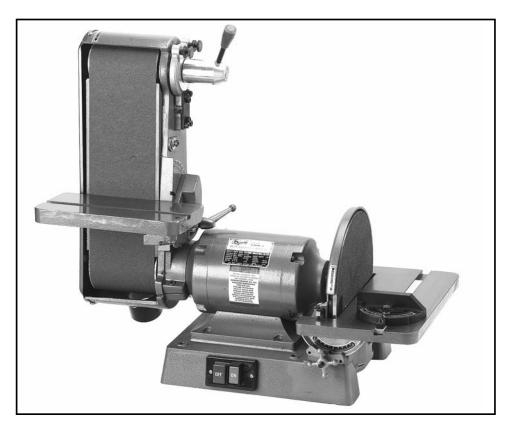


### **COMBINATION SANDER**

MODEL G1183/G1276
INSTRUCTION MANUAL



COPYRIGHT © 1989 BY GRIZZLY IMPORTS, INC.

WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY IMPORTS, INC.

REVISED APRIL, 1999. PRINTED IN U.S.A.



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 chemical 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.

### **TABLE OF CONTENTS**

	TABLE OF CONTENTS	<b>PAGE</b>
1.	SAFETY RULES	
	SAFETY RULES FOR POWER TOOLS	2-3
	ADDITIONAL SAFETY INSTRUCTIONS FOR THE SANDER	4
2.	CIRCUIT REQUIREMENTS	
	110/220V OPERATION	5
	GROUNDING	5
	FUSING	5
	EXTENSION CORDS	6
	WIRING DIAGRAM	6
3.	GENERAL INFORMATION	
	COMMENTARY	7
	UNPACKING	8
	PIECE INVENTORY	8
	CLEAN UP	9
	SITE CONSIDERATIONS	9
4.	ASSEMBLY	
	ASSEMBLY BASICS	10
	BELT TABLE	10
	DISC TABLE	11
	BELT LEVER	11
5.	ADJUSTMENTS	
	TABLES	12
	POSITIVE STOPS	2-13
	BELT PLATEN	13
	DISC GUARD	14
	BELT ARM MOVEMENT	14
	BELT INSTALLATION	15
	BELT TRACKING	5-16
6.	OPERATIONS	
	TABLE TILT	17
	DISC SANDING	18
	SURFACE SANDING	18
	BEVEL SANDING	19
	MITER SANDING	19
7.	MAINTENANCE	20
8.	CLOSURE	22
	RING DIAGRAM	
	ACHINE DATA	_
PA	RTS DIAGRAMS/PARTS LISTS	26-29
W۵	ARRANTY	30

### **SECTION 1: SAFETY**

#### **AWARNING**

# 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.



Indicates an imminently hazardous situation which, if not avoided, <u>WILL</u> result in death or serious injury.

**AWARNING** 

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

**A**CAUTION

Indicates a potentially hazardous situation which, if not avoided, <u>MAY</u> 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.

# **AWARNING**Safety Instructions For Power Tools

- KEEP GUARDS IN PLACE and in working order.
- 2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.
- **3. KEEP WORK AREA CLEAN**. Cluttered areas and benches invite accidents.
- 4. DON'T USE IN DANGEROUS ENVIRON-MENT. Don't use power tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.

- 5. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
- **6. MAKE WORK SHOP CHILD PROOF** with padlocks, master switches, or by removing starter keys.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- **8. USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

#### **AWARNING**

### Safety Instructions For Power Tools

9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. Conductor size should be in accordance with the chart below. The amperage rating should be listed on the motor or tool nameplate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

Minimum Gauge for Extension Cords

	LENGTH				
AMP RATING	25ft	50ft	100ft		
0-6	18	16	16		
7-10	18	16	14		
11-12	16	16	14		
13-16	14	12	12		
17-20	12	12	10		
21-30	10	10	No		

- 10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- **12. SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

- **13. DON'T OVERREACH.** Keep proper footing and balance at all times.
- **14. MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **15. DISCONNECT TOOLS** before servicing and changing accessories, such as blades, bits, cutters, and the like.
- 16. REDUCE THE RISK OF UNINTENTION-AL STARTING. Make sure switch is in off position before plugging in.
- 17. USE RECOMMENDED ACCESSORIES.

  Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- 18. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 19. NEVER LEAVE TOOL RUNNING UNAT-TENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

#### **AWARNING**

### **Additional Safety Instructions For The Sander**

- **1.** Be aware of belt or disc rotation direction when sanding.
- 2. Keep fingertips away from moving parts.
- Never use excessive force when sanding. Doing so greatly increases the chance of personal injury, mechanical damage, or damage to your workpiece.
- **4.** Always feed your work AGAINST the direction of rotation.
- DO NOT operate the sander if the disc or belt are damaged or badly worn. Portions of sandpaper could be ejected from the sander.

- 6. Even if you have a reliable method of dust collection, use a dust mask or respirator when sanding. Use eye and hearing protection as well.
- DO NOT sand material when you doubt its stability or integrity. Inspect all materials carefully for foreign objects like nails and staples.
- **8.** When disc sanding, feed material into the portion of the disc spinning DOWN toward the table.
- 9. Habits good and bad are hard to break. Develop good habits in your shop and safety will become second-nature to you.

### **AWARNING**

Operating this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

#### **AWARNING**

Like all power tools, there is danger associated with the Model G1183/1276 Combination Sander. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this tool with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

### **A**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: CIRCUIT REQUIREMENTS**

### 110/220V Operation

The Model G1183/1276 is prewired for 110V, single phase operation. **Figure 1** depicts the typical grounded receptacle which should be used. This machine can be rewired to operate at 220V, however a different plug will need to be installed. **Figure 2** shows a typical 220V plug. A wiring diagram is provided at the back of the manual to show the two wiring configurations.

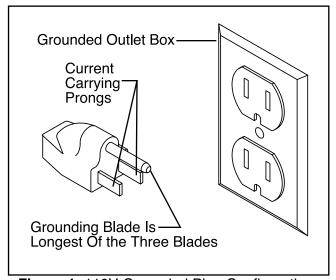


Figure 1. 110V Grounded Plug Configuration.

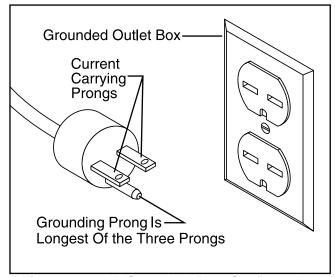


Figure 2. 220V Grounded Plug Configuration.



### Grounding

In the event of an electrical short, grounding reduces the risk of electric shock by providing a path of least resistance to disperse electric current. This tool is equipped with a power cord having an equipment-grounding conductor. **See Figure 1.** The outlet must be properly installed and grounded in accordance with all local codes and ordinances.

#### **AWARNING**

This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. If it is not, it will be necessary to run a separate 12 A.W.G. copper grounding wire from the outlet to a known ground. Under no circumstances should the grounding pin from any three-pronged plug be removed. Serious injury may occur.



### **Fusing**

The 1 HP motor will draw 12 amps at 110V and 6 amps at 220V. A 15-amp fuse or circuit breaker should be used when fusing this combination sander. Circuits rated any higher are not adequate to protect the motor from power surges. If you operate this sander on any circuit that is already close to capacity, it might trip the breaker or blow the fuse. However, if an unusual load does not exist, and the circuit protection is still activated, you should have the circuit inspected by a qualified electrician.



#### **Extension Cords**

If you find it necessary to use an extension cord with the Model G1183/1276, make sure the cord is rated Hard Service (grade S) or better. Refer to the chart in the standard safety instructions to determine the minimum gauge for the extension cord. The extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords when they become worn or damaged.

### **Wiring Diagram**

Your G1183/1276 machine comes pre-wired for 110 volt operation. A wiring diagram is provided at the back of this manual should it be necessary to repair or revise the wiring. Always utilize a qualified electrician when doing any electrical work on this equipment.





#### **A**CAUTION

We have covered some basic electrical requirements for the safe operation of your Sander. These requirements are not necessarily comprehensive. You must be sure that your particular electrical configuration complies with local and state codes. Ensure compliance by checking with your local municipality or a licensed electrician.

### **SECTION 3: GENERAL INFORMATION**

#### Commentary

Grizzly Industrial, Inc. is proud to offer the Model G1183 6" x 48" – 12" Disc Combination Sander and its slower-speed version, the Model G1276. This saw is a part of Grizzly's growing family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation, and proof of Grizzly's commitment to customer satisfaction.

