

## 8" Low Speed, Long Shaft Buffer



## Operator's Manual

Record the serial number and date of purchase in your manual for future reference.

Serial Number: \_\_\_\_\_ Date of purchase: \_\_\_\_\_

For technical support or parts questions, email [techsupport@rikontools.com](mailto:techsupport@rikontools.com) or call toll free at (877) 884-5167

# TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Safety Instructions.....	2-7
Electrical Safety.....	6-7
Specifications.....	7
Carton Contents.....	8
Overview.....	9
Assembly.....	10
Installation.....	10
Operation.....	11
Parts Diagram.....	12
Parts List.....	13
Troubleshooting.....	14
Maintenance.....	14
Warranty.....	15

**NOTE:** The specifications, photographs, drawings and information in this manual represent the current machine model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Rikon Power Tools to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of this machine.

**This owner's manual is not a teaching aid and is intended to show assembly, adjustments, and general use.  
SAVE THESE INSTRUCTIONS. Refer to them often.**

**IMPORTANT!** Safety is the single most important consideration in the operation of this equipment. The following instructions must be followed at all times. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury. There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.

## SYMBOL MEANING



**SAFETY ALERT SYMBOL:** Indicates DANGER, WARNING, or CAUTION. May be used in conjunction with other symbols or pictographs.



Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.



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



Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

**NOTICE:** (Without Safety Alert Symbol) indicates a situation that may result in property damage.

# SAFETY INSTRUCTIONS

## GENERAL SAFETY

Operating a Buffer can be dangerous if safety and common sense are ignored. The user must be familiar with the operation of the tool. Read this manual to understand this machine. **DO NOT** operate this Buffer if you do not fully understand the limitations of this tool. **DO NOT** modify this machine in any way.

## BEFORE USING THE BUFFER

### **WARNING:**

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the Buffer.

### **WARNING:**

**1. CALIFORNIA PROPOSITION 65 WARNING:** Some dust created by using power tools contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement, and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. For more information about California Proposition 65 log onto [www.rikontools.com](http://www.rikontools.com).

**2. READ** the entire Owner's Manual. **LEARN** how to use the tool for its intended applications.

**3. GROUND ALL TOOLS.** If the tool is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The 3rd prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the 3rd prong. See Grounding Instructions on page 6.

**4. AVOID A DANGEROUS WORKING ENVIRONMENT.** **DO NOT** use electrical tools in a damp environment or expose them to rain.

**5. DO NOT** use electrical tools in the presence of flammable liquids or gasses.

**6. ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an environment with floor surfaces that are slippery from debris, grease, and wax.

**7. KEEP VISITORS AND CHILDREN AWAY.** **DO NOT** permit people to be in the immediate work area, especially when the electrical tool is operating.

**8. DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.

**9. WEAR PROPER CLOTHING.** **DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.

**10. CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

**11. ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.

**12. KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.**

**13. AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.

**14. REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning "ON" the machine.

# SAFETY INSTRUCTIONS

## 15. USE ONLY RECOMMENDED

**ACCESSORIES.** Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.

## 16. NEVER LEAVE A RUNNING TOOL UNAT-

**TENDED.** Turn the power switch to the "OFF" position. **DO NOT** leave the tool until it has come to a complete stop.

17. **DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over, or you accidentally contact the tool.

18. **DO NOT** store anything above or near the tool where anyone might try to stand on the tool to reach it.

## 19. MAINTAIN YOUR BALANCE. DO NOT

extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

20. **MAINTAIN TOOLS WITH CARE.** Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.

21. **EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL.** Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.

22. **DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.**

23. **SECURE ALL WORK.** Use clamps or jigs to secure the work piece. This is safer than attempting to hold the work piece with your hands.

24. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL.**

A moment of inattention while operating power tools may result in serious personal injury.

25. **ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES,** including wood dust, crystalline silica dust and asbestos dust.

Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal.

Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death.

Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material.

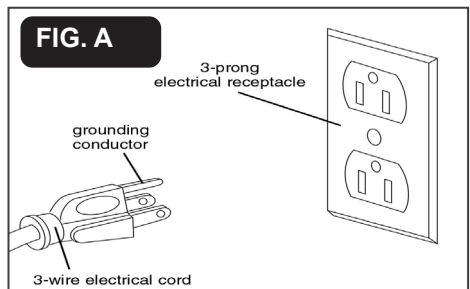
Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

## 26. USE A PROPER EXTENSION CORD IN GOOD CONDITION.

When using an extension cord, be sure to use one heavy enough to carry the current your product will draw.

