

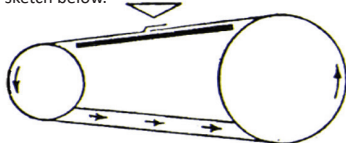
SAFETY INSTRUCTIONS



WARNING:

To avoid mistakes that could cause injury, do not use the Multitool until you have read and understood the following:

- 1. ALWAYS WEAR EYE PROTECTION.** A full-face visor is preferred. Any Belt/Disc Grinder can throw foreign objects into the eyes.
- 2. AVOID EYE CONTACT WITH BELT OR DISC.** The abrasive belt when running is an aggressive cutting tool. Extra care should be exercised when using coarse grit belts because of their rapid cutting action.
- 3. KEEP CHILDREN AWAY.** All visitors should be kept a safe distance from the work area.
- 4. BOLT THE BENCH GRINDER** securely to the bench or supporting surface to stop it from tipping over or moving when in use.
- 5. DO NOT MOUNT** the attachment protruding into walkways.
- 6. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- 7. ALWAYS WEAR A DUST MASK** to prevent dust inhalation when adequate ventilation or extraction is not available.
- 8. DO NOT WEAR LOOSE CLOTHING**, which may become entangled in the machine. Wear protective hair covering to contain long hair.
- 9. ALWAYS HOLD** the work piece firmly when grinding and apply a light and steady pressure against abrasive disc or belt.
- 10. ALWAYS GRIND ON THE DOWNWARD SIDE** of the grinding disc. Grinding on the upward side of the disc could cause the work piece to fly out of position, resulting in injury.
- 11. DO NOT USE BELTS THAT ARE DAMAGED, TORN, OR SHOW SIGNS OF WEAR**
- 12. ALWAYS INSTALL BELTS** with arrows in the back of the belts pointing the correct direction. Belts with lap joints must be fitted facing the correct direction. See sketch below.



INTRODUCTION TO BELT GRINDING

Belt grinding or finishing has many advantages over the use of conventional grinding wheels. It is possible to remove material up to 5 times faster than the equivalent grade of grinding wheel with far less heat. The electrostatic process used in the manufacturing of an abrasive belt ensures that the sharp side of each piece of grit is facing outwards on the belt thus giving cleaner, smoother and faster cutting. The flexing of the belt has a self-cleaning and cooling action, making it more suitable to any application where heat could damage the work such as grinding leather, plastics, tool sharpening etc.

BELT APPLICATIONS

ALL METALS	COARSE FINISH	Use 24 to 80 Grit
	MEDIUM TO FINE	Use 120 to 180 Grit
	VERY FINE	Use 220 to 400 Grit
	MICROFINISHING	Use 3M Trizact 700 to 1200 Grit
	HEAVY GRINDING	Use Zirconia Belts 24, 40 or 80 Grit
ALUMINUM	Always use belt grease to prevent clogging.	
WOOD	Use Aluminum Oxide Resin Bond (open or closed) 40, 60, 80, 100, or 120 Grits	
PLASTICS & GLASS CERAMIC	Use Silicon Carbide Resin Bond 40 to 600 Grit	

OPERATING INSTRUCTIONS

BELT CHANGING

To remove the belt simply push down on the underside of belt to compress the tensioner assembly. Catch automatically holds the slide in retracted position. When refitting the belt simply release the catch (Step 3:O). Always make sure belt lap faces the correct direction (see diagram left).

BELT TRACKING

Always ensure the belt entirely covers the rubber contact wheel. Adjustment is made when running or when belt is rotated by hand. To adjust left, move tracking lever down. To adjust right, move lever up. If tracking lever is constantly set in up or down position, refer to Steps 3 & 4 of fitting instructions on reverse side.