The Model G1183 and Model G1276 feature heavy-duty cast-iron bodies and tilting tables, and powerful 1 HP single-phase motors. The Model G1183 provides 3,450 R.P.M. disc rotation and a 5,000 F.P.M. belt speed. The Model G1276 produces a 1,725 R.P.M. disc rotation and a 2,500 F.P.M. belt speed. Both have 3" dust ports attached. These sanders come prewired and ready to operate at 110V.

Both offer a wide 6" belt surface for fast stock removal and a 12" disc for convenient shaping. Fully-adjustable tables allow sanding at a variety of angles.

We are also pleased to provide this manual with the G1183 and G1276. This instruction manual was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our latest effort to produce the best documentation possible. If you have any criticisms that you feel we should pay attention to in our next printing, please write to us at the address shown to the right. Most importantly, we stand behind our machines. We have an excellent service department at your disposal should the need arise. If you have any service questions or parts requests, please call or write to us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com
Web Site: www.grizzly.com

To comment on this manual write to:

Grizzly Industrial, Inc.
% Technical Documentation
P.O. Box 2069
Bellingham, WA 98227-2069

The specifications, drawings and photographs represent the G1183 and G1276 as supplied when the manual was created. Due to our policy of continuous improvement, some features of this machine may vary from that portrayed in this manual.



#### **A**CAUTION

To operate this, or any power tool, safely and efficiently, it is essential to become as familiar with its characteristics as possible. The time you invest before you begin to use your Model G1183/1276 will be time well spent. DO NOT operate this machine until you are completely familiar with the contents of this manual. Make sure you read and understand all of the safety procedures. If you do not understand something, DO NOT operate the machine.

### Unpacking

The Combination Sander is shipped from the factory in a carefully packed carton. If you find the machine to be damaged after you've signed for delivery and the truck and driver are already gone, you will need to file a freight claim with the carrier. Save the containers and all packing materials for inspection by the carrier or their agent. Without the packing materials, filing a freight claim can be difficult. If you need advice regarding this situation, please call us.

### **AWARNING**

The G1183/1276 is a fairly heavy machine (155 lbs.). DO NOT over-exert yourself while unpacking or moving your machine — get assistance. In the event that your Combination Sander must be moved up or down a flight of stairs, be sure that the stairs are capable of supporting the combined weight of people and the machine. Serious personal injury may occur.

When you are completely satisfied with the condition of your shipment, you should inventory its parts.

#### **NOTICE**

Please keep all packaging materials until you are satisfied that the machine is in good condition. Should you need to file a freight claim, the carrier's agent will require inspection of those materials. Settling a claim can be difficult if packaging is not available.

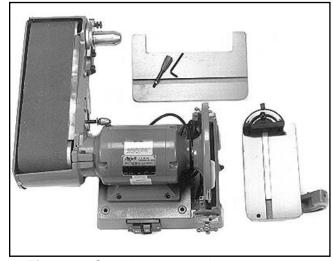


### **Piece Inventory**

With all the parts removed from the container, you should have components as listed below and shown in **Figure 3**:

- Motor Body and Belt Assembly
- Disc Table
- Belt Table
- Allen® Wrench
- Miter Gauge
- Handle

If anything is missing, call or write to the appropriate service department listed in the General Information section. If anything is damaged, please follow the procedures described to the left.



**Figure 3.** Combination sander components.

#### **NOTICE**

Ensure that the Model G1183/G1276 is located on a flat, level surface. This will maximize the stability of the machine and ensure that adjustments are accurate. For conditions where permanent mounting is possible, we recommend bolting the Combination Sander to your bench top or work table. This type of mounting will minimize vibration and provide a more stable work environment.



### Clean Up

The unpainted surfaces are coated with a waxy oil to protect it from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser. Avoid chlorine-based solvents as they may damage painted surfaces should they come in contact. Always follow the usage instructions on the product you choose for clean up.

### **A**CAUTION

Many of the solvents commonly used to clean machinery can be highly flammable, and toxic when inhaled or ingested. Always work in well-ventilated areas far from potential ignition sources when dealing with solvents. Use care when disposing of waste rags and towels to be sure they do not create fire or environmental hazards. Keep children and animals safely away when cleaning and assembling this machine.

### **AWARNING**

Do not use gasoline or other petroleumbased solvents to remove this protective coating. These products generally have low flash points which makes them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur.

### **A**CAUTION

All die-cut metal parts have a sharp edge (called "flashing") on them after they are formed. This is generally removed at the factory. Sometimes a bit of flashing might escape inspection, and the sharp edge may cause cuts or lacerations when handled. Please examine the edges of all die-cut metal parts and file or sand the edge to remove the flashing before handling.

# 8

#### **Site Considerations**

#### **BENCH LOAD**

The G1183/1276 Combination Sander represents a moderately large weight load in a small footprint. Most commercial or home shop benches should be sufficient to carry the weight of the machine. If you question the strength of your workbench, you can opt to reinforce it, or consider placing the sander on a freestanding bench such as Shop Fox® Deluxe Tool Table.

#### **WORKING CLEARANCES**

Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and space for auxiliary stands and/or work tables. Also consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely run your machines in any foreseeable operation.

#### LIGHTING AND OUTLETS

Lighting should be bright enough to eliminate shadow and prevent eye strain. Electrical circuits should be dedicated or large enough to handle combined motor amp loads. Outlets should be located near each machine so power or extension cords are not obstructing high-traffic areas. Be sure to observe local electrical codes for proper installation of new lighting, outlets, or circuits.

### **A**CAUTION

Make your shop "child safe". Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. Never allow visitors in your shop when assembling, adjusting or operating equipment.



### **SECTION 4: ASSEMBLY**

### **Assembly Basics**

Most of your Combination Sander has been assembled at the factory. There are several simple steps to follow to complete the assembly.

A few common tools will be required for assembly: Screwdrivers - medium and large straight blade or Phillips®, Allen® wrenches - 2mm, 3mm, 6mm and open end wrenches - 8mm and 10mm.



#### **Belt Table**

The belt table adjusts to allow you to sand your work at angles from -30° up to 45°. To make assembly easier, we recommend you mount the Combination Sander on a table or bench before assembling. Four bolt holes are included on the sander's base for mounting.

To attach the belt table:

- Swing the belt assembly to its vertical position by loosening the 6mm Allen® capscrew shown in Figure 4. Tighten capscrew to hold the belt assembly in this position.
- 2. Remove the lock handle assembly and the threaded stud from the belt housing using a large flat bladed screwdriver.
- 3. Line up the belt table trunnion with the slot in the belt assembly bracket. Reinstall the threaded stud, then install the flat washer, toothed nut, lock handle, lock washer and bolt, as shown in **Figure 5**. Make sure the handle is installed so the table can be loosened and tightened without interfering with other components. The belt table's tight fit is deliberate. Placing the table in position is easier if you swing the belt table so the 45° positive stop bolt is located over the gap in the motor casting cover.

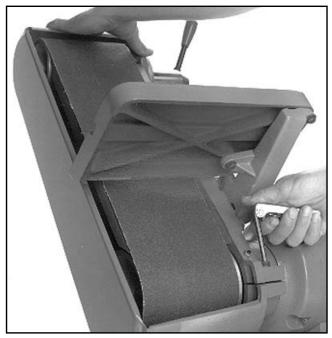


Figure 4. Attaching belt table.

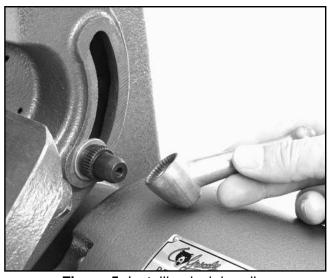


Figure 5. Installing lock handle.



#### **Disc Table**

The disc table adjusts to allow you to sand your work at angles from -20° up to 45°. To install the disc table:

- Loosen the two star knobs at either end of the disc table base until they reach the ends of their threaded rods.
- 2. Move the sliding rails and the washers to allow enough room for the table to be installed.
- **3.** Flip the 90° stop block out of position.
- **4.** Install table securely between the two sliding rails as shown in **Figure 6**.
- **5.** Tighten star knobs to secure the table in position.

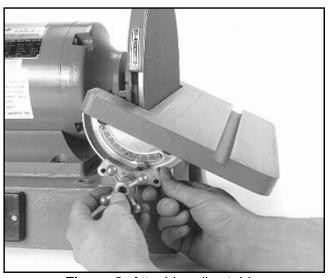


Figure 6. Attaching disc table.