The table on page 7 shows the correct size to use depending on cord length and nameplate amperage rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the larger the diameter of the extension cord. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.

**USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG. FIG. A.**



# SAFETY INSTRUCTIONS

## SPECIFIC SAFETY INSTRUCTIONS FOR BUFFERS

Basic precautions should always be followed when using your buffing machine. To reduce the risk of injury, electrical shock, or fire, comply with the safety rules listed below:

### 1. ALWAYS WEAR EYE PROTECTION.

Everyday eyeglasses are **NOT** safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools. The operation of any buffer or power tool can result in debris being thrown into your eyes, which can result in severe and permanent eye damage.

### 2. ALWAYS WEAR RESPIRATORY PROTECTION.

Exposure to fine dust and buffing debris particles can be hazardous to your health. Always wear a NIOSH-approved respirator or dust mask to reduce your risk of respiratory damage.

3. **SECURE THE BUFFER** to a stand or work-bench to prevent sliding or tipping during use. See page 10.

4. **WEAR TIGHT FITTING GLOVES** when buffing as the work pieces can get hot or have sharp edges. Gloves should be tight so they will not get caught in the buffing wheel. Leather gloves are recommended.

5. **INSPECT THE WORK PIECE** before buffing to insure that there are no loose parts, knots, splinters or sharp and potentially dangerous shaped areas that may catch and thrown at the operator.

6. **NEVER BUFF SMALL WORK PIECES** without them being properly held by pliers or clamps, or they will be ripped out of your hands and possibly cause harm to you or damage the item.

7. **NEVER PUT FINGERS INSIDE WORK PIECES** to hold them when buffing. Should the object being buffed be caught and thrown by the wheel, damage to your fingers may result.

8. **DO NOT STAND IN FRONT OF THE BUFFER WHEN STARTING IT.** Stand to one side of the Buffing and turn it "ON". Wait at the side for one minute until the machine comes up to full speed. There is always a possibility that debris from a glazed or damaged buffing wheel may be discharged towards the operator.

9. **ALLOW THE BUFFER TO ATTAIN FULL SPEED BEFORE BEGINNING WORK.** Hold the work piece securely, and slowly ease the work into the buffing wheel. Be careful of any sharp edges or corners that may catch on the wheel and be torn from your hands.

10. **DO NOT** buff using the sides or the rear of the buffing wheels. Buff only on the wheel slightly below the wheel center.

11. **NEVER STOP THE BUFFER BY FORCING MATERIAL INTO THE WHEEL.** Let the buffer stop rotating on its own.

12. **RESURFACE / DRESS THE BUFFING WHEEL OFTEN.** This will keep the wheel surface free of residue and glaze. Use a metal rake or stiff wire brush.

13. **THE DIAMETER OF THE BUFFING WHEELS WILL DECREASE WITH USE.** Replace the buffing wheels when they become too small for effective buffing, to avoid any damage should the sewn or bonded material break apart.

14. **REPLACE A DAMAGED BUFFING WHEEL IMMEDIATELY.** A damaged wheel can discharge debris at a high velocity towards the operator. Tighten the spindle nut just enough to hold the buffing wheel firmly on the arbor. **DO NOT** over-tighten the nut. Only use the wheel flanges provided with the grinder. When selecting a replacement buffing wheel, use only properly sized wheels, and verify that the wheel has a higher R.P.M. rating than the maximum R.P.M. of the Buffer.

15. **FREQUENTLY** clean buffing debris and dust from beneath and around the machine. Keep the work area clean.

# SAFETY INSTRUCTIONS

16. **ADDITIONAL INFORMATION** regarding the safe and proper operation of this product is available from:

- Power Tool Institute  
1300 Summer Avenue  
Cleveland, OH 44115-2851  
www.powertoolinstitute.org
- National Safety Council  
1121 Spring Lake Drive  
Itasca, IL 60143-3201  
www.nsc.org
- American National Standards Institute  
25 West 43rd Street, 4th Floor  
New York, NY 10036  
www.ansi.org
- ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor regulations  
www.osha.gov

17. **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use them to instruct others.

## ELECTRICAL SAFETY

### **WARNING:**

**THIS 120 VOLT TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.**

**IN THE EVENT OF A MALFUNCTION OR BREAKDOWN**, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

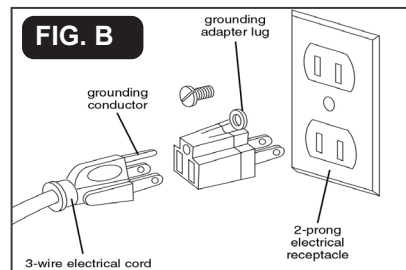
**DO NOT MODIFY THE PLUG PROVIDED.** If it will not fit the electrical receptacle, have the proper receptacle installed by a qualified electrician.

