



6 Inch Car Polisher

Owner's Manual



⚠ WARNING: Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item #61461

READ & SAVE THESE INSTRUCTIONS

Thank you very much for choosing an Ironton® product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: _____

Purchase Date: _____

Save the receipt, warranty, and this manual. It is important that you read the entire manual to become familiar with this product before you begin using it.

This car polisher is designed for certain applications only. Northern Tool and Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

For technical questions, please call **1-800-222-5381**.

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Intended Use

The Ironton 6 Inch Car Polisher provides a smooth, swirl-free finish to your vehicle. Its two-way action creates a random orbital pattern for a glass-smooth finish. The car polisher cuts through oxidation without harming paint.

Note: The polishing pad and form pad are included; other accessories are sold separately.

Packaging Contents

- Car Polisher
- Carbon Brush
- Owner's Manual
- Side Handle
- 6" Backing Pad
- Spindle Wrench
- Polishing Pad

Technical Specifications

Property	Specification
Motor	110V / 60 Hz / 5.7A
NO Load Speed	2000 – 6400 RPM
Max. Accessory Diameter	6" (150mm)

Important Safety Information

⚠WARNING

- Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.
- The warnings, cautions, and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using this tool. Always be aware of the environment and ensure that the tool is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the product until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this product in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- Use the right tool for the job. DO NOT attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. This product will be safer and do a better job at the capacity for which it was intended. DO NOT use this equipment for a purpose for which it was not intended.
- Industrial or commercial applications must follow OSHA requirements.

⚠WARNING

WORK AREA SAFETY

- Inspect the work area before each use. Keep work area clean, dry, free of clutter, and well-lit. Cluttered, wet, or dark work areas can result in injury. Using the product in confined work areas

may put you dangerously close to cutting tools and rotating parts.

- Do not use the product where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The product can create sparks, which may ignite the flammable liquids, gases, or dust.
- Do not allow the product to come into contact with an electrical source. The tool is not insulated and contact will cause electrical shock.
- Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the product.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.

⚠WARNING

PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the tool. Do not use the tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents on the tool often cover moving parts and should be avoided.
- Wear the proper personal protective equipment when necessary. Use ANSI Z87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- Do not overreach. Keep proper footing and balance at all times.
- Remove keys or wrenches before connecting the tool to an air supply, power supply, or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may cause personal injury.
- Secure the work with clamps or a vise instead of your hand when practical. This safety precaution allows for proper tool operation using both hands.

⚠CAUTION

CAR POLISHER USE AND CARE

- Do not force the car polisher. Products are safer and do a better job when used in the manner for which they are designed. Plan your work, and use the correct product for the job.
- Check for damaged parts before each use. Carefully check that the product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.
- Do not use a product with a malfunctioning switch. Any power tool that cannot be controlled with the power switch is dangerous and must be repaired by an authorized service representative

before using.

- Disconnect the power/air supply from the product and place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Store the car polisher when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your product. Accessories that may be suitable for one product may create a risk of injury when used with another tool. Never use an accessory that has a lower operating speed or operating pressure than the tool itself.
- Keep guards in place and in working order. Never operate the product without the guards in place.
- Do not leave the tool running unattended.

Specific Operation Warnings

⚠WARNING

- To reduce the risk of injury, user must read instruction manual.
- To reduce the risk of injury, always wear eye and respiratory protection.
- Hold power tools by insulated gripping surfaces, when performing an operation where the cutting tool may contact hidden wiring or its own cord.
- Never place your hand near the rotating accessory. Accessories may kickback over your hand.
- Operations such as grinding, sanding, wire brushing or cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was designed may create a hazard and cause personal injury.
- Do not use accessories which are not specifically designed and recommended by the tool manufacturer.

Grounding

⚠WARNING

- This machine must be grounded while in use to protect the operator from electrical shock. This unit is equipped with an electrical cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching receptacle that is properly installed and grounded in accordance with ALL local codes and ordinances.
- **DO NOT MODIFY THE PROVIDED PLUG.** If it will not fit the receptacle, have the proper receptacle installed by a qualified electrician.
- **CHECK** with a qualified electrician or service person if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

Grounded Tools: Tools with 3-Prong Plugs

Tools marked with **Grounding Required** have a 3-wire cord and 3-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.)

