESE INSTRUCTIONS

#### **Attaching Abrasive Paper**

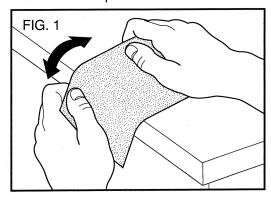
Your sander is designed to use 1/4 sized sanding sheets. This size paper can be made by:

- a. Cutting full sized (9" x 11") sandpaper into 1/4 sheets of 4 1/2" x 5 1/2".
- b. Cutting 1/2 sheet sandpaper into two 4 1/2" x 5 1/2" sheets.

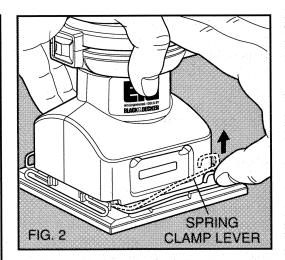
Pre-cut 4 1/2" x 5 1/2" sandpaper is available at extra cost from your service center.

For normal operations, assemble the abrasive paper to your unit as follows.

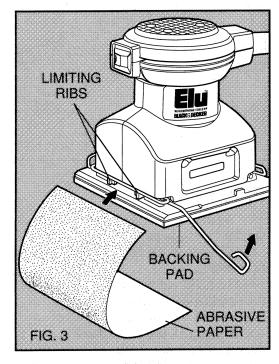
 Soften the stiff sandpaper by pulling it over the 90° edge of a table or other straight edge, as shown in Figure 1. Concentrate on softening the edges to be clamped.



 Release clamp by pulling up on clamp lever and disengaging it from the tab on the base plate. (See Fig. 2)



3. Insert the 4 1/2" edge of the abrasive paper under the front paper clamp, as shown in Figure 3 until it hits the paper limiting ribs shown in the figure. Close the front paper clamp and hook it into the lock position behind the tab on the base plate.

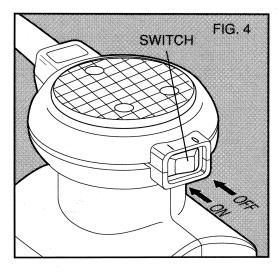


- 4. Stretch paper over backing pad and insert under the opposite clamp in the same way.
- 5. If you are using the dust extraction feature, perforate the sandpaper with the provided paper punch as instructed on page 6.

Caution: When using perforated paper be sure to raise the dust door (Figure 7), and install the dust collection bag to insure maximum effectiveness. Conversely, when not using the dust extraction feature, be sure to close the dust door, shown in Figure 7.

#### **Switch**

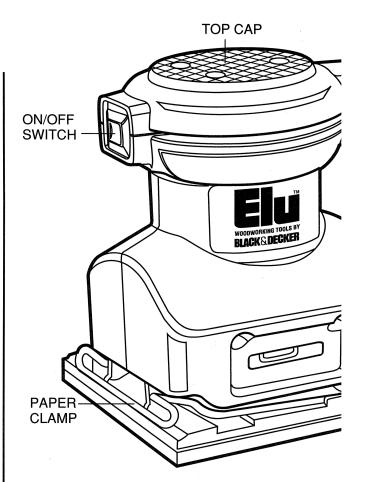
To turn the unit on, depress the side of the dust protected switch that corresponds to the symbol "I". To turn the tool off, depress the side of the switch that corresponds to the symbol "O". See Figure 4.

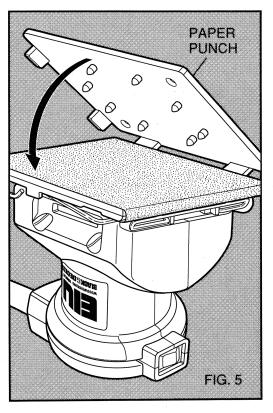


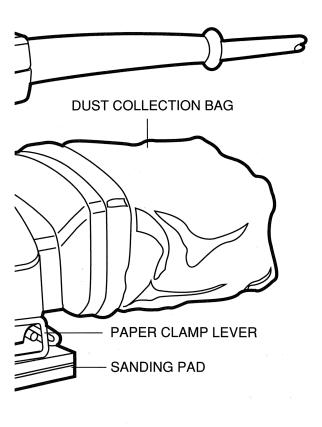
#### **Paper Punch**

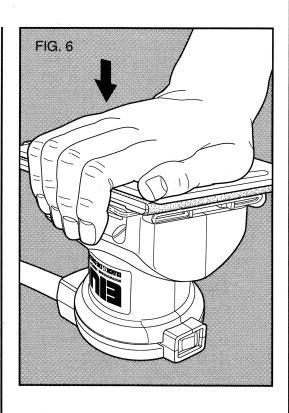
A paper punch is provided with your sander to let you perforate regular sandpaper to make dust collection possible.