#### **Belt Lever**

The belt lever is used for releasing the tension on the idler pulley for belt installation. To attach the belt lever:

 Thread the belt lever onto the loosen/tighten collar and secure with the checknut. See Figure 7.

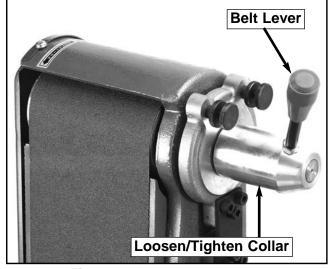


Figure 7. Attaching belt lever.



#### WARNING

DO NOT attempt to operate this machine before completing the assembly and adjustment instructions. Be sure that the switch is off and the cord is disconnected from the power source at all times until assembly and adjustment are complete and you have reviewed all safety guidelines. Serious injury could occur.

#### **NOTICE**

After all parts have been assembled, double-check the entire machine to make sure all fasteners are tight.

### **SECTION 5: ADJUSTMENTS**

Proper adjustment of the Combination Sander is essential to ensure its optimum performance. The adjustments covered in this section are easily accomplished.

#### **Tables**

Tables should be square in both planes to execute precise work. Procedures for accomplishing this are described below.

- 1. Adjust the miter gauge to 90°. You can use it as a reference point from which to make other adjustments.
- 2. Place the miter gauge in the table slot and, with a high-quality machinist's or combination square against the face of the miter gauge, check the tables for squareness against the sanding surfaces. See **Figures 8** and **9**.
- 3. If either table is out of square, loosen the bolts that attach the table to the trunnion and adjust the table until it is square to the disc or belt. Tighten the table and reinspect results.

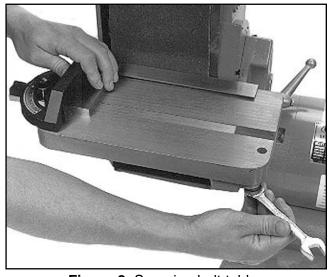


Figure 8. Squaring belt table.

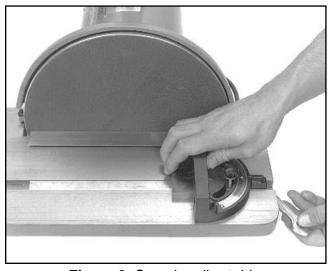


Figure 9. Squaring disc table.



### **Positive Stops**

Positive stops are used to move the tables to different positions quickly, without measurement. The belt table has two positive stops (one at 45° and one at 90°) and the disc table has one (at 90°).

#### To Adjust the **Belt Table Positive Stops**:

- 1. Loosen the lock handle.
- **2.** Flip block into the 90° position.
- **3.** Use a square to verify the accuracy to the stop.
- **4.** If the stop is engaged and the table isn't quite perpendicular to the belt, adjust the stop by turning the setscrew in or out as needed. **See Figure 10**.
- **5.** Flip the block back to its former position, then back to 90° to double-check accuracy.

6. Repeat this procedure with the 45° stop. You'll need a known 45° angle, such as a speed square or the head of a combination square to check accuracy.



Figure 10. Adjusting belt table stops.

To Adjust the Disc Table Positive Stops:

- 1. Loosen both star knobs.
- 2. Flip block over table.
- 3. Loosen check nut.
- **4.** Place accurate square on table and against disc as shown in **Figure 11.**
- **5.** Make fine adjustments by turning the setscrew in or out. Secure the checknut.

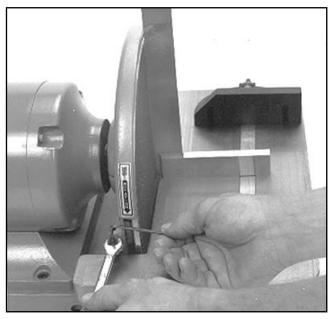


Figure 11. Adjusting disc table stops.

#### **Belt Platen**

The belt platen should be adjusted out far enough so it is flush with, or slightly higher than the upper roller. The rollers are slightly crowned, that is they are higher in the center than at the edges. This crowning helps the belt to stay centralized on the rollers. The adjustment of the platen to the roller should be done at the high point, or center, of the roller.

- Loosen the cap screw on the side of the belt housing with a 6mm Allen® wrench. This frees the in and out movement of the belt platen
- Use a straightedge positioned in the center of the platen which extends over the upper roller. Adjust the belt platen in and out until the straightedge is just barely lifted off of the idler roller.
- 3. Tighten cap screw.

See the section on Belt Installation/Tracking for more information on adjusting the rollers for proper tracking.



### **AWARNING**

DO NOT attempt to operate this machine before completing the assembly and adjustment instructions. Be sure that the switch is off and the cord is disconnected from the power source at all times until assembly and adjustment are complete and you have reviewed all safety guidelines. Serious injury could occur.

#### **Disc Guard**

- Loosen the two screws (A and B) shown in Figure 12. These screws hold the guard in place.
- 2. Adjust the two vertically-aligned screws (C and D in Figure 12) so the guard is upright and not touching the disc. The top screw moves the guard toward the disc and the bottom screw moves it away from the disc.

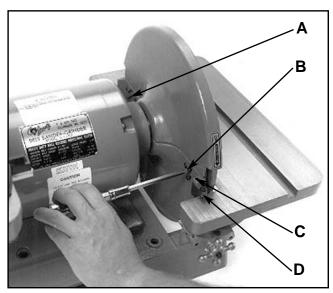


Figure 12. Adjusting disc guard.

- Rotate the disc by hand to see if the disc scrapes against the guard; repeat Steps 1 and 2, if needed.
- **4.** Tighten screws C and D to secure guard.



#### **AWARNING**

Operating this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

#### **Belt Arm Movement**

The 6" x 48" Belt Arm can be locked at any angle between horizontal and vertical for a variety of sanding applications.

Loosen the locking bolt as shown in Figure
 13.

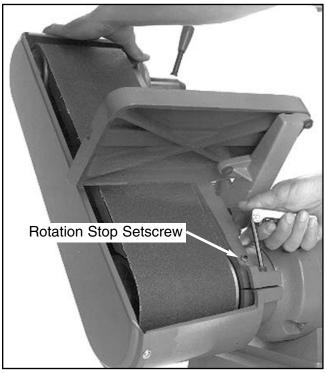


Figure 13. Loosening belt arm locking bolt.

- 2. Grab the top of the belt arm housing and move the belt arm to the desired position.
- 3. Tighten the locking bolt.

The setscrew/checknut combination shown in Figure 13 acts as a stop for the rotation of the belt arm. If it ever becomes necessary to remove the belt arm from the motor, be sure to remove this setscrew to allow the arm housing to be slipped of the motor mounting.



#### **Belt Installation**

The 6" x 48" sanding belt is easily installed. First remove the belt guard by loosening the four combination-head screws. Pull down on the spring loaded belt tensioning lever which lowers the upper roller and allows the belt to be slid off of the two rollers. **See Figure 14.** 

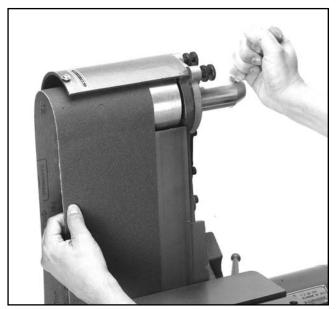


Figure 14. Installing sanding belt.

The new belt will have a rotation arrow on the backing. Make certain the belt is placed onto the rollers in the proper orientation. There is a rotation label on the housing indicating the direction. Pull the lever down and slide the new belt onto the rollers and center it.



#### **Belt Tracking**

Tracking adjustment is conducted as follows:

1. Insure that the upper roller is parallel to the platen (there is no adjustment for the lower roller). This adjustment is easier to accomplish with the belt removed. Remember that the roller is crowned, and a rough alignment of the roller to the platen was already described in the section entitled Belt Platen. To determine parallelism for proper tracking, measure at a point approximately .5" from the ends of the roller. Use a straight edge on top of the platen and extend it over the roller. See Figure 15.



Figure 15. Measuring platen to roller parallelism.

- 2. You should see a gap between the straight edge and roller. Measure this with a feeler gauge.
- Repeat step 1 and 2 with the straight edge positioned at the opposite edge of the platen.
- 4. The difference in the measurements is the amount of "twist" in the belt. Reduce the twist by adjusting one of the two tracking knobs. See Figure 16. If the "out-board" end (or the end furthest from the tracking adjustment side) of the roller measures greater than the "in-board" side, tighten the right hand tracking knob.

