

Multitool™

BELT AND DISC GRINDING ATTACHMENTS

Installation Instructions for Belt Grinder Attachment Models MT362, MT364, MT482 and MT484

SAFETY INSTRUCTIONS



USER IS RESPONSIBLE TO HAVE WORKING KNOWLEDGE OF BELT GRINDER USAGE. MULTITOOL GRINDERS IS NOT RESPONSIBLE FOR ANY DAMAGES OR INJURIES INCURRED WHILE USING THE MULTITOOL PRODUCT LINE.

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 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.

WARRANTY AND CONDITIONS OF SALE

The words "us", "we" or "our" refers to Multitool Grinders 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 Multitool Grinders. Contact Multitool Grinders at 641-628-4253 or email us at sales@multitoolgrinders.com to obtain RGA# and return approval.
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.

For parts, tech support, belts, or discs contact Multitool Grinders at 641-628-4253 or sales@multitoolgrinders.com

OPERATING INSTRUCTIONS

BELT CHANGING

To remove the belt, simply push down on the underside of belt to compress the tensioner assembly. The catch will automatically hold the slide in the retracted position. When replacing the belt simply release the catch. Make sure that directional belts are turning the correct direction.

BELT TRACKING

Ensure the belt entirely covers the rubber contact wheel. Adjustments can be made when running or when belt is rotated by hand. To adjust left, move tracking lever down. To adjust right, move lever up.

PLATEN GRINDING (HORIZONTAL OR VERTICAL)

It is important that the platen is not set too high. If belt is deflected and rides up over the platen, this creates an undue strain on the grinder, especially when starting. If platen is not often used, it is better to adjust it slightly below 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 pulley and raise platen so that it just touches the under side of belt.

DISC GRINDING

Disc grinding is well suited for shaping and general deburring work. Grind parts on the downward side of the disc's rotation, so that dust and sparks are directed away from the operator's face. For grinding small parts, a secure work holding tool should be used to help prevent operator from contact with the grinding disc surface. Abrasive disc grit should be matched to the amount of material intended to be removed. The more quickly material can be removed, the less heat will build up in the part being ground. This will also help preserve abrasive life. 80 – 180 grit discs are good for general deburring and chamfering operations. For heavy material removal use more aggressive 40 grit abrasive discs.

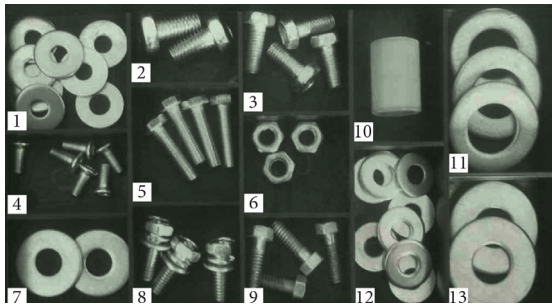
CONTACT WHEEL GRINDING, POLISHING, AND SANDING

Always grind on the lower half of the contact wheel, so that dust and sparks are directed away from the operator's face. For grinding small parts, a secure work holding tool should be used to help prevent operator contact with the grinding belt surface. Abrasive belt grit should be matched to the amount of material intended to be removed. The more quickly material can be removed, the less heat will build up in the part being ground. This will also help preserve abrasive life. 80 – 180 grit belts are good for general deburring and chamfering operations. For heavy material removal use aggressive (24 – 40 grit) abrasive belts until desired shape is achieved. Finer grit belts should be utilized for removal of coarser grinding marks and polishing operations. Scotchbrite® belts are ideally suited for paint and rust removal operations.

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. Slack belt grinding can be performed on the underneath side of the belt opposite the platen. Belt grits of 180 to 400 are recommended due to the rapid cutting action of this method of grinding.

CONTENTS



Hardware Kit

(Refer to this image for numbered hardware throughout the instructions)



Belt and Disk



Adaptor Plate



Main Bracket



Tensioner Arm



Drive Drum

REQUIRED TOOLS



·1/2" Wrench



· #2 Phillips
Screw Driver



· Socket Wrench
·15/16" Socket

FITTING INSTRUCTIONS

1. Disconnect grinder from power source. From the right side of the grinder, remove wheel guards, grinding stone, and any flanges or washers used with the factory stone. Retain factory arbor nut for use with Multitool drive drum.

