

Grizzly *Industrial, Inc.*®

MODEL T23084 5" PNEUMATIC ANGLE GRINDER INSTRUCTION MANUAL



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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.

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.



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



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



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 Pneumatic Tools

- 1. READ THIS MANUAL.** This tool may cause personal injury if used incorrectly. This manual contains proper safety and operating instructions that must be followed to reduce this risk.
- 2. WEAR EYE PROTECTION.** This tool may throw small fragments during operation, which may cause serious eye injury. Always wear ANSI approved safety glasses or face shield to reduce your risk from this hazard.
- 3. WEAR A RESPIRATOR.** This tool may produce fine dust during operation, which can cause respiratory injury if inhaled. Always wear a respirator NIOSH approved for the type of material being processed.
- 4. WEAR HEARING PROTECTION.** Operating this tool for prolonged time periods may damage your hearing. Your risk depends on length and frequency of use. To reduce your risk of this hazard, wear hearing protection.
- 5. MAINTAIN SAFETY GUARDS.** Your tool may be equipped with safety guards or other structural components designed to reduce the risk of injury during operation. Never modify or operate this tool with any guards or components removed or damaged.
- 6. KEEP CHILDREN AWAY.** Prevent children from injury by keeping them away from this tool. Disconnect and lock the tool away when not in use.

7. **AVOID ENTANGLEMENTS.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry, which may get caught in moving parts, when operating this tool. Wear a protective hair covering to contain long hair.
8. **USE CORRECT AIR PRESSURE.** Exceeding the maximum PSI rating of this tool may cause unpredictable operation or bursting.
9. **DISCONNECT AIR PRESSURE** before servicing, changing accessories, or moving to another location. Never leave this tool unattended when connected to air.
10. **SECURE TOOLING.** Always verify tooling is secure before operation.
11. **SHARP SURFACES.** DO NOT place hands near the tooling surfaces when in operation.
12. **REMOVE ADJUSTING KEYS AND WRENCHES AFTER USE.** These tools become dangerous projectiles if left on the tool when it is started.
13. **AVOID FLAMMABLES.** Do not use this tool around any flammables that may be ignited by sparks.
14. **SECURE WORK.** Use clamps or a vise to hold work when practical. It is safer than using your hand and frees both hands to operate tool.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools lubricated and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DO NOT FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
17. **CHECK FOR DAMAGED PARTS BEFORE USING.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect operation. Repair or replace damaged parts before operating.
18. **USE GOOD LIGHTING.** Keep work area well lighted. Dark work areas increase risk of accidental injury.
19. **AVOID UNINTENTIONAL OPERATION.** Always disconnect air when not in use, and do not carry tool with hand on trigger.
20. **USE THE RECOMMENDED ACCESSORIES.** Consult owner's manual for recommended accessories. Using improper accessories may increase the risk of injury.
21. **NEVER ALLOW UNTRAINED USERS TO USE THIS TOOL WHILE UNSUPERVISED.**
22. **IF YOU ARE UNSURE OF THE INTENDED OPERATION, STOP USING TOOL.** Seek formal training or research books or magazines that specialize in pneumatic tools.
23. **BE AWARE OF HOSE LOCATION.** Hoses can easily become a tripping hazard when laid across the floor in a disorganized fashion.
24. **DO NOT USE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL, OR WHEN TIRED.**

WARNING

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

INTRODUCTION

Foreword

The specifications, details, and photographs in this manual represent the Model T23084 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly.

If you have any comments regarding this manual, please write to us at the following address:

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Most importantly, we stand behind our tools. If you have any service questions or parts requests, please call or write us at the location listed below.

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CAUTION

No list of safety guidelines is complete, because every work environment is different. Always consider safety first and use common sense. Failure to use this tool with caution and respect could result in serious personal injury.

Specifications

Arbor Speed Variable 0–11,000 RPM
Arbor Size..... $\frac{5}{8}$ "-11
Grinding Wheel Diameter..... 5"
Grinding Wheel Bore..... $\frac{7}{8}$ "
Grinding Wheel Type..... 27
Air Inlet $\frac{1}{4}$ " NPT
Average Air Consumption 6 CFM
Maximum Air Pressure 90 PSI
Weight 4 lbs.

