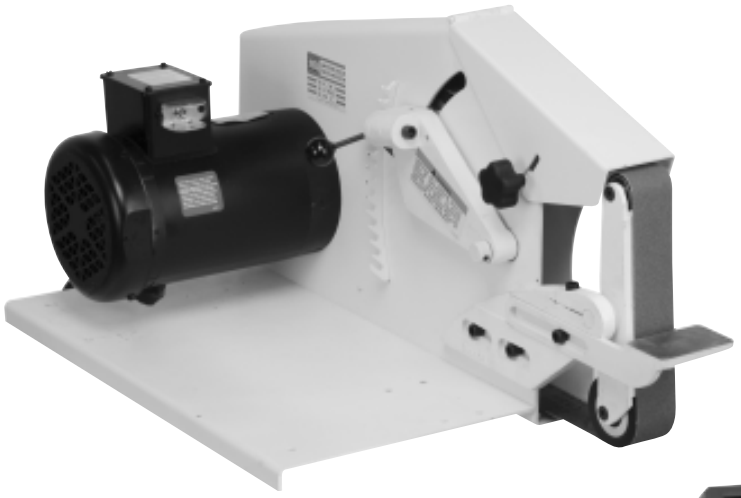
JET®

Operating Instructions and Parts Manual
Square Wheel Belt Grinder

Models: J-4103, J-4126AC



Model J-4103



Model J-4126AC

WALTER MEIER (Manufacturing) Inc.
427 New Sanford Road
LaVergne, Tennessee 37086
Ph.: 800-274-6848
www.waltermeier.com

Part No. M-577000
Revision A3 01/2011
Copyright © 2011 Walter Meier (Manufacturing) Inc.

Warranty and Service

Walter Meier (Manufacturing) Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these Walter Meier Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

Walter Meier is consistently adding new products to the line. For complete, up-to-date product information, check with your local Walter Meier distributor, or visit waltermeier.com.

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product (MW stands for Metalworking, WW stands for Woodworking).

90 DAY WARRANTY

Lathe Accessories
Machine Accessories
Mobile Bases
Safety Equipment
Specialty Items
Vise Accessories

1 YEAR WARRANTY

Air Tools-Contractor
Air Tools-Industrial
Air Tools-Light Industrial
Lubrication

2 YEAR WARRANTY

Body Repair Kits
Bottle Jacks
Cable Pullers
Cold Saws
Hoists-Air
Hoists-Electric
Metal forming
Mill/Drills
Milling Machines
MW Bandsaws
MW Drill Presses
MW Finishing Equipment
MW Lathes
MW Precision Vises
Palet Trucks
Rigging Equip.
Service Jacks
Stackers
Surface Grinders
Tapping
Trolleys-Air
Trolleys-Electric
Web Slings
Winches-Electric

3 YEAR WARRANTY

WW Benchtop Tools

5 YEAR WARRANTY

Beam Clamps
Chain Hoist-Manual
Lever Hoists
Pullers-JCH Models
Scissor Lift Tables
Screw Jacks
Trolleys-Geared
Trolleys-Plain
Winches-Manual
WW Air Filtration
WW Bandsaws
WW Buffers
WW Drill Presses
WW Dust Collectors
WW Dust Filters
WW Dust Fittings
WW Jointers
WW Lathes
WW Planers
WW Sanders
WW Shapers
WW Tablesaws

LIFE LIFETIME WARRANTY

Fastening Tools
Mechanics Hand Tools
Striking Tools
Vises (no -precision)
Clamps

Warranty reverts to 1 Year Warranty if woodworking (WW) products listed above are used for industrial or educational purposes.

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Three Year, Five Year and Lifetime Warranties do not cover products used for industrial or educational purposes. Products with Three Year, Five Year or Lifetime Warranties that are used for industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option. We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

LIMITATIONS ON THIS WARRANTY

WALTER MEIER (MANUFACTURING) INC., LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

WALTER MEIER (MANUFACTURING) INC., 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. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Walter Meier sells through distributors only. The specifications in Walter Meier catalogs are given as general information and are not binding. Members of Walter Meier reserve the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by Walter Meier.

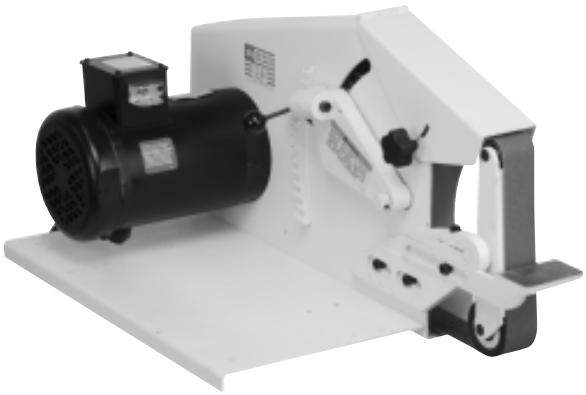
Table of Contents

Cover Page 1
General Specifications 4
Operating Precautions 5
Setup and Operation 7
Maintenance 10
Wiring Diagrams 12
Replacement Parts 13
Troubleshooting 13
Accessories 17

General Specifications

The JET Square Wheel Belt Grinder, Models J-4103 and J-4126AC, are designed for grinding, deburring, chamfering, and internal/external grinding of small and large parts. The Square Wheel Belt Grinder can be used to polish or buff finished parts and grind small internal radii using available accessories. Accessory changeover is quick and easy. Belt tension and tracking are easily adjustable.

The Square Wheel Belt Grinder is available in either single speed (Model J-4103) or variable speed model (Model J-4126AC). The variable speed model is controlled by an inverter that provides belt speeds ranging from 0 to 6000 SFPM.



Model J-4103



Model J-4126AC

Specifications	Model J-4103	Model J-4126AC
Stock Number	577000	577001
Belt Width & Length	2 x 72 Inches	2 x 72 inches
Belt Speed	4600 SFPM	0 - 6000 SFPM
Motor	1 HP, Single Phase, 1750 rpm	1 HP, 1,750 rpm
Contact Wheel Diameters	1-1/2, 3, & 8 inches	1-1/2, 3, & 8 inches
Weight	115-125 pounds	120 pounds

WARNING

- Misuse of this machine can cause serious injury.
- For safety, machine must be set up, used and serviced properly.
- Read, understand and follow instructions in the operator's and parts manual which was shipped with your machine.

When setting up machine:

- Always avoid using machine in damp or poorly lighted work areas.
- Always be sure machine is securely anchored to the floor.
- Always keep machine guards in place.
- Always put start switch in OFF position before plugging in machine.

When using machine:

- Never operate with machine guards missing.
- Always wear safety glasses with side shields (See ANSI Z87.1)
- Never wear loose clothing or jewelry.
- Never overreach — you may slip and fall into the machine.
- Never leave machine running while you are away from it.
- Always shut off the machine when not in use.

When servicing machine:

- Always unplug machine from electrical power while servicing.
- Always follow instructions in operators and parts manual when changing accessory tools or parts.
- Never modify the machine without consulting Walter Meier (Manufacturing), Inc.

You — the stationary power tool user— hold the key to safety.

Read and follow these simple rules for best results and full benefits from your machine. Used properly, JET machinery is among the best in design and safety. However, any machine used improperly can be rendered inefficient and unsafe. It is absolutely mandatory that those who use our products be properly trained in how to use them correctly. They should read and understand the Operators and Parts Manual as well as all labels affixed to the machine. Failure in following all of these warnings can cause serious injuries.

Machinery general safety warnings

1. Always wear protective eye wear when operating machinery. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specifications. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from breakage of eye protection.
2. Wear proper apparel. No loose clothing or jewelry which can get caught in moving parts. Rubber soled footwear is recommended for best footing.
3. Do not overreach. Failure to maintain proper working position can cause you to fall into the machine or cause your clothing to get caught pulling you into the machine.
4. Keep guards in place and in proper working order. Do not operate the machine with guards removed.
5. Avoid dangerous working environments. Do not use stationary machine tools in wet or damp locations. Keep work areas clean and well lit.
6. Avoid accidental starts by being sure the start switch is OFF before plugging in the machine.
7. Never leave the machine running while unattended. Machine shall be shut off whenever it is not in operation.
8. Disconnect electrical power before servicing. Whenever changing accessories or general maintenance is done on the machine, electrical power to the machine must be disconnected before work is done.
9. Maintain all machine tools with care. Follow all maintenance instructions for lubricating and the changing of accessories. No attempt shall be made to modify or have makeshift repairs done to the machine. This not only voids the warranty but also renders the machine unsafe.
10. Machinery must be anchored to the floor.
11. Secure work. Use clamps or a vise to hold work, when practical. It is safer than using your hands and it frees both hands to operate the machine.
12. Never brush away chips while the machine is in operation.
13. Keep work area clean. Cluttered areas invite accidents.
14. Remove adjusting keys and wrenches before turning machine on.
15. Use the right tool. Don't force a tool or attachment to do a job it was not designed for.
16. Use only recommended accessories and follow manufacturers instructions pertaining to them.