**IMPROPER ELECTRICAL CONNECTION** of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

**CHECK** with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

**USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG. REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.**

This tool is intended for use on a circuit that has an electrical receptacle as shown in **FIGURE B**. **FIGURE B** shows a 3-wire electrical plug and electrical receptacle that has a grounding conductor. If a properly grounded electrical receptacle is not available, an adapter as shown, can be used to temporarily connect this plug to a 2-contact ungrounded receptacle. The adapter has a rigid lug extending from it that **MUST** be connected to a permanent earth ground, such as a properly grounded receptacle box. **THIS ADAPTER IS PROHIBITED IN CANADA.**



THIS SYMBOL DESIGNATES THAT THIS TOOL IS LISTED BY THE CSA GROUP TESTING SERVICES, TO UNITED STATES AND CANADIAN STANDARDS

# SAFETY INSTRUCTIONS

## EXTENSION CORDS

**⚠ WARNING:** Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with a power tool.

**⚠ WARNING:** Check extension cords before each use. If damaged replace immediately. Never use a tool with a damaged cord, since touching the damaged area could cause electrical shock, resulting in serious injury.

Use a proper extension cord. Only use cords listed by Underwriters Laboratories (UL). Other extension cords can cause a drop in line voltage, resulting in a loss of power and overheating of tool. When operating a power tool outdoors, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)

120 VOLT OPERATION ONLY				
	25' LONG	50' LONG	100' LONG	150' LONG
0 to 6 Amps	18 AWG	16 AWG	16 AWG	14 AWG
6 to 10 Amps	18 AWG	16 AWG	14 AWG	12 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG	12 AWG

## SPECIFICATIONS

MOTOR POWER ..... 1/2HP, 120V, 2.5A, 60Hz, 1Ph, Induction  
 MOTOR RPM (no load) ..... 1750 RPM  
 RECOMMENDED RUN TIME ..... 30 Minutes  
 MOTOR ARBOR ..... 15.88mm (5/8")  
 ARBOR THREADING ..... M16LH / M16RH  
 BUFFING WHEEL SIZE ..... 8" Dia. x 1/2" Wide, 5/8" Bore  
 MAX. BUFFING WHEEL WIDTH ..... 1-3/8"  
 BUFFING WHEEL SPEED ..... 1750 RPM  
 ROTATION (Viewed from left side) ..... Clockwise  
 ON/OFF SWITCH ..... Toggle and Safety Lock  
 POWER CORD ..... 18AWG, 6 Feet  
 GRINDER BASE (LxW) ..... 8-3/4" x 7-3/4"  
 MOUNTING HOLES (2) ..... 7/16" Dia., 7-3/4" Apart  
 OVERALL SIZE Approx. (LxWxH) ..... 22-1/2" x 7-3/4" x 9-1/2"  
 NET WEIGHT ..... 23 lbs.  
 SHIPPING WEIGHT ..... 26 lbs.

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# CARTON CONTENTS

## UNPACKING AND CHECKING CONTENTS

This 8" Buffer will require a minimal amount of assembly.

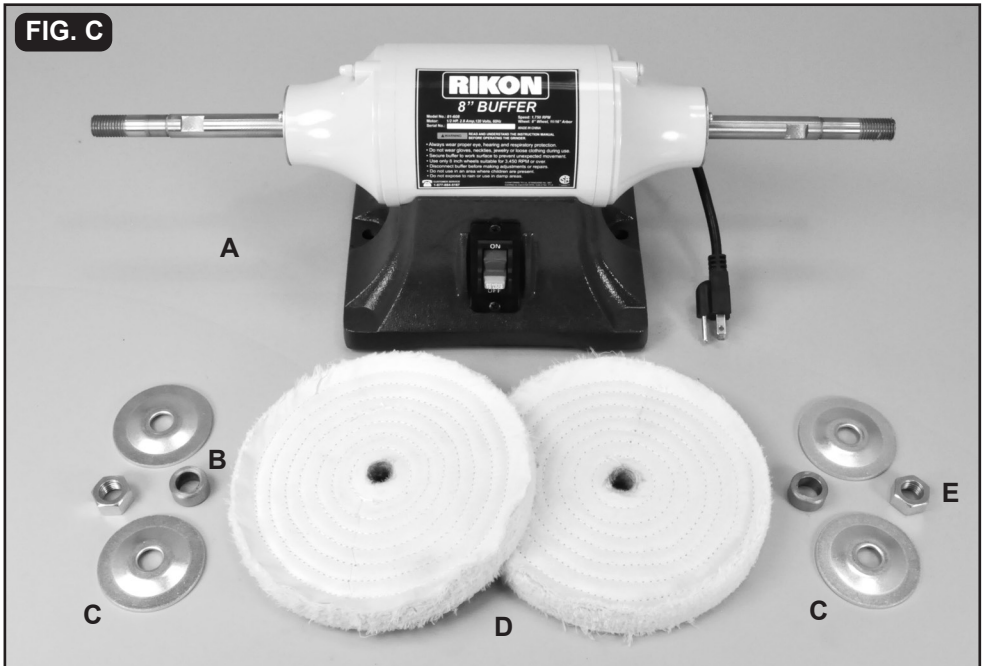
1. Remove all of the parts from the carton and lay them on a clean work surface.

