

CENTRAL MACHINERY

®

8" Buffer

Model 40668

SET UP AND OPERATING INSTRUCTIONS



(Buffing Wheels Not Included)

Distributed exclusively by Harbor Freight Tools®.

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Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

SPECIFICATIONS MODEL # 40668 BUFFER

| | |
|--------------------------|--|
| Motor: | 115V, 8.2 Amps, 60 HZ, Single Phase, 3/4 HP, 3450 RPM |
| Extended Shaft Diameter: | 3/4" |
| Spindle Thread: | 3/4" x 12 TPI |
| Spindle Length: | 2-5/16" |
| Mounting Flange: | 3-3/8" diameter |
| Base Size: | 8" x 5-3/4" |

FEATURES OF THIS BUFFER

1. Double-ended spindle accommodates both Polishing and Buffing wheels.
2. Powerful 3/4 HP motor delivers effective polishing and buffing at 3450 rpm.
3. Heavy Cast Iron construction provides a sturdy base for polishing workpieces.
4. Rubber feet reduce vibration.
5. Ball bearing construction provides smooth, reliable performance.
6. Pull-on Push-off safety switch is easy to use while handling workpieces.
7. No maintenance required, other than periodic replacement of wheels.



SAVE THIS MANUAL

You will need this manual for the safety warnings and cautions, assembly instructions, operating procedures, maintenance procedures, trouble shooting, parts list, and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep both this manual and your invoice in a safe, dry place for future reference.

NOTICE

The Warnings, Cautions, and Instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAFETY WARNING & CAUTIONS

WARNING: When using shop equipment, basic safety precautions should always be followed to reduce the risk of personal injury and hazards.

READ ALL INSTRUCTIONS BEFORE USING THIS TOOL!

1. **KEEP WORK AREA CLEAN.** Cluttered areas invite injuries.
2. **OBSERVE WORK AREA CONDITIONS.** Do not use tools in damp, wet, or poorly lit locations. Don't expose to rain. Keep work area well lit. Do not use electrically powered equipment in the presence of flammable gases or liquids.
3. **KEEP CHILDREN AWAY.** Children must never be allowed in the work area. Do not let them handle machines, tools, or equipment.
4. **STORE IDLE EQUIPMENT.** When not in use, tools must be locked up in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **DO NOT FORCE THE TOOL.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool's capacities.
6. **USE THE RIGHT TOOL FOR THE JOB.** Do not use a tool for a purpose for which it was not intended.
7. **DRESS PROPERLY** Do not wear loose clothing or jewelry, as they can be caught in moving parts. Non-skid footwear is recommended. Wear restrictive hair covering to contain long hair. Always wear appropriate work clothing.
8. **USE EYE, EAR AND BREATHING PROTECTION.** Always wear ANSI approved impact safety goggles if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Use ANSI approved ear protection when working in a loud or noisy environment.
9. **DO NOT ABUSE THE POWER CORD.** Protect the power cord from damage, either from impacts, pulling or corrosive materials. Do not yank machine's cord to disconnect it from the receptacle.
10. **DO NOT OVERREACH.** Keep proper footing and balance at all times. Do not reach over or across running machines.
11. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect power cord periodically and, if damaged, have it repaired by an authorized technician. Inspect all hydraulic seals for leaks prior to use. Control handle and power switch must be kept clean, dry, and free from oil and grease at all times.

12. REMOVE ADJUSTING KEYS AND WRENCHES. Be sure that keys and adjusting wrenches are removed from the tool or machine work surface before operation.
13. AVOID UNINTENTIONAL STARTING. Be sure that you are prepared to begin work before turning the start switch on.
14. STAY ALERT. Watch what you are doing. Do not operate this machine when you are tired.
15. DO NOT OPERATE THIS MACHINE WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS, OR PRESCRIPTION MEDICINES.
16. CHECK FOR DAMAGED PARTS. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts, any broken parts or mounting fixtures, and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn on and off properly.
17. REPLACEMENT PARTS AND ACCESSORIES. When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use parts and accessories intended for use with this tool. Replacement parts are available from Harbor Freight Tools.

SPECIAL WARNINGS WHEN USING THIS BUFFER

Using this Buffer may create special hazards.

Take particular care to safeguard yourself and those around you.

Electrical Safety. *Never operate any tool if there is an electrical hazard.* Never operate an electrical tool in wet conditions. Never operate a tool with an improper electrical cord or extension cord. Never operate an electrical tool unless you are plugged into a properly grounded outlet, which supplies 110-120Volts. We recommend that you use a circuit which is protected by a 30 Amp circuit breaker.