17. Keep hands in sight and clear of all moving parts and cutting surfaces.
18. All visitors should be kept at a safe distance from the work area. Make workshop completely safe by using padlocks, master switches, or by removing starter keys.
19. Know the tool you are using—its application, limitations, and potential hazards.

General Electrical Cautions

This machine should be grounded in accordance with the National Electrical Code and local codes and ordinances. This work should be done by a qualified electrician. The machine should be grounded to protect the user from electrical shock.

Wire sizes

Caution: for circuits which are far away from the electrical service box, the wire size must be increased in order to deliver ample voltage to the motor. To minimize power losses and to prevent motor overheating and burnout, the use of wire sizes for branch circuits or electrical extension cords according to the following table is recommended:

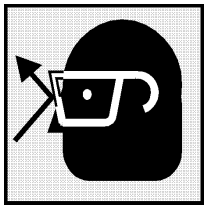
Conductor Length	AWG (American wire gauge) Number	
	240 Volt Lines	120 Volt Lines
0 - 50 Feet	No. 14	No. 14
50 - 100 Feet	No. 14	No. 12
Over 100 Feet	No. 14	No. 8

Safety requirements for abrasive grinding machines

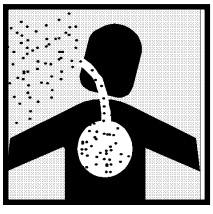
Abrasive grinding can be hazardous to operators and bystanders. Grinding sparks, chips and dust particles thrown off by the grinding disc can cause serious injury by contact or inhalation. To avoid such injuries you must comply with the following safety requirements:

1. Always wear protective eyewear when operating machinery. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from breakage of eye protection. See Figure A, below.
2. Wear leather safety gloves, arm guards, leather aprons and safety shoes.
3. A dust collection system is recommended, Operator shall also wear a dust mask at all times. See Figure B, below.
4. Additional precautions may be necessary for grinding materials which are flammable or have other hazardous properties. You should always consult the manufacturer of such materials for instructions on grinding and handling.
5. Do not force or jamb the workpiece into the grinding disc.
6. Before grinding, always allow the motor to come up to operating speed, then check the grinding disc for wobble, runout, or any unbalanced condition. If the disc is not operating accurately and smoothly, immediately stop the motor and make repairs before attempting any grinding operations.
7. Abrasive discs must be stored in a controlled environment area. Relative humidity should be 35% to 50% and the temperature should be between 60 and 80 degrees Fahrenheit. Failure to do so could cause premature disc failure.
8. Examine the face of the grinding disc carefully. Excessive grinding which wears down to the backing material can tear the disc. Never use a disc which shows backing, nicks or cuts on the surface or edge or damage due to creasing or poor handling.
9. When installing a new disc, be certain the disc is accurately centered on the drive wheel. Failure to do so could cause a serious unbalanced condition.
10. Always present the workpiece to the wheel while resting the workpiece firmly on the table. Failure to do so could result in damage to the workpiece or throwing of the workpiece off the wheel.
11. Safety shoes which comply with ANSI Z41.1 shall be worn. See Figure C.
12. Personal hearing protection such as ear plugs or ear muffs shall be used to protect against the effect of noise exposure. See Figure D:

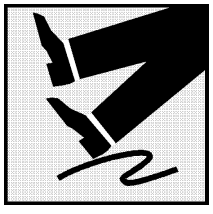
A



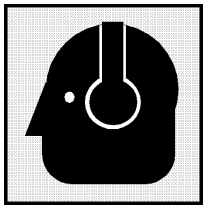
B



C



D



Introduction

This manual includes operating and maintenance instructions for the JET Model J-4103 and J-4126AC Square Wheel Belt Grinder. The manual also includes parts listings and illustrations of replaceable parts.

Refer to Figures 1 and 2 for key features of the Square Wheel Belt Grinder.

Setup and Operation

The Square Wheel Belt Grinder can be mounted on a work bench or an optional pedestal. The grinder should be secured to the work bench or pedestal using the four holes in the base of the grinder. (Refer to ***Assembly of Pedestal*** for machines that are to be pedestal-mounted.)

Installation of Work Rest

The work rest mounts on the left side of the head casting. Attach the work rest using the socket head cap screw provided with the machine.

The slot in the work rest has a lip against which the cap screw is tightened. Place the hole at the end of the slot over the cap screw. Then slide the rest inward until the work rest is in position in front of the contact wheel. Tighten the cap screw.

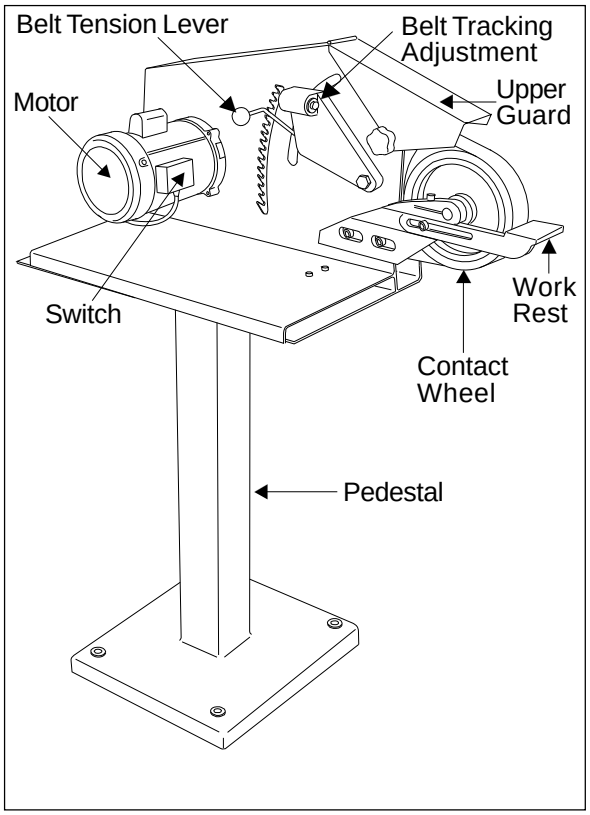


Figure 1: Square Wheel Grinder Features (single speed)

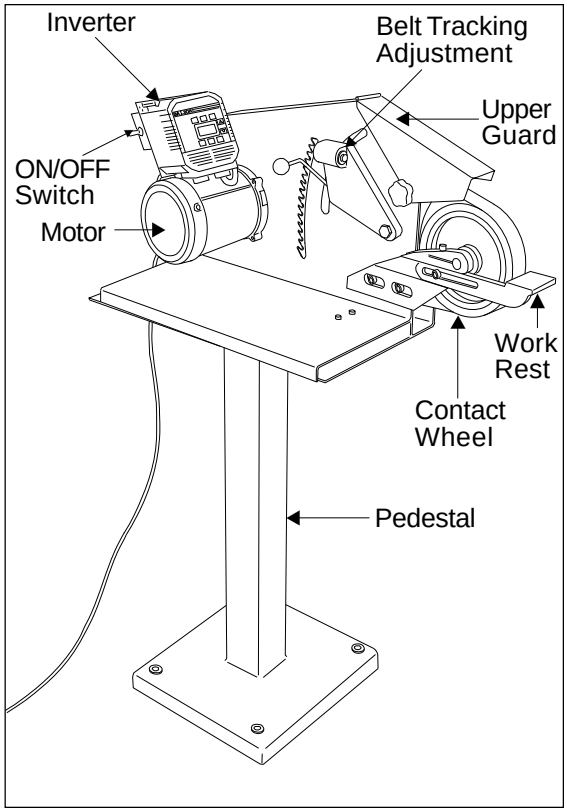


Figure 2: Square Wheel Grinder Features (variable speed)

Vacuum Connection

NOTE: A variety of vacuum system options are available. *(Refer to **Accessories** section.)*

The grinder uses a front mounted vacuum system. Refer to Fgure 3. Install the vacuum system components as follows:

1. Slide the support bracket into the channel secured to belt grinder base. Install one knob in the belt grinder base to secure the support bracket.
   NOTE: Refer to vacuum scoop exploded view, Figure 11 when installing channel.