2. Remove any protective materials and coatings from all of the parts. The protective coatings can be removed by spraying WD-40 on them and wiping it off with a soft cloth. This may need to be redone several times before all of the protective coatings are removed completely.

**CAUTION: DO NOT** use acetone, gasoline or lacquer thinner to remove any protective coatings.

3. Compare the items to Figure C; verify that all items are accounted for before discarding the shipping box.

**WARNING:** If any parts are missing, do not attempt to plug in the power cord and turn "ON" the machine. The Buffer must only be turned "ON" after all the parts have been obtained and installed correctly.



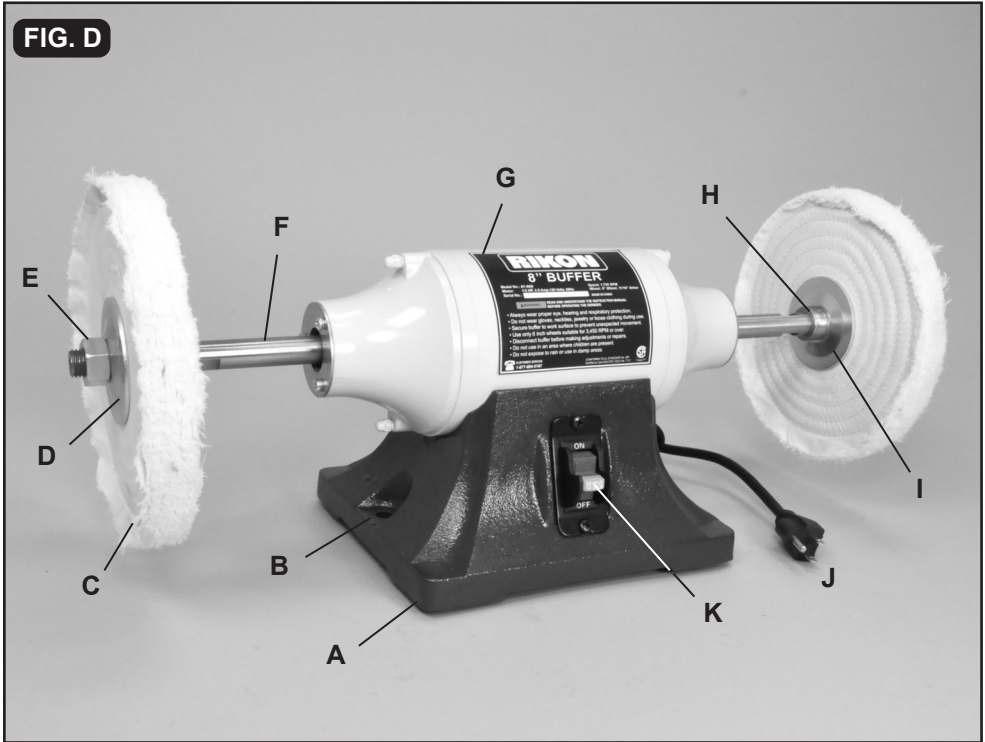
The following items are provided in the shipping box - FIG. C:

- |                      |   |
|----------------------|---|
| A. Buffer            | D. Cotton 8" Buffing Wheels (2)             |
| B. Arbor Spacers (2) | E. Arbor Nuts (2); left M16LH & right M16RH |
| C. Wheel Flanges (4) | F. Manual & Warranty Card (not shown)       |

**NOTE:** Full Parts Diagram and Parts List are listed on pages 12 and 13.



# OVERVIEW



81-608 8" LOW SPEED, LONG SHAFT BUFFER OVERVIEW - FIGURE D

- |                            |                                  |
|----------------------------|----------------------------------|
| A. Cast Iron Base          | G. Motor                         |
| B. Mounting Hole in Base   | H. Spacer                        |
| C. 6" Cotton Buffing Wheel | I. Inner Flange                  |
| D. Outer Flange            | J. Power Cable & Plug            |
| E. Arbor Nut               | K. On/Off Switch with Safety Key |
| F. Arbor / Spindle         |                                  |

**NOTE:** Full Parts Diagram and Parts List are listed on pages 12 and 13.



**WARNING:** THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ASSEMBLY OF THE PARTS AND ALL ADJUSTMENTS ARE COMPLETE.

