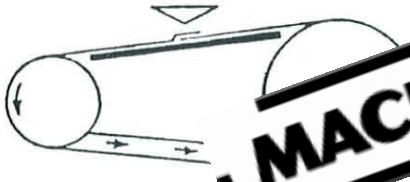
Multitool BELT AND DISC GRINDING ATTACHMENT

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 