PLATEN GRINDING (HORIZONTAL OR VERTICAL)

It is important that the Platen (Step 4: P) is not set too high. If belt is deflected and rides up over the platen it creates an undue strain on the grinder, especially when starting. If platen is not often used, it is better to set a little clear of the belt. A simple method to adjust the platen is to place a straight edge on top of the belt between the contact wheel and drive drum and raise platen so that it just touches under side of belt. Work of any length can be surfaced on the platen, for example the saw edges of wood from short pieces up to lengths of several feet. Never grind or sand on platen unless you are sure belt lap is facing in correct position. (See diagram at left)

DISC GRINDING

Whenever possible remove the belt when using the grinding disc. The disc grinder is a very versatile part of the attachment that can be used for dressing small castings and components, patterns, models, etc. often eliminating costly machining. Tool and cutter sharpening is a simple task and there is less chance of burning edges. With the addition of the table, lengths and angles are easy to adjust. Dressing end grain, flat and square, has always been a difficult task but now it is a simple and quick operation, making perfect joints possible. A rubber cleaning stick should be used regularly to prevent build up wood resin. When changing a disc pad remove any remaining adhesive with a solvent, e.g. Lacquer thinner, acetone (nail polish remover). Do not use household cleaners.

CONTACT WHEEL GRINDING, POLISHING, AND SANDING

Using the front contact wheel removes material many times faster than a conventional grinding wheel. The unique smooth cutting action is cooler, faster, and safer than conventional grinding methods. A good example of one of the many uses is the smoothing of welds and casting blemishes prior to plating. Using the extremely fast and easy belt change, it is possible to go from a rough weld finish to a flat, smooth polish suitable to chrome plate in only two belt changes. e.g. Remove rough weld with 40 or 80 grit belt. Remove grinding marks with 240 grit belt. Change ground finish to smooth, brushed finish for plating using Scotchbrite super fine or Trizact belts. Wood shaping and finishing can be done in a similar manner, but belts should always be kept exclusively for wood, especially in the finer grades. A rubber belt cleaning stick helps prevent clogging on wood use.

SLACK BELT

Slack Belt grinding is a method of belt grinding, sanding, or polishing where no backing is used behind the belt. It is especially suitable for round and contoured work and some sharpening operations. It is done on the underneath side of the belt opposite the platen. Belt grits of 180 to 400 are recommended because of the rapid cutting action.

MACHINE SPECIFICATIONS

MULTITOOL 364

Belt size 36" x 4" - Disc size 7" - Contact Wheel 3½" diameter. Fits most 6" or 8" bench grinders with minimum 1/2 H.P. and shaft sizes of 1/2" or 5/8".

BELT SPEED

Approximately 5000 Ft/min

AVAILABLE ACCESSORIES

ADJUSTABLE ANGLE WORK TABLE (MTBL) - for Disc Grinding

POLISHING ROUGE (MTRouge) - for use with Polishing Belts

90 DEGREE TILTING FLOOR STAND W/ WORK REST - for use with Front Contact Wheel

WALL MOUNT PEDESTAL (MT-WM)

WARRANTY AND CONDITIONS OF SALE

The words "us", "we" or "our" refers to P.A Products or their authorized agent

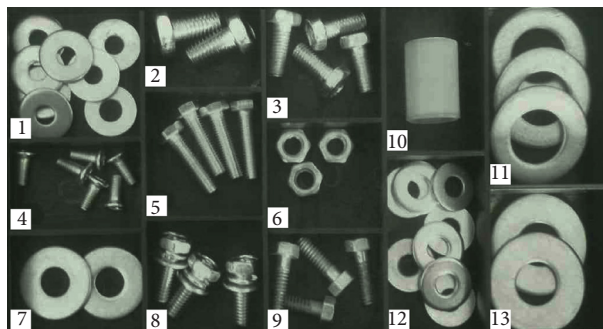
A.) The warranty will only apply if the fitting and operating instructions are followed.

B.) The warranty will only apply for a period of 1 year from the date of original purchase against any defect in our product, which can be proved, to our satisfaction to have been caused by faulty materials or workmanship. Our liability is limited to the cost of repairing or at our option, replacement of the defective goods or parts of the goods. We will not be liable for any defect caused by unauthorized repair.