- 5. With the straightedge along the edge which is low, loosen the knurled locking nut and turn the tracking knob while watching the gap change between the straight edge and the roller. Make small changes and check for a change in gap on the opposite side.
- 6. When the gap has been equalized between the two sides, make sure the center of the roller, or the crown, is still approximately flush or just slightly above the platen surface. Lock the adjustment knobs with the locking knobs.
- 7. Reinstall the belt. Move the belt by hand (DO NOT turn on the power). If the belt tracks to one side or the other, adjust the idler roller slightly by backing off the locking knobs and turning the knurled adjustment screws in or out. See Figure 16. Make very small adjustments and move the belt by hand for a few revolutions to test the result. Keep readjusting until you are satisfied the belt is tracking properly when moved by hand.
- **8.** Lock the adjustment in place by tightening the knurled lock knobs on both adjusters.

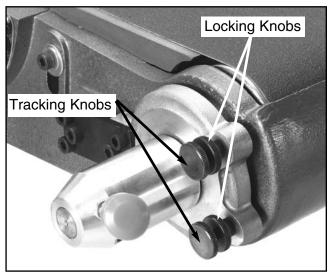


Figure 16. Belt arm adjuster knobs.

9. Test the tracking by cycling the machine on and off very quickly. See if the belt stays centered during this test cycle. If the belt doesn't remain centered on the rollers, it must be adjusted further.



#### **A**CAUTION

Moving sanding discs and belts are dangerously abrasive. Use extreme caution when working near sanding surfaces. Failure to exercise care while sanding could result in severe injury.

### **SECTION 6: OPERATIONS**

The aluminum disc accepts 12" diameter cloth or paper-backed PSA sanding discs. The belt sander requires a 6" x 48" sanding belt. For disc or belt sanding, we recommend a 100-grit (medium) material for general sanding chores, a 60-grit (coarse) material for rough work, and a 150-grit (fine) surface for finish work. See the current Grizzly catalog for prices and ordering information.

Please review all safety rules for sanders and all power tools before attempting operation. The hints listed below are also worth your consideration:

- 1. When using the table for beveled sanding operations, try to keep an open table angle (90° or more). This eliminates the risk of getting the workpiece jammed between the disc (or vertical belt) and the table.
- The surface feet per minute of the spinning disc increases as you move from the center to the rim.
- **3**. When belt sanding, sand with the grain of the wood.
- **4.** Do not over-sand soft woods such as bass wood or pine.
- **5.** Choose the correct sanding grit for the job.
- **6.** Do not use the sander as a replacement for a bandsaw or a planer. It is designed for finish work, not rough dimensioning.
- **7.** Keep your workpiece moving across the face of the disc or belt to prevent grooves or ruts in the surface you're sanding.



#### **Table Tilt**

The belt table can be adjusted from -30° to 45° and the disc table can go from -20° to 45° relative to the plane of the sanding surface. Both tables have positive stop blocks which will quickly position the table at the 90° and 45° angles. To adjust the tilt it is sometimes necessary to swing the stop block out of the way, move the table, swing the block back in, then contact the stop block. If angles other than the preset are desired, swing the stop out of the way and use the angle scale or a bevel gauge to set to the position needed. Lock the handle (on the belt table) or the star knob (on the disc table) firmly in position.

Whenever possible, sand with an open angle where there is plenty of clearance between the belt and the table. This will avoid getting the work-piece trapped between the sanding surface and the table.



### **Disc Sanding**

- Loosen table lock knob and tilt work table to desired angle. Tighten lock knob.
- 2. Use miter gauge to guide work into position.
- 3. Ease workpiece into the half of the disc that spins down toward the table. **See Figure 17**.

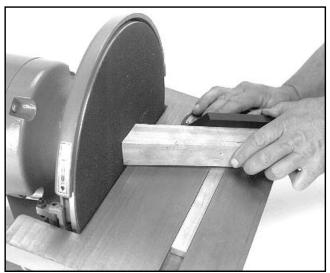


Figure 17. Disc sanding.



### **Surface Sanding**

To remove a large amount of material quickly from a large surface area, use the belt arm in its horizontal position.

- Turn the sander on and let it reach its full working speed.
- 2. Place the workpiece flat on the belt. Be sure to hold the work securely with both hands. Place one hand at the end of the workpiece to feed it against the rotation of the belt. Place the other hand lightly on top of the workpiece to ensure adequate stock removal. See Figure 18.



Figure 18. Surface sanding.



#### **AWARNING**

Operating this equipment has the potential to propel debris into the air which can cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).

#### **Bevel Sanding**

When bevel sanding, be sure to re-position the work table so it is at a maximum of 1/16" away from the disc or belt.

- **1.** Hold workpiece against miter gauge to keep piece square to the disc or belt.
- 2. Move workpiece against sanding surface width to ensure even abrasion. Use even, but firm, pressure.
- When using the belt arm for bevel sanding, you will have greater control over your work if you tilt the belt arm and maintain the table at level. See Figure 19.

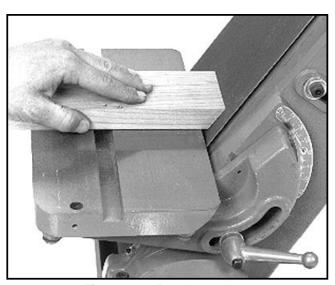


Figure 19. Bevel sanding.



#### **AWARNING**

DO NOT attempt to operate this machine before completing the assembly and adjustment instructions. Be sure that the switch is off and the cord is disconnected from the power source at all times until assembly and adjustment are complete and you have reviewed all safety guidelines. Serious injury could occur.

#### **Miter Sanding**

The most efficient way to get a perfect miter is to cut the workpiece slightly long and sand it to the desired dimension. Miter sanding can be done on either the belt or the disc.

- 1. Loosen the knob on the miter gauge and adjust the angle to the desired point. Tighten the knob.
- 2. Slide the miter gauge into its slot and use it to hold your workpiece in position. The miter gauge can be used in either direction in the slot to achieve the proper relation of the workpiece to the disc.
- **3.** With light, but firm pressure, push the work-piece slowly into the downspin side of the rotating disc. **See Figure 20.**

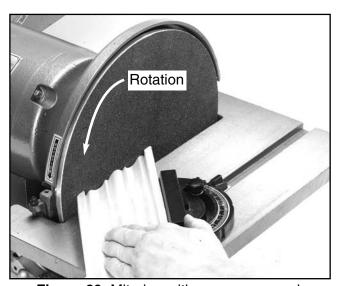


Figure 20. Mitering with gauge reversed.



### **SECTION 7: MAINTENANCE**

#### General

The Combination Sander is ruggedly constructed to provide years of dependable service. To ensure that you enjoy maximum performance and longevity, we suggest the following routine maintenance:

- **1.** Check all fasteners for tightness before each use. Tighten when necessary.
- 2. Keep the Combination Sander clean for maximum efficiency and heat dissipation. Wipe away accumulated sanding dust and grime after each use.
- **3.** Inspect sanding disc and belt for excessive wear and damage. Replace if necessary.
- **4.** Inspect switches and cord periodically for wear or damage. Replace if necessary.
- 5. Bearings are sealed and permanently lubricated, so no lubrication is needed. Check for wear periodically and replace when worn. Increased motor noise and vibration are both indicators of bearing wear.
- **6.** Inspect roller drive bearings for wear. Replace if needed.



### WARNING

DO NOT make adjustments or attempt any maintenance procedures while this machine is running. Ensure that the switch is off, power is disconnected and all moving parts have stopped before making adjustments. Failure to do so could result in serious operator injury.

#### **Tables**

The tables and other non-painted surfaces on the Model G1183 and G1276 should be protected against rust and pitting. Wiping the sander clean after every use ensures that moisture from wood dust isn't allowed to trap moisture against bare metal surfaces.

Some woodworkers recommend using automotive paste wax on exposed steel and cast iron surfaces. The wax provides a layer of protection, as well as reducing friction between lumber and the table, making cuts faster and smoother. Avoid waxes that contain silicone or other synthetic ingredients. These materials can find their way into lumber that's being worked, and can make staining and finishing difficult. If you use paste wax, make sure that it's 100% Carnauba wax.



