MODEL T33305
6" 3-SPEED RANDOM ORBITAL POLISHER
OWNER'S MANUAL
(For models manufactured since 11/22)

Model T33305 shown w/optional battery.

#JM22458 PRINTED IN CHINA V1.11.22

******Keep for Future Reference******

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities 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.

SECTION 1: SAFETY

⚠WARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

⚠DANGER **Indicates an imminent hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the equipment.**

⚠WARNING

Safety Instructions for Power Tools

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this power tool. When tool is not being used, disconnect power, and store in out-of-reach location to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use tools in areas that are wet, cluttered, or have poor lighting. Operating tools in these areas greatly increases risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of power tools. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

DISCONNECT POWER FIRST. Always disconnect tool from power supply BEFORE making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

⚠WARNING

ELECTRICAL SAFETY. Tool plug must match outlet. Double-insulated tools have a polarized plug (one blade is wider than the other), which must be plugged into a polarized outlet. Never modify plug. Do not use adapter for grounded tools. Use a ground fault circuit interrupter if operation is unavoidable in damp locations. Avoid touching grounded surfaces when operating tool.

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control. Wear hard hat as needed.

HAZARDOUS DUST. Dust created while using tools may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, always wear a NIOSH-approved respirator, and connect tool to an appropriate dust collection device to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on tool—especially near moving parts. Verify removal before starting!

INTENDED USAGE. Only use tool for its intended purpose. Never modify or alter tool for a purpose not intended by the manufacturer or serious injury or death may result!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating tool. Do not overreach! Avoid awkward hand positions that make tool control difficult or increase the risk of accidental injury.

SAFE HANDLING. Firmly grip tool. To avoid accidental firing, do not keep finger on switch or trigger while carrying.

FORCING TOOLS.. Use right tool for job, and do not force it. It will do job safer and better at rate for which it was designed.

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. This protects hands and frees both of them to operate tool.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Ensure they are properly installed, undamaged, and working correctly.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using tool if they become a distraction.

USE RECOMMENDED ACCESSORIES. Consult this manual or manufacturer for recommended accessories. Using improper accessories will increase risk of serious injury.

MAINTAIN WITH CARE. Keep cutting tool edges sharp and clean. Follow all maintenance instructions and lubrication schedules to keep tool in good working condition. A tool that is improperly maintained could malfunction, leading to serious personal injury or death. Only have tool serviced by qualified service-personnel using matching replacement parts.

CHECK DAMAGED PARTS. Regularly inspect tool for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating tool.

MAINTAIN POWER CORDS. When disconnecting cord-connected tools from power, grab and pull the plug—NOT the cord. Carrying or pulling the cord may damage wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, sharp edges, moving parts, and wet/damp locations. Damaged cords increase risk of electrocution.

UNATTENDED OPERATION. Never leave tool running while unattended. Turn tool ***OFF*** and ensure all moving parts completely stop before walking away.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

Additional Safety for Polishers

⚠WARNING

Serious injury can occur from getting clothing, jewelry, or long hair entangled in rotating pad. Flying debris can cause eye injuries or blindness. Rotating pad may pinch or snag and cause tool to strike operator. To reduce the risk of these hazards, operator and bystanders MUST completely heed hazards and warnings below.

AVOIDING ENTANGLEMENT. Do not wear loose clothing, gloves, or jewelry. Tie back long hair. Always allow tool to stop on its own.

PERSONAL PROTECTIVE EQUIPMENT (PPE). Polishing can create large amounts of dust and can lead to eye injury or respiratory illness. Polishing toxic material, like asbestos, can deposit material into the air and create a respiratory hazard. Always wear safety glasses and a respirator.

KICKBACK. Sharp corners or edges on workpiece can snag or grab polishing pads, so maintain a firm grip with both hands on tool and position body and arms to resist kickback forces. Always use auxiliary handle for maximum control over kickback. Do not position your body where tool or workpiece will propel in event of kickback.

USE FOR INTENDED PURPOSE. This tool is designed to polish metal, fiberglass, and composite surfaces. DO NOT use tool to perform sanding, wire brushing, hole cutting or cut-off operations. Doing so may damage tool or cause personal injury.

POWER SOURCE. Remove battery from polisher before installing or removing pads, making adjustments, or performing maintenance or service.

ACCESSORY CAPACITY. Diameter and thickness of pads must be within capacity rating of your tool. Incorrectly sized pads should not be used.

POLISHING PADS. Inspect pads before use. DO NOT use pads that show signs of excessive wear or damage. Used pads can become dislodged and may cause damage to tool or work surface. Make sure pad is properly installed before use.

START-UP. Before using tool on a workpiece, start tool and allow it to reach full speed to see if there is any vibration or wobbling. This could indicate poor installation of pads. Stop machine and reinstall pads to secure them.

WORKPIECE INSPECTION. Never try to polish stock with embedded foreign objects or questionable imperfections. Make sure workpiece is properly supported. Do not polish workpieces containing toxic material.

OPERATION. Use only specified surface of pad to perform polishing operations. Make sure tool comes to a complete stop before setting tool down. DO NOT touch workpiece or any accessories after operation, as surfaces may be extremely hot and can cause burns. Never place hand near rotating accessory. DO NOT operate tool for long periods of time. Vibration from tool can cause permanent damage to fingers, hands, and arms.

MAINTENANCE. Dust and grit often accumulate on tool and can create an electric shock hazard. Wipe tool with a clean rag after use and make sure motor vents are clear.

Additional Safety for Batteries & Chargers

⚠WARNING

Battery and charger components may cause irritation, burns, electric shock or fire if disassembled, damaged, stored incorrectly, or disposed of incorrectly. Connecting charger to circuit it is not rated for could result in fire or explosion. To reduce the risk of these hazards, operator and bystanders MUST completely heed hazards and warnings below.

READ ENTIRE MANUAL. Read and understand all of the instructions and warnings before charging battery.