2. Slide the ducted scoop onto the support bracket. Install remaining knob in the support bracket to secure the scoop.
3. Connect hose to exhaust duct and secure with a clamp.

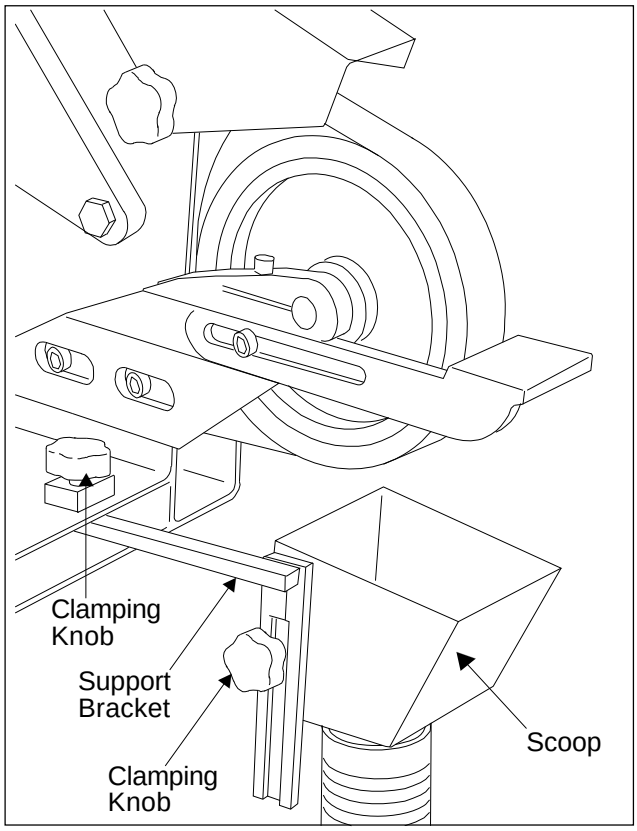


Figure 3: Vacuum Connection

Electrical Connection

Refer to the Wiring Diagram section for wiring information. Connection to electrical power should be made by a qualified electrician. Observe local electrical codes when connecting the machine.

Operating Controls

Model J-4103
The ON/OFF switch for the Model J-4103 grinder is located in a switch box mounted on the drive motor.

Model 4126AC
NOTE: Refer to Figure 4. Use only the inverter controls defined in the following procedures. The inverter is pre-programmed at the factory and requires no further programming.The controls for the Model 4126AC grinder are located on the inverter. The ON/OFF switch is located on the left side of the inverter. Start the grinder by setting the ON/OFF switch to ON.

Press the FWD RUN pushbutton on the inverter and set the speed using the up/down arrow keys (to the right of the speed display). Press the up arrow to increase speed; press the down arrow to reduce speed. The display on the inverter shows drive motor speed in revolutions per minute. Press the STOP button on the inverter to stop the grinder. Then set the ON/OFF switch to OFF.

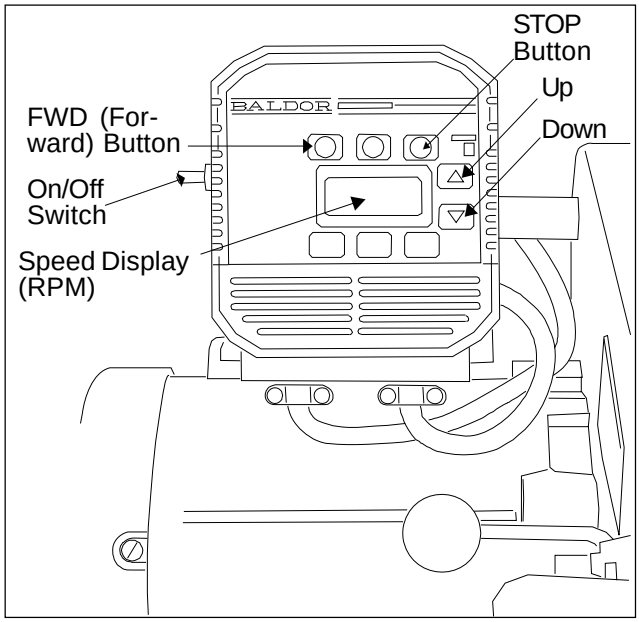
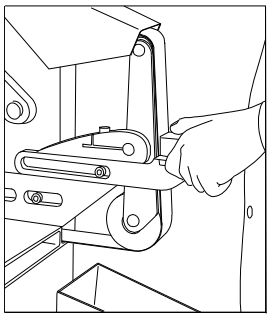
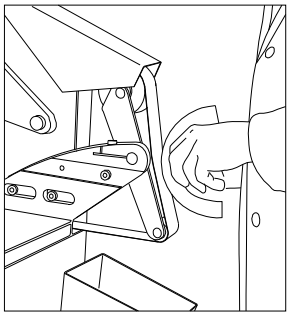


Figure 4: Operating Controls
(Model 4126AC)

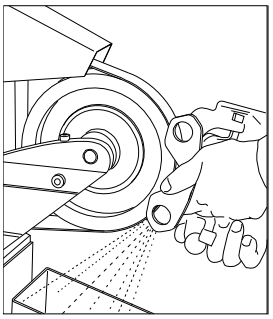
Typical Uses for the Square Wheel Belt Grinder



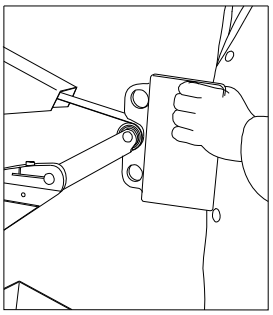
Flat or angular stock — Platen setting is the perfect angle for high speed, precision, flat and level grinding of tools, knives, plastics, and other materials. The platen allows working to very close tolerances. An adjustable work rest is standard on all models.



Shaping — For grinding and finishing cylindrical shapes. The yoke surface conforms to the shape of the surface to produce an even, smooth finish without the danger of scarring. Excellent for tool post applications.

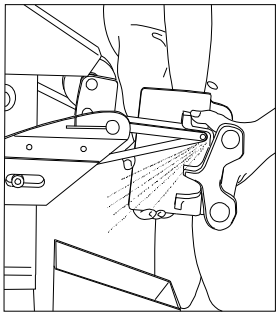


Roughing — Serrated contact wheel is used for removing heavy stock, cleaning up a weld or snagging a casting. This durable 8-inch diameter wheel is used extensively for hollow grinding and profiling knives and other culinary tools. It is standard equipment on all models.

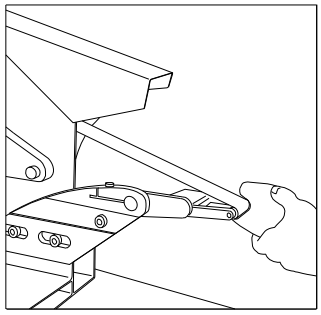


Contouring — Grind difficult, hard to reach areas with the 3-inch by 2-inch or 1-1/2 inch by 2-inch diameter contact wheels. Contours and shapes unique parts like propellers and metal furniture.

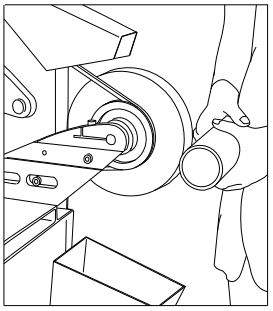
OPTIONAL FEATURES



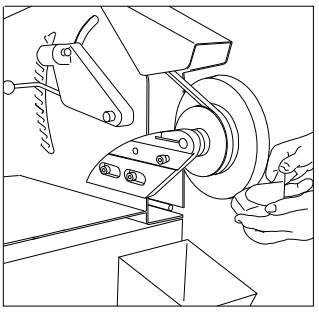
Internal contouring — The air-cushioned dead head is for use on very small radius grinding. When connected to a source of shop air (80-90 psi), the belt rides on a cushion of air to decrease head and belt wear. The dead head is easy to use, and adapts to any of the available radius tips.