Ejected Material. *Use safe practices to avoid injury from ejected material.* Because the Buffing and Polishing wheels turn at high speed, there is a danger of being injured by materials that may be ejected from the wheels at high speed. Always wear ANSI-certified eye protection. Never insert any item into the wheels if it is not adequately held. Always stand to one side of the plane in which the wheels are spinning, to avoid being hit if an item is ejected. Never allow bystanders to be in the proximity of the Buffer while in operation.

Entanglement. *Use extreme caution to prevent loose materials from being caught in the wheels.* Never operate this buffer with loose clothing, long hair, jewelry, or other items which may become caught in the spinning wheels. In case of entanglement, press the OFF switch immediately.

NOTICE: No list of warnings can be all inclusive. The operator must supply common sense, and operate this tool in a safe manner.

ASSEMBLY AND OPERATION

To prepare for use, you must mount the Buffer securely on a bench top, install buffing wheels, and route the power supply .

Mounting the Buffer

1. Place the buffer on the bench top where you plan to use it. The bench must be sturdy, and preferably able to resist vibrations.
2. Be sure the 4 rubber feet are on a level surface, and that all 4 feet are firmly contacting the bench top. If not, select another sight which is level.
3. You may use this buffer without permanently mounting it. However, permanently mounting it makes a more secure installation.
4. To permanently install, position the buffer where you want it; then mark the bench top through the holes on the left and right sides of the base. Set the buffer aside, and drill holes through the bench top at each mark. Replace the buffer, and insert suitable bolts through the buffer base, and through the bench top. Secure underneath using washers and nuts. Tighten firmly.

Install the Buffing Wheels.

Note: Generally buffers are set up with one wheel for “Rouge”, an abrasive polishing compound, and one wheel for “Polish” a non-abrasive compound. Since Rouge can contaminate the Polishing wheel, never allow the abrasive compound to come in contact with the Polishing wheel.

1. When facing the Buffer, the spindle nut on the right side uses a right hand thread. The Nut on the left side uses a left hand thread. Do not mix these up.
2. Remove the Spindle nut. Then remove the Outer Flange.
3. Slide the Buffing Wheel (Not Included) onto the Spindle.
4. Replace the Outer Flange. Replace the Nut, and tighten firmly.
5. Repeat this process for the other side.

NOTE: You may purchase suitable Buffing Wheels and polishing compound from Harbor Freight Tools.

Route the Electrical Cord.

WARNING: Only plug the power cord into a grounded (3-prong) outlet which delivers 110-120 Volts. We recommend that you use a circuit which is protected by a 30-amp breaker switch.

1. Choose a suitable outlet.
2. Determine a route for the power cord which will keep it away from other tools, moisture, danger of being cut or damaged by other equipment, and away from pathways.
3. Make sure the Power Switch on the front of the Buffer is OFF (pushed in) before plugging in the Power Cord.

Safe Operation

1. Never pull the Power Switch out into the ON position until you are prepared to do so.
2. Always wear ANSI-approved eye protection when using this buffer.
3. Hold the workpiece against the buffing wheel slightly below the horizontal mid-point of the wheel, and at a slight downward angle. This will reduce the likelihood of the piece being ejected outward, should it slip from your hands or the holder.

GROUNDING / VOLTAGE WARNING

Common household current is 110-120 volts. As long as the outlet used with this tool is rated from 110-120V there will be no complications using it with household receptacles. Plug the tool into a 110-120V properly grounded outlet. We recommend that you use a circuit which is protected by a 15-ampere, dual element time delay or circuit breaker.

NEVER try to plug a 110-120V tool into a 220-240V circuit or serious complications and possible injury to the operator may occur. The plugs have different shapes to prevent this.

This tool has a three-prong plug. The third (round) prong is the ground. Cutting off the ground will result in a safety hazard and void the warranty.

If the outlet you are planning to use is the two-prong type, do not remove or alter the grounding prong in any manner. Use an adapter and always connect the grounding lug to a known grounding source. It is recommended that you have a qualified electrician replace the two-prong outlet with a properly grounded three-prong outlet.

EXTENSION CORDS

Your tool has a three-prong plug, therefore you must use a three-prong extension cord. Only use rounded jacket extension cords listed by the Underwriters Laboratories (UL). Improper use of extension cords may cause inefficient operation of your tool which can result in overheating. Be sure your extension cord is rated to allow sufficient current flow to the motor.

If you are using the tool outdoors, use an extension cord rated for outdoor use (signified by “WA” on the jacket).

