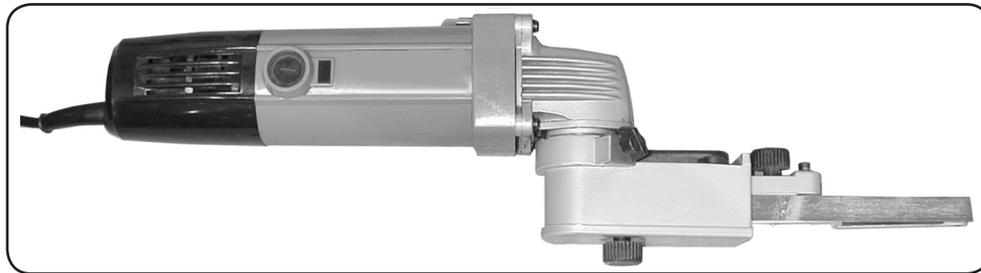


**CHICAGO**  
**Electric<sup>®</sup>Power Tools**

# **BANDFILE 1/2 INCH BELT SANDER**

**Model 92158**

## **ASSEMBLY AND OPERATION INSTRUCTIONS**



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011

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

**TO PREVENT SERIOUS INJURY, READ AND UNDERSTAND  
ALL WARNINGS AND INSTRUCTIONS BEFORE USE.**

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

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## SPECIFICATIONS

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Motor	120 V~, 60 Hz, 600 watts, n <sub>0</sub> 10,000/min
Belt Speed	2300 FPM (feet per minute) (single speed); Gear driven
Sanding Area	1/2 (W) x 5 (L) Inches
Pivot Head	Adjustable 180°
Line Cord	Two prong polarized, 8 feet, 9 inches long
Overall Dimensions	11 (L) x 4-1/2 (H) x 3 (W) Inches, 18-1/4 (L) with sanding head
Weight	4.8 lb.
Accessories	5 – Sanding Belts



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## SAVE THIS MANUAL

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

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## GENERAL SAFETY RULES

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 **WARNING!**

**READ AND UNDERSTAND ALL INSTRUCTIONS**  
**Failure to follow all instructions listed below may result in**  
**electric shock, fire, and/or serious injury.**  
**SAVE THESE INSTRUCTIONS**

### Work Area

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

### Electrical Safety

4. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
5. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

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6. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
7. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.
8. **Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
9. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

### Personal Safety

10. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
11. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
12. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
13. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
14. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
15. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

## Tool Use and Care

16. **Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
17. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
18. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
19. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
20. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
21. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.
22. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
23. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

## Service

24. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
25. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

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## **SPECIFIC SAFETY RULES FOR THIS PRODUCT**

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1. **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire will make exposed metal parts of the tool “live” and shock the operator.
2. **Maintain labels and nameplates on the Belt Sander.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

3. **Always wear ANSI-approved safety impact eye goggles, heavy work gloves, and ear protection when using the Belt Sander.** Using personal safety devices reduce the risk for injury.
4. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
5. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the Belt Sander.
6. **Do not force the Belt Sander.** This tool will do the work better and safer at the speed and capacity for which it was designed.
7. **Always unplug the Belt Sander from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.**
8. **Never leave the Belt Sander unattended while running.** Turn power off if you have to leave the Belt Sander.
9. **Before each use, check all nuts, bolts, and screws for tightness.** Vibration during mixing may cause these to loosen.
10. **Use both hands when operating.** Many tools such as chain saws, hand-held sanders, drills, routers, etc., require the use of both hands when operating. Also, hold stock with both hands when buffing or sanding. This helps maintain tool and stock stability and keeps hands away from the working area of the tool.
11. **⚠️ WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain 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 and cement or 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. (California Health & Safety Code § 25249.5, *et seq.*)
12. **⚠️ WARNING!** People with pacemakers should consult their physician(s) before using this product. Electromagnetic fields in close proximity to a heart pacemaker could cause interference to or failure of the pacemaker.  
In addition, people with pacemakers should adhere to the following:
  - Avoid operating power tools alone.
  - Don't use a power tool with the power switch locked on.
  - If powered via a power cord be certain that the tool is properly grounded. A ground fault interrupt (GFCI) system is also a good precaution. This inexpensive device is a good safety measure because it prevents a sustained electrical shock.
  - Properly maintain and inspect all tools before use to avoid electrical shock.