Internal contouring with small wheel — This small wheel accessory is designed for hard to reach places. Includes 5/8-inch, 70 durometer contact wheel. Available contact wheels are 1/2-inch, 3/4-inch, and 1-inch.



Polishing — The buffing pad is perfect for satin finish or high gloss polishing. The fine, close stitched burring pads are ideal for metal and plastic



Finishing — The nylon reinforced, silicone carbide wheel is perfect for polishing and deburring. It applies a high luster finish on rough surfaces and is excellent for steel, iron, or aluminum.

Maintenance

Cleaning

Shutoff the machine before cleaning. Keep the exterior of the machine clean and free of chips. Use a brush for cleaning. Periodically empty grinding dust and particles from the dust collection system.

Lubrication

Lubrication of the grinder is not required. The drive motor and contact wheel are fitted with sealed bearings.

Replacement of Contact Wheel

WARNING: BE SURE TO SET ON/OFF SWITCH TO OFF TO AVOID PERSONAL INJURY.

1. Refer to Figure 5. Lower the tension lever to release belt tension.
2. Loosen upper guard knob and swing guard back for clearance.
3. Loosen the contact wheel shaft clamping screw on the head casting.
4. Remove the contact wheel assembly.
5. Remove retaining rings from wheel shaft.
6. Remove shaft and wheel bearings.
7. Install bearings in replacement contact wheel.
8. Install shaft and secure with retaining rings.
9. Install contact wheel shaft in head casting.
10. Tighten clamping screw.
11. Lift tension lever to set belt tension.
12. Lower and adjust position of upper guard. Tighten the upper guard knob.

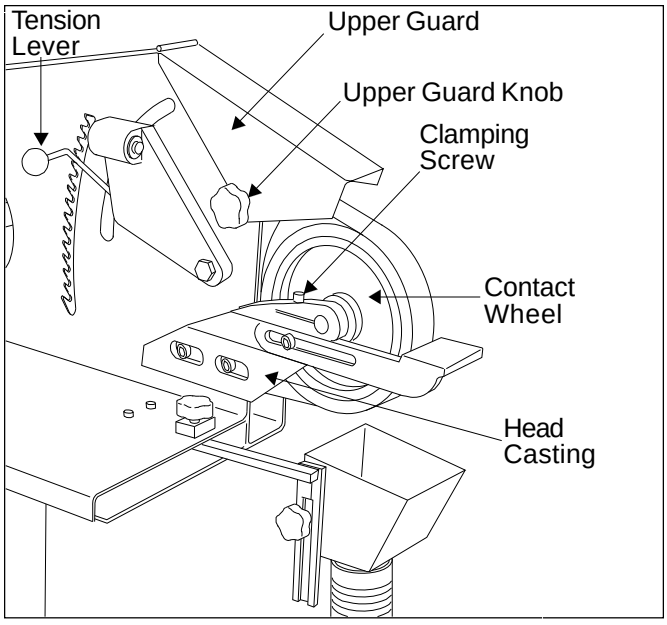


Figure 5: Replacement of Contact Wheel

Installation of Platen

WARNING: BE SURE TO SET ON/OFF SWITCH OFF TO AVOID PERSONAL INJURY.

1. Refer to Figure 6. Lower the tension lever to release belt tension.
2. Loosen upper guard knob and swing guard back for clearance.
3. Loosen the contact wheel shaft clamping screw on the head casting.
4. Remove contact wheel (see Replacement of Contact Wheel).
5. Install pivot shaft of platen in head casting. Position platen as desired.
   A. For grinding flat or angular work pieces, position the platen with the platen surface facing outward.
   B. For grinding of cylindrical work pieces, position the platen with the “yoke” side facing outward.
   C. Set at desired angle.
6. Tighten clamping screw.
7. Lift tension lever to set belt tension.
8. Lower and adjust position of upper guard. Tighten the upper guard knob.

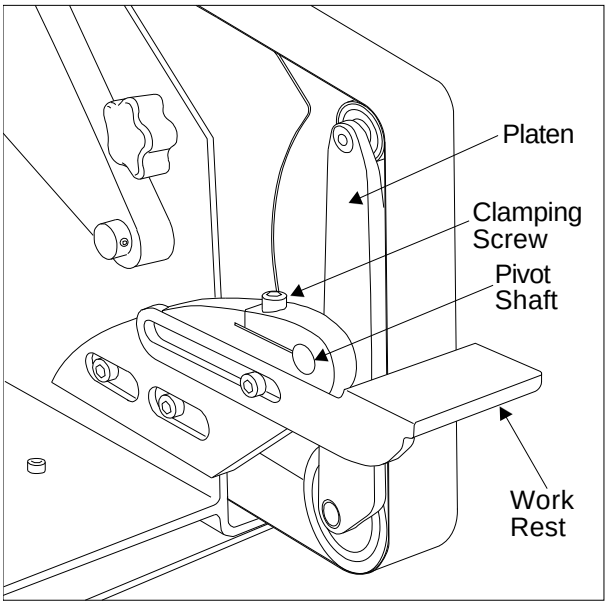


Figure 6: Installation of Platen

Replacement of Grinding Belt

WARNING: DO NOT OPERATE THE MACHINE WITH THE SIDE PANEL OPEN. DISCONNECT ELECTRICAL POWER TO THE MACHINE BEFORE PERFORMING ANY MAINTENANCE.

1. Refer to Figure 7. Lower the belt tension lever to release tension on the belt.
2. Loosen the knob on the left side of the machine and raise upper guard. Turn the knob on the side panel and lower the side panel.
3. If required, loosen work rest to provide clearance for belt removal.
4. Remove the belt from the drive wheel, idler wheel, and contact wheel. Install the replacement belt over the drive wheel, idler wheel, and contact wheel.
5. Raise the belt tension lever to tighten the belt against the wheels. Tighten the belt until it is just taut. A moderate tension will provide faster cutting, longer belt life, and better tracking. Do not over-tension the belt.
6. Check belt tracking by spinning the drive wheel by hand. Adjust tracking if required. (Refer to Checking Belt Tracking.)

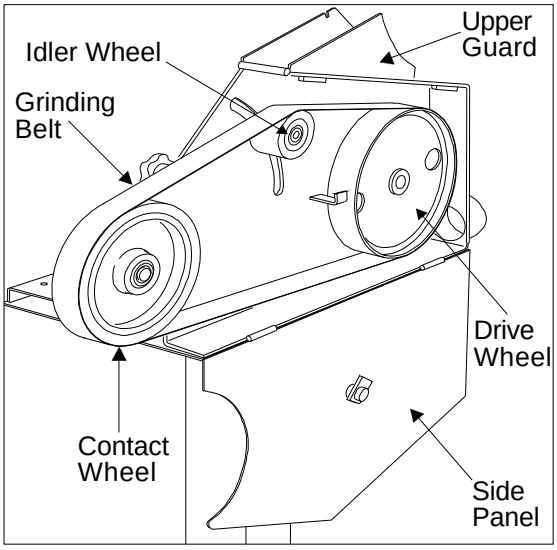


Figure 7: Replacement of Grinding Belt

Checking Belt Tracking

WARNING: DO NOT OPERATE THE MACHINE WITH THE SIDE PANEL OPEN. DISCONNECT ELECTRICAL POWER TO THE MACHINE BEFORE PERFORMING ANY MAINTENANCE.

1. Loosen the knob on the left side of the machine and raise upper guard. Turn the knob on the side panel and lower the side panel.
2. Spin the drive wheel by hand and check tracking of the belt. If the belt tracks either right or left, adjustment is required.
3. Use an Allen wrench to change the alignment of the idler wheel. Turn the idler adjustment screw clockwise to cause the belt to track right. Turn the idler adjustment screw counterclockwise to cause the belt to track left.
4. Close side panel and secure by turning the knob on the panel. Lower the upper belt guard and secure with the knob on the left side of the grinder.
5. Connect electrical power and start the grinder. Check belt tracking (the belt should be centered on the contact wheel.
6. If required, adjust belt tracking to center the belt on the contact wheel. Turn the idler adjustment screw clockwise to move the belt to the right. Turn the idler adjustment screw counterclockwise to move the belt to the left.
7. If the belt does not track properly, increase belt tension. Repeat steps 1 through 6.