CHARGING EQUIPMENT. Only charge battery using charger and battery supplied with tool. DO NOT use batteries or chargers from other cordless tools.

CHARGING ENVIRONMENT. Charge battery on dry, hard surface in shaded location with good ventilation. DO NOT place charger on or near flammable materials. DO NOT cover charger when charging. DO NOT expose charger to moisture. Only charge battery when temperature is between 50°F (10°C)–104°F (40°C). Charging in temperatures beyond these extremes will damage battery.

DO NOT DISASSEMBLE BATTERY OR CHARGER. Tampering with battery or charger may result in risk of electric shock or fire.

CHARGER DAMAGE. Replace charger if it has been dropped, damaged, exposed to liquid, or has received hard impact.

DISCONNECT CHARGER. Unplug charger when cleaning, or when not in use.

SHORTING BATTERY. Avoid touching terminals with skin or metal, to prevent injury from an electrical shock and to prevent fire from spark. Do not store battery with metal objects that could create connection between terminals or in place where it could get wet.

CHARGER VOLTAGE. DO NOT plug into circuit that charger is not rated for. Connecting charger to circuit with incorrect voltage will damage charger, possibly causing fire or explosion. DO NOT charge from DC power supply or generator or with extension cord.

DAMAGED BATTERY. Regularly inspect battery for any damage, corrosion, or any condition that may affect safe operation. Immediately replace damaged battery before operating tool.

BATTERY DISPOSAL. Battery must be recycled or disposed of properly. DO NOT dispose of battery in landfill or incinerate. Combustion of some of battery's components can cause toxic fumes and possible explosion.

BATTERY LIQUID. Liquid contained in batteries can cause irritation or burns. If liquid contacts eyes or skin, flush with water and seek medical assistance.

⚠CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment or poor work results.

SECTION 2: INTRODUCTION

Foreword

We are proud to offer this manual with your new polisher! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the polisher we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, your polisher may not exactly match the manual. If you find this to be the case, and the difference between the manual and polisher leaves you in doubt, check our website for the latest manual update or call technical support for help.

For your convenience, we post all available manuals and manual updates for free on our website at www.grizzly.com. Any updates to your model of tool will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Technical Support
1815 W. Battlefield
Springfield, MO 65807
Phone: (570) 546-9663
E-Mail: techsupport@grizzly.com

We want your feedback on this manual. If you can take the time, please email or write to us at the address below and tell us how we did:

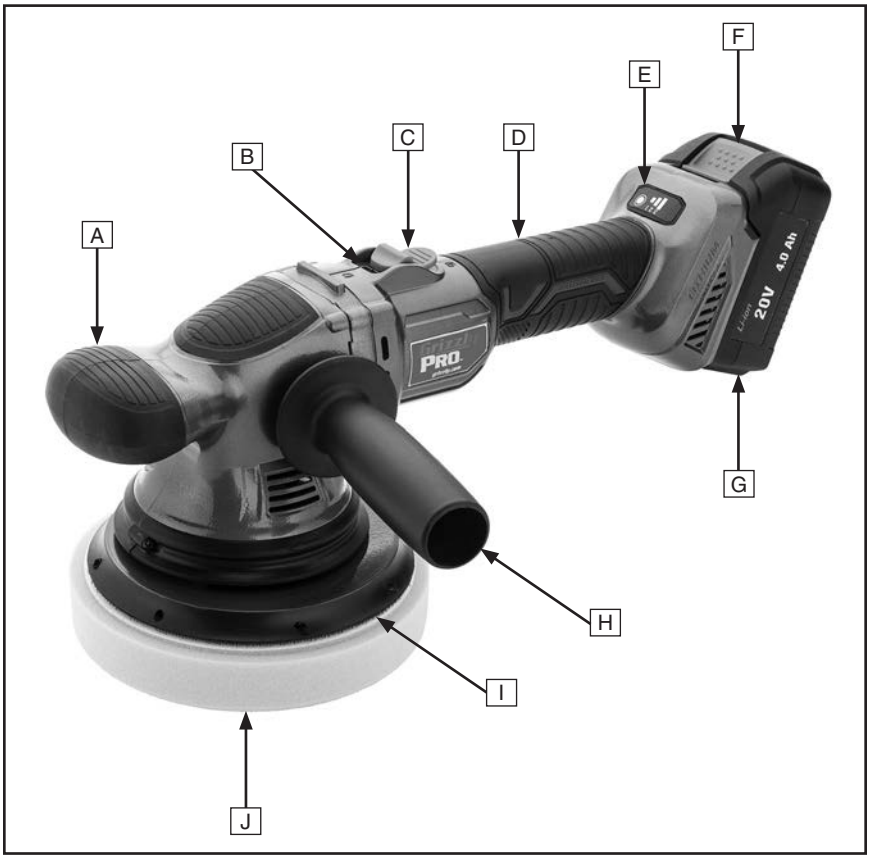
Grizzly Industrial, Inc.
C/O Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Specifications

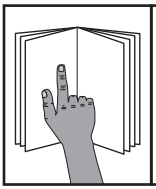
Charging Source	120V
Battery Type	20V Lithium-Ion
Pad/Disc Size	6 in.
Orbits Per Minute Range	3600/6800/10000
Orbit Diameter	0.60 in.
Motor Speed Range	1800 - 5000 RPM
Weight	3.5 lbs.
Length x Width x Height	16 x 6 x 5-1/2 in.

Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.

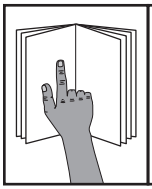


A. Front Grip
B. Locking Tray
C. Start/Stop Switch
D. Handle
E. Speed Selector Button
F. Battery Lock
G. 20V Li-Ion Battery (not included)
H. Auxiliary Handle
I. Backing Pad
J. Polishing Pad



⚠WARNING
To reduce your risk of serious injury, read this entire manual BEFORE using Tool.

Controls & Components



⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using tool.