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## GROUNDING

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**Note:** This tool comes with a two-prong, polarized plug and is double insulated for safety.

**⚠ WARNING!**

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

### GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool’s grounding system and must never be attached to an electrically “live” terminal. **(See Figure A.)**
3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**

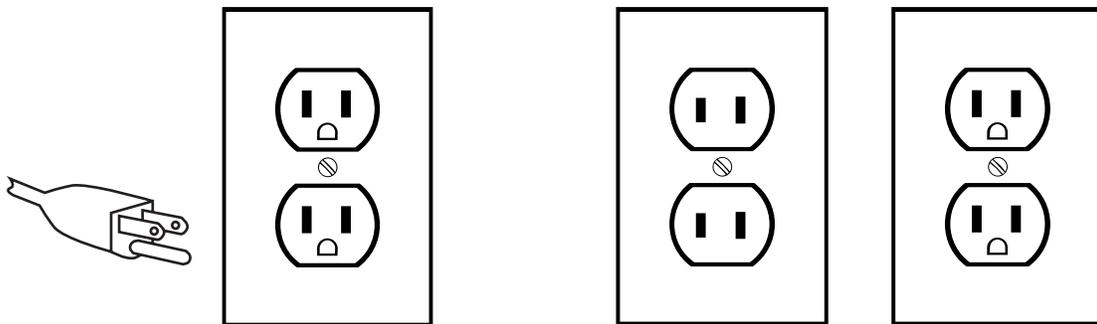


FIGURE A

FIGURE B

### DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

1. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure B.)**

2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. **(See Figure B.)**

### EXTENSION CORDS

1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Figure C, next page.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Figure C.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figure C.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Figure C.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

<b>RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS*</b> <b>(120 OR 240 VOLT)</b>					
<b>NAMEPLATE AMPERES (at full load)</b>	<b>EXTENSION CORD LENGTH</b>				
	<b>25 Feet</b>	<b>50 Feet</b>	<b>75 Feet</b>	<b>100 Feet</b>	<b>150 Feet</b>
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

**FIGURE C**      \* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

## SYMBOLOLOGY

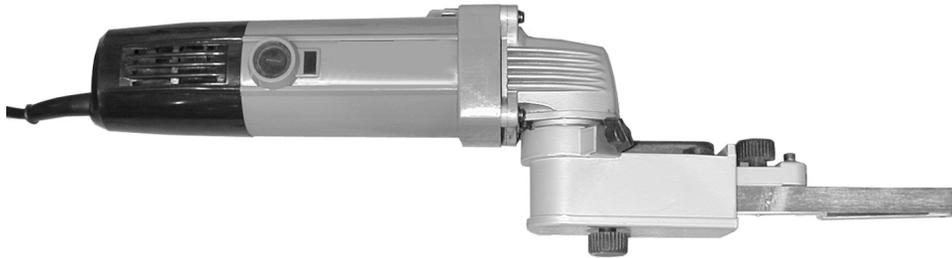
	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
$V \sim$	Volts Alternating Current
<b>A</b>	Amperes
$n_0$ xxxx/min.	No Load Revolutions per Minute (RPM)

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## UNPACKING

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When unpacking, check to make sure that all the parts are included. Refer to the Assembly Drawing and Parts List at the end of this manual. Not shown are five accessory Sanding Belts.