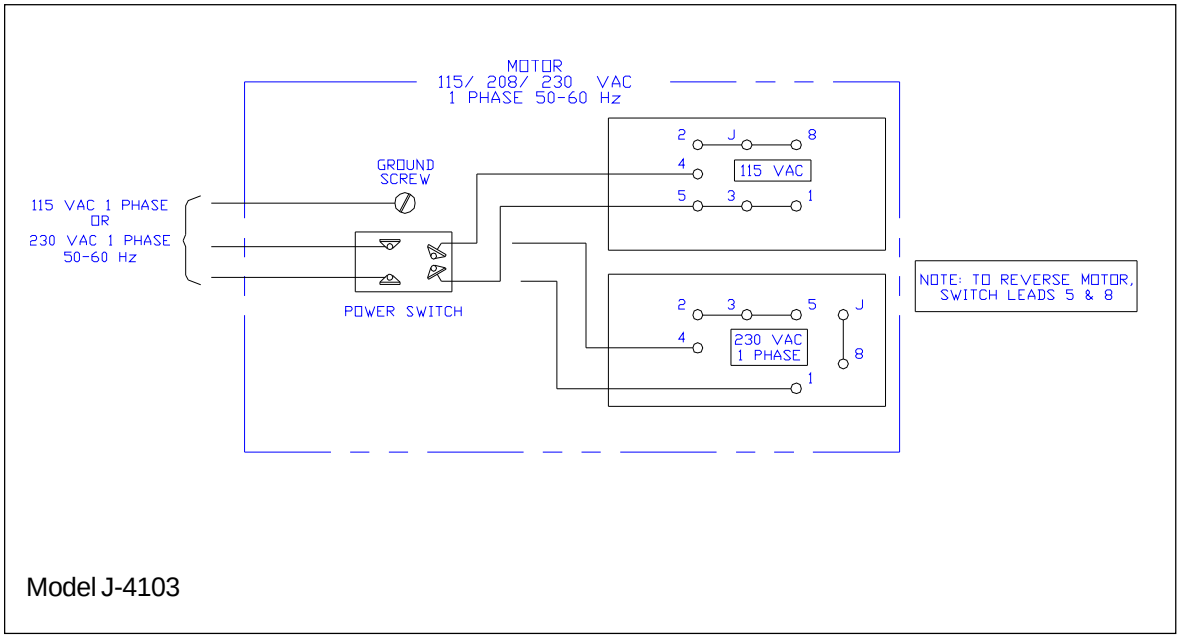
Replacement of Inverter

WARNING: DISCONNECT ELECTRICAL POWER TO THE MACHINE BEFORE PERFORMING ANY MAINTENANCE.

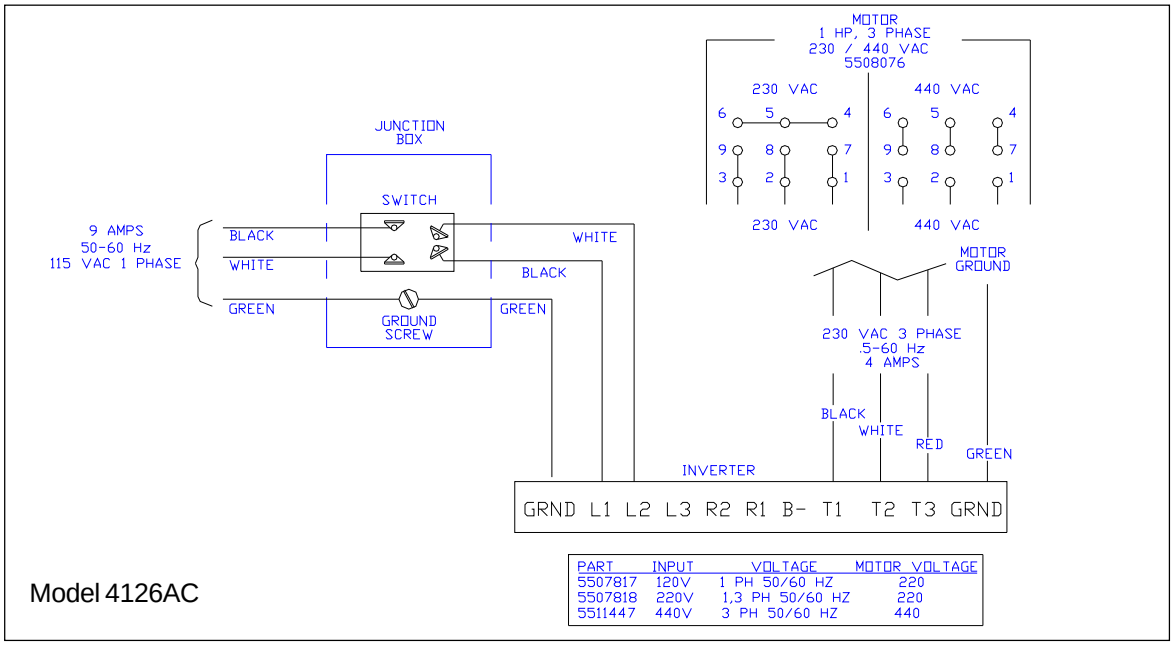
1. Disconnect electrical power.
2. Remove access panel on front of inverter. Disconnect inverter wiring.
3. Remove four screws (1) and four nuts (6) from inverter (2). Separate inverter (2) from mount (4).
4. Install replacement inverter (2) and secure with four screws (1) and four nuts (6).
5. Connect electrical wiring (refer to Wiring Diagram section for connections).
6. Start belt grinder and check for proper operation.

NOTE: Inverter is pre-programmed at the factory, further programming is not required.

Wiring Diagrams



Model J-4103



PART	INPUT	VOLTAGE	MOTOR VOLTAGE
5507817	120V	1 PH 50/60 HZ	220
5507818	220V	1,3 PH 50/60 HZ	220
5511447	440V	3 PH 50/60 HZ	440

Model 4126AC

Troubleshooting

Problem	Probable Cause	Suggested Remedy
Poor Tracking	1. Improper belt splice. 2. Excessive belt tension. 3. Insufficient belt tension. 4. Worn contact surfaces. 5. Misaligned contact surfaces. 6. Lack of crown on drive wheel. 7. Worn bearings.	1. Check belt for irregular seam or shape. 2. Set tension so belt is just taut. 3. Set tension so belt is just taut. 4. Check elastomer on contact wheels. Replace worn wheels. 5. Check alignment of drive wheel and contact wheels. The drive pulley and contact wheel must be aligned. To adjust drive wheel, loosen set screws and move drive wheel in or out on motor shaft as required. To adjust contact wheel, loosen shaft clamping screw and move contact wheel in or out as required. 6. Check for 1/16-inch crown. Replace drive wheel if crown is not present. 7. Check all bearings for overheating or damage. Replace worn or damaged bearings.
Slack Belt	1. Insufficient belt tension.	1. Set tension so belt is just taut.
Contact Wheel Wear	1. Excessive belt tension. 2. Grinding in one area on belt. 3. Excessive grinding deposits on belt and debris in machine.	1. Set tension so belt is just taut. 2. Use entire work surface of belt when ever possible. 3. Periodically clean interior of grinder.
Short Belt Life	1. Excessive grinding pressure.	1. Allow the belt to do the cutting. Excessive pressure dulls the belt and removes the grit from the belt.