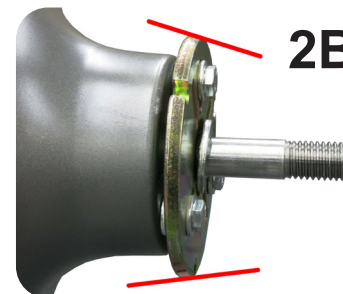


2. Install slotted adaptor plate using either 6mm bolt (3), 5mm bolt (5), or 4.8mm bolt (9) provided (image 2A). Use appropriate size washers under heads (1 or 12). The outer edge of the adaptor plate is tapered. **Face smallest side of taper away from grinder motor (image 2B).**

NOTE: Some grinders may require the use of additional washers between the grinder and adaptor plate to clear bolt heads in step 3. This may require the use of longer bolts to get full thread engagement in motor housing.



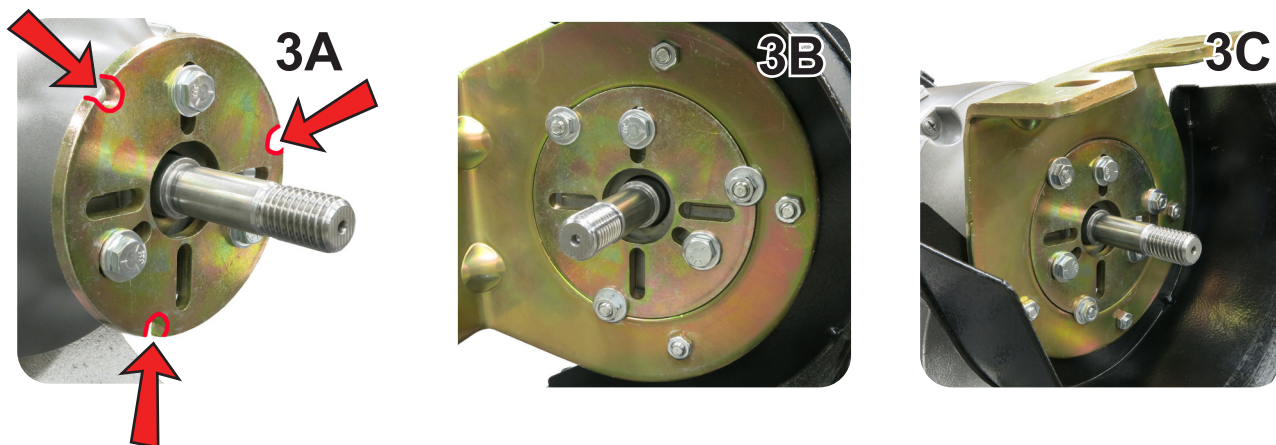
2A



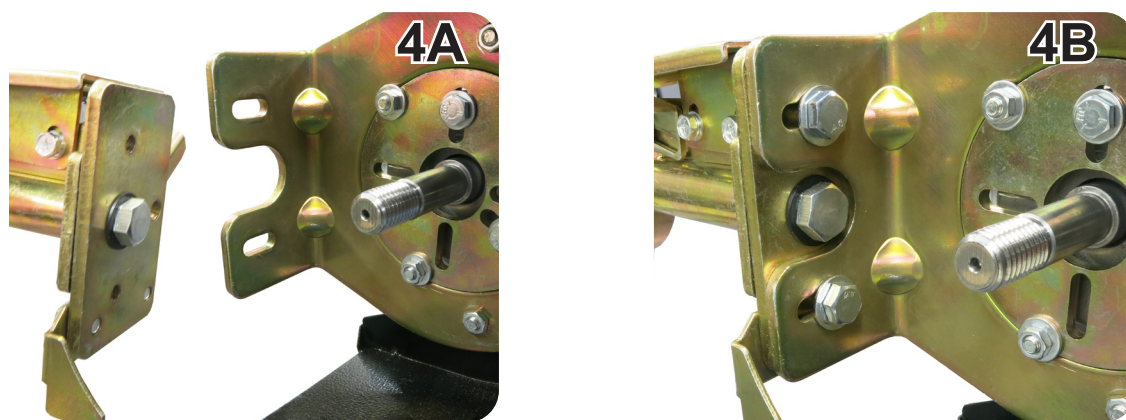
2B

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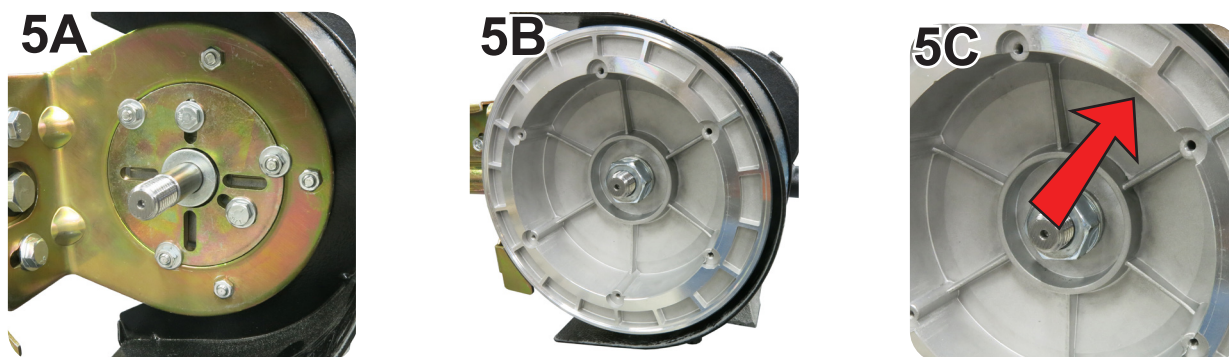