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.

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.

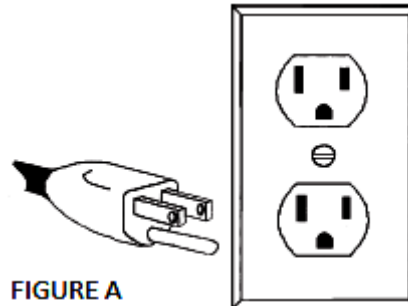


FIGURE A

Double Insulated Tools: Tools with Two-Prong Plugs

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.)

Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration.

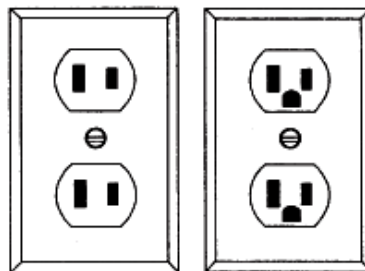


FIGURE B

Extension Cords

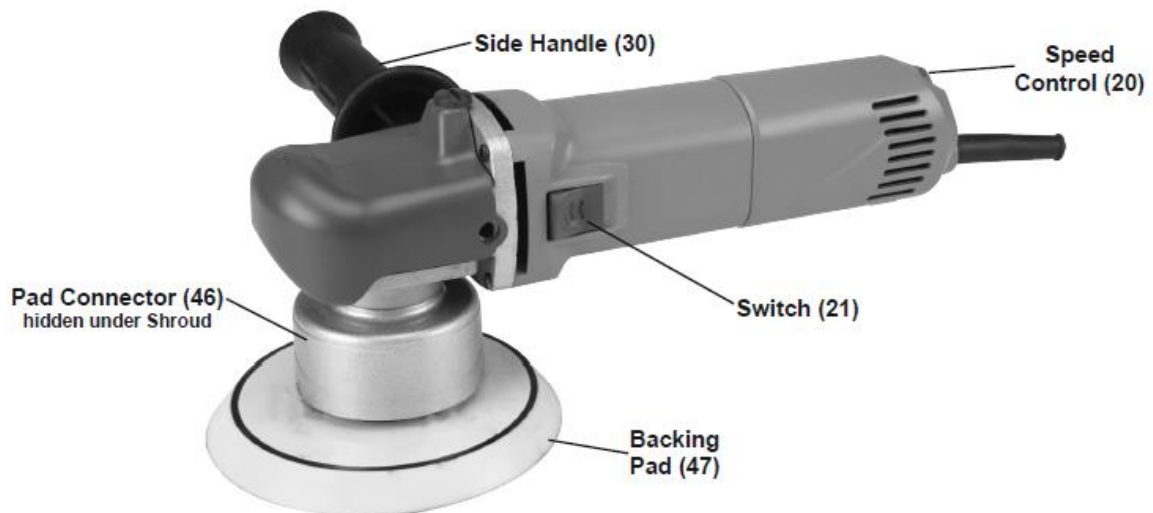
⚠WARNING

- USE A PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and cause overheating.
- Be sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

- Grounded tools require a 3-wire extension cord. Double Insulated tools can use either a 2- or 3-wire extension cord.
- 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.
- The smaller the wire's gauge number, the greater the capacity of the cord. For example, a 14-gauge cord can carry a higher current than a 16-gauge cord. Minimum extension cord wire size is shown in the following table:

Minimum Wire Size Of Extension Cords				
Nameplate AMPS	Cord Length			
	25'	50'	100'	150'
0-6	18 AWG	16 AWG	16 AWG	14 AWG
6-10	18 AWG	16 AWG	14 AWG	12 AWG
10-12	16 AWG	16 AWG	14 AWG	12 AWG
12-16	14 AWG	12 AWG	NOT RECOMMENDED	

- 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.
- 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.
- 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.
- 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.
- Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.



Main Parts of Car Polisher	
Subassembly	
	Pad Connector
	Side Handle
	6" Backing Pad
	Speed Control
	Switch

Assembly Instructions

⚠WARNING

- Disconnect the car polisher from the power supply.
- Do not operate the car polisher with one hand only or without the side handle properly installed.

