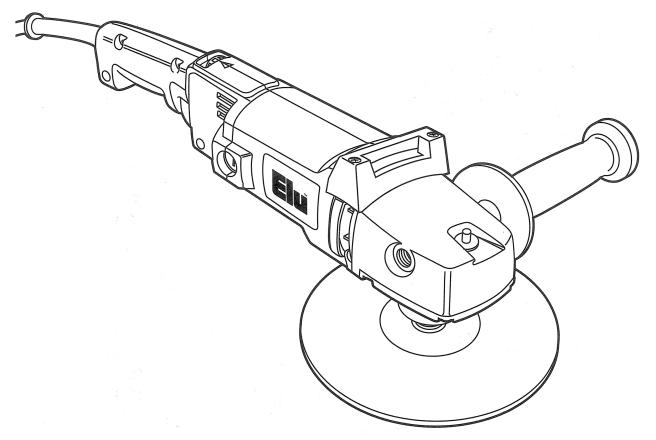


# **Instruction Manual**

Electronic Variable Speed 7" & 9" Sander/Polisher 2717



# **Thanks For Selecting an ELU Sander/Polisher.**

Designed with all the rugged dependability for which ELU is famous, your new tool is sure to give you years of reliable service.

Features like Double Insulation, a built-in Spindle Lock and Checkpoint Brush System make your new tool a real value.

An Electronic Speed Control feature is the heart of your new Sander/Polisher.
Especially designed electronics inside the tool enable it to compensate for loading and

maintain a pre-selected speed that you choose yourself.

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

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

Once again, thanks for buying ELU.



# **Important Safety Instructions**

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

#### READ ALL INSTRUCTIONS

- 1. KEEP WORK AREA CLEAN. Cluttered areas and benches invite injuries.
- 2. **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.
- 3. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
- KEEP CHILDREN AWAY. All visitors should be kept away from work area. Do not let visitors contact tool or extension cord.
- 5. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place—out of reach of children.
- 6. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was intended.
- 7. **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, for example, don't use circular saw for cutting tree limbs or logs.
- 8. **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.
- 9. **USE SAFETY GLASSES.** Also use face or dustmask if operation is dusty.
- 10. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
- 11. **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.
- 12. DON'T OVERREACH. Keep proper footing and balance at all times.
- 13. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for better and safe 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.
- 14. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
- 15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 16. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
- 17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- 18. STAY ALERT. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- 19. 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.
- 20. **DO NOT OPERATE** portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.

### SAVE THESE INSTRUCTIONS FOR FUTURE USE.

### **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 it 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 all tools, USE ONLY IDENTICAL REPLACEMENT PARTS. Repair or replace damaged cords.

### **Important**

To assure product SAFETY and RELIABILITY, repairs, maintenance (excluding brush inspection and replacement) and adjustment should be performed by qualified service organizations, always using ELU replacement parts.

ELU products are serviced by Black & Decker company owned Service Centers.

### **Extension Cords**

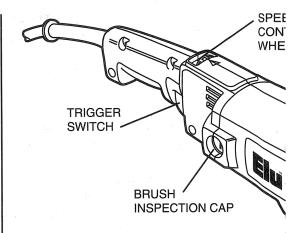
Double insulated tools have two-wire cords and can be used with two-wire or three-wire extension cords. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.) (C.S.A. in Canada). If the extension will be used outside, the cord must be suitable for outdoor use. Any cord marked as outdoor can also be used for indoor work. The letters "WA" on the cord jacket indicate that the cord is suitable for outdoor use.

An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension cord to make up the total length, be sure each individual extension contains at least the minimum wire size.

To determine the minimum wire size required, refer to the chart below.

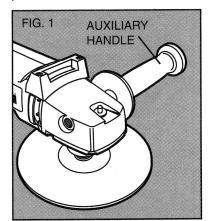
CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS								
NAMEPLATE DATING AMPS	TOTA							
RATING-AMPS	25	50	/5	100	125	150	1/5	200
0 - 10.0	18	18	16	16	14	14	12	12
10.1 - 13.0	16	16	14			12	12	12
13.1 - 15.0	14	14	12	12	12	12	12	-

Before using an extension cord, inspect it for loose or exposed wires, damaged insulation and defective fittings. Make any needed repairs or replace the cord if necessary. Black & Decker has extension cords available that are U.L. (C.S.A. in Canada) listed for outdoor use.