- 3.** Install the main bracket using bolts (8) through the three cut outs shown in image 3A. With head of bolt facing the grinder motor, use 6mm nuts (6) and washers (12) and tighten evenly. The adaptor plate should be flush with the main bracket as shown image 3B. If the Multitool is to be used in a vertical position simply loosen nuts and tap main bracket to loosen. Swivel to desired position and retighten nuts (image 3C).



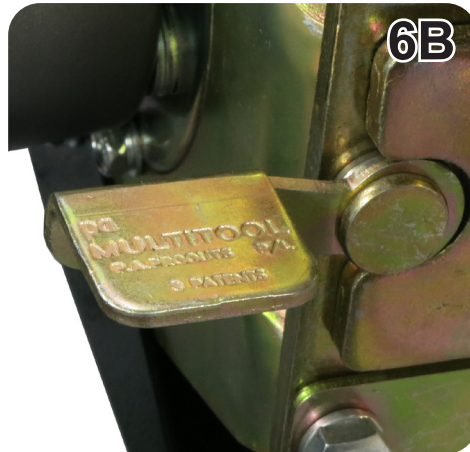
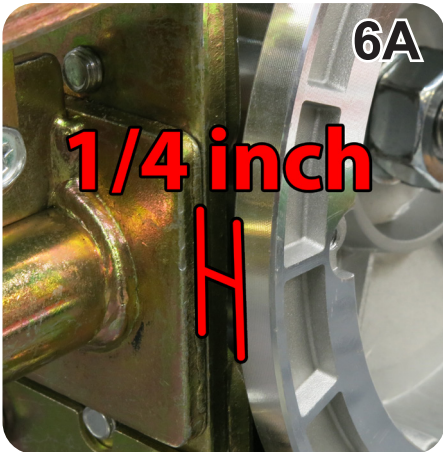
- 4.** Install the tensioner arm using 8mm bolts (2) and washers (7) into the slots on the main bracket, keeping the bolts slightly loose for future adjustments in step 6.