If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

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## ASSEMBLY INSTRUCTIONS

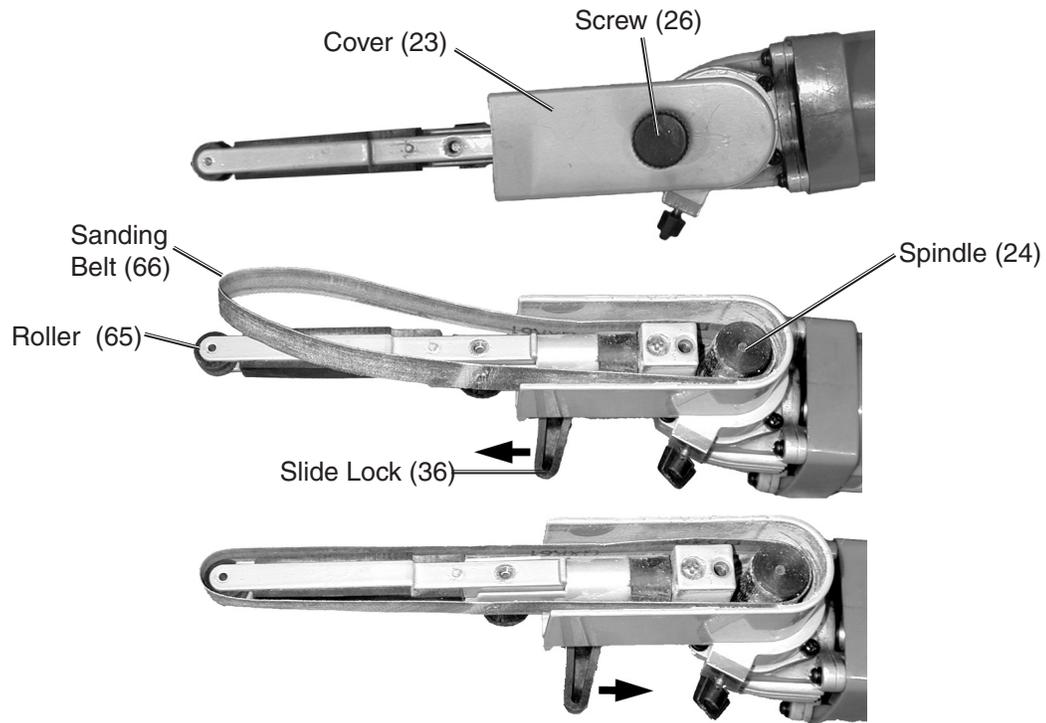
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**⚠ WARNING!** Make sure the Power Switch of the Tool is in its Off (O) position and that the tool is unplugged from its electrical outlet before performing any assembly, inspection, maintenance, or cleaning procedures.

### Installing the Sanding Belt

1. Remove Screw (26) and Cover (23). Refer to the photos on the next page.
2. Turn the Slide Lock (36) completely to one side.  
This reduces the tension on the Roller (65) so that the Sanding Belt (66) can be slipped over easily.
3. Place the Sanding Belt (66) over the Roller (65) and the Spindle (24).

4. Turn the Slide Bar (36) so it points to the Pulley (65) and tightens the tension on the Sanding Belt (66). Replace Cover (23) and Screw (26).
5. If needed, adjust the tracking of the Sanding Belt by turning the Adjustment Screw (59).