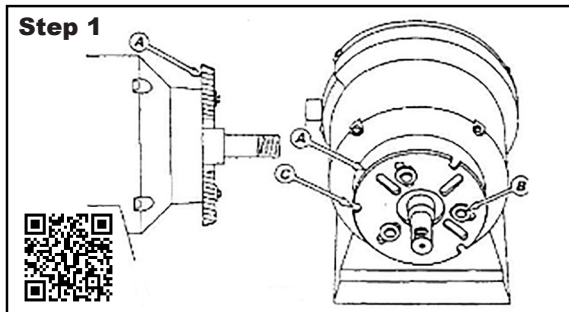
INSTRUCTIONS TO FOLLOW FOR WARRANTY CLAIMS:

1. If warranty claim is made, we must be notified as soon as possible after assumed defect has become apparent.
2. Goods may only be returned with the approval and RGA # from Van Sant Distributing, Inc. 800-828-2043 or email us at sales@multitoolgrinder.com.
3. The customer must prepay all freight charges for returned goods.
4. We will contact the customer with a suggestion after inspecting the goods to determine with the customer what action should be taken in the circumstances.

FITTING INSTRUCTIONS -MULTITOOl MT364

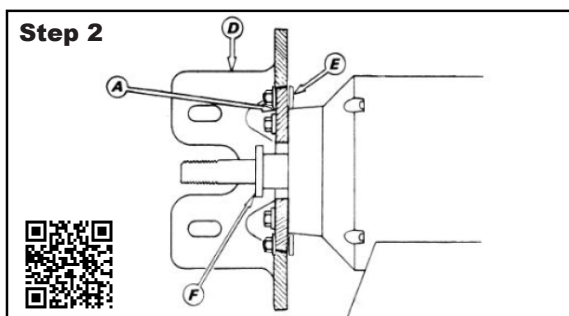


The Fitting Kit (pictured above) is provided with all Multitool models. Please refer to this image for all numbered items throughout the instructions.

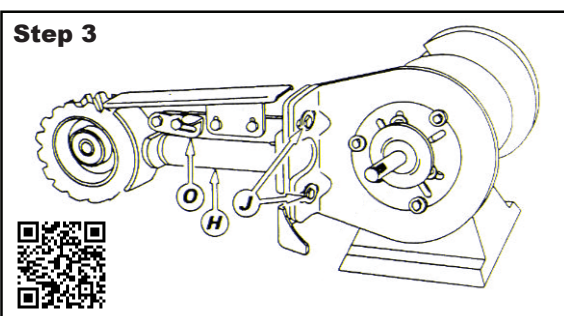


Disconnect grinder from power source. From the right hand end of the grinder, remove wheel cover, wheel, wheel flanges, and wheel guard. Fit slotted adaptor plate (A) using either 6mm bolt (3), 5mm bolt (5), or 4.8mm bolt (9) provided. Use appropriate size washers under heads (1 or 12). The outer Edge of the adaptor plate is tapered. **Face smallest side of taper away from grinder motor** as shown above.

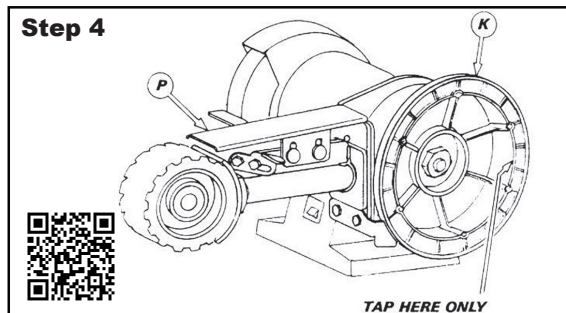
NOTE: Some grinders may require the use of additional washers between the grinder and adaptor plate to clear bolt heads. This may require the use of longer bolts to get full thread engagement in motor housing. (Step 2: E).