Replacement Parts

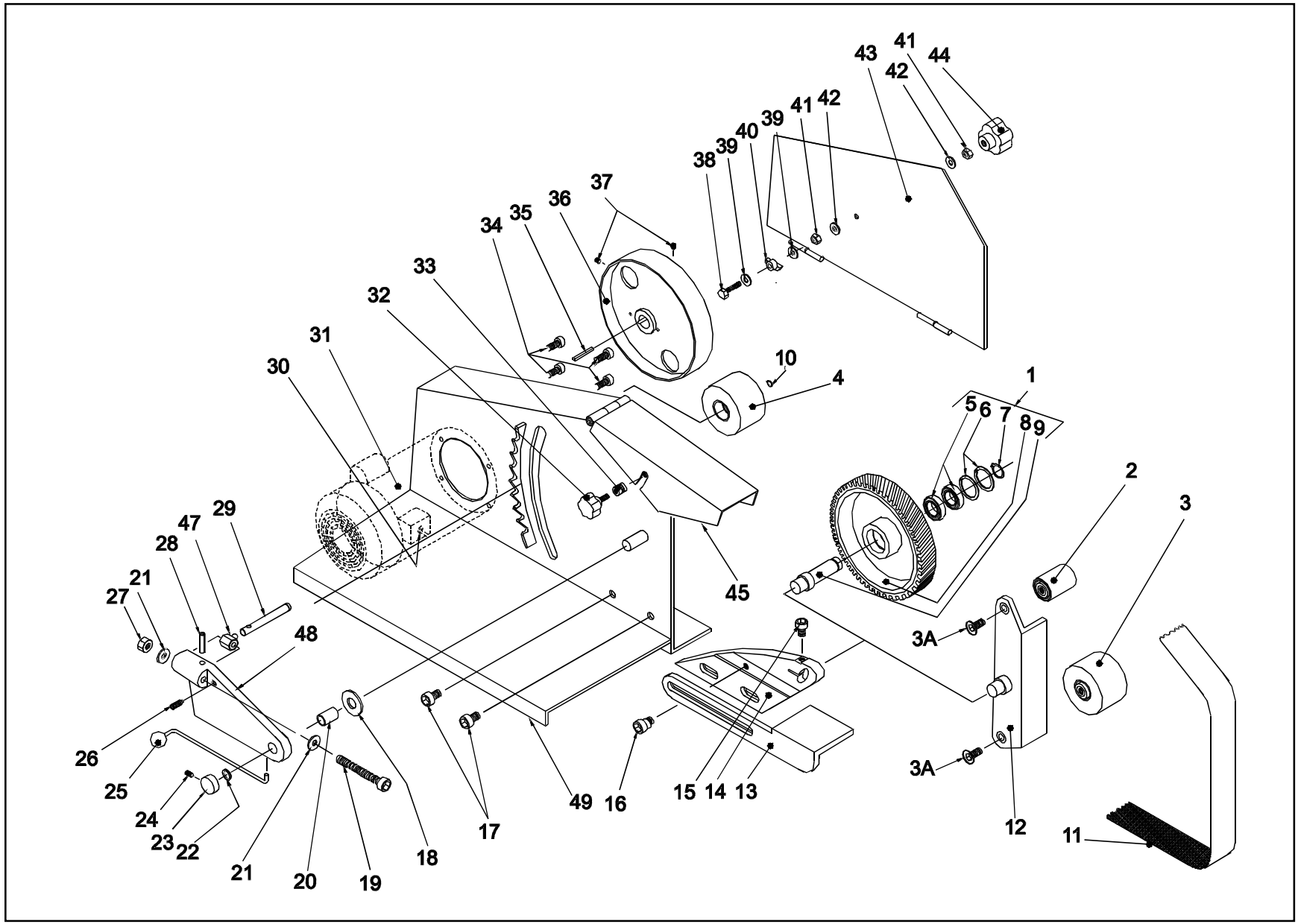
This section provides exploded view illustrations that show the replacement parts for the JET Models J-4103 and J-4126AC Square Wheel Belt Grinder. Also provided are parts listings that show part number, description and quantity. The item numbers on the illustration relate to the item number in the facing page of the parts listing.

Order replacement parts from:

WALTER MEIER (Manufacturing) Inc.
427 New Sanford Road
LaVergne, Tennessee 37086
Phone: 800-274-6848

Identify the replacement part by the part number shown in the parts listing. Be sure to include the model number and serial number of your machine when ordering replacement parts to assure that you will receive the correct part.

Exploded View - Square Wheel Belt Grinder

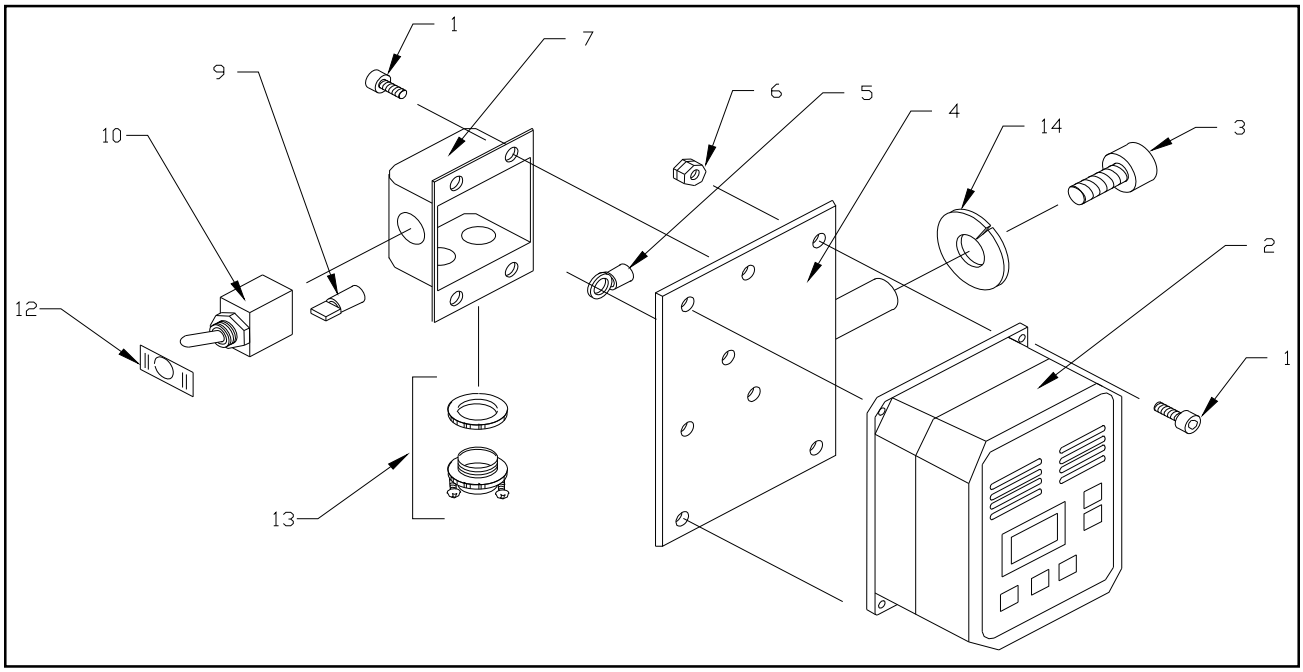


Parts List - Square Wheel Belt Grinder

Ref. No.	Part Number	Description	Qty.
1	5510944	Contact Wheel Assy, 10 x 2 Serrat, 90 Duro	1
	5510943	Contact Wheel Assy, 8 x 2 Smooth, 50 Duro	1
	5510942	Contact Wheel Assy, 8 x 2 Serrated, 50 Duro	1
2	5044590	Contact Wheel Assy, 1-1/2 x 2	1
3	5044610	Contact Wheel Assy, 3 x 2	1
3A	9049821	Screw, Flat Head Cap	2
4	5507582	Idler Wheel	1
5	9100331	Bearing	2
6	9074011	Retaining Ring, Internal	2
7	9074081	Retaining Ring, External	2
8	5510946	Contact Wheel, 8 x 2 Serrated, 50 Duro	1
	5510947	Contact Wheel, 8 x 2 Smooth, 50 Duro	1
	5510948	Contact Wheel, 10 x 2 Serrated, 90 Duro	1
9	5053231	Shaft, 8 x 10 Wheel	1
10	9074381	Retaining Ring, External	1
11	9112811	Abrasive Belt, 2 x 72, 50 Grit (Standard - optional grit below) (10 piece minimum order)	1
12	J-5044400	Platen Casting	1
13	J-5044410	Work Rest Casting	1
14	J-5044370	Head Casting	1
15	9128441	Screw, Socket Head Cap 3/8-16 x 1	1
16	5049990	Screw, Work Rest Machine	1
17	9129881	Screw, Socket Head Cap 3/8-16 x 5/8	2
18	9055361	Flat Washer, Nylon 1/2 I.D. x 1 O.D.	1
19	9129861	Scr, Socket Head Cap, Fll Thrd, 3/8-24 x 3	1
20	5046571	Bearing, Idler Housing	1
21	9055381	Flat Washer, Nylon, 3/8	2
22	9010271	O-Ring, 1/2	1
23	5044651	Cap, Idler Housing Pin	1
24	9133041	Set Screw, Socket Head 1/4-20 x 1/4	1
25	5046560	Lever, Tension	1
26	9133191	Set Screw, Nylon Tipped 5/16-18 x 3/4	1
27	9129561	Locknut, Hex, 3/8-24	1
28	9059811	Roll Pin, 3/16 x 1-1/2	1
29	5053301	Shaft, Idler Pulley	1