# ASSEMBLY INSTRUCTIONS

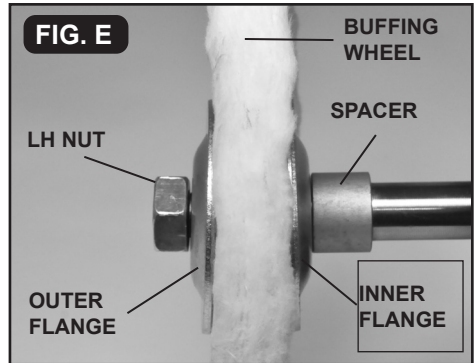
**⚠ THE BUFFER MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ASSEMBLY IS COMPLETE.**

## INSTALL THE BUFFING WHEELS

1. Remove the plastic protective sleeves from the arbor shafts, if present.
2. Slide the Spacer onto the arbor shaft. FIG. E.

**NOTE:** Spacers are not required when mounting several, or thicker, wheels are mounted onto the shaft. Their purpose is to set the flanges and wheel(s) away from the step in the arbor far enough so that the arbor nuts can be threaded onto the arbor to secure the wheels in place.

3. Slide the Inner Flange onto the shaft. The 'cup' side should be facing towards the threaded end of the shaft, and will be against the buffing wheel when it is installed in step 4.
4. Slide the Buffing Wheel onto the shaft and butt it against the inner flange.
5. Slide the Outer Flange onto the shaft and butt it against the buffing wheel. The 'cup' side should be facing towards the buffing wheel.



6. Thread the Arbor Nut onto the shaft to secure the buffing wheel firmly in place. The places pressure against the flanges which press against the buffing wheel to hold it in place on the shaft.

**NOTE:** The left hand arbor hex nut is left hand threaded and is installed by rotating it counterclockwise onto the threaded shaft. The right hand arbor hex nut is right hand threaded and is installed by rotating it clockwise onto the shaft.

7. Install the second buffing wheel following the same procedure outlined above.

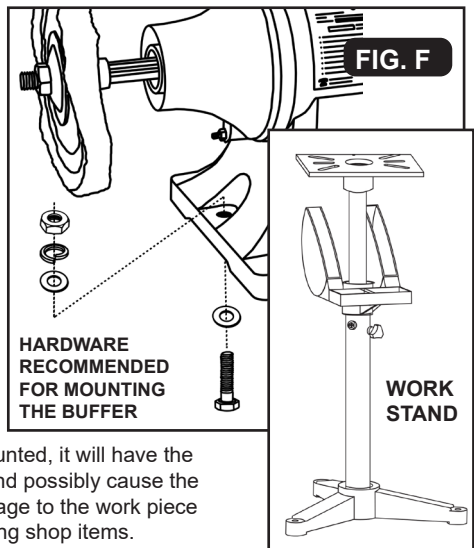
# INSTALLATION

## PERMANENT MOUNTING

Use the mounting holes in the base of the machine to firmly attach the Buffer to a solid work surface or stand (mounting hardware and stand not included). See Figure F.

To avoid serious injury, secure the Buffer to a solid work surface. If the Buffer is not permanently mounted to a work surface, and remains portable, the Buffer's base should be temporarily clamped to a table or board/plywood. Make sure that the clamps do not interfere with the buffing wheels or hinders the movement of the user and the material during use.

**⚠ CAUTION:** If the Buffer is not securely mounted, it will have the ability to move or tip over during buffing operations, and possibly cause the operator's fingers to contact the rotating wheels, damage to the work piece being buffed, or damage the buffer and any surrounding shop items.



# OPERATING THE BENCH GRINDER

The Buffer is designed for hand held buffing, polishing, sharpening, and cleaning operations.

## **CAUTION:** ALWAYS WEAR EYE AND RESPIRATORY PROTECTION!

Residue from the buffing wheels and any buffing compound on the wheels are thrown off during buffing and may cause injury.