Refer to **Figures 1–3** and the following descriptions to become familiar with the basic controls of this tool.

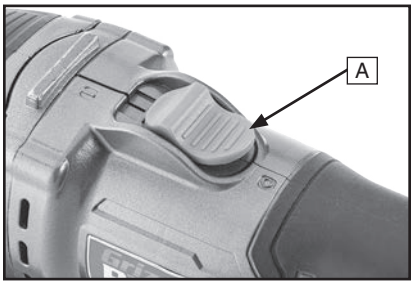


Figure 1. Power controls.

A. Start/Stop Switch: Starts and stops tool.

— To start tool, press bottom of switch and push switch forward. To stop tool, slide switch backward.

— For continuous operation, press bottom of switch, push switch forward, and lower front of switch into locking tray. To stop tool, press bottom of switch.

Figure 2. Speed selector button.

B. Speed Selector Button: Press button to select one of three speeds. Indicator light illuminates selection.

Speed Setting	RPM/OPM
1	1800/3600
2	3400/6800
3	5000/10000

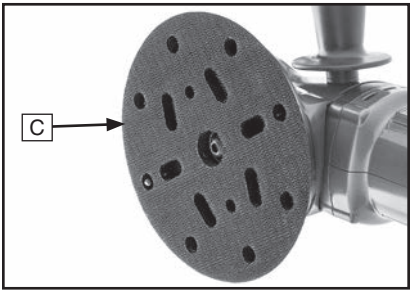


Figure 3. Hook & loop backing pad.

C. Backing Pad: Secures pad to tool with hook & loop mounting plate.

SECTION 3: SETUP

Unpacking

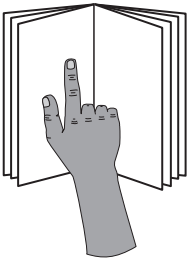
This tool was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the tool and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return the tool later.*

⚠CAUTION

Like all tools there is potential danger when operating this tool. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this tool with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

⚠WARNING



This tool presents serious injury hazards to untrained users. Read through entire manual to become familiar with controls and operations before starting tool!

Needed for Setup

The following are needed to complete the setup process:

Description	Qty
• Safety Glasses (per person)	1

Inventory

The following is a list of items shipped with your tool. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Box (Figure 4)	Qty
A. Auxiliary Handle	1
B. Hex Wrench 5mm	1
C. 3-Speed Random Orbital Polisher	1
D. Fine Finish Polishing Pad	1
E. Wool Pad	1
F. Finish Polishing Pad	1
G. Compounding/Cutting Pad	1

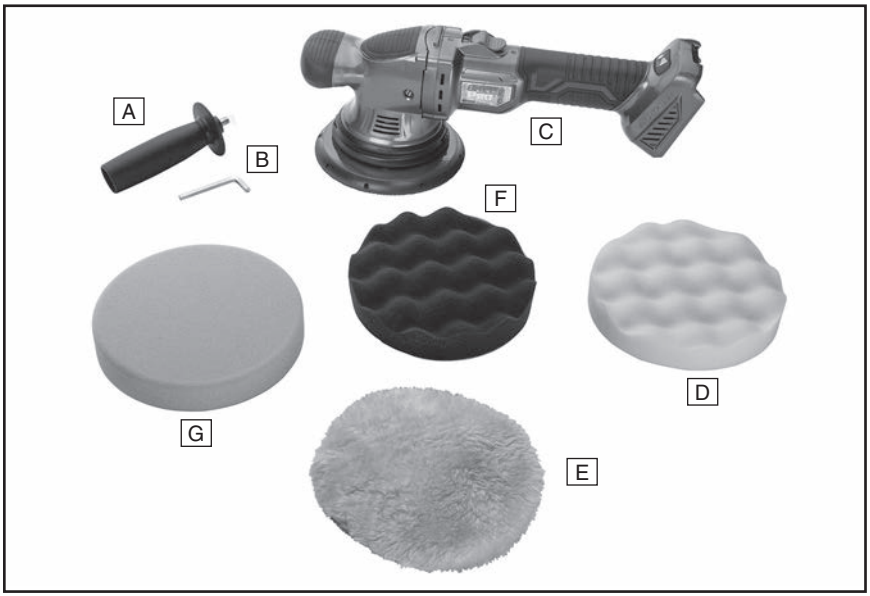


Figure 4. Model T33305 inventory.

NOTICE

If you cannot find an item on this list, carefully check around/inside the tool and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Charging/Installing Battery

The Model T33305 is compatible with Grizzly PRO 20V Lithium-Ion batteries and chargers (see **Accessories** on **Page 20**).

Removing/Charging Battery

1. Press battery lock (see **Figure 5**) and remove battery from polisher.

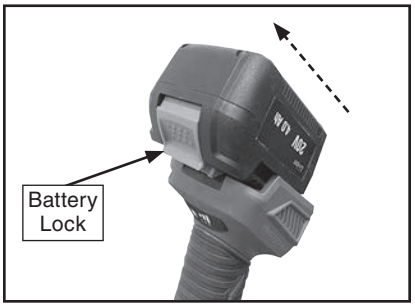


Figure 5. Location of battery lock.

2. Plug charger into 120V outlet.

3. Slide battery into charger until battery clicks in place (see **Figure 6**). Red light will illuminate while battery is charging. When green light illuminates, battery is fully charged.

   Note: *Fully charge battery before first use.*

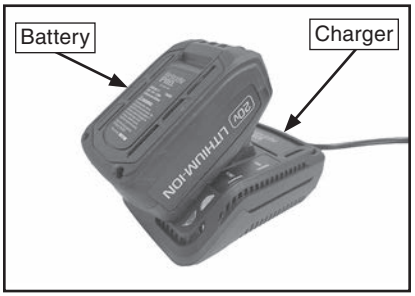


Figure 6. Battery charging in Model T30302 Fast Charger (not included).