Ref. No.	Part Number	Description	Qty.
30	5541241	Switch (Model 4103 only)	1
31	9066821	Motor & Switch, 1 HP, 1-Phase (J-4103)	1
	5508076	Motor, 1 HP, 3-Phase (J-4126AC only)	1
32	9070361	Knob, Hand	1
33	9070781	Nut, Allen, 5/16-18	1
34	9128671	Bolt, Hex Head, w/Nylock 3/8-16 x 3/4	4
35	9114320	Key, 3/16 x 3/16 x 1-1/4	1
36	5044511	Pulley, Drive	1
37	9054541	Set Screw, Socket Head 5/16-18 x 1/2	2
38	5630451	Screw, Socket Head Hex 5/16-18 x 1-1/2	1
39	5077041	Lock Washer, 5/16	2
40	9070381	Latch, Cam	1
41	5630061	Nut, Hex, 5/16-18	1
42	5507583	Washer, Nylon 5/16	2
43	5055311	Door	1
44	9070371	Knob, Hand	1
45	J-5044630	Guard Flap Assembly	1
46	9057461	Washer, Flat 0.26 x 0.63 x 0.06	1
47	5046600	Tracking Leader Assembly	1
48	J-5046540	Casting, Idler Housing	1
49	J-5541030	Main Frame Assembly	1

Parts List - Inverter



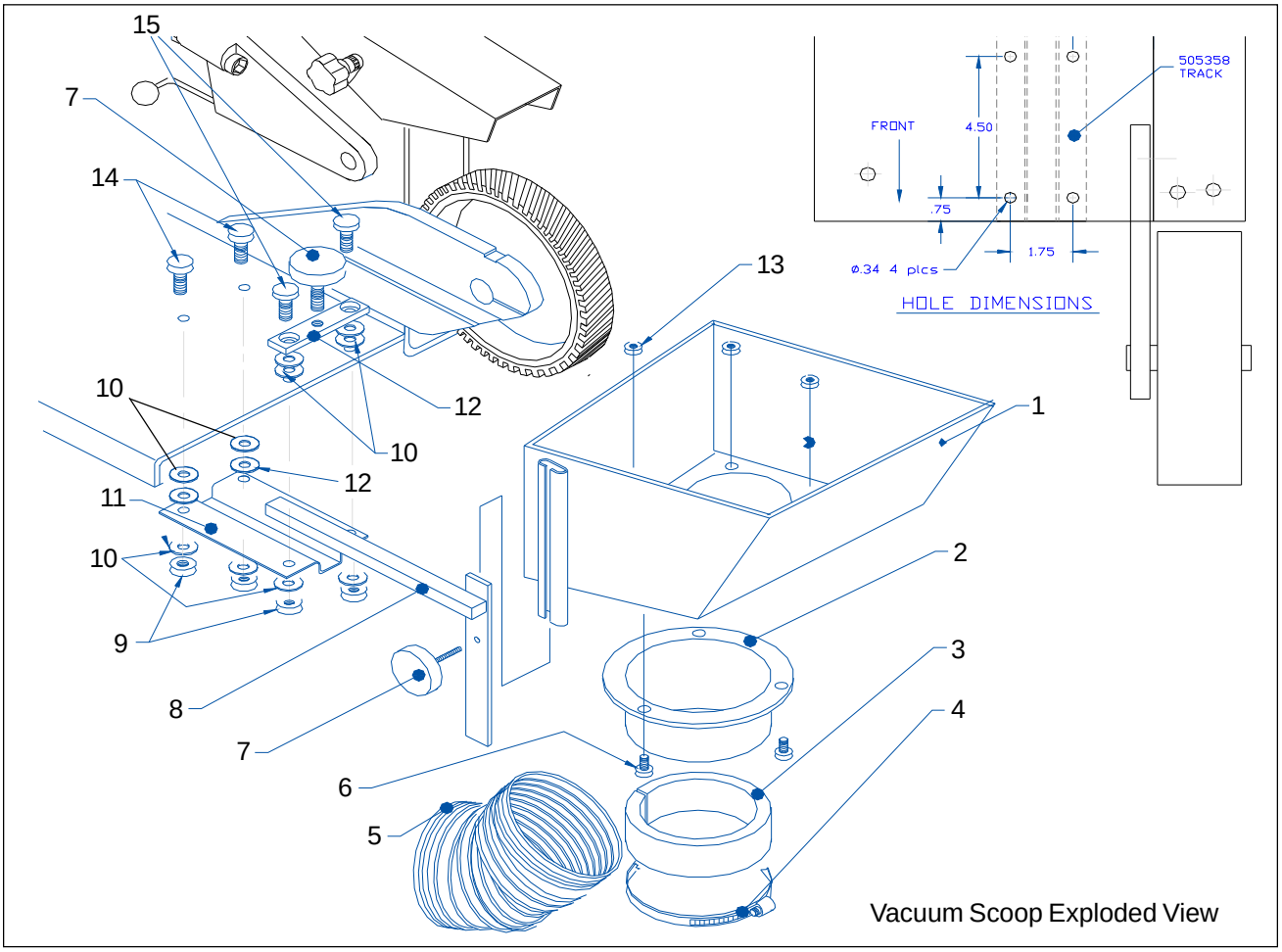
Ref. No.	Part Number	Description	Qty.
1	5550874	Screw, Socket head Cap, 10-32NF x 3/8	7
2	5507817	inverter (1ph, 120V, 50/60Hz)	1
	5507818	Inverter (3ph, 220V, 50/60Hz)	
	5511447	Inverter (3ph, 440V, 50/60Hz)	
3	9128571	Screw, Hex Head 1/2-13 x 1	1
4	5515215	Mount, Inverter	1
5	9119481	Terminal, Full Closed	1

Ref. No.	Part Number	Description	Qty.
6	5508073	Nut, Lock, 10-32 Nylock	4
7	5507934	Box, Switch	1
9	9119721	Spade, Female 16-14AWG	4
10	9117401	Switch, Toggle	1
12	9085061	Dial, ON-OFF	1
13	9119071	Grip, Cord	2
14	5628371	Lock Washer, 1/2	1

Accessories

Exploded View - Vacuum Scoop

A vacuum scoop connects the machine to the vacuum system. The mounting provisions for the scoop are shown in the exploded view below.



Vacuum Scoop Exploded View

Ref. No.	Part Number	Description	Qty.
1	5053531	Scoop Assembly	1
2	5052471	Adapter, Hose	1
3	5053601	Reducer, 4 x 3 in. (Woodworkers)	1
	5053611	Reducer, 4 x 3 in. (Metal Workers)	1
4	5507534	Clamp, Hose 3 in.	1
5	5507533	Hose, 3 x 5 in.	1
6	9128241	Screw, HH Cap	3
7	9070361	Knob	2

Ref. No.	Part Number	Description	Qty.
8	5053571	Rail	1
9	9032961	Lock Nut, Nylon Insert	4
10	9055411	Washer, Nylon	8
11	5053581	Channel	1
12	9057391	Washer, Flat	2
13	9056411	Nut, Hex Jam	3
14	9062111	Screw, SHCS (5/16-18 X 3/4)	2
15	9146801	Screw, SHCS Low Head (5/16-18 X 1 1/2)	2

Accessories

Belt Grinder Pedestal

The optional pedestal enables the Square Wheel Belt Grinder to be mounted in a free standing configuration rather than on a work bench. The grinder is secured to the pedestal using the four holes in the base of the grinder - follow the below instructions.

Assembly of Pedestal

Unpacking

The grinding machine pedestal is shipped separately from the grinding machine. Transport the shipping containers to the installation site before unpacking.