To perforate your sandpaper, install the sandpaper on the tool as instructed in this manual. With the sander turned off and unplugged, place the paper punch on the paper so that the tabs at the edges of the punch are against any two adjacent sides of the sanding pad, as shown in Figure 5. Press the punch against the pad so that the 8 points penetrate the paper, as shown in Figure 6. (Press the punch into the pad as far as it will go.) Remove the paper punch and the paper is ready.









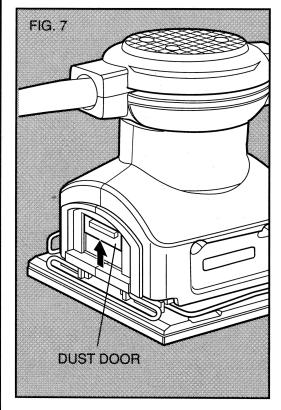
An alternate method of perforating the paper is to fasten the punch down to a suitable work surface and press the sander (with the paper attached) down on the punch. Two holes are provided in the punch for this purpose. Use #8 flat head

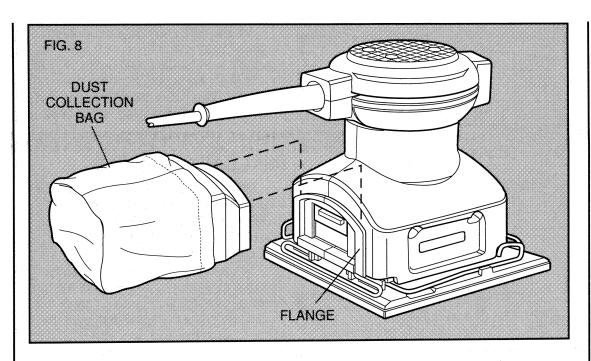
#### **Dust Collection Bag**

DUST COLLECTION BAG: NEVER OPERATE THIS TOOL WITH PERFORATED PAPER UNLESS THE DUST COLLECTION BAG IS IN PLACE, OR THE DUST DOOR IS CLOSED.

To use the dust collecting system, raise the dust door by sliding it up into the housing, as shown in Figure 7. Lower the plastic end of the collection bag over the flange around the dust door and push it down as far as it will go, as shown in Figure 8.

To empty the dust collection bag, simply lift it up, off of the sander and empty over a trash receptacle.





#### **Operation**

To operate your sander, grasp it as shown on the front cover of this manual and turn it on. Move it in long, sweeping strokes along the surface being sanded, letting it do the work. Pushing down on the tool while sanding actually slows the removal rate and produces an inferior quality surface. Be sure to check your work often, this sander is capable of removing material rapidly, especially with coarse paper.

Your sander is designed to sand flush on three sides (four sides without the dust collection bag) for sanding in corners, and its small size and light weight make it ideal for overhead work.

The orbital action of your sander allows you to sand with the grain or at any angle across it for most sanding jobs. On the final sanding steps, as discussed below, a better finish will result if you sand only with the grain.

To produce the best finish possible, start with coarse grit sandpaper and change gradually to finer and finer paper.

A final sanding with a piece of well worn fine sandpaper will produce a really professional looking finish that in many cases will need no hand sanding at all.

The rate at which the dust collection bag will fill up will vary with the type of material being sanded and the coarseness of the sandpaper. For best results, empty the bag frequently and check the dust door opening for clogging.

### Precautions To Take When Sanding Paint

- Sanding of lead based paint is NOT RECOMMENDED due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women.
- 2. Since it is difficult to identify whether or not a paint contains lead without a chemical analysis, we recommend the following precautions when sanding any paint:

#### PERSONAL SAFETY

- a. No children or pregnant women should enter the work area where the paint sanding is being done until all clean up is completed.
- b. A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing. NOTE: Only those dust masks suitable for working with lead paint dust and fumes should be used. Ordinary painting masks do not offer this protection. See your local hardware dealer for the proper mask.
- c. NO EATING, DRINKING or SMOKING should be done in the work area to prevent ingesting contaminated paint particles. Workers should wash and clean up BEFORE eating, drinking or smoking. Articles of food, drink, or smoking should not be left in the work area where dust would settle on them.