Installing Battery in Router

1. Press battery lock (see **Figure 7**) and remove battery from charger.

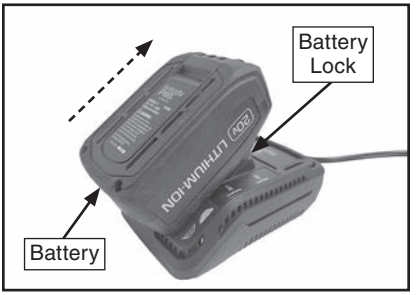


Figure 7. Removal of battery.

2. Insert battery by aligning polisher base with groove in battery and pushing in direction of arrow until battery pack is secured in tool (see **Figure 8**).

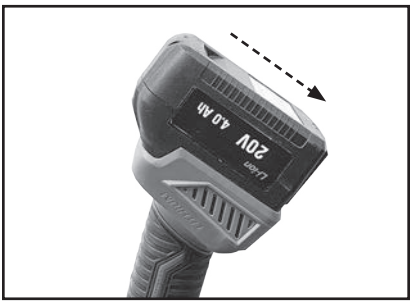


Figure 8. Battery installed in polisher.

Assembly

Assembling the Model T33305 consists of installing the auxiliary handle into the polisher body.

To assemble tool:

1. Install auxiliary handle tightly into one of two mounting holes located on either side of tool (see **Figure 9**).

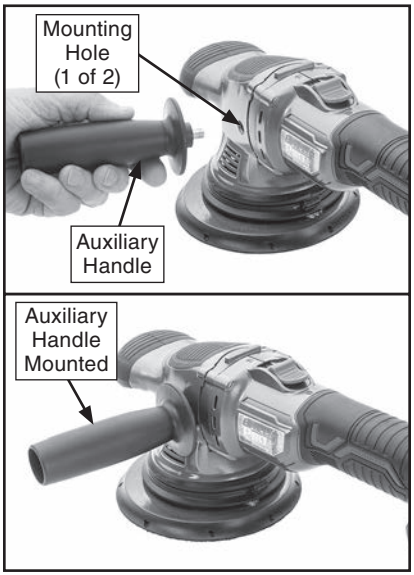


Figure 9. Mounting auxiliary handle.

Test Run

Once assembly is complete, test run the tool to ensure it is properly connected to power and safety components are working properly.

If you find an unusual problem during the test run, immediately stop the tool, disconnect it from power, and fix the problem BEFORE operating the tool again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) Start/Stop switch safety feature functions correctly.

⚠WARNING

DO NOT start tool until all preceding setup instructions have been performed. Operating an improperly set up tool may result in malfunction or unexpected results that can lead to serious injury, death, or tool/property damage.

⚠WARNING

Serious injury or death can result from using tool BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, tool until information is understood.

⚠WARNING

DO NOT start tool unless you have both hands on the tool. Torque from the motor can cause the tool to twist. This can lead to serious injury and tool/property damage.

⚠CAUTION

Before installing the battery cartridge into the tool, always check to see that the start/stop switch actuates properly and returns to the *OFF* position when released.

To test run tool:

1. Clear all setup tools away from tool.

2. Install battery in polisher (see **Charging/ Installing Battery** on **Page 10**).

3. Pick up polisher with one hand on handle and other hand on either front grip or auxiliary handle (if installed) (see **Figure 10**), keeping tool away from any surfaces or objects.

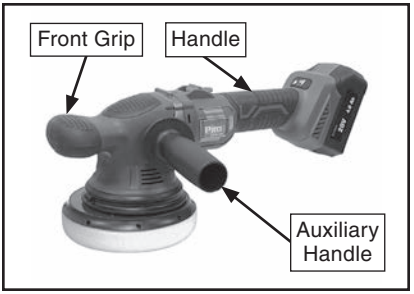


Figure 10. Polisher handle/grip locations.

4. Press bottom of Start/Stop switch, push switch forward, and lower front of switch into locking tray. Tool should run without unusual problems or noises.

5. Press speed selector button to cycle through RPM settings. Tool should continue to run without unusual problems or noises.

6. Press and release bottom of Start/stop switch. Switch should automatically return to Stop position, and tool will stop.

   — If tool *does* stop, Start/Stop switch is working correctly.

   — If tool *does not* stop, immediately disconnect battery. Contact Technical Support before using tool.

7. Try to start motor by pushing Start/ Stop switch forward without applying pressure on bottom of switch.

   — If tool *does not* start, safety feature of switch lockout is working correctly. Congratulations! Test run is complete.

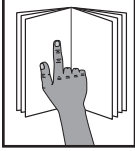
   — If tool *does* start, immediately disconnect battery. Contact Technical Support before using tool.

SECTION 4: OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the tool is used during operation, so the tool controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is not intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using tool.

⚠WARNING

Eye injuries and respiratory problems can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.

⚠WARNING

DO NOT operate tool around flammable materials as tool can produce sparks that may ignite them. DO NOT polish workpieces that require liquid coolant.

NOTICE

If you are not experienced with this type of machine, WE STRONGLY RECOMMEND that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

To complete a typical operation, the operator does the following:

1. Examines workpiece to make sure it is suitable for polishing.
2. Secures workpiece.
3. Installs correct polishing pad for operation.
4. Prepares polishing pad for use.
5. Puts on safety glasses and respirator.
6. Per manufacturer's instructions, evenly spreads polishing compound on pad or surface to be polished.
7. Holds tool with one hand on handle and other hand on front grip or auxiliary handle.

8. Places polishing pad on workpiece.

9. Starts tool at lowest speed, waits for tool to reach full speed, then begins polishing with even, steady motion.

   Note: *Always do a test run on a small area of workpiece to make sure desired result is achieved.*

10. Stops tool, allows tool to come to complete stop, then lifts tool off workpiece.

Workpiece Inspection

Some workpieces are not safe to polish or may require modification before they are safe to polish. **Before polishing, inspect all workpieces for the following:**

- ***Material Type:*** This tool is intended for polishing painted or unpainted metal, fiberglass, wood, and composite surfaces.