# **NOTES**

### **SECTION 8: CLOSURE**

The following pages contain general machine data, part diagrams/lists, troubleshooting guide and Warranty/Return information for your Model G1183/1276 Combination Sander.

If you need parts or help in assembling your machine, or if you need operational information, we encourage you to call our Service Department. Our trained service technicians will be glad to help you.

If you have comments dealing specifically with this manual, please write to our Bellingham, Washington location using the address in Section 3: General Information. The specifications, drawings, and photographs illustrated in this manual represent the Model G1183/1276 as supplied when the manual was prepared. However, due to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, add the new information to this manual and keep it for reference.

We have included some important safety measures that are essential to this machine's operation. While most safety measures are generally universal, Grizzly reminds you that each workshop is different and safety rules should be considered as they apply to your specific situation.

We recommend you keep a copy of our current catalog for complete information regarding Grizzly's warranty and return policy. If you need additional technical information relating to this machine, or if you need general assistance or replacement parts, please contact the Service Department listed in Section 3: General Information.

Additional information sources are necessary to realize the full potential of this machine. Trade journals, woodworking magazines, and your local library are good places to start.

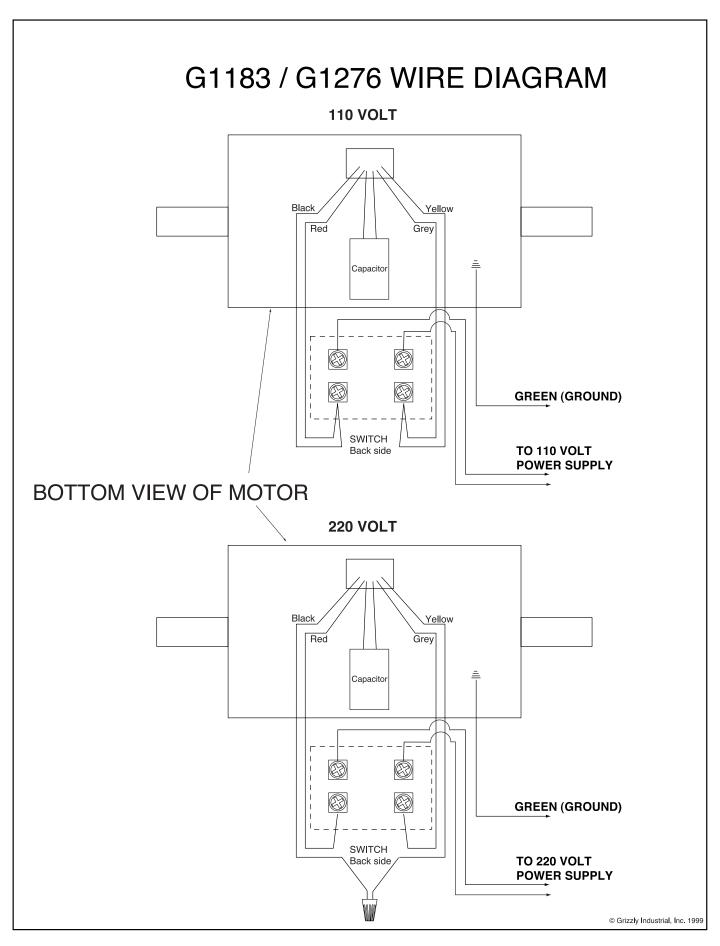
#### **AWARNING**

The Model G1183/1276 was specifically designed for wood sanding. DO NOT MODIFY AND/OR USE THIS MACHINE FOR ANY OTHER PURPOSE. Modifications or improper use of this tool will void the warranty. If you are confused about any aspect of this machine, DO NOT use it until you have answered all your questions. Serious personal injury may occur.

### WARNING

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







# MACHINE DATA SHEET

Customer Service #: (570) 326-3806 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

#### **GRIZZLY MODEL G1183 COMBINATION SANDER**

Design Type	Bench Model
Overall Dimensions:	
Height (Belt arm horizontal)	14½"
Height (Belt arm vertical)	29½"
Width	
Length	32½"
Table (Belt)	7" x 12½"
Table (Disc)	7" x 16½"
Arbor Size (Disc)	
Dust Port	3"
Weight	155 lbs.
Box Size	30" L x 28" W x 17" H
Footprint	16½" x 14"
Specifications:	
Sanding Belt	6" x 48"
Sanding Belt Speed	
Aluminum Disc	
Aluminum Disc Speed	
Miter Gauge Groove	
Miter GaugeD	
Table Tilt Range (Belt)	
Table Tilt Range (Disc)	
Table Positive Stops (Belt)	
Table Positive Stops (Disc)	
Belt Tension Method	Quick-Release Lever
Construction:	
Base	
Tables	Ground Cast Iron
Motor:	
Type	•
Horsepower	
Phase / Voltage	<u> </u>
Prewired	
Amps	
Cycle and RPM	
Switch	
Power Transfer	
Bearings	Shielded, Permanently Lubricated

Specifications, while deemed accurate, are not guaranteed.

REVISED 4/99



# MACHINE DATA SHEET

Customer Service #: (570) 326-3806 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

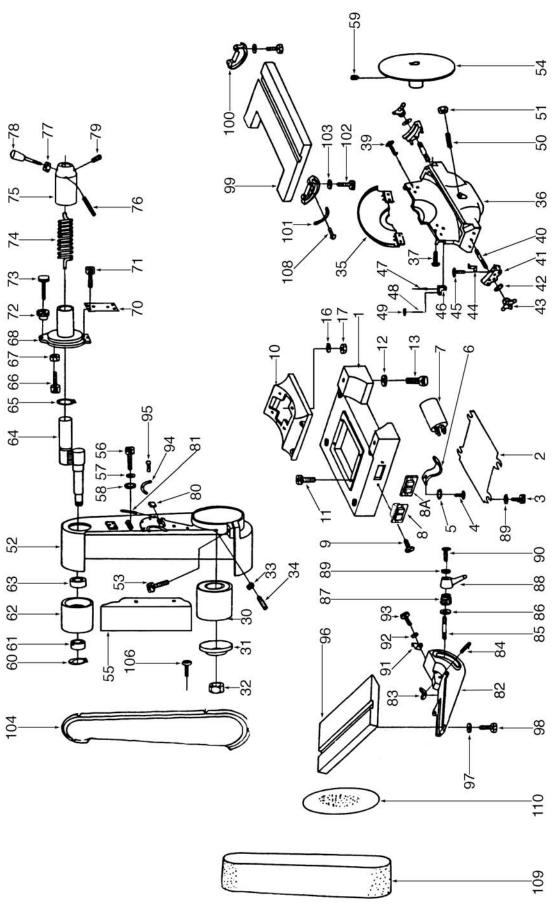
#### **GRIZZLY MODEL G1276 COMBINATION SANDER**

Design Type	Bench Model
Overall Dimensions:	
Height (Belt arm horizontal)	1.41%"
Height (Belt arm vertical)	
Width	
Length	
Table (Belt)	
Table (Disc)	
Dust Port	
Arbor Size	
Weight	
Footprint	
Box Size	
Specifications:	
Sanding Belt	6" x 48"
Sanding Belt Speed	2500 FPM
Aluminum Disc	12" Diameter
Aluminum Disc Speed	1725 RPM
Roller Drive	
Miter Gauge Groove	
Miter Gauge	Die Cast Aluminum / Aluminum Bar
Table Tilt Range (Belt)	
Table Tilt Range (Disc)	
Table Positive Stops (Belt)	
Table Positive Stops (Disc)	
Belt Tension Method	Quick-Release Lever
Construction:	
Base	
Tables	Ground Cast Iron
Motor:	TEEO O
Type	
Horsepower	
Phase / Voltage	
Amps Prewired	
Cycle and RPM	
Switch	
Power Transfer	
Bearings	
Douings	omolded, i emianemy Lubilcated

Specifications, while deemed accurate, are not guaranteed.