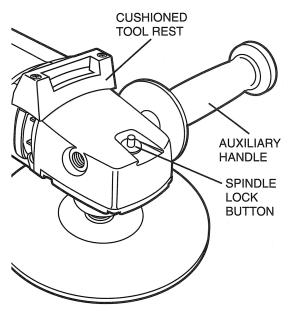
# **Auxiliary Handle (Fig. 1)**

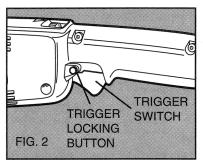
An auxiliary handle is furnished with your tool and can be installed on either side of the front housing. This handle SHOULD BE USED AT ALL TIMES to maintain complete control of the tool.



# Switch (Fig. 2)

The Variable Speed Switch allows you to increase or decrease tool speed. This is very useful for slow, controlled tool starting under light loads. It is operated simply by depressing and releasing the trigger fully. Depressing the trigger turns the tool "ON"; releasing the trigger turns the tool "OFF". To lock the switch in the full "ON" position for continuous operation, depress the trigger fully, push in the Trigger Locking Button on the left side of the handle and then release the trigger. To release the Locking Button, depress trigger fully, then release it. As the trigger is depressOL





ed, the speed of the tool will increase up to that speed indicated on the Speed Control Wheel. (See "Speed Control Wheel")

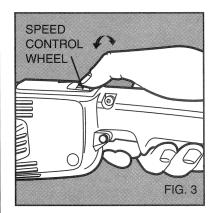
**NOTE:** The switch can only be locked in the FULL ON position.

**CAUTION:** Grasp tool firmly with both hands before starting.

# **Speed Control Wheel** (Fig. 3)

The maximum speed of your tool can be changed by rotating the Speed Control Wheel to the desired setting. The Wheel incorporates detents to prevent inadvertent wheel movement and to facilitate speed selection. For added versatility, the

switch may be locked in its full "ON" position and tool speed changed by means of the Speed Control Wheel alone.



# **Electronic Speed Control**

Your tool is equipped with electronic speed control that not only lets you select the speed to suit the job, but also helps maintain that speed as you load the tool by pressing down. It's this feature, coupled with the variable speed switch that make this tool such a value.

The speed control wheel can be set for any speed between 1000 and 3000 RPM and the variable speed switch will then control tool speed from zero to the wheel setting. For example: A control wheel setting of 2400 RPM will allow the variable speed switch to operate the tool between zero RPM and 2400 RPM, depending on how far the trigger is depressed. A wheel setting of 2000 RPM would allow the switch to operate the tool from zero RPM to 2000 RPM.

The Electronic Speed Control feature comes into play whenever the trigger switch is fully depressed and the tool is running at the selected speed determined by the setting of the control wheel. As you load the tool by pushing it down on the work surface, (with the trigger fully depressed) the electronic circuit inside the tool will compensate for the loading and maintain the selected speed. If the speed selected by the control wheel is 2400 RPM, as in the example above, the tool will maintain 2400 RPM, as it is loaded.

It is important to remember two things about Electronic Speed Control. They are:

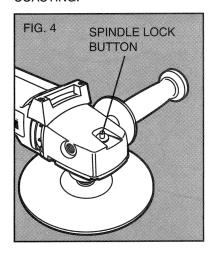
- The Electronic Speed Control operates only when the trigger switch is fully depressed.
- The effect of Electronic Speed Control is much easier to observe at lower speed settings (2500 RPM and below), than at high speeds. As the tool approaches 3000 RPM, the effect is considerably less dramatic.

Keep in mind that, with a conventional polisher running at a typical no load speed of 2400 RPM, the tool slows down to about 2000 RPM under a polishing load. Your 2717 will continue to run at 2400 RPM (or any speed you select with the control wheel) as a load is applied. Since it doesn't slow down, the speed may be greater than you're used to so some extra caution should be observed until you get the "feel" of your polisher. If you feel the speed is too great, you can, of course slow the tool down with either the trigger switch or the control wheel.

# Spindle Lock Button (Fig. 4)

Turn off and unplug tool.

In order to prevent the spindle of the tool from rotating while installing or removing accessories, a Spindle Lock button has been provided in the gear head of the machine. To lock the spindle, depress and hold the Lock button. NEVER DEPRESS THE SPINDLE LOCK BUTTON WITH THE TOOL RUNNING OR COASTING.