- ***Foreign Objects:*** Fasteners, rivets, clips, and other foreign objects are often found in and around metal, fiberglass, wood, and composite surfaces. While polishing, these objects can become dislodged and hit the operator, cause kickback, or damage the pad, which might then fly apart, leading to damage to the operator, bystanders, or surface being polished. Always visually inspect your workpiece for these items. If they cannot be removed, DO NOT polish the workpiece.

Installing/Removing Polishing Pads

The Model T33305 polisher is supplied with polishing pads for use with the hook & loop backing pad.

To install/remove polishing pad:

1. DISCONNECT BATTERY FROM TOOL!

2. Place tool on tool rest with backing pad upright (see **Figure 11**).

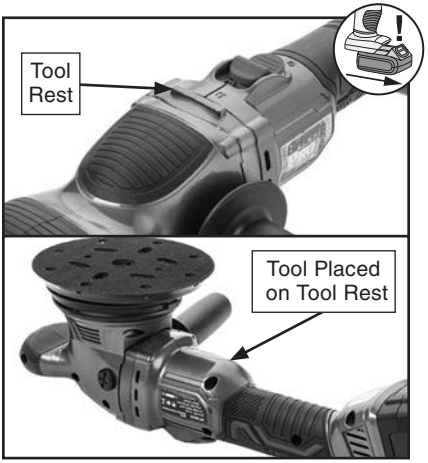


Figure 11. Location of tool rest.

⚠CAUTION

Make sure backing pad is secured properly. Loose attachment will cause tool to run out of balance and create excessive vibration, which may cause loss of control.

NOTICE

Only use polishing pads that are compatible with hook & loop fasteners.

3. Press pad onto hook & loop surface, making sure edges align to ensure proper tool balance (see **Figure 12**).

   Note: *Make sure hook & loop surface is free from dirt and other material before attaching polishing pad.*

   Note: *Polishing pad diameter should match backing pad diameter.*

4. To remove pad, make sure battery is removed, then peel away pad from edge (see **Figure 12**).

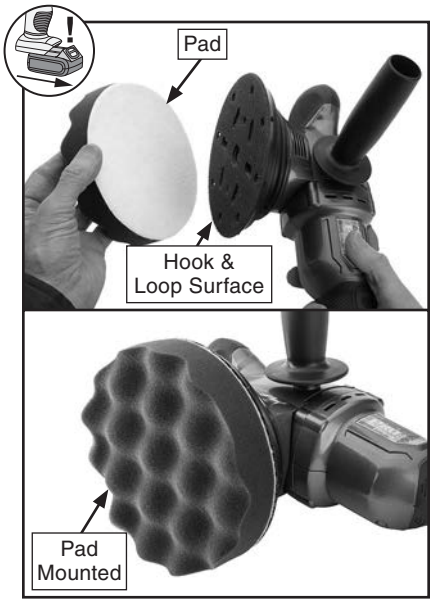


Figure 12. Attaching pad.

Choosing a Pad

Choosing a pad depends upon the surface to be treated and the finish desired. Listed below are general classification guidelines for polishing pads. Reference recommendations from your specific polishing pad manufacturer.

Wool — Removes color, sanding, scratches, and extra swirl marks.

Yellow — Heavy cutting and compounding. Cuts through scratches, oxidation, and heavy swirls.

Orange — Light cutting pad. Removes swirls/scratches; can be used as a one-step pad.

Black — Finishing, applying wax, and refining finishes.

Choosing a Polish

There are two main categories of polishes: compounds and polishes.

Compounds are used for removing heavy scratching and oxidation. Compounds do not generally leave a fine finish, as they can leave behind swirls and scratches.

Polishes are less aggressive and are used to remove small scratches and swirls.

Some polishes are labeled Diminishing or Non-Diminishing. Diminishing polishes start aggressively and break down during use, gradually becoming less abrasive.

Non-Diminishing polishes do not break down during use. Generally, a finer polish will have to be used after using a non-diminishing polish.

Polishing Operations

The Model T33305 is a random orbital polisher. The pad spins on a spindle, and the spindle rotates around an eccentric offset. This polisher is suitable for light to moderate defect removal and finishing projects, and is typically used with wool, foam, and microfiber pads.

The polisher reacts to the amount of pressure you apply while polishing. The more pressure applied, the slower the tool spins. So there is less chance of building up heat and harming the surface finish.

Polishing compounds differ by manufacturer. How a compound reacts and works can vary from surface to surface. Always test a small section of the surface to judge the strength or cleaning action of a compound (see **Choosing a Polish** on **Page 15**).

Make sure the area to be polished is clean and dry. Unwashed surfaces can contain foreign matter that can permanently damage the surface when polished. Unwashed surfaces can also lead to premature pad wear or damage.

Always hold the tool firmly with one hand on the main handle and the other hand on the auxiliary handle or front grip.

It may be beneficial to draw a reference line, or a series of reference lines, with a marker to track if the pad is still rotating (see **Figure 13**).

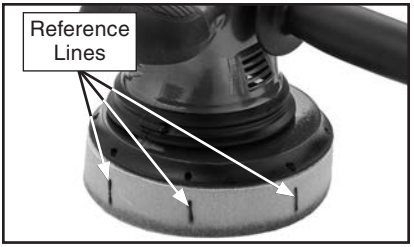
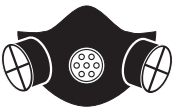


Figure 13. Reference lines drawn on pad.

⚠WARNING

Damage to your eyes and lungs could result from using this tool without proper protective gear. Always wear safety glasses and a dust mask/respirator when operating this tool.



⚠WARNING

Loose hair and clothing could get caught in tool and cause serious personal injury. Keep loose clothing and long hair away from moving parts.