REVISED 4/99

#### **MAIN UNIT PARTS DIAGRAM**



#### **PARTS LIST**

RFF#	PART#	DESCRIPTION
111 77	1 (1) 17	DESCIVII HON

001 P1183001 STAND 002 P1183002 BASE PLATE 003 PB17M HEX BOLT M8-1.25 X 16mm 004 P1183004 COVER SCREW 005 PW03 FLAT WASHER #10 006 P1183006 COVER LOCK 007 PC400B CAPACITOR-BIG OD 008 P1019090A SWITCH 008A P1019090B PLASTIC SWITCH COVER 009 P1183009 SWITCH SCREW 010 P1183010 MOTOR BASE 011 PSB11M CAP SCREW M8-1.25 x 16mm 012 PLW05 LOCK WASHER 7/16"-14 x 11/4" 014 P1183014 STATOR HOUSING 015 PB07 HEX BOLT 5/16"-18 x 3/4" 016 PLW01 LOCK WASHER 5/16" 017 PN02 HEX NUT 5/16"-18 018 P1183019 SHAFT 020 PK13M KEY 5 x 5 x 70 mm 021 PK12M KEY 5 x 5 x 30 mm	——————————————————————————————————————				
003         PB17M         HEX BOLT M8-1.25 X 16mm           004         P1183004         COVER SCREW           005         PW03         FLAT WASHER #10           006         P1183006         COVER LOCK           007         PC400B         CAPACITOR-BIG OD           008         P1019090A         SWITCH           008A         P1019090B         PLASTIC SWITCH COVER           009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	001	P1183001	STAND		
004         P1183004         COVER SCREW           005         PW03         FLAT WASHER #10           006         P1183006         COVER LOCK           007         PC400B         CAPACITOR-BIG OD           008         P1019090A         SWITCH           008A         P1019090B         PLASTIC SWITCH COVER           009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	002	P1183002	BASE PLATE		
005         PW03         FLAT WASHER #10           006         P1183006         COVER LOCK           007         PC400B         CAPACITOR-BIG OD           008         P1019090A         SWITCH           008A         P1019090B         PLASTIC SWITCH COVER           009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	003	PB17M	HEX BOLT M8-1.25 X 16mm		
006         P1183006         COVER LOCK           007         PC400B         CAPACITOR-BIG OD           008         P1019090A         SWITCH           008A         P1019090B         PLASTIC SWITCH COVER           009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	004	P1183004	COVER SCREW		
007         PC400B         CAPACITOR-BIG OD           008         P1019090A         SWITCH           008A         P1019090B         PLASTIC SWITCH COVER           009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	005	PW03	FLAT WASHER #10		
008         P1019090A         SWITCH           008A         P1019090B         PLASTIC SWITCH COVER           009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	006	P1183006	COVER LOCK		
008A         P1019090B         PLASTIC SWITCH COVER           009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER ½6"           013         PSB13         CAP SCREW ½16"-14 x 1½"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT ½16"-18 x ¾4"           016         PLW01         LOCK WASHER ½16"           017         PN02         HEX NUT ½16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	007	PC400B	CAPACITOR-BIG OD		
009         P1183009         SWITCH SCREW           010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	800	P1019090A	SWITCH		
010         P1183010         MOTOR BASE           011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	008A	P1019090B	PLASTIC SWITCH COVER		
011         PSB11M         CAP SCREW M8-1.25 x 16mm           012         PLW05         LOCK WASHER ½6"           013         PSB13         CAP SCREW ⅙6"-14 x 1¼"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT ½½6"-18 x ¾4"           016         PLW01         LOCK WASHER ½½6"           017         PN02         HEX NUT ½½6"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	009	P1183009	SWITCH SCREW		
012         PLW05         LOCK WASHER 7/16"           013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	010	P1183010	MOTOR BASE		
013         PSB13         CAP SCREW 7/16"-14 x 11/4"           014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	011	PSB11M	CAP SCREW M8-1.25 x 16mm		
014         P1183014         STATOR HOUSING           015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	012	PLW05	LOCK WASHER 7/16"		
015         PB07         HEX BOLT 5/16"-18 x 3/4"           016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	013	PSB13	CAP SCREW 7/16"-14 x 11/4"		
016         PLW01         LOCK WASHER 5/16"           017         PN02         HEX NUT 5/16"-18           018         P1183018         STATOR           019         P1183019         SHAFT           020         PK13M         KEY 5 x 5 x 70 mm           021         PK12M         KEY 5 x 5 x 30 mm	014	P1183014	STATOR HOUSING		
017       PN02       HEX NUT 5/16"-18         018       P1183018       STATOR         019       P1183019       SHAFT         020       PK13M       KEY 5 x 5 x 70 mm         021       PK12M       KEY 5 x 5 x 30 mm	015	PB07	HEX BOLT 5/16"-18 x 3/4"		
018       P1183018       STATOR         019       P1183019       SHAFT         020       PK13M       KEY 5 x 5 x 70 mm         021       PK12M       KEY 5 x 5 x 30 mm	016	PLW01	LOCK WASHER 5/16"		
019       P1183019       SHAFT         020       PK13M       KEY 5 x 5 x 70 mm         021       PK12M       KEY 5 x 5 x 30 mm	017	PN02	HEX NUT 5/16"-18		
020 PK13M KEY 5 x 5 x 70 mm 021 PK12M KEY 5 x 5 x 30 mm	018	P1183018	STATOR		
021 PK12M KEY 5 x 5 x 30 mm	019	P1183019	SHAFT		
	020	PK13M	KEY 5 x 5 x 70 mm		
022 D6206 BALL BEADING 6206	021	PK12M	KEY 5 x 5 x 30 mm		
ULL FULUU   DALL DEANING 0200	022	P6206	BALL BEARING 6206		
023 P1183023 RIGHT CASTING COVER	023	P1183023	RIGHT CASTING COVER		
024 PS19 PHLP HD SCR 1/4"-20 x 1"	024	PS19	PHLP HD SCR 1/4"-20 x 1"		
025 PLW02 LOCK WASHER 1/4"	025	PLW02	LOCK WASHER 1/4"		
026 P6206 BALL BEARING 6206	026	P6206	BALL BEARING 6206		
027 P1183027 LEFT CASTING COVER	027	P1183027	LEFT CASTING COVER		
028 PCP004 CONTACT PLT, LG, INT PT	028	PCP004	CONTACT PLT, LG, INT PT		
029 P1183029 CENTRIFUGAL SWITCH	029	P1183029	CENTRIFUGAL SWITCH		
030 P1183030 LOWER WHEEL	030	P1183030	LOWER WHEEL		
031 P1183031 FLANGE	031	P1183031	FLANGE		
032 P1183032 1"-8 LH HEX NUT	032	P1183032	1"-8 LH HEX NUT		
033 PN01M HEX NUT M6-1.0 mm	033	PN01M	HEX NUT M6-1.0 mm		