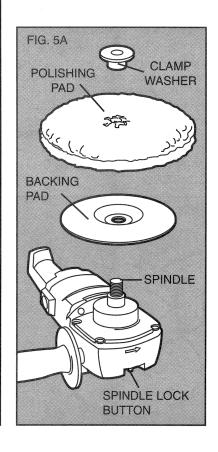
## **Operation**

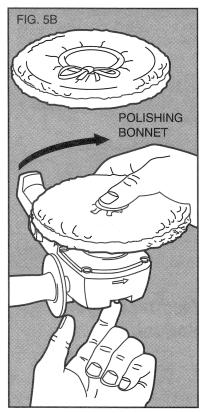
ATTACHING AND REMOVING POLISHING PADS (FIG. 5A AND 5B)

BE SURE THE TOOL IS
UNPLUGGED! To attach pad, push
the hub of the clamp washer through
the hole in the center of the Polishing
Pad as far as it will go. Engage the
hexagonal Clamp Washer hub with
the hexagonal hole in the Backing
Pad. Holding the three pieces firmly
together, place the assembly on the
tool spindle. Hold the spindle lock
button while turning the pads clockwise to thread them completely on
the spindle.

To remove the pads, turn them by hand in the opposite direction from normal rotation to allow lock button to engage spindle, then unscrew pads in normal direction for right hand thread.

NOTE: If you are using a Polishing Bonnet, rather than a Pad, put clamp washer on first, pull Bonnet completely over backing pad and pull draw strings tight. Tie bow knot and push knot and all loose string completely under the inside cloth edge of the Polishing Bonnet.





**WARNING:** Tied knot and all strings must be tucked entirely under the cloth apron. Failure to do so may cause serious injury

#### **POLISHING**

These instructions and suggestions are intended to familiarize new operators in overall general operation of POWER POLISHING. You will develop your own techniques which will make the job easier and faster as you learn power polishing.

You should use utmost care when power polishing around or over sharp objects and contours of the car body. It is very important to use the correct pressure while polishing various sections of an automobile body. For example, light pressure should be applied when polishing over sharp edges of body panels, or over edges of the rain gutter along the top.

Since everyone does not use the same type of Power Polish, we recommend you clean and polish a test section on a flat area of the car FIRST. From this test section, you can judge the strength or cleaning action of your Power Polish.

Remember, all Power Polish is not the same. Different brands will

react differently on various painted surfaces. Also, you are now using a POWER POLISHER with Power Polish. This is entirely different from any hand application which you may have done before. Wash the car before power polishing it. Washing will remove loose dirt, scum, road salt, etc. which could act as an abrasive and damage paint. Loose dirt, etc. will also clog the polishing pad and you will have to clean it more often.

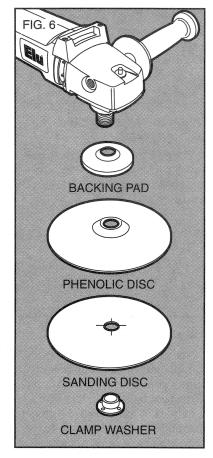
Without turning the tool "ON", grasp the handles of the tool and pick it up. Keep the tool away from your body and turn the switch "ON." Make sure you have a firm grip on the handles and operate the tool freely without forced effort or unnecessary pressure. The side handle can be easily changed to either side of the tool for left-handed or right-handed operation.

NOTE: The high speed rubbing action of the polishing bonnet upon the surface of an automobile can build a static charge on the metal portions of this tool. This can result in a sensation of a very short mild electric shock when the metal area of the tool is touched, and will be more noticeable on days when the humidity is low. This is a harmless phenomenon but you are invited to bring the tool to a Black & Decker service Branch where it can be checked to assure that no electrical malfunction is present.

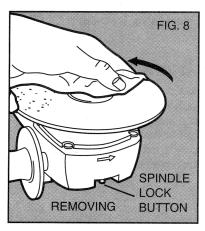
#### ATTACHING AND REMOVING ABRASIVE DISCS (FIGS. 6, 7, AND 8)

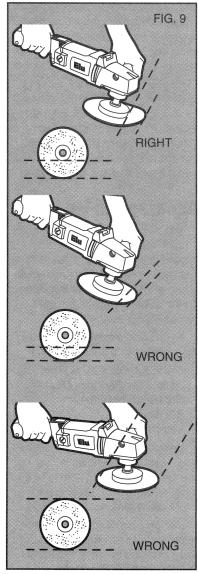
BE SURE THAT TOOL IS UNPLUGGED! To attach Sanding Disc, push the hub of the clamp washer through the center of the sanding and phenolic discs, as far as it will go, and also through the Backing Pad. Engage the clamp washer threads on the tool spindle and thread assembly clockwise, completely down on the spindle. Hold the spindle from rotating by engaging the Spindle Lock button.