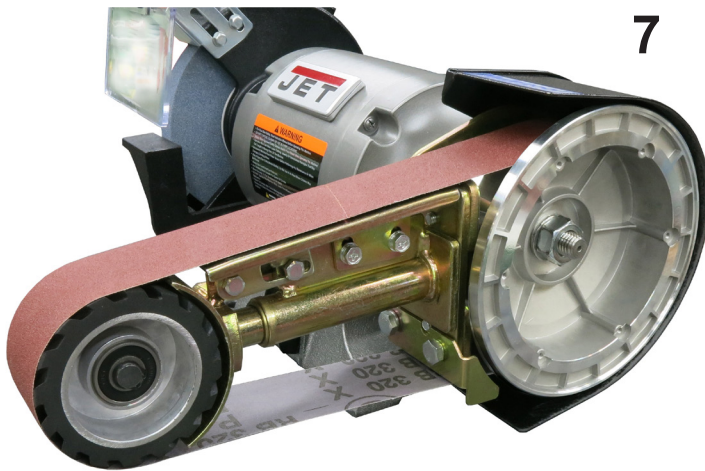
- 5.** Install a 1/2" washer (13) or a 5/8" washer (11) on the grinder shaft (image 5A). The drive drum features a 5/8" bore, however a nylon bushing (10) is provided for 1/2" shafts. Fit the drive drum by sliding over the shaft of the grinder (image 5B). If there is interference between the adapter plate bolts and drive drum, add additional washers behind the drum to gain acceptable clearance. Use 1/2" (13) or 5/8" (11) diameter washers under the arbor nut and tighten. If drive drum does not run true, use rubber or leather mallet to tap on the inside edge of rim (image 5C) where run-out may occur.



6. The tensioner arm plate should now be set 1/4" (6mm) from the inside edge of the drive drum (image 6A). Set tracking lever in horizontal position as shown in image 6B. Use a 1/2" wrench to tighten the two bolts securing the tensioner arm to the main bracket (image 6C).



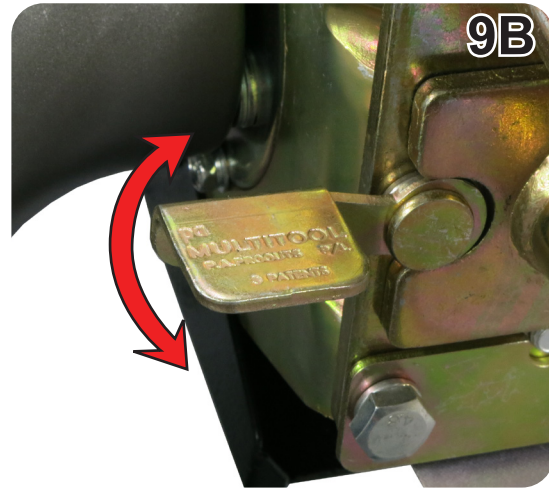
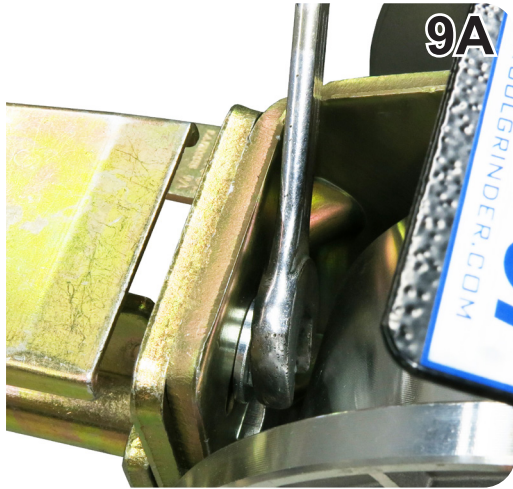
7. Collapse tensioner arm until the catch lever engages. Install the belt and release spring loaded tensioner arm by lifting the catch.



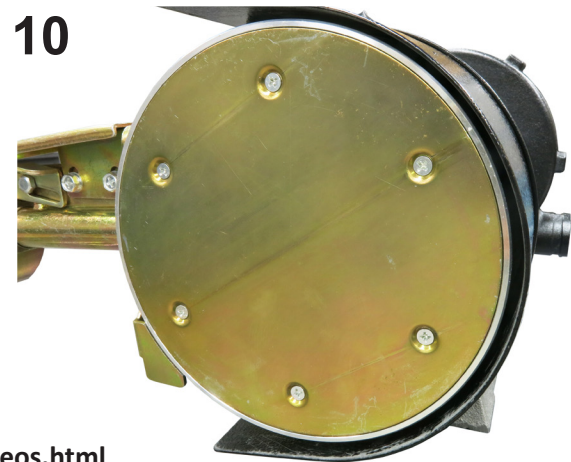
8. Spin the belt over a few revolutions by hand. If the belt wanders towards the drive drum, remove belt, loosen the top bolt of the tensioner arm (image 6C) and tap the edge of the platen in small amount on the left using a mallet (image 8A). If the belt moves towards the grinder, tap the edge of platen on the right (image 8B). Reinstall belt and repeat test.