When Using Polishes

1. Polish test spot to find a combination that works best for your application.

   Note: *For best results read instructions provided with finish, wax, or polish being used.*

2. Use least abrasive polish and pad combination that produces best result.

3. Shine a light on finish at several angles to check if finish is satisfactory.

Polishing Basics

1. Make sure workpiece is always properly supported.

2. Hold tool firmly with one hand on main handle, and other hand on auxiliary handle or front grip.

3. Start tool. Let motor reach full speed, then carefully move tool back and forth in long strokes with steady pressure over workpiece surface.

   Note: *Use circular motions on curved or angled sections.*

4. When finished, turn tool ***OFF*** and let pad come to a complete stop before lifting tool from workpiece surface.

Performing a Polishing Operation

1. Attach pad to backing pad (see **Installing/Removing Polishing Pads** on **Page 14**).

2. Prime pad by applying a few dots of polish evenly on pad surface (see **Figure 14**).

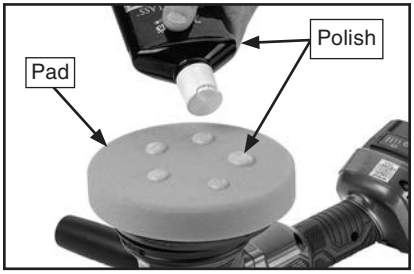


Figure 14. Applying polish to pad.

   Note: *Using excessive polish will decrease life of pad.*

3. Dab pad over a small area of workpiece to evenly spread polish.

4. With pad contacting surface, and hands firmly on grips, start tool at lowest speed (see **Figure 15**).

   Note: *Always use handles/grips for proper control.*

Figure 15. Polishing surface.

5. Lightly move polisher around workpiece in long sweeping strokes, making sure to overlap last polishing pass to spread polish evenly.

6. Increase speed of polisher to level 2 or 3 while polisher is in contact with surface.

   Note: *Tool speed can be changed by pressing speed selector switch.*

   Note: *Too much pressure or improper motion can cause swirl marks or burning.*

   Note: *For best results read instructions provided by manufacturer with finish, wax, or polish being used.*

7. When done, wipe excess polish off with a clean polishing cloth.

8. Examine polished surface.

   — If results are satisfactory, repeat **Steps 1–7** over larger area.

   — If results are unsatisfactory, repeat **Steps 1–7** and use either a less or more abrasive polish.

Polishing a Wood Workpiece

The Model T33305 polisher can be used to achieve a high gloss shine on finished wood surfaces.

Allow your finish to cure thoroughly before beginning the buffing process. The general rule is that the longer the finish is allowed to cure, the better the final result will be.

Always follow the manufacturer's instructions on how to use their product (see **Choosing a Polish** on **Page 15**).

Before using the polisher, use a fine grit of sandpaper or steel wool to lightly roughen the surface. This will remove any bumps or dust on the workpiece surface.

Apply mineral spirits and wipe the workpiece dry. This will remove the debris created by the light sanding.

To polish a wood workpiece:

1. Attach pad to backing pad (see **Installing/Removing Polishing Pads** on **Page 14**).

2. Apply polish evenly on wood surface (see **Figure 14**).

3. With hands firmly gripping tool, start tool at lowest speed.

   Note: *Always use handles/grip for proper control.*

4. Place polisher lightly surface of wood. Move polisher slowly and evenly, from side to side, slightly overlapping on each pass. Continue until most of polish has disappeared.

   Note: *Too much pressure, improper motion, or stopping polisher in one location can cause swirl marks or burning.*

Figure 16. Example of polishing a wooden surface.

5. Wipe off any dust with a clean polishing cloth.

6. Remove existing pad, then attach a clean finishing pad to backing pad.

7. Apply final polish compound (example: wax) to wood surface.

8. Repeat **Steps 4**–**5** until desired result is achieved.

Removing/Installing Backing Pad

The backing pad can become damaged or worn through general use, but it can be easily removed and replaced. Never replace the backing pad with either a larger or smaller diameter backing pad.

Items Needed	Qty
Hex Wrench 5mm	1
Putty Knife	1

To remove/install backing pad:

1. DISCONNECT BATTERY FROM TOOL!

2. Remove cap screw and external tooth washer (see **Figure 17**), then remove backing pad from polisher.

   Note: *It may be helpful to use a putty knife to gently pry backing pad away from polisher.*

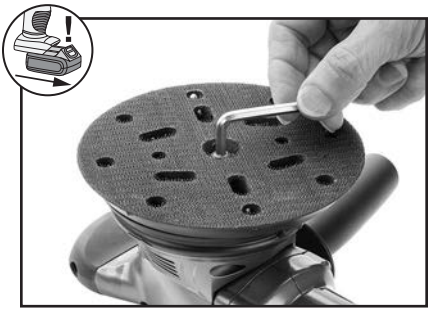


Figure 17. Location of cap screw.

3. To install backing pad, orient slot on housing to match slot on hub (see **Figure 18**), and install external tooth washer and cap screw.

   IMPORTANT: Do not overtighten cap screw or damage to backing pad or hub can result.

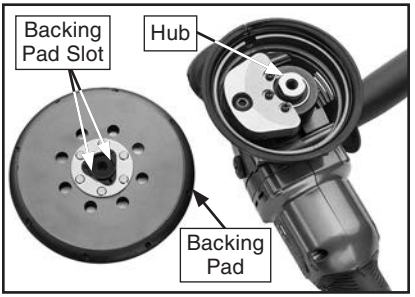


Figure 18. Backing pad removed.

SECTION 5: ACCESSORIES

⚠WARNING

Installing unapproved accessories may cause tool to malfunction, resulting in serious personal injury or tool damage. To reduce this risk, only install accessories recommended for this tool by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

T30304—2.0Ah Lithium-Ion Battery
T30305—4.0Ah Lithium-Ion Battery
These 20V rechargeable batteries can be used with any 20V Grizzly PRO cordless power tool. Built by Samsung®, these batteries are low profile and lightweight.

Figure 19. Grizzly PRO 20V Lithium-Ion batteries.