Installing the Side Handle

The side handle can be installed on the left or right side of the gear housing. Screw the threaded end of the side handle into the selected position. Tighten securely before beginning work.



Installing a Threaded Accessory

1. The accessory MUST be:
 - Rated to at least 6,400 OPM.
 - No larger than 6" (150mm) in diameter.
 - Fitted with a threaded opening of 5/16" - 24 UNF, undamaged.
 - Compatible with the car polisher, i.e., the sanding disc, polishing bonnet, or foam pad and backing pad. (The sanding disc and polishing bonnet are sold separately.)
2. Use the included wrench to prevent the spindle from turning.
3. Thread the disc accessory firmly onto the spindle.
4. Remove the wrench before use.



Before Each Use

⚠WARNING

- ALWAYS check for damaged or worn out parts before using the car polisher. Broken parts will affect the car polisher's operation. Replace or repair damaged or worn parts immediately.
- Make sure that the power switch is in the OFF position and unplug the car polisher from its electrical outlet before performing any procedure in this section.

Operating Instructions

⚠WARNING

- To reduce the risk of injury, user must read instruction manual.
- To reduce the risk of injury, always wear eye and respiratory protection.
- Hold power tools by insulated gripping surfaces, when performing an operation where the cutting tool may contact hidden wiring or its own cord.
- Never place your hand near the rotating accessory. Accessories may kickback over your hand.
- Operations such as grinding, sanding, wire brushing or cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was designed may create a hazard and cause personal injury.
- Do not use accessories which are not specifically designed and recommended by the tool manufacturer.
- Do not allow any loose portion of the polishing bonnet or its attachment strings to spin freely. Tuck away or trim any loose attachment strings. Loose and spinning attachments strings can entangle your fingers or snag on the workpiece.
- Grip the car polisher firmly in both hands.
- To prevent property damage, wash the work surface thoroughly, and make sure it is free of dust, dirt, oil, and grease.

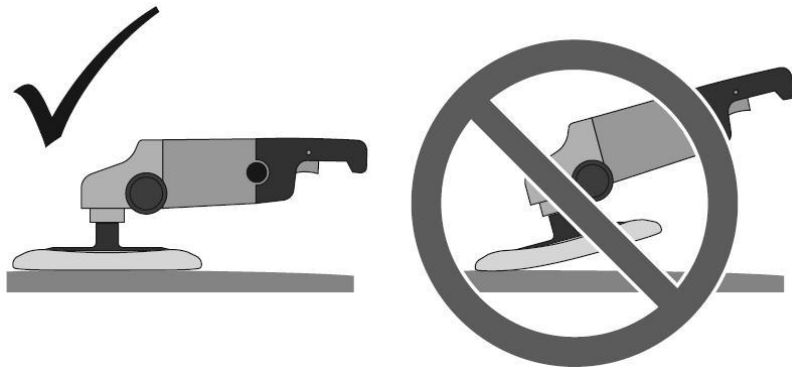
1. Attach the desired grit sanding disk or pad accessory (sold separately) onto the backing pad.
2. Make sure that the switch is in the OFF position and plug in the car polisher.
3. To start, grip the car polisher firmly with both hands and press the trigger. Release the trigger to stop.
4. Wait until the car polisher has reached full speed and gently contact the surface.

Note: Keep heavy pressure off the car polisher when operating. Allow the car polisher to do the work.

5. Move the car polisher in a uniform pattern up-and-down or side-to-side while sanding to ensure even sanding.



Note: Only apply the pad/bonnet flat against the surface.



After Each Use

⚠WARNING

- ALWAYS store idle tools when not in use. Store them in a dry, secure place out of the reach of children. Inspect tools for good working condition prior to storage and before re-use.

Maintenance

⚠WARNING

- If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.
- Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Maintain the car polisher by adopting a program of conscientious repair and maintenance in accordance with the following recommended procedures. It is recommended that the general condition of any tool be examined before it is used. Keep your tool in good repair. Keep handles dry, clean, and free from oil and grease. The following chart is based on a normal operation schedule.