The above cutaway view is from the rear of the right hand end of the grinder showing the tapered fit of the adaptor plate (A) and main bracket (D). Fit the main bracket (D) using bolt (8) through the three cut outs (Step 1: C) with head of bolt facing the grinder motor. With slotted face of bracket approximately vertical, tighten 6mm nuts (6) evenly. The adaptor plate (Step 1: A) should be flush with the main bracket (D). If the Multitool is to be used in a vertical position simply loosen nuts, tap main bracket (D) to loosen. Swivel to desired position and retighten nuts (6).

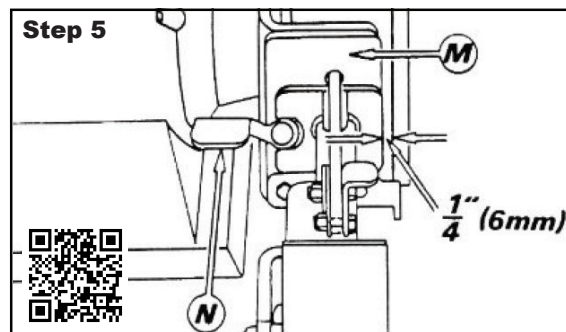


Fit the tensioner arm (H) using 8mm bolts (2) and washers (7) provided into slots (J). Fit one of the washers (13) that suits 1/2" or (11) suiting 5/8" diameter shaft size on the grinder shaft. Fit the drive drum (Step 4: K) by sliding over the shaft of the grinder. If there is interference between the adapter plate bolts and drive drum, add additional washers to gain acceptable clearance. The drive drum (Step 4: K) comes with a 5/8" bore. There is a nylon bushing (10) provided for 1/2" shafts.



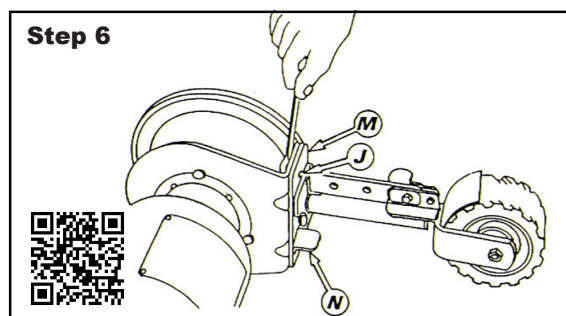
Use 13mm (13) or 16mm (11) diameter washer under the shaft nut and tighten. If drive drum does not run true, use rubber or leather hammer to tap on the inside edge of rim where run-out may occur.

NOTE: A poor quality nut may prevent drum from running true. If this is the case, replace factory nut with high quality alternative.



Tensioner arm cam plate (M) must now be set 1/4" (6mm) from the inside edge of the drive drum (Step 4: K). Slots are provided for 8mm bolts (Step 3: J) for this adjustment. Set tracking lever (N) in mid or horizontal position. Fit the belt and release spring loaded contact wheel by lifting the catch (Step 3: O).

NOTE: It is not necessary to remove the platen as in Steps 5 and 6. This has been removed for clarity and instruction only. There will always be some parts left over after fitting.



Spin the belt over a few revolutions by hand. If the belt wanders towards the drive drum (Step 4: K), loosen the top bolt (Step 3: J) and tap the top of the cam plate (M) in small amount towards the drum. If the belt moves towards the grinder, tap the top of cam plate (M) towards the grinder. When the belt runs evenly on the contact wheel, re-tighten bolt (J), turn grinder on to check. Final tracking adjustments can be done with the tracking lever (N). Pulling the tracking lever down moves belt to the left, up moves the belt to the right. Fit the cover plate using bolts (4). Clean face of cover disc with a solvent and fit adhesive backed abrasive disc provided.

For parts, tech support, belts, or discs contact:

Van Sant Distributing, Inc.
800-828-2043
sales@multitoolgrinder.com



For a short instruction video, see
www.youtube.com/vansantdistributing

MULTITOOL TROUBLESHOOTING

Vibration or wobble from the drive drum.