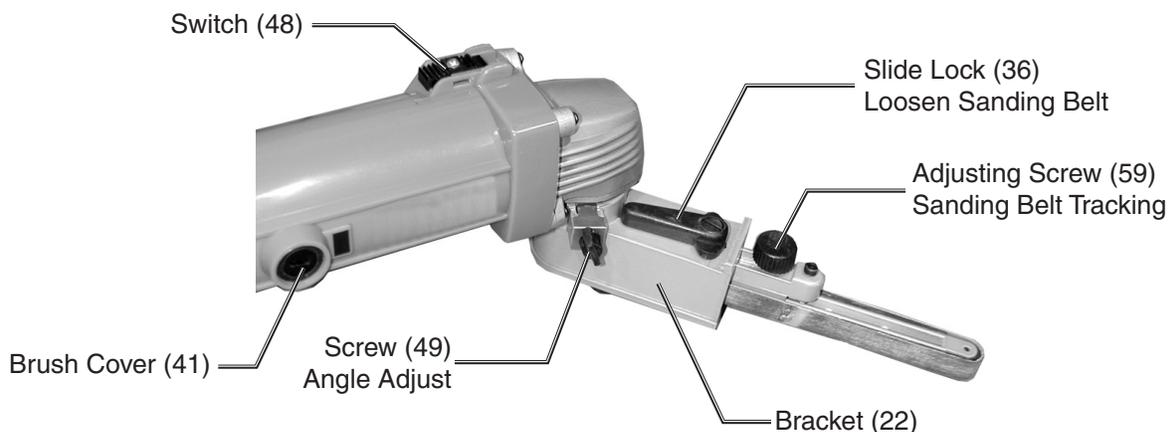



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## OPERATING INSTRUCTIONS

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### Controls



### Operation

1. Secure the workpiece to be sanded.
2. Loosen Screw (49) and adjust Bracket (22) to the desired angle for sanding.
3. Plug the Line Cord (52) into a GFCI electrical outlet.
4. Always follow all safety instructions and warnings in this instruction manual.

5. Securely grasp the tool handle (with both hands) and press the On / Off Switch (48) to the On (I) position.
6. Begin sanding with light movements and pressure until the sanding capability is known on the material being sanded.
7. When finished using the Belt Sander, press the On / Off Switch (48) to the Off (O) position. Wait until the motor stops before setting the tool down.
8. Unplug the unit from the electrical outlet.

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## INSPECTION, MAINTENANCE, AND CLEANING

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 **WARNING!** Make sure the Power Switch of the Tool is in its Off (O) position and that the tool is unplugged from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

1. Before each use, inspect the general condition of the Belt Sander. Check for loose screws, misalignment, binding, or tears of sanding belt, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
2. Store in a clean and dry location.
3. Inspect the Carbon Brushes every few months for excessive wear; Sooner if the tool is used daily. Over time, if the performance of the tool diminishes, or it stops working completely, it may be necessary to replace the motor's Carbon Brushes. The brushes are accessed by removing the Carbon Brush Cover (41) on top and bottom of the unit. Pull out the Carbon Brushes (40) and clean or replace both. This procedure should be completed by a qualified technician.
4. Before each use, inspect the general condition of the Belt Sander. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. Do not use damaged equipment.
5. Clean the outside of the unit with a damp cloth. Never use solvents to clean any parts of this tool. Use compressed air to blow out debris from the motor vents.