#### **ENVIRONMENTAL SAFETY**

- a. Paint should be removed in such a manner as to minimize the amount of dust generated.
- Areas where paint removal is occurring should be sealed with plastic sheeting of 4 mils thickness.
- c. Sanding should be done in a manner to reduce tracking of paint dust outside the work area.

#### **CLEANING AND DISPOSAL**

- a. All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project.
   Vacuum filter bags should be changed frequently.
- Plastic drop cloths should be gathered up and disposed of along with any dust chips or other removal debris. They should be placed in sealed refuse recep-

- tacles and disposed of through regular trash pick-up procedures. During clean up, children and pregnant women should be kept away from the immediate work area.
- All toys, washable furniture and utensils used by children should be washed thoroughly before being used again.

#### **Tool Care**

Keep your machine as clean as possible by wiping with a clean cloth and occasionally blowing through with air.

Don't use harsh chemicals or solvents to clean the tool. These chemicals could seriously damage the plastic.

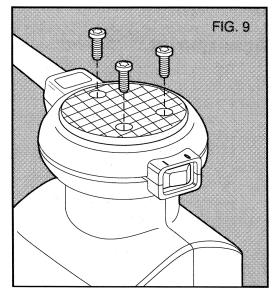
Avoid overloading your sander.

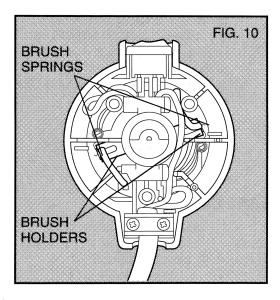
Overloading will result in a considerable reduction in speed and efficiency and the unit will become hot. In this event, run sander at a "no load" condition for a minute or two.

#### **Brush Replacement**

#### TURN OFF AND UNPLUG THE SANDER

To replace the tool's brushes, remove the three screws located in the top cap, as shown in Figure 9.





Lift off the top cap. Observe the brush holders, as shown in Figure 10 and the wires leading from the brushes to the motor field.

Pull the wires from the motor field and then lift and hold out of the way one of the brush springs. Remove the old brush from the brush holder and discard the brush/wire assembly. Still holding the brush spring out of the way, insert the new brush, release the spring against the back of the brush and plug the wire into the motor field. Repeat the procedure for the second brush.

Replace the top cap and tighten the three screws that hold it in place. (Always replace both brushes.)

#### **Accessories**

The accessories listed in this manual are available at extra cost from your local dealer or service center.

A complete listing of service centers is included with your tool.

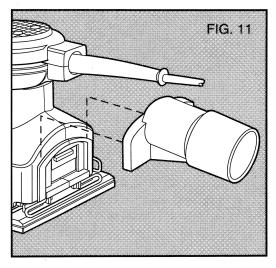
If you need assistance in locating any accessory please contact:

Black & Decker (U.S.) Inc. Consumer Service Department 626 Hanover Pike P.O. Box 618 Hampstead, MD 21074-0618

Cat. No.	Grit	Sheets per pack
74-420 74-421 74-422 74-423	Coarse Medium Fine Assortment	6 6 6 2 coarse/ 2 medium/ 2 fine

Dust Extraction Hose Adaptor (Cat. No. 40175)

Slides over flange at rear of tool, as shown in Figure 11. Accepts a variety of vacuum hoses for dust extraction.



6" Circular Platen (Cat. No. 40176)

Includes 6" dia. round sanding pad for sanding irregular shapes where extra flexibility may be desired.

To install the circular platen, remove the four screws in the bottom of the sanding pad and remove the pad and the rectangular platen. Replace with the circular platen and the 6" diameter sanding pad using the same four screws.

Accepts 6" dia. adhesive backed sanding discs only.

**NOTE:** Recommended accessories for this tool are listed in this manual. The use of any other may be hazardous.

#### **NOTES**

#### Lubrication

Self lubricating bearings are used in the tool and periodic relubrication is not required. However, it is recommended that, once a year, you take or send the tool to a service center for a thorough cleaning and inspection.

#### **Important**

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments should be performed by Black & Decker Service Centers or other qualified service organizations, always using Black & Decker replacement parts.

#### **Commercial/Industrial Use Warranty**

Black & Decker (U.S.) Inc. warrants this product for one year from the date of purchase. We will repair without charge, any defects due to faulty material or workmanship. Please return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station listed under "Tools Electric" in the yellow pages. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others.

Like most Black & Decker tools, this tool is listed by Underwriters Laboratories to ensure that it meets stringent safety requirements.

This symbol on the nameplate means the product is listed by Underwriters Laboratories, Inc.