## OPERATING THE BUFFER

1. Stand to the side of the Buffering machine and plug in the power cord to a suitable power source.

2. Remain to the side of the Buffer and turn it "ON" by moving the switch to the up position.

3. Allow the buffing wheels to come up to a steady speed for at least one minute before any buffing is done.

4. Apply buffing compound, if needed, to the rotating rim of the spinning buffing wheel. **DO NOT** jam or force the compound bar into the wheel with excess pressure. Ease the compound bar into the wheel until the whole rim is covered with the compound material.

For final polishing or buffing of waxed surfaces, no compound is needed. Use the untreated cotton buffing wheel to finish polish these pieces.

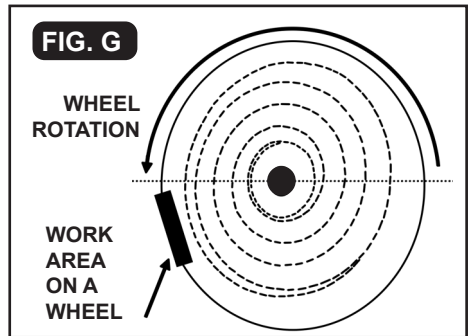
5. Move the work piece towards the buffing wheel until it lightly touches. Move the work piece back and forth across the lower front surface of the wheel to buff your work piece to the desired finish.

6. Never force the work piece against the buffing wheel. Apply the work piece slowly, allowing the grinding wheel an opportunity to adjust to the variety of surface shapes of your work piece. Excessive pressure may slow down the rotating buffing wheel and motor. This can cause uneven marks on the work piece and overheat the motor.

**DO NOT** buff using the sides of the wheels.

**DO NOT** buff using the top or rear of the buffing wheel in case your work piece is thrown from your hands and possibly in the direction of your body.

**WARNING:** To avoid serious injury, never buff on the sides, top or rear of the cotton buffing wheels.



7. Check the wheel every few minutes to see the condition of the wheel and buffing compound coating that was previously applied to the rim of the wheel.

- If the wheel is worn or damaged, remove and replace it immediately.
- If the rim surface is glazed over from material residue from buffing, or to apply a new/different grade (color) of compound, use a buffing rake to remove the old compound from the wheel.



8. After completing the buffing and polishing operations, turn "OFF" the Buffer by pushing down on the Power Switch. **NOTE:** It will take a few minutes for the buffing wheels to come to a complete stop. **NEVER STOP THE BUFFER BY FORCING MATERIAL INTO THE WHEEL.** Let the buffer stop rotating on its own.

9. Unplug the Buffer from the power source.

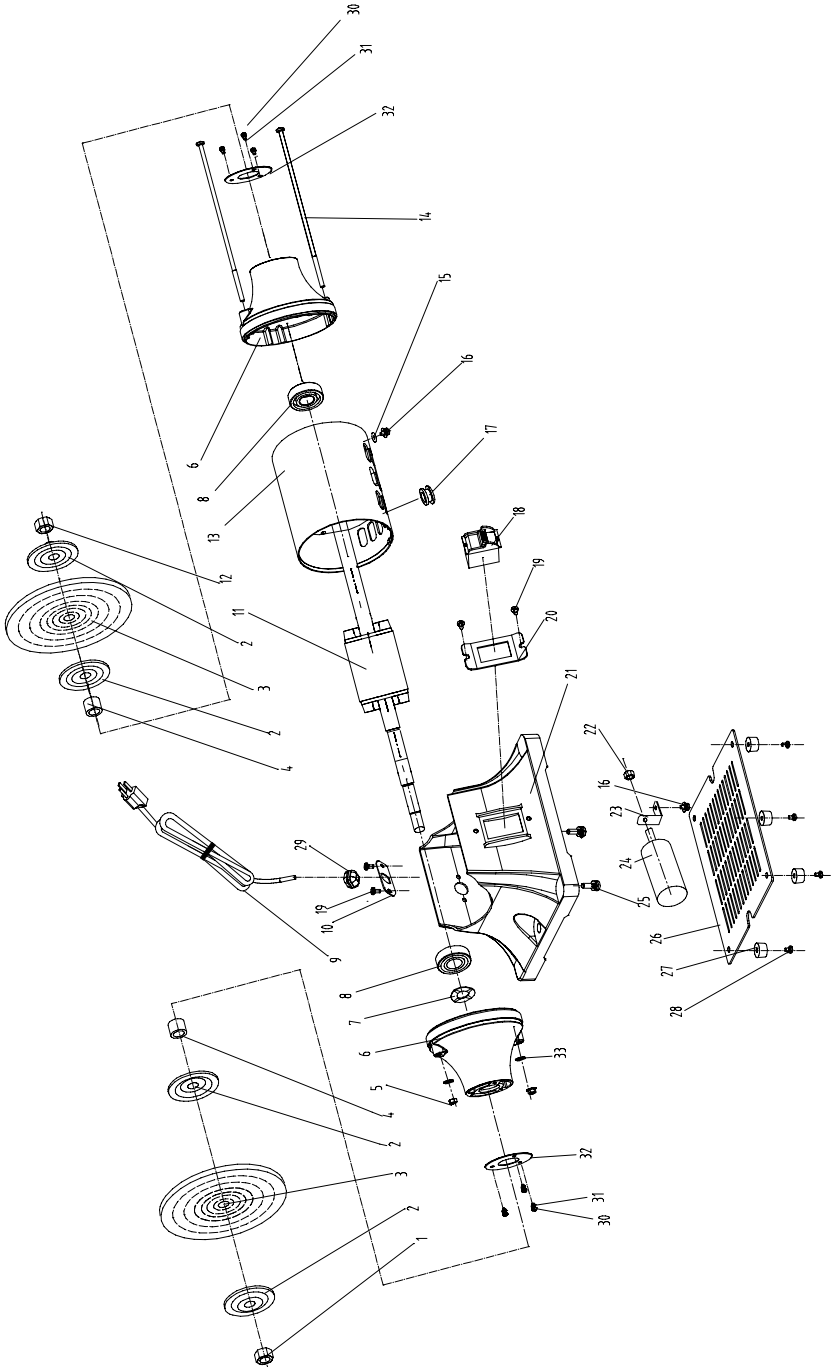
**NOTE:** To prevent unauthorized use of the machine, the power switch has a removable locking key. With the power switch in the "OFF" position, pull the locking key out. The Buffer can not be turned "ON" with the key removed. To resume buffing, insert the locking key into the on/off switch.