Unpack the pedestal and grinding machine. Locate and open the plastic bag containing four 5/16-18 socket head cap screws. Verify that that there are two screws 1-inch long and two screws 1-3/4 inches long (Figure 16, View A).

Securing the Pedestal

WARNING: BOLTING THE PEDESTAL TO THE FLOOR IS STRONGLY RECOMMENDED. THE PEDESTAL IS BOLTED TO THE FLOOR TO ELIMINATE THE POSSIBILITY OF TIP-OVER WHILE THE MACHINE IS BEING OPERATED. FAILURE TO DO SO CAN RESULT IN INJURY TO THE OPERATOR AND/OR OTHER NEARBY PERSONNEL.

The pedestal has four mounting holes in its base. Use these mounting holes to secure the pedestal to the floor before installing the grinder. Shims should be used to level the pedestal before the attaching bolts are tightened.

Assembly

WARNING: THE MACHINE MOUNTING PLATE IS NOT CENTERED ON THE LEG OF THE PEDESTAL. THIS OFFSET EVENLY DISTRIBUTES THE WEIGHT OF THE GRINDING MACHINE. MAKE SURE THE GRINDING MACHINE IS CORRECTLY POSITIONED AND SECURED TO THE PEDESTAL BEFORE LEAVING THE MACHINE UNATTENDED. FAILURE TO CORRECTLY POSITION AND SECURE THE MACHINE COULD RESULT IN THE MACHINE TIPPING OVER, CAUSING INJURY TO PERSONNEL.

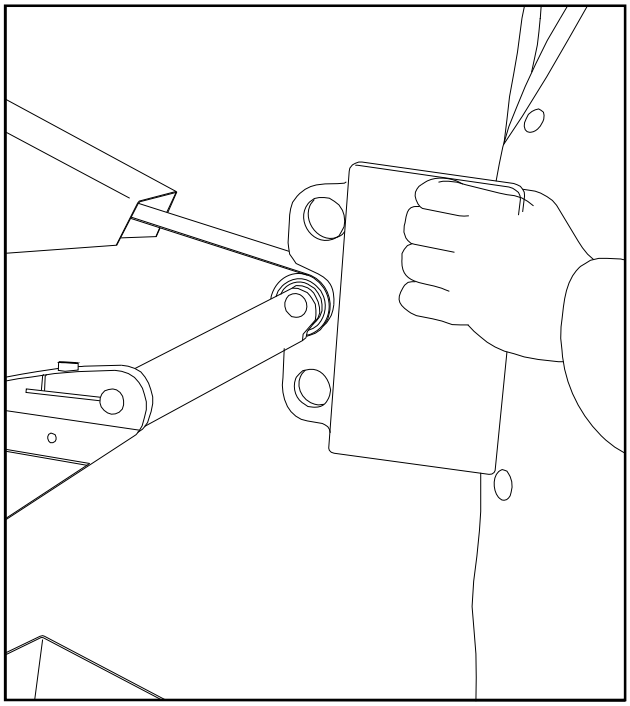


Figure 15: Contouring Using Small Diameter Contact Wheel

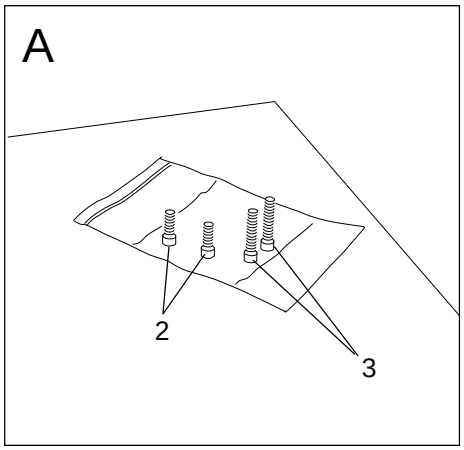
There are four mounting holes in the mounting plate on the pedestal. The holes on the motor side of the machine are approximately 20 inches apart. The holes on the belt-guard side of the machine are located approximately ½-inch from the corners of the plate. When correctly installed, all four screw holes in the machine base plate and belt guard will align with the holes in the mounting plate of the pedestal.

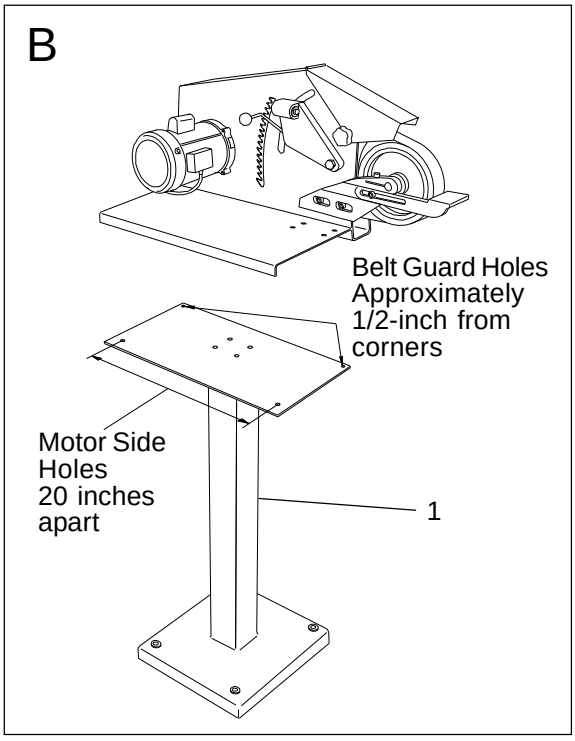
Mounting Procedure

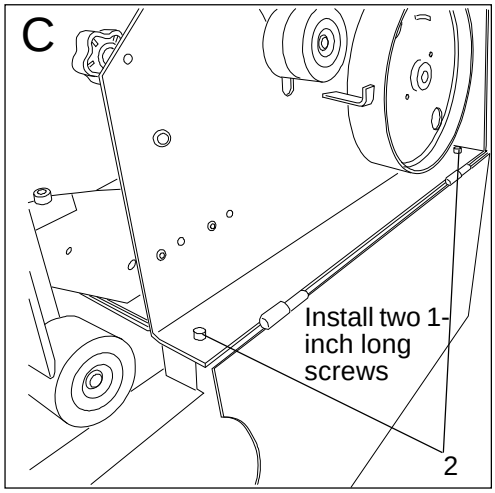
A. Using two people or a hoisting device, lift the grinding machine and set it on the pedestal. Align all four screw holes in the machine base plate and belt guard with the holes in the mounting plate of the pedestal (Figure 16, View B).

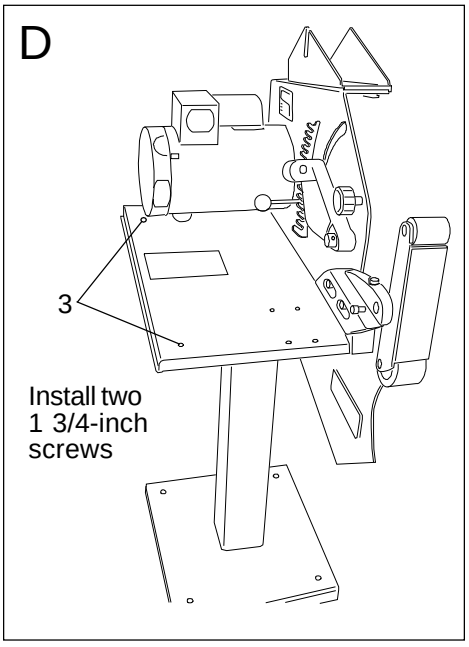
B. Open the grinding belt guard door (Figure 16, View C). Install two 5/16-18 x 1-inch long screws in the base of the grinding belt guard. Install screws finger-tight.

C. Install the two 5/16-18 x 1-3/4-inch long screws in the screw holes on the motor side of the machine base (Figure 16, View D). Tighten all four screws.









Ref. No.	Part Number	Description	Qty.
1	5248081	Pedestal	1
2	9062121	Socket Head Cap Screw (5/16-18 x 1)	2
3	5511051	Socket Head Cap Screw (5/16-18 x 1 3/4)	2

Figure 16: Assembly of Grinding Machine and Pedestal

WALTER MEIER (Manufacturing) Inc.
427 New Sanford Road
LaVergne, Tennessee 37086
Ph.: 800-274-6848
www.waltermeier.com