## PARTS LIST

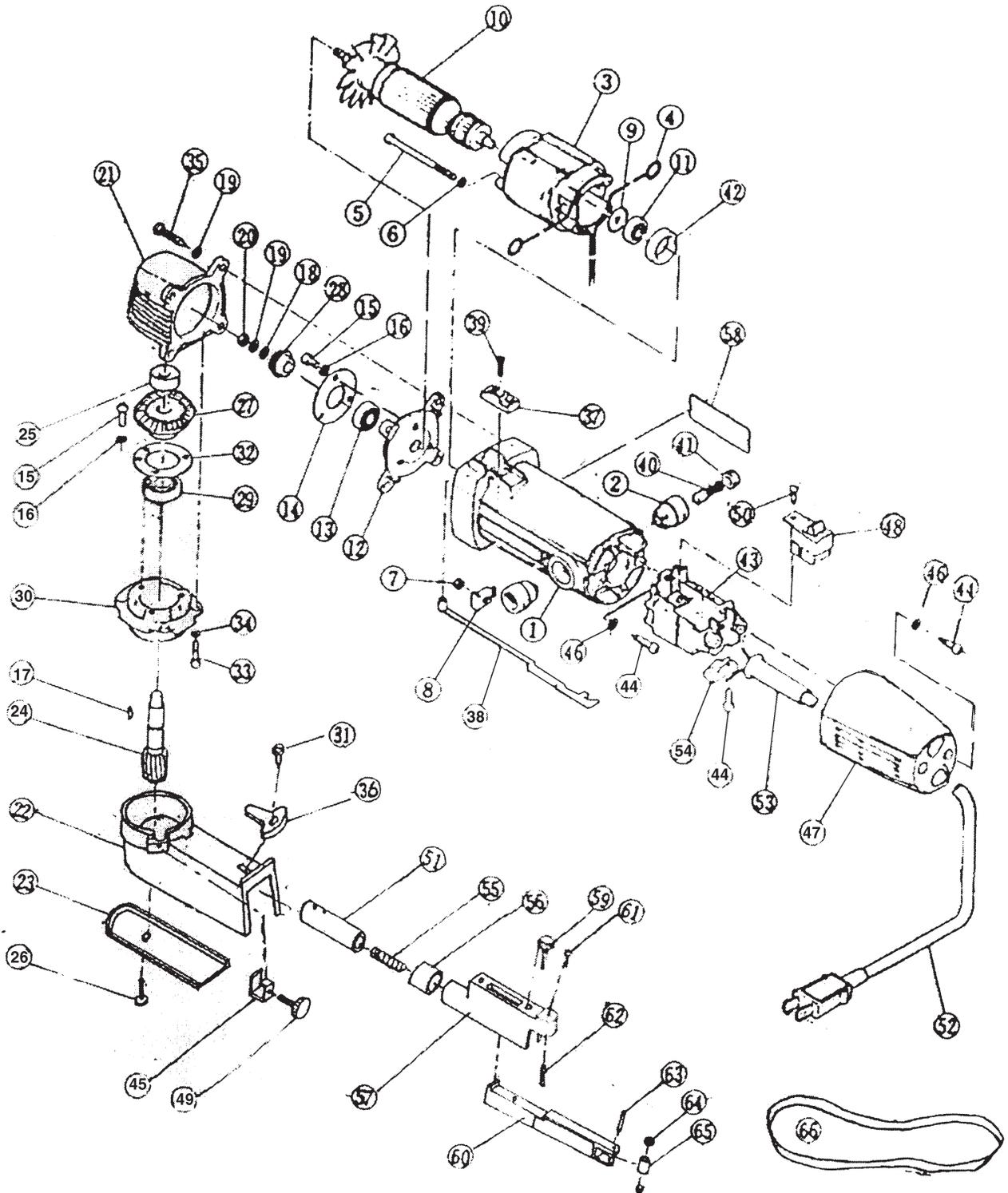
Part	Description
1	Housing
2	Brush Holder
3	Stator
4	Brush Holder Ring
5	Screw, 4x65
6	Washer, Spring
7	Nut, M4
8	Nut Mount
9	Dust Seal
10	Armature
11	Bearing, 626
12	Cover, Inner
13	Bearing, 608
14	Bearing Cover A
15	Screw, M4x14
16	Washer, Spring
17	Woodruff Key
18	Washer, Flat
19	Washer, Spring
20	Nut, M6
21	Bear Box
22	Bracket
23	Cover
24	Spindle
25	Bearing, 608
26	Screw, M5x20
27	Gear
28	Pinion
29	Bearing, 6001
30	Gear Box Cover
31	Screw
32	Bearing Cover B
33	Screw, M4x14

Part	Description
34	Washer, Spring
35	Screw, Tapping, M4x25
36	Slide Lock
37	Button
38	Lever
39	Screw
40	Carbon Brush
41	Brush Cover
42	Bushing, Rubber
43	Switch Base
44	Screw, Tapping, M4x18
45	Bracket, Fixed
46	Washer, Flat
47	Screw, Tapping, M4x18
48	Switch
49	Screw
50	Screw, Tapping, M4x10
51	Shaft
52	Line Cord
53	Line Cord Protector
54	Cord Clip
55	Spring
56	Bushing
57	Slide Block
58	Label
59	Screw, Adjusting
60	Bar, Adjusting
61	Screw, Hex, M4x20
62	Spring, Adjusting
63	Pin
64	Bearing, 693
65	Roller
66	Belt, Sanding

### PLEASE READ THE FOLLOWING CAREFULLY

**THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR 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.**

# ASSEMBLY DRAWING



**Record Product's Serial Number Here:** \_\_\_\_\_

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.