# PARTS DIAGRAM

## 81-608 8" LOW SPEED BUFFER

**NOTE:** Please reference the Manufacturer's Part Number when calling for Replacement Parts.

For Parts under Warranty, the Serial Number of your machine is required.



# PARTS LIST

KEY NO.	DESCRIPTION	QTY	MFG. PART NO.	KEY NO.	DESCRIPTION	QTY	MFG. PART NO.
1	Hex Nut, Type I (Left) M16 LH	1	P80-608-1	17	Cord Bushing	1	P80-608-17
2	Flange	4	P80-608-2	18	ON/OFF Switch	1	P80-608-18
3	Spiral Sewn Cotton Buffing Wheel	2	P80-608-3	19	Phillips Screw M5x8	4	P80-608-19
4	Spacer	2	P80-608-4	20	Switch Plate	1	P80-608-20
5	Cap Nut M5	2	P80-608-5	21	Base	1	P80-608-21
6	End Cap	2	P80-608-6	22	Hex Nut, I Type M8	1	P80-608-22
7	Wave Washer D40	1	P80-608-7	23	Capacitor Support	1	P80-608-23
8	Bearing 6203	2	P80-608-8	24	Capacitor	1	P80-608-24
9	Power Cord	1	P80-608-9	25	Phillips Screw & Spring Washer M6x20	2	P80-608-25
10	Clip Plate	1	P80-608-10	26	Base Plate	1	P80-608-26
11	Rotor	1	P80-608-11	27	Rubber Foot	4	P80-608-27
12	Hex Nut, I Type (Right) M16 RH	1	P80-608-12	28	Phillips Screw & Flat Washer M4x12	4	P80-608-28
13	Stator	1	P80-608-13	29	Cord Clip	1	P80-608-29
14	Phillips Screw & Flat Washer M5x196	2	P80-608-14	30	Phillips Screw M4x8	6	P80-608-30
15	Outer Locking Washer D4	1	P80-608-15	31	Spring Washer D4	6	P80-608-31
16	Phillips Screw, Spring Screw & Washer Assy M4x8	2	P80-608-16	32	End Cap Cover	2	P80-608-32
				33	Spring Washer	2	P80-608-33

**NOTE:** Please reference the Manufacturer's Part Number when calling for Replacement Parts.

For Parts under Warranty, the Serial Number of your machine is required.