9. When the belt runs evenly on the contact wheel, re-tighten bolt (image 9A). Briefly turn grinder on to perform final check. Final tracking adjustments can be done with the tracking lever (image 9B). Pulling the tracking lever down moves the belt to the left, while moving it up moves the belt to the right.



10. Install the cover plate using screws (4). Clean face of cover disc with a solvent and install adhesive backed abrasive disc provided.



For a short instruction video, see <https://multitoolgrinders.com/pages/support/videos.html>

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 attachment. 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 arbor nut can sometimes cause the drum to wobble. You may notice that as the nut is tightened, runout increases. It may be necessary to use a soft face mallet or hammer and block of wood to take out the bind created by tightening and true the drum on the shaft. Rotate the drum until the high spot is identified and strike the drum on the inside edge near the screw bosses for the cover disc. A substantial strike with a dead blow mallet is required to adjust runout. Light tapping will generally not 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 website: <https://multitoolgrinders.com/pages/support/videos.html>

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BELTS FOR EACH ATTACHMENT

Belts for Model 362

Grit	Type	Abrasive	Part Number
24	Premium	Aluminum zirconia	BLT36224-P
40	Premium	Aluminum zirconia	BLT36240-P
40	Standard	Aluminum oxide	BLT36240-S
80	Premium	Aluminum zirconia	BLT36280-P
80	Standard	Aluminum oxide	BLT36280-S
120	Premium	Aluminum zirconia	BLT362120-P
120	Standard	Aluminum oxide	BLT362120-S
180	Premium	Aluminum zirconia	BLT362180-P
180	Standard	Aluminum oxide	BLT362180-S
220 (A80)	Premium	Trizact	BLT362TZ220
240	Standard	Aluminum oxide	BLT362240-S
320	Standard	Aluminum oxide	BLT362320-S
400 (A45)	Premium	Trizact	BLT362TZ400
700 (A30)	Premium	Trizact	BLT362TZ700
1200 (A16)	Premium	Trizact	BLT362TZ1200
Coarse	Premium	Scotch-Brite	BLT362SBC-S
Medium	Premium	Scotch-Brite	BLT362SBM
Fine	Premium	Scotch-Brite	BLT362SBVF
Polishing	Standard	-	BLT362SBP

Belts for Model 482

Grit	Type	Abrasive	Part Number
24	Premium	Aluminum zirconia	BLT48224-P
40	Premium	Aluminum zirconia	BLT48240-P
40	Standard	Aluminum oxide	BLT48240-S
80	Premium	Aluminum zirconia	BLT48280-P
80	Standard	Aluminum oxide	BLT48280-S
120	Premium	Aluminum zirconia	BLT482120-P
120	Standard	Aluminum oxide	BLT482120-S
180	Premium	Aluminum zirconia	BLT482180-P
180	Standard	Aluminum oxide	BLT482180-S
220 (A80)	Premium	Trizact	BLT482TZ220
240	Standard	Aluminum oxide	BLT482240-S
320	Standard	Aluminum oxide	BLT482320-S
400 (A45)	Premium	Trizact	BLT482TZ400
700 (A30)	Premium	Trizact	BLT482TZ700
1200 (A16)	Premium	Trizact	BLT482TZ1200
Medium	Premium	Scotch-Brite	BLT482SBM
Fine	Premium	Scotch-Brite	BLT482SBVF
Polishing	Standard	-	BLT482SBP

Belts for Model 364

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

Belts for Model 484

Grit	Type	Abrasive	Part Number
40	Standard	Aluminum oxide	BLT48440-S
80	Standard	Aluminum oxide	BLT48480-P
120	Standard	Aluminum oxide	BLT484120-S
180	Standard	Aluminum oxide	BLT484180-P
240	Standard	Aluminum oxide	BLT484240-S
320	Standard	Aluminum oxide	BLT484320-S

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