To remove the Abrasive Disc, use a cloth or glove to protect your hand, turn the disc assembly counterclockwise. Hold the spindle from rotating by engaging the Spindle Lock Button.









#### SANDING FIG. 9

When using an abrasive disc, hold the tool so that an angle of 10 to 15 degrees exists between the disc and the work. If only the outer edge of the sanding disc is used, a rough cut surface will result. If the sanding disc is pressed flat against the work the sanding action will be irregular and bumpy, and the tool will be difficult to control.

# **Precautions To Take When Sanding Paint**

 Sanding of lead based paints is NOT RECOMMENDED due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women. II. 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.

#### A. PERSONAL SAFETY

- No children or pregnant women should enter the work area where paint sanding is being done until all clean-up is completed.
- 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 NIOSH APPROVED MASK.

3. 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.

#### **B. ENVIRONMENTAL SAFETY**

- Paint should be removed in such a manner as to reduce the amount of dust generated.
- 2. Areas where paint removal is occurring should be sealed with plastic sheeting of 4 mils thickness.
- Sanding should be done in a manner to reduce tracking of paint dust outside the work area.
- C. CLEANING AND DISPOSAL
- 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.
- 2. Plastic drop cloths should be gathered up and disposed of

along with any dust chips or removable debris. They should be placed in sealed refuse receptacles 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 should be washed thoroughly before being used again.

# **Maintenance of Tool**

#### **CLEANING**

Blowing dust, polishing bonnet lint, and grit out of the motor housing using compressed air is a necessary regular maintenance procedure. Dust and grit containing metal particles often accumulate on interior surfaces and could create an electrical shock hazard if not frequently cleaned out.

**CAUTION:** Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. Use clean, dry rag only.

#### **LUBRICATION**

ELU tools are properly lubricated at the factory and are ready for use. Tools should be lubricated regularly every sixty days to six months, depending on usage. (Tools used constantly on production or heavyduty jobs and tools exposed to heat may require more frequent lubrication.) This lubrication should only be attempted by trained power tool repairmen such as those at Black & Decker Service Centers or in other qualified service organizations.

#### **MOTOR BRUSHES**

Be sure tool is unplugged before inspecting brushes. Carbon Brushes should be regularly inspected for wear. To inspect brushes, unscrew the plastic brush inspection caps (located in the sides of the motor housing) and the spring and brush assemblies may be withdrawn from the tool.

Keep brushes clean and sliding freely in their guides. Carbon

brushes have varying symbols stamped into them, and if the brush is worn down to the line closest to the spring, they must be replaced. New brush assemblies are available at Service Centers; see TOOLS, ELECTRIC in the Yellow Pages.

Your tool is equipped with the ELU brush check-point system. When the brushes become worn out, the tool will automatically stop and prevent damage to the motor.

### **Accessories**

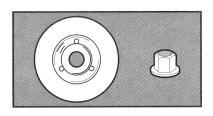
The accessories listed in this manual are available at extra cost from your local dealer or Black & Decker Service Center. A complete listing of service centers is included on the owner's registration card packed with your tool.

If you need assistance in locating any accessory, please contact:

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

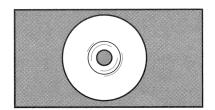
Recommended accessories for your polisher are shown in this manual. **CAUTION:** The use of any other accessory or attachment might be hazardous.

Use only accessories having a maximum operating speed at least as high as the highest "NO LOAD RPM" marked on the tool's nameplate. This precaution applies to any accessory on any tool.



# QUICK-CHANGE FLEXIBLE BACKING PADS

C51824: 7" quick change Super-Flexible rubber Backing Pad with No. 50933 Clamp Washer. Max. safe rpm: 5000.



#### PHENOLIC BACKING DISCS

These lightweight backing discs provide greater flexibility for most sanding operations. For maximum rigidity combine two or three sizes with 3-1/2" backing disc and proper size abrasive pad. For more flexibility use one or two sizes with 3-1/2" backing pad and proper size abrasive disc.

31001: 9" Kool FLEX® Phenolic Disc.

61907: 7" Phenolic Disc only. Max. safe rpm: 6000.

61908: 9" Phenolic Disc only. Max. safe rpm: 6000.

Every Black & Decker tool is of the highest quality. If you wish to contact us regarding this product, please call toll free between 8:00 a.m. and 5:00 p.m. EST, Monday through Friday. 1-800-762-6672

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



# **Commercial/Industrial Use Warranty**

ELU warrants this product for one year from 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.