T30302—2.4A Fast Charger
T30303—2.4A Dual Port Charger
These chargers are compatible with the Model T30304 and T30305 batteries used with 20V Grizzly PRO cordless power tools.

Figure 20. Battery chargers.

Basic Eye Protection

T32323—Woodturners Face Shield
T32401—EDGE Brazeau Safety Glasses
T32402—EDGE Khor G2 Safety Glasses
T32404—EDGE Mazeno Safety Glasses

Figure 21. Assortment of basic eye protection.

SECTION 6: MAINTENANCE

⚠WARNING

Always DISCONNECT BATTERY from tool before servicing, adjusting, or doing maintenance to reduce the risk of injury due to tool starting accidentally.

Schedule

For optimum performance from this tool, this maintenance schedule must be strictly followed.

Ongoing

To minimize your risk of injury and maintain proper tool operation, shut down the tool immediately if you ever observe any of the items below, and fix the problem before continuing operations:

- Loose bolts.
- Damaged/dull or worn out pads.
- Damaged backing pad.
- Worn or damaged wires.
- Regularly wipe down tool with a soft cloth.
- Any other unsafe condition.

Cleaning & Protecting

Cleaning the Model T33305 is relatively easy. Vacuum excess dust, and wipe off the remaining dust with a dry cloth. If any polish or paint has built up, use a resin or paint dissolving cleaner to remove it.

Inspect the polisher for loose parts, damaged battery, battery housing, backing pad or switch, and inspect the pads for rips and tears. Replace pads if they are worn or damaged. Continuous use of a worn or damaged pad will not only decrease working efficiency, but also overload the motor, so the pads must be frequently checked and replaced.

⚠WARNING

DO NOT operate tool around flammable materials as tool can produce sparks that may ignite them. DO NOT polish workpieces that require liquid coolant.

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your tool. If you need replacement parts or additional help with a procedure, call our Technical Support.

Troubleshooting

Motor & Electrical

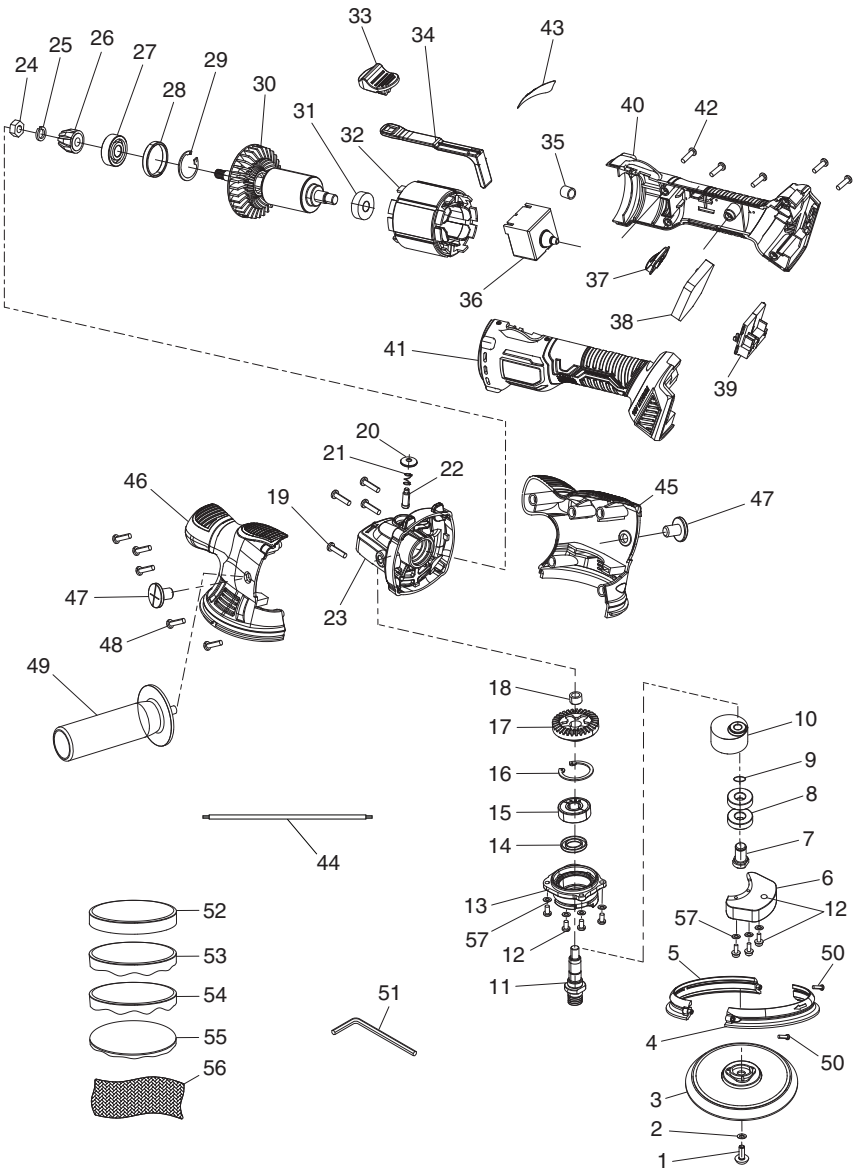
Symptom	Possible Cause	Solution
Tool does not start.	1. Battery charge low.	1. Recharge battery (**Page 10**); verify charger is working using volt meter if battery does not recharge.
	2. Wiring broken, disconnected, or corroded.	2. Fix broken wires or disconnected/corroded connections.
	3. Start/Stop switch at fault.	3. Replace Start/Stop switch.
	4. Motor or motor bearings at fault.	4. Replace motor.
Tool stalls or is underpowered.	1. Battery charge low.	1. Recharge battery (**Page 10**).
	2. Motor overheated.	2. Clean motor, let cool, and reduce workload. Do not clean motor with compressed air.
	3. Motor or motor bearings at fault.	3. Replace motor.
Tool has vibration or noisy operation.	1. Motor or components loose.	1. Inspect/tighten all bolts/knobs. Verify collet cone/nut are properly tightened.
	2. Backing pad damaged or loose.	2. Replace damaged backing pad or tighten backing pad cap screw (**Page 19**).
	3. Motor bearings at fault.	3. Remove backing pad (**Page 19**) and rotate backing pad mounting nut; rotational grinding/loose shaft requires bearing replacement.