Inventory

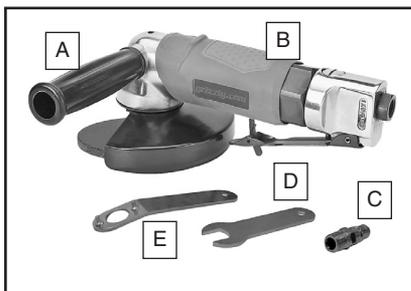


Figure 1. Model T23084 Inventory.

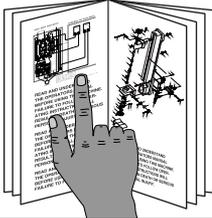
Description	Qty
A. Handle.....	1
B. Angle Grinder Assembly w/Wheel.....	1
C. Quick Disconnect Coupler.....	1
D. Arbor Wrench.....	1
E. Flange Spanner Wrench.....	1

Assembly

Thread the handle into the housing, as shown in **Figure 1** above.

OPERATIONS

!WARNING



Read the manual before operation. Become familiar with this tool, its safety instructions, and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.

Changing Grinding Wheels

The Model T23084 uses Type 27, 5" grinding wheels with a $\frac{7}{8}$ " bore. See the Grizzly catalog or www.grizzly.com for a complete listing of available grinding wheels.

!WARNING

An incorrect size or type of grinding wheel will not work properly with this grinder and could fly apart and cause operator injury. Always make sure to install only Type 27, 5" grinding wheels with a $\frac{7}{8}$ " bore on this grinder.

To change the grinding wheel:

1. DISCONNECT GRINDER FROM AIR!
2. Position the arbor wrench on the arbor flats behind the inner arbor flange (see **Figure 2**).

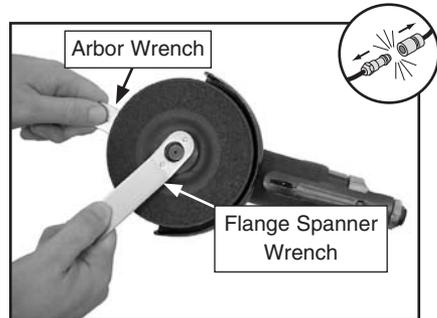


Figure 2. Loosening the outer arbor flange.

3. Insert the prongs of the flange spanner wrench into the holes on the outer arbor flange, then rotate the flange counterclockwise to unthread it from the arbor.
4. Remove the grinding wheel.
5. Use the wrenches to make sure the inner arbor flange is tight, then slide the replacement grinding wheel onto the arbor.
6. Make sure the protruding lip of the outer arbor flange is seated into the grinding wheel bore, then use the wrenches to fully tighten the flange and secure the grinding wheel.



Using Grinder

Always test the grinder on a scrap piece of material similar to the workpiece to determine the ideal setup.

To use the grinder:

1. Make sure the workpiece is securely held in a vise or a similar device that will ensure the workpiece does not unexpectedly move during operation.
2. Attach the grinder to an air supply set at no more than 90 PSI.
3. Hold the grinder securely, turn the grinder **ON** by depressing the trigger, then ease the grinding wheel against the workpiece with a light, but steady, pressure.

Note: *The pressure applied to the trigger varies the grinder speed.*

4. To turn the grinder **OFF**, release the trigger.

Note: *To avoid accidental start up, disconnect the grinder from the air supply when it is not in use. Replace the protective cap over the air inlet port to keep dust or debris out of the internal components.*



Daily Maintenance

The angle grinder **MUST** have 4-5 drops of pneumatic tool oil directly dropped into the air inlet port before and after each use. In addition, add oil after 1–2 hours of continuous use or install an in-line filter, lubricator, and regulator, as shown in **Figure 3**.

These procedures should be done after each use:

- Wipe the grinding housing with a dry cloth, or blow off the dust and debris with compressed air.
- Check for damage to grinding wheels, hoses, housing, or other accessories.