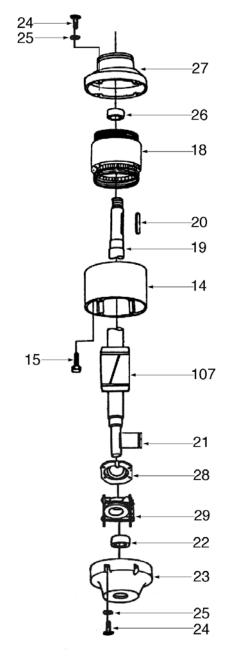
#### REF# PART# DESCRIPTION

035         P1183035         DISC GUARD           036         P1183036         BASE           037         PS06         PHLP HD SCR 10-24 x ¾"           039         PS06         PHLP HD SCR 10-24 x ¾"           040         P1183040         STUD           041         P1183041         SLIDING RAIL           042         PW04         FLAT WASHER ¾6"           043         P1183043         STAR KNOB           044         P1183044         POINTER           045         P1183045         SPECIAL SCREW           046         P1183046         BLOCK           047         PRP32M         ROLL PIN 6 x 40mm           048         PSS12M         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW M6-1.0 x 34"           051         PN02         HEX NUT M6-1.8           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC	034	PSS12M	SET SCREW M6-1.0 x 25mm
037 PS06 PHLP HD SCR 10-24 x ¾6" 039 PS06 PHLP HD SCR 10-24 x ¾6" 040 P1183040 STUD 041 P1183041 SLIDING RAIL 042 PW04 FLAT WASHER ⅓6" 043 P1183043 STAR KNOB 044 P1183044 POINTER 045 P1183045 SPECIAL SCREW 046 P1183046 BLOCK 047 PRP32M ROLL PIN 6 x 40mm 048 PSS12M SETSCREW M6-1.0 x 25mm 049 PN01M HEX NUT M6-1.0 050 PSS18 SETSCREW ½6"-18 x ¾4" 051 PN02 HEX NUT ⅙6"-18 052 P1183052 BELT HOUSING CASTING 053 PSB12M CAP SCREW M8-1.25 x 40mm 054 P1183054 ALUMINUM DISC 055 P1183055 PLATEN 056 PSB13M CAP SCREW M8-1.25 x 30mm 057 PW07 FLAT WASHER ⅙6" 058 PW04 FLAT WASHER ⅙6" 059 PSS01M SET SCREW M6-1.0 x 10mm 060 PR05M EXT RETAINING RING 15mm 061 P6202` BALL BEARING 6202 062 P1183062 UPPER WHEEL 063 P6203 BALL BEARING 6203 064 P1183064 SHAFT 065 PR10M EXT RETAINING RING 22mm 066 PSB01M CAP SCREW M6-1.0 x 16	035	P1183035	DISC GUARD
039         PS06         PHLP HD SCR 10-24 x 3/6"           040         P1183040         STUD           041         P1183041         SLIDING RAIL           042         PW04         FLAT WASHER 7/16"           043         P1183043         STAR KNOB           044         P1183044         POINTER           045         P1183045         SPECIAL SCREW           046         P1183046         BLOCK           047         PRP32M         ROLL PIN 6 x 40mm           048         PSS12M         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 5/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm <td>036</td> <td>P1183036</td> <td>BASE</td>	036	P1183036	BASE
040 P1183040 STUD 041 P1183041 SLIDING RAIL 042 PW04 FLAT WASHER 7/16" 043 P1183043 STAR KNOB 044 P1183044 POINTER 045 P1183045 SPECIAL SCREW 046 P1183046 BLOCK 047 PRP32M ROLL PIN 6 x 40mm 048 PSS12M SETSCREW M6-1.0 x 25mm 049 PN01M HEX NUT M6-1.0 050 PSS18 SETSCREW 5/16"-18 x 3/4" 051 PN02 HEX NUT 5/16"-18 052 P1183052 BELT HOUSING CASTING 053 PSB12M CAP SCREW M8-1.25 x 40mm 054 P1183054 ALUMINUM DISC 055 P1183055 PLATEN 056 PSB13M CAP SCREW M8-1.25 x 30mm 057 PW07 FLAT WASHER 5/16" 058 PW04 FLAT WASHER 5/16" 059 PSS01M SET SCREW M6-1.0 x 10mm 060 PR05M EXT RETAINING RING 15mm 061 P6202 BALL BEARING 6202 062 P1183064 SHAFT 065 PR10M EXT RETAINING RING 22mm 066 PSB01M CAP SCREW M6-1.0 x 16	037	PS06	PHLP HD SCR 10-24 x 3/8"
041 P1183041 SLIDING RAIL 042 PW04 FLAT WASHER 7/16" 043 P1183043 STAR KNOB 044 P1183044 POINTER 045 P1183045 SPECIAL SCREW 046 P1183046 BLOCK 047 PRP32M ROLL PIN 6 x 40mm 048 PSS12M SETSCREW M6-1.0 x 25mm 049 PN01M HEX NUT M6-1.0 050 PSS18 SETSCREW 5/16"-18 x 3/4" 051 PN02 HEX NUT 5/16"-18 052 P1183052 BELT HOUSING CASTING 053 PSB12M CAP SCREW M8-1.25 x 40mm 054 P1183054 ALUMINUM DISC 055 P1183055 PLATEN 056 PSB13M CAP SCREW M8-1.25 x 30mm 057 PW07 FLAT WASHER 5/16" 058 PW04 FLAT WASHER 7/16" 059 PSS01M SET SCREW M6-1.0 x 10mm 060 PR05M EXT RETAINING RING 15mm 061 P6202` BALL BEARING 6202 062 P1183064 SHAFT 065 PR10M EXT RETAINING RING 22mm 066 PSB01M CAP SCREW M6-1.0 x 16	039	PS06	PHLP HD SCR 10-24 x 3/8"
042         PW04         FLAT WASHER 7/16"           043         P1183043         STAR KNOB           044         P1183044         POINTER           045         P1183045         SPECIAL SCREW           046         P1183046         BLOCK           047         PRP32M         ROLL PIN 6 x 40mm           048         PSS12M         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202         BALL BEARING 6202           062         P1183064         SHAFT	040	P1183040	STUD
043         P1183043         STAR KNOB           044         P1183044         POINTER           045         P1183045         SPECIAL SCREW           046         P1183046         BLOCK           047         PRP32M         ROLL PIN 6 x 40mm           048         PSS12M         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202         BALL BEARING 6202           062         P1183064         SHAFT           065         PR10M         EXT RETAINING RIN	041	P1183041	SLIDING RAIL
044 P1183044 POINTER 045 P1183045 SPECIAL SCREW 046 P1183046 BLOCK 047 PRP32M ROLL PIN 6 x 40mm 048 PSS12M SETSCREW M6-1.0 x 25mm 049 PN01M HEX NUT M6-1.0 050 PSS18 SETSCREW ⁵/₁6"-18 x ³⁄₄" 051 PN02 HEX NUT ⁵/₁6"-18 052 P1183052 BELT HOUSING CASTING 053 PSB12M CAP SCREW M8-1.25 x 40mm 054 P1183054 ALUMINUM DISC 055 P1183055 PLATEN 056 PSB13M CAP SCREW M8-1.25 x 30mm 057 PW07 FLAT WASHER ⁵/₁6" 058 PW04 FLAT WASHER ⁵/₁6" 059 PSS01M SET SCREW M6-1.0 x 10mm 060 PR05M EXT RETAINING RING 15mm 061 P6202` BALL BEARING 6202 062 P1183062 UPPER WHEEL 063 P6203 BALL BEARING 6203 064 P1183064 SHAFT 065 PR10M EXT RETAINING RING 22mm 066 PSB01M CAP SCREW M6-1.0 x 16	042	PW04	FLAT WASHER 7/16"
045         P1183045         SPECIAL SCREW           046         P1183046         BLOCK           047         PRP32M         ROLL PIN 6 x 40mm           048         PSS12M         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202'         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RET	043	P1183043	STAR KNOB
046 P1183046 BLOCK 047 PRP32M ROLL PIN 6 x 40mm 048 PSS12M SETSCREW M6-1.0 x 25mm 049 PN01M HEX NUT M6-1.0 050 PSS18 SETSCREW <sup>5</sup> / <sub>16</sub> "-18 x <sup>3</sup> / <sub>4</sub> " 051 PN02 HEX NUT <sup>5</sup> / <sub>16</sub> "-18 052 P1183052 BELT HOUSING CASTING 053 PSB12M CAP SCREW M8-1.25 x 40mm 054 P1183054 ALUMINUM DISC 055 P1183055 PLATEN 056 PSB13M CAP SCREW M8-1.25 x 30mm 057 PW07 FLAT WASHER <sup>5</sup> / <sub>16</sub> " 058 PW04 FLAT WASHER <sup>7</sup> / <sub>16</sub> " 059 PSS01M SET SCREW M6-1.0 x 10mm 060 PR05M EXT RETAINING RING 15mm 061 P6202` BALL BEARING 6202 062 P1183062 UPPER WHEEL 063 P6203 BALL BEARING 6203 064 P1183064 SHAFT 065 PR10M EXT RETAINING RING 22mm 066 PSB01M CAP SCREW M6-1.0 x 16	044	P1183044	POINTER
047         PRP32M         ROLL PIN 6 x 40mm           048         PSS12M         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202'         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	045	P1183045	SPECIAL SCREW
048         PSS12M         SETSCREW M6-1.0 x 25mm           049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	046	P1183046	BLOCK
049         PN01M         HEX NUT M6-1.0           050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202'         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	047	PRP32M	ROLL PIN 6 x 40mm
050         PSS18         SETSCREW 5/16"-18 x 3/4"           051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	048	PSS12M	SETSCREW M6-1.0 x 25mm
051         PN02         HEX NUT 5/16"-18           052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	049	PN01M	HEX NUT M6-1.0
052         P1183052         BELT HOUSING CASTING           053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER ½6"           058         PW04         FLAT WASHER ½6"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	050	PSS18	SETSCREW 5/16"-18 x 3/4"
053         PSB12M         CAP SCREW M8-1.25 x 40mm           054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER ½6"           058         PW04         FLAT WASHER ½6"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	051	PN02	HEX NUT 5/16"-18
054         P1183054         ALUMINUM DISC           055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER <sup>5</sup> / <sub>16</sub> "           058         PW04         FLAT WASHER <sup>7</sup> / <sub>16</sub> "           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	052	P1183052	BELT HOUSING CASTING
055         P1183055         PLATEN           056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER ½6"           058         PW04         FLAT WASHER ⅙6"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	053	PSB12M	CAP SCREW M8-1.25 x 40mm
056         PSB13M         CAP SCREW M8-1.25 x 30mm           057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	054	P1183054	ALUMINUM DISC
057         PW07         FLAT WASHER 5/16"           058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	055	P1183055	PLATEN
058         PW04         FLAT WASHER 7/16"           059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	056	PSB13M	CAP SCREW M8-1.25 x 30mm
059         PSS01M         SET SCREW M6-1.0 x 10mm           060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	057	PW07	FLAT WASHER 5/16"
060         PR05M         EXT RETAINING RING 15mm           061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	058	PW04	FLAT WASHER 7/16"
061         P6202`         BALL BEARING 6202           062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	059	PSS01M	SET SCREW M6-1.0 x 10mm
062         P1183062         UPPER WHEEL           063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	060	PR05M	EXT RETAINING RING 15mm
063         P6203         BALL BEARING 6203           064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	061	P6202`	BALL BEARING 6202
064         P1183064         SHAFT           065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	062	P1183062	UPPER WHEEL
065         PR10M         EXT RETAINING RING 22mm           066         PSB01M         CAP SCREW M6-1.0 x 16	063	P6203	BALL BEARING 6203
066 PSB01M CAP SCREW M6-1.0 x 16	064	P1183064	SHAFT
	065	PR10M	EXT RETAINING RING 22mm
067 PN01M HEX NUT M6-1.0	066	PSB01M	CAP SCREW M6-1.0 x 16
	067	PN01M	HEX NUT M6-1.0