Operations

Symptom	Possible Cause	Solution
Machine slows or stops when operating.	1. Operator using too much pressure. 2. Speed setting too low.	1. Use less pressure when buffing. 2. Increase speed.
Poor results from polishing compound.	1. Wrong buffing compound for material. 2. Using too much or too little polish/compound.	1. Use correct buffing compound (**Page 15**). 2. Some trial-and-error necessary with each product. Too much or too little product creates too much or too little lubricity, compromising effectiveness (**Page 15**).
Poor results from polishing operation.	1. Work surface contains residue or contaminants. 2. Contaminated or overused pad on polisher. 3. Incorrect polishing technique for buffing. 4. Incorrect pad type. 5. Incorrect polishing technique for buffing. 6. Moving polisher too fast over surface. 7. Using too low of a speed setting. 8. Using too little or too much downward pressure. 9. Pad not flat against surface being polished.	1. Dirt, oil, rust, paint, or other film must be removed chemically or with water. Dry surface before buffing. 2. Replace pad (**Page 14**). 3. Make sure to overlap strokes by 50%. Use light pressure. 4. Use correct pad for your application (**Page 15**). 5. Reduce work area to no more than 20" x 20". 6. Move polisher slowly over surface, especially when removing paint defects like oxidation, scratches, swirls, etc. 7. Use higher speed setting, especially when removing paint defects scratches, swirls, etc. 8. Apply enough pressure that polish/compound can be effective, but not so much pressure that backing pad stops spinning. Some trial-and-error necessary (**Page 16**). 9. Keep pad flat against surface being polished. Applying too much pressure to one edge can stop rotation and decrease effectiveness (**Page 17**).

SECTION 8: PARTS

Main



Main Parts List

REF	PART #	DESCRIPTION
1	PT33305001	BUTTON HD CAP SCR M8-1.25 X 16
2	PT33305002	EXT TOOTH WASHER 8MM
3	PT33305003	BACKING PLATE 6"
4	PT33305004	PROTECTION RING (LEFT)
5	PT33305005	PROTECTION RING (RIGHT)
6	PT33305006	COUNTERWEIGHT
7	PT33305007	T-BOLT M12-1.75 X 30
8	PT33305008	BALL BEARING 6001-RS
9	PT33305009	EXT RETAINING RING 12MM
10	PT33305010	ECCENTRIC WHEEL
11	PT33305011	GEARBOX OUTPUT SHAFT
12	PT33305012	PHLP HD SCR M4-.7 X 14
13	PT33305013	GEARBOX COVER
14	PT33305014	BEARING SEAT
15	PT33305015	BALL BEARING 6201-RS
16	PT33305016	INT RETAINING RING 32MM
17	PT33305017	GEAR 41T
18	PT33305018	NEEDLE BEARING HK0808
19	PT33305019	TAP SCREW M4 X 20
20	PT33305020	LOCK BUTTON
21	PT33305021	COMPRESSION SPRING 0.6 X 8.7 X 12
22	PT33305022	LOCK PIN 6 X 15
23	PT33305023	GEARBOX
24	PT33305024	HEX NUT M5-.8
25	PT33305025	LOCK WASHER 5MM
26	PT33305026	PINION GEAR 8T
27	PT33305027	BALL BEARING 608-2RS
28	PT33305028	SEAL 22 X 24 X 7
29	PT33305029	INT RETAINING RING 22MM

REF	PART #	DESCRIPTION
30	PT33305030	ARMATURE
31	PT33305031	BALL BEARING 607-2RS
32	PT33305032	STATOR
33	PT33305033	ON/OFF SWITCH
34	PT33305034	SWITCH LEVER
35	PT33305035	SPACER 4ID X 5OD X 7L
36	PT33305036	START/STOP SWITCH DKLD JT02-3
37	PT33305037	3-SPEED CONTROL SWITCH
38	PT33305038	CONTROLLER
39	PT33305039	BATTERY TERMINAL BLOCK
40	PT33305040	MOTOR HOUSING (RIGHT)
41	PT33305041	MOTOR HOUSING (LEFT)
42	PT33305042	TAP SCREW M4 X 18
43	PT33305043	SPEED LABEL
44	PT33305044	MOTOR WIRE 22G 6"
45	PT33305045	COVER (RIGHT)
46	PT33305046	COVER (LEFT)
47	PT33305047	PHLP HD SCR M8-1.25 X 12 PL
48	PT33305048	TAP SCREW M4 X 14
49	PT33305049	FIXED HANDLE 30 X 110, M8-1.25 X 10
50	PT33305050	TAP SCREW M3-.5 X 10
51	PT33305051	HEX WRENCH 5MM
52	PT33305052	FOAM PAD 6" (ORANGE)
53	PT33305053	FOAM PAD 6" (BLACK)
54	PT33305054	FOAM PAD 6" (YELLOW)
55	PT33305055	WOOL PAD 6"
56	PT33305056	CLEANING TOWEL
57	PT33305057	FLAT WASHER 4MM

Parts breakdown provided for reference only. Not all parts shown are available for purchase.

Labels & Cosmetics

REF	PART #	DESCRIPTION
101	PT33305101	MACHINE ID LABEL
102	PT33305102	QR CODE LABEL

REF	PART #	DESCRIPTION
103	PT33305103	GRIZZLY PRO LABEL

⚠WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.

WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We 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.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

In the event you need to use this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number,'' which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

To take advantage of this warranty, you must register it at **https://www.grizzly.com/forms/warranty**, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.

WARRANTY

grizzly.com