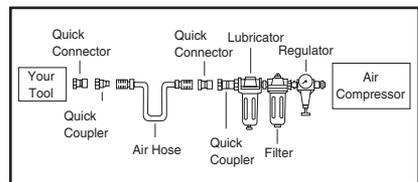
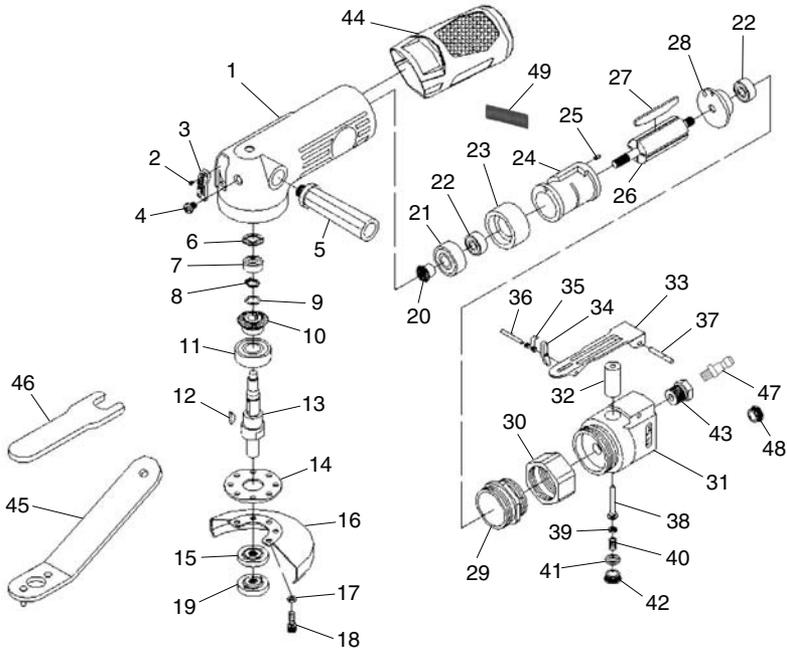


Figure 3. Installed filter lubricator regulator.

PARTS



REF PART #	DESCRIPTION
1	PT23084001 MAIN HOUSING
2	PS79M PHLP HD SCR M3-.5 X 8
3	PT23084003 AIR OUTLET PLATE
4	PS68M PHLP HD SCR M6-1 X 10
5	PT23084005 HANDLE
6	PT23084006 O-RING 12.5MM
7	P626ZZ BALL BEARING 626ZZ
8	PR45M INT RETAINING RING 10MM
9	PT23084009 O-RING 10MM
10	PT23084010 BEVEL GEAR
11	P6206ZZ BALL BEARING 6206ZZ
12	PT23084012 WOODRUFF KEY 12.6 X 3 X 4.5
13	PT23084013 ARBOR 9/16-12
14	PT23084014 HOUSING GASKET
15	PT23084015 INNER ARBOR FLANGE
16	PT23084016 GRINDING WHEEL GUARD
17	PLW01M LOCK WASHER 5MM
18	PCAP50M CAP SCREW M5-.8 X 10
19	PT23084019 OUTER ARBOR FLANGE
20	PT23084020 BEVEL GEAR
21	P6201ZZ BALL BEARING 6201ZZ
22	P608ZZ BALL BEARING 608ZZ
23	PT23084023 ROTOR CYLINDER FRONT CAP
24	PT23084024 ROTOR CYLINDER
25	PCAP80M CAP SCREW M3-.5 X 8

REF PART #	DESCRIPTION
26	PT23084026 ROTOR
27	PT23084027 ROTOR BLADE
28	PT23084028 ROTOR CYLINDER REAR CAP
29	PT23084029 HOUSING COUPLER
30	PT23084030 COUPLER NUT
31	PT23084031 REAR HOUSING
32	PT23084032 VALVE CAP BRASS
33	PT23084033 TRIGGER
34	PT23084034 TRIGGER LOCK
35	PT23084035 TORSION SPRING
36	PT23084036 ROLL PIN 3 X 1.8
37	PT23084037 ROLL PIN 4 X 2.8
38	PT23084038 VALVE STEM
39	PT23084039 VALVE CAP RUBBER
40	PT23084040 COMPRESSION SPRING
41	PT23084041 O-RING 11MM
42	PT23084042 BUSHING BRASS
43	PT23086001 AIR INLET PORT 1/4" NPT
44	PT23084044 GRIP RUBBER
45	PT23084045 FLANGE SPANNER WRENCH
46	PT23084046 ARBOR WRENCH
47	PT23086037 QUICK DISCONNECT 1/4" NPT
48	PT23083038 PROTECTIVE AIR INLET CAP
49	PT23084049 GRIZZLY LOGO LABEL