Vibration is often related to the hardware, installation, or the grinder itself. It is best to remove the stone or wheel on the opposite side of the grinder to be sure that is not the source of the problem. Runout at the edge of the drum of approximately 1/16" is within the standard tolerances for this machine. This small amount of runout has virtually no impact on how the attachment operates.

The most common issue we have found is that tightening the drum nut can sometimes cause the drum to wobble. You may be able to see that the more you tighten the nut, the more the runout increases. You may need to use a soft face mallet or hammer and block of wood to take out the bind created by tightening and true it up on the shaft. Just rotate the drum until you identify the high spot and strike the drum on the inside edge near the screw bosses for the cover disc. It takes a substantial strike with a dead blow mallet to make a change. Light tapping is generally not going to have an effect.



For more information on how to perform the drive drum troubleshooting fix, scan the QR Code on the left or visit our youtube channel: www.youtube.com/vansantdistributing.

Tracking Adjustments

Although, your new Multitool should track correctly right out of the box, there's a chance that some simple adjustments may need to be made so that your Multitool will track properly. After taking it out of the box and attempting to use it for the first time, you may notice the belt wandering left or right on the contact wheel. Using the tracking lever on the Multitool arm will help track the belt, but sometimes that adjustment isn't enough. The following steps can be made to help your Multitool track properly.

Center the tracking lever on the Multitool arm and take off the Drive Drum. Removing the Drive Drum will allow you to gain access to two bolts attaching the Multitool cam plate to the 90 degree mounting bracket that is attached to the grinder motor. Loosen the two bolts that attach the arm, however keep them snug enough so adjustments to the arm can be made. Re-mount the Drive Drum and install the belt. Spin the belt by hand. If the belt wanders towards the right, tap the top of the cam plate in small amounts towards the right. If the belt moves towards the left, tap the top of cam plate towards the left. When the belt runs evenly on the contact wheel, re-tighten bolts that attach the multitool cam plate to the 90 degree bracket. Turn grinder on to check that it is tracking properly. Final tracking adjustments can be done with the tracking lever. Note: the belt will always drift toward the high side of the contact wheel.



For more information on how to make tracking adjustments, scan the QR Code on the left or visit our youtube channel: www.youtube.com/vansantdistributing.

MULTITOOL BELTS AND ACCESSORIES

Grit	Type	Abrasive	Part Number
40	Standard	Aluminum oxide	BLT36440-S
80	Standard	Aluminum oxide	BLT36480-S
120	Standard	Aluminum oxide	BLT364120-S
180	Standard	Aluminum oxide	BLT364180-S
240	Standard	Aluminum oxide	BLT364240-S
320	Standard	Aluminum oxide	BLT364320-S

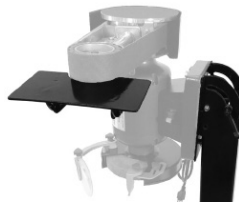


Abrasive Starter Pack

This convenient pack includes 1 each of: 40, 80, 120, 180, 240, and 320 grit premium aluminum oxide belts.

Tilting Pedestal and Work Table

This accessory is a great way to mount your bench grinder at a comfortable working height. The platform can pivot up to 90 degrees when used with the optional work table, adding versatility to contact wheel grinding.



Wall Mount

The wall mount bracket gives back valuable floor space and can swivel under the grinder via a quickrelease handle. Features a powdercoat finish and heavy steel construction. Makes shop clean up easy!

Sharpening Jig

The Multitool Sharpening Fixture quickly sharpens chisels up to 50mm, plane blades to 60mm and power plane blades to 82mm to the correct angles. It gives a razor sharp edge without burning and does not need honed. Also works great for re-tipping screwdrivers.



Miter Table

This is the most popular accessory available. The table will tilt 5 degrees up and 50 degrees down. The included miter bracket is adjustable to the angle you need and is excellent for squaring or adjusting an angle.

Foot Switch



This on/off foot switch is an excellent accessory and will make work in your shop faster, safer, and easier! It features an all steel momentary foot pedal with non-slip traction pads and an 8ft, 14AWG grounded power cord.