# TROUBLESHOOTING

PROBLEM	LIKELY CAUSE(S)	SOLUTION(S)
<b>Motor does not run</b>	<ol style="list-style-type: none"> <li>1. Machine not plugged in</li> <li>2. Power switch in "OFF" position</li> <li>3. Power switch or cord is faulty</li> <li>4. Fuse or circuit breaker are open</li> </ol>	<ol style="list-style-type: none"> <li>1. Plug power cord into electrical receptacle</li> <li>2. Lift switch to "ON" position</li> <li>3. Replace switch or power cord</li> <li>4. Overloaded electrical circuit</li> </ol>
<b>Motor does not have full power</b>	<ol style="list-style-type: none"> <li>1. Incorrect line voltage</li> <li>2. Motor capacitor has failed</li> </ol>	<ol style="list-style-type: none"> <li>1. Have a qualified electrician check circuit for proper voltage</li> <li>2. Replace motor capacitor</li> </ol>
<b>Motor runs hot</b>	<ol style="list-style-type: none"> <li>1. Motor is overloaded</li> <li>2. Poor air circulation around motor</li> <li>3. Overuse in high ambient temperature room</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure on work piece</li> <li>2. Remove any blockage around motor</li> <li>3. Reduce runtime to 20 minutes or less</li> </ol>
<b>Motor stalls or runs slow</b>	<ol style="list-style-type: none"> <li>1. Motor is overloaded</li> <li>2. Incorrect line voltage</li> <li>3. Motor capacitor has failed</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure on work piece</li> <li>2. Have a qualified electrician check circuit for proper voltage</li> <li>3. Replace motor capacitor</li> </ol>
<b>Fuses blow or circuit breaker trips</b>	<ol style="list-style-type: none"> <li>1. Motor is overloaded</li> <li>2. Overloaded electrical circuit</li> <li>3. Undersized fuse or circuit breaker</li> <li>4. Defective cord, plug or switch creating a short circuit</li> <li>5. Undersized or excessive length of extension cord, see page 8</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce pressure on work piece</li> <li>2. Reduce the amount of items on circuit</li> <li>3. Replace with correct fuse or circuit breaker</li> <li>4. Replace with new parts</li> <li>5. Use correct size and length of extension cord</li> </ol>
<b>Excessive vibration</b>	<ol style="list-style-type: none"> <li>1. Improper mounting of buffing wheels on arbor</li> <li>2. Buffing wheels not balanced</li> </ol>	<ol style="list-style-type: none"> <li>1. Remount buffing wheels</li> <li>2. Remount or replace wheels</li> </ol>

## MAINTENANCE OF THE BENCH GRINDER

**⚠ WARNING:** Turn the power switch "OFF" and unplug the power cord from its power source prior to any maintenance or repairs.

### LUBRICATION

The buffer has sealed lubricated bearings in the motor housing that do not require any additional lubrication from the operator.

### CLEANING

Periodically blow areas in and around the buffer to keep the machine and work area clean. Should the buffing wheels become glazed with excessive compound or metallic build-up, clean the wheel with a metal buffing rake or stiff wire brush.

**CAUTION:** REPLACE the buffing wheels if there is any damage at all. **FAILURE** to replace a damaged wheel can cause serious injury to the operator. Periodically check all nuts and fasteners to make sure that they are secure. Check the power cord, plug and switch and replace them if they are found to be worn.

**CAUTION: DO NOT USE FLAMMABLE MATERIALS** to clean the Buffer. A clean dry rag or brush is all that is needed to remove dust and debris buildup.

**⚠ WARNING:** Repairs to the Buffer should be performed by trained personnel only. Unauthorized repairs or replacement with non-factory parts could cause serious injury to the operator and damage to the machine.

# WARRANTY

## **RIKON** **POWER TOOLS®**

### **2-Year Limited Warranty**

RIKON Power Tools Inc. ("Seller") warrants to only the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship for a period of two (2) years from the date the product was purchased at retail. This warranty may not be transferred.

This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs, alterations, lack of maintenance or normal wear and tear. Under no circumstances will Seller be liable for incidental or consequential damages resulting from defective products. All other warranties, expressed or implied, whether of merchantability, fitness for purpose, or otherwise are expressly disclaimed by Seller. This warranty also covers products used for commercial, industrial or educational purposes. The warranty for these claims will be limited to a one-year period.

This limited warranty does not apply to accessory items such as blades, drill bits, sanding discs, grinding wheels, guide bearings, belts and other related items.

Seller shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty proof of purchase documentation, which includes date of purchase and an explanation of the complaint, must be provided.

The Seller reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason

To register your machine online, visit RIKON at [www.rikontools.com/warranty](http://www.rikontools.com/warranty)

To take advantage of this warranty, or if you have questions, please contact us at 877-884-5167 or email [warranty@rikontools.com](mailto:warranty@rikontools.com).



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