# **NOTES**

### **MOTOR UNIT PARTS DIAGRAM**

KEF#	PARI#	DESCRIPTION		
068	P1183068	COVER		
070	P1183070	PLATE		
071	PSB14M	CAP SCREW M8-1.25 x 20		
072	P1183072	KNURLED CHECK NUT		
073	P1183073	KNURLED BOLT		
074	P1183074	SPRING		
075	P1183075	LEVER HOLDER		
076	PRP33M	ROLL PIN 6 x 50mm		
077	PN08	HEX NUT %"-16		
078	P1183078	IDLER PULLEY LEVER		
079	PSS01M	SETSCREW M6-1.0 x 10mm		
080	P1183080	BLOCK		
081	PRP33M	ROLL PIN 6 x 50		
082	P1183082	TRUNNION		
083	P1183083	SLIDE		
084	PRP19M	ROLL PIN 4 x 14mm		
085	P1183085	STUD		
086	PW04	FLAT WASHER 7/16"		
087	P1183087	TOOTHED NUT		
088	P1024039	LOCK HANDLE		
089	PLW02	LOCK WASHER 1/4"		
090	PB02	HEX BOLT 1/4"-20 x 5/8"		
091	P1183044	POINTER		
092	PW03	FLAT WASHER #10		
093	PS18	PHLP HD SCR 10-24 1/4"		
094	P1183094	DEGREE SCALE		
095	P1183108	RIVET		
096	P1183096	BELT SANDER TABLE		
097	PW07	FLAT WASHER 5/16"		
098	PB07	HEX BOLT 5/16"-18 x 3/4"		
099	P1183099	DISC SANDER TABLE		
100	P1183100	DEGREE SLIDE		
101	P1183101	DEGREE SCALE		
102	PB07	HEX BOLT 5/16"-18 x 3/4"		



103	PW07	FLAT WASHER 5/16"
104	P1183104	BELT GUARD
106	P1183106	SPECIAL SCREW
107	P1183019	SHAFT
108	P1183108	RIVET
109	G1215	SANDING BELT 6" x 48" 100GT
110	G1221	SANDING DISC 12" 100 GT
112	P1183112	MOTOR FAN
113	P1183113	COMPLETE MOTOR 3450 RPM
113	P1276113	COMPLETE MOTOR 1720 RPM

### WARRANTY AND 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.

To take advantage of 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.

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.

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.

#### **WARRANTY CARD**

City				State	Zip
,		E-Mail_			
/OI	DEL #	Order #_			
	ollowing information is given on a e, all information is strictly confide	voluntary basis. It will be used for m ential.	arketing	purposes to help us develop better	products and services. Of
-	How did you learn about us?				
	Advertisement	Friend	10.	Which benchtop tools do you own?	Check all that apply.
	Catalog World Wide Web	Card Deck		dill or doll Dalk Caradan	CII OII Oriandan
	vvorid vvide vveb			1" x 42" Belt Sander 5" - 8" Drill Press	6" - 8" Grinder Mini Lathe
	Other			8" Table Saw	10" - 12" Thickness Planer
				8" - 10" Bandsaw	Scroll Saw
	Which of the following magazines d	lo you subscribe to.		Disc/Belt Sander	Spindle/Belt Sander
				Mini Jointer	•
	American Woodworker	Practical Homeowner			
	Cabinetmaker	Shop Notes		Other	
	Family Handyman	Today's Homeowner	11.	How many of the machines checked	Labovo aro Grizzly?
	Fine Homebuilding	WOOD	11.	flow many of the machines checked	above are Grizziy:
	Fine Woodworking Home Handyman	Wooden Boat Woodshop News	12.	Which portable/hand held power too	ols do you own? Check all that an
	Journal of Light Construction	Woodsmith			,
	Old House Journal	Woodwork		Belt Sander	Orbital Sander
	Popular Mechanics	Woodworker		Biscuit Joiner	Palm Sander
	Popular Science	Woodworker's Journal		Circular Saw	Portable Planer
	Popular Woodworking	Workbench		Detail Sander	Saber Saw
	0.11			Drill/Driver	Reciprocating Saw
	Other			Miter Saw	Router
	Which of the following woodworking	g/remodeling shows do you watch?		Other	
	Backyard America	The New Yankee Workshop	13.	What machines/supplies would you	like Grizzly Industrial to carry?
	Home Time	This Old House			
	The American Woodworker	Woodwright's Shop		12" Table Saw	Radial Arm Saw
	Oth - ·			12" Jointer	Panel Saw
	Otner			Combination Planer/Jointer	Brass Hardware
	What is your annual household inco	ome?		Paint & Finishing SuppliesContractor's Supplies	Lumber
	#00 000 #00 000	#00 000 #00 000		oonii aotoi o cappiloo	
	\$20,000-\$29,999 \$30,000-\$39,999	\$60,000-\$69,999 \$70.000-\$79.999		Other	
	\$40.000-\$39,999 \$40.000-\$49.999	\$70,000-\$79,999			0
	\$50,000-\$49,999 \$50,000-\$59,999	\$90,000 +	14.	What new accessories would you like	te Grizzly Industrial to carry?
	\$30,000-\$39,999	\$90,000 +		Builders Hardware	Hand Tools
	What is your age group?			Fasteners	Wood Components
				actomore	
	20-29	50-59		Other	
	30-39	60-69			
	40-49	70 +	15.	What other companies do you purch	hase your tools and supplies from
	How long have you been a woodwo	orker?			
	0 - 2 Years	8 - 20 Years			
	2 - 8 Years	20+ Years			
			16.	Do you think your purchase represe	nts good value?
	How would you rank your woodwor	king skills?		Yes	No
	Simple	Advanced	. <u> </u>	w	
	Intermediate	Master Craftsman	17.	Would you recommend Grizzly Indus	strial to a friend?
	What stationary woodworking tools	do you own? Check all that apply.		Yes	No
	, ,	,,	18.	Would you allow us to use your name	a as a reference for Grizzly system
	Air Compressor	Panel Saw	10.	in your area? <b>Note: We never use</b>	
	Band Saw	Planer		in your area: Note. We never use	names more than three times.
	Drill Press	Power Feeder		Yes	No
	Drum Sander	Radial Arm Saw			
	Dust Collector	Shaper	19.	Comments:	
	Horizontal Boring Machine	Spindle Sander	**		
	Jointer	Table Saw			
	Lathe Mortiser	Vacuum Veneer Press Wide Belt Sander			
	ivioi lisei	vviue deit sätiuet			

FOLD ALONG DOTTED LINE		



GRIZZLY INDUSTRIAL, INC. P.O. BOX 2069 BELLINGHAM, WA 98227-2069

EOLD ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

 Name\_\_\_\_\_\_

 Street\_\_\_\_\_\_

 City\_\_\_\_\_\_

 State\_\_\_\_\_Zip\_\_\_\_\_