Maintenance Interval	Maintenance Point
Daily before operating	Inspect the general condition of the car polisher. Check for: loose hardware, misalignment or binding of moving parts, damaged cord/electrical wiring, cracked or broken parts, and any other condition that may affect its safe operation.
After use	Wipe external surfaces of the car polisher with a clean cloth.
Periodically	Wear ANSI-approved safety goggles and NIOSH-approved breathing protection and blow dust and grit out of the motor vents using dry compressed air.

Troubleshooting

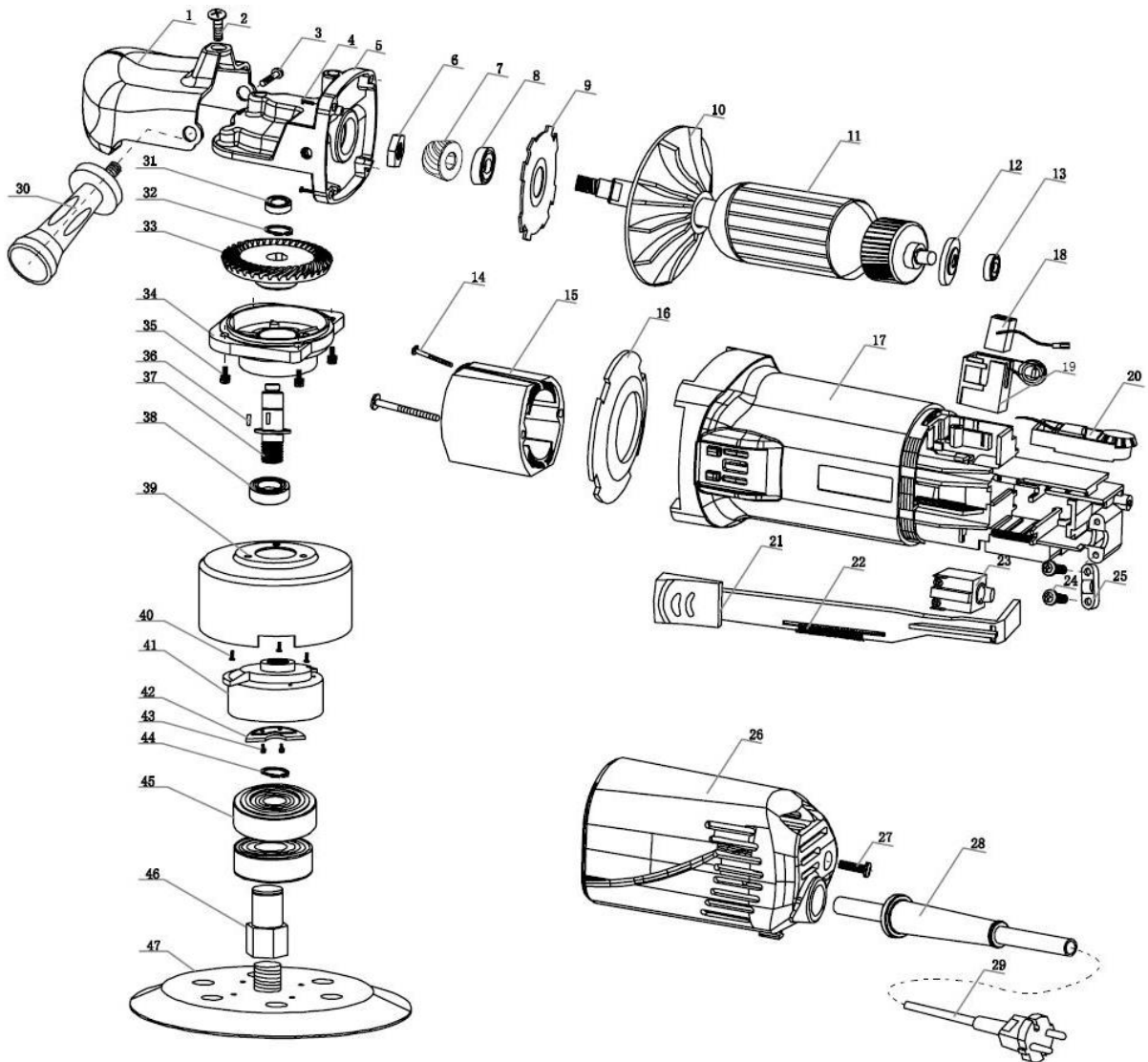
⚠WARNING

- Follow all safety precautions whenever diagnosing or servicing the car polisher. Disconnect the power supply before servicing.