The extension cord must have a minimum wire size depending on the amperage of the tool and the length of the extension cord. This size is determined by its AWG (American Wire Gauge) rating. The smaller the gauge, the greater the cable’s capacity. The amount of cords used does not matter: Total length determines the minimum AWG rating. Every cord must meet the AWG rating. Use the chart below to determine what AWG rating is required for your situation. Cord length is rated in feet. **Harbor Freight Tools can supply UL listed and outdoor rated cords in multiple AWG ratings if needed.**

AWG RATING CHART

| CORD LENGTH | 25’ | 50’ | 75’ | 100’ | 125’ | 150’ | 175’ | 200’ |
|-------------|-----|-----|-----|------|------|------|------|------|
| AMPS | AWG | AWG | AWG | AWG | AWG | AWG | AWG | AWG |
| 0-10.0 | 18 | 18 | 16 | 16 | 14 | 14 | 12 | 12 |
| 10.1-13.0 | 16 | 16 | 14 | 14 | 14 | 12 | 12 | 12 |
| 13.1-15 | 14 | 14 | 12 | 12 | 12 | 12 | 12 | — |

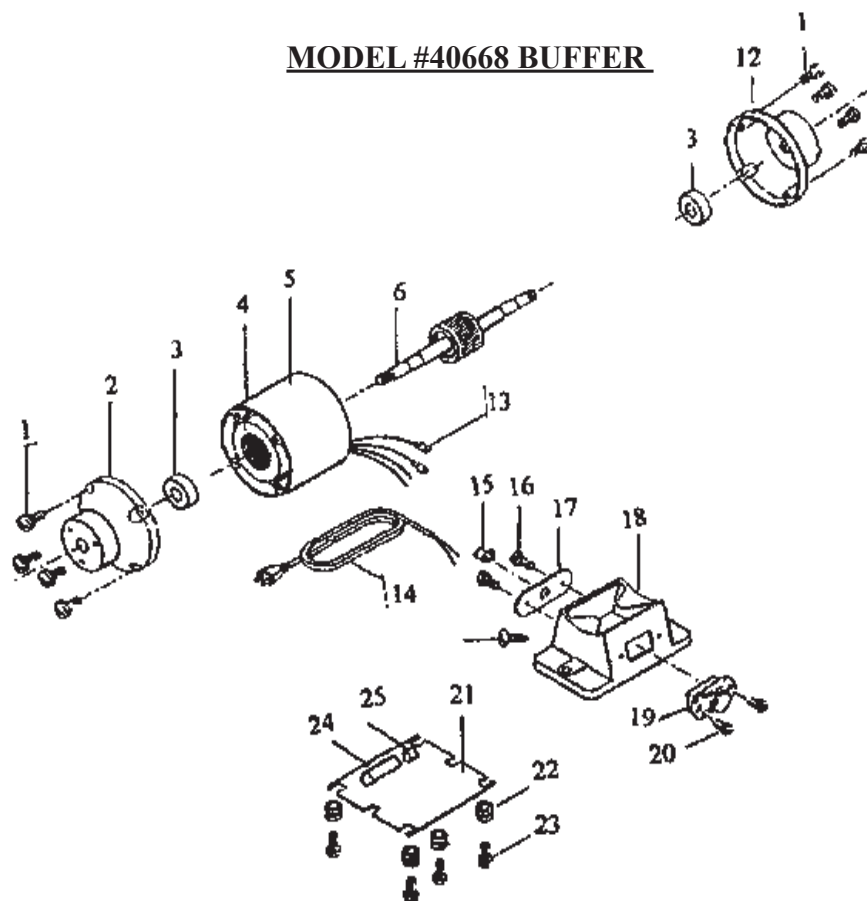
Do not modify your plug in any way. If you have any doubt, call a qualified electrician.

MAINTENANCE

This tool requires very little maintenance. However, to keep it in best condition:

1. Clean your Buffer periodically.
2. Keep the ventilation holes free of debris.
3. When not in use, keep your Buffer covered to prevent moisture damage, and contamination.

MODEL #40668 BUFFER



MODEL #40668 BUFFER PARTS LIST

| Part # | Description | Part # | Description |
|---------------|--------------------|---------------|--------------------|
| 1 | Screw | 16 | Screw |
| 2 | End Bell (left) | 17 | Plate |
| 3 | Bearing | 18 | Base |
| 4 | Stator | 19 | Pul On Switch |
| 5 | Motor Housing | 20 | Screw |
| 6 | Rotor | 21 | Base |
| 12 | End Bell (right) | 22 | Rubber Pad |
| 13 | Terminals | 23 | Screw |
| 14 | Power Cord | 24 | Capacitor |
| 15 | Strain Relief | 25 | Capacitor Cover |

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY: NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT: IN FACT THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.