Use the table below to troubleshoot problems before contacting service personnel or your local dealer. If the problem continues after troubleshooting, call your local dealer for assistance.

Failure	Possible Cause	Corrective Action
Car polisher will not start.	<ol style="list-style-type: none"> 1. Cord is not connected. 2. There is no power at the outlet. 3. Car polisher's thermal reset breaker tripped (if equipped). 4. Internal damage or wear (carbon brushes or switch, for example). 	<ol style="list-style-type: none"> 1. Check that cord is plugged in. 2. Check power at the outlet. If outlet is not powered, turn off the car polisher and check the circuit breaker. If the breaker is tripped, make sure the circuit is the right capacity for the car polisher and the circuit has no other loads. 3. Turn off the car polisher and allow it to cool. Press the reset button on the car polisher. 4. Have a technician service the car polisher.
Car polisher operates slowly.	<ol style="list-style-type: none"> 1. Excess pressure applied to workpiece. 2. Power being reduced by long or small diameter extension cord. 	<ol style="list-style-type: none"> 1. Decrease pressure and allow the car polisher to do the work. 2. Do not use an extension cord. If an extension cord is needed, use one with the proper diameter for its length and load.
Performance decreases over time.	Carbon brushes worn or damaged.	Have a qualified technician replace brushes.
Excessive noise or rattling.	Internal damage or wear (carbon brushes or bearings, for example).	Have a technician service the car polisher.
Overheating.	<ol style="list-style-type: none"> 1. Forcing car polisher to work too fast. 2. Blocked motor housing vents. 3. Motor being strained by long or small diameter extension cord. 	<ol style="list-style-type: none"> 1. Allow car polisher to work at its own rate. 2. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air. 3. Do not use an extension cord. If an extension cord is needed, use one with the proper diameter for its length and load.
Car polisher does not sand effectively.	<ol style="list-style-type: none"> 1. Accessory loose. 2. Accessory damaged, worn, or wrong type for the material being polished. 	<ol style="list-style-type: none"> 1. Confirm the accessory arbor is correct and the outer flange/arbor nut is tight. 2. Check the condition and the type of disc accessory. <p>Use the correct disc accessory for the job and make sure it is in good condition.</p>

Parts Diagram



Parts List

Part Number	Part Description	Quantity
1	Gearbox Cover	1
2	Screw	1
3	Screw	1
4	Screw	4
5	Gearbox	1
6	Lock Nut	1
7	Pinion Gear	1
8	Bearing	1
9	Bearing Spacer	1
10	Fan	1
11	Rotor	1
12	Magnetic Ring	1
13	Bearing	1
14	Stator Screw	2

Part Number	Part Description	Quantity
15	Stator	1
16	Fan Shroud	1
17	Housing	1
18	Carbon Brush	1
19	Carbon Brush Holder	1
20	Speed Control	1
21	Switch	1
22	Spring	1
23	Internal Switch	1
24	Clamp Screw	2
25	Cord Clamp	1
26	Rear Housing	1
27	Rear Housing Screw	1
28	Cord Sleeve	1
29	Power Cord	1
30	Side Handle	1
31	Bearing NSK688	1
32	Gear Retaining Ring	1
33	Face Gear	1
34	Gearbox Cap	1
35	Gearbox Cap Screw	4
36	Woodruff Key	1
37	Spindle	1
38	Bearing	1
39	Shroud	1
40	Shroud Screw	3
41	Eccentric Wheel	1
42	Eccentric Plate	1
43	Eccentric Plate Screw	2
44	Bearing Retaining Ring	1
45	Bearing	1
46	Pad Connector	1
47	Backing Pad	1

Replacement Parts

- For replacement parts and technical questions, please call Customer Service at **1-800-222-5381**.
- Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part reference number.
- The distributor reserves the rights to make design changes and improvements to product lines and manuals without notice.

Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the Ironton product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of **one year** from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

Obligations of Purchaser

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-800-222-5381, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

Remedy Limits

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your property incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

Assumption of Risk

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction for any disputes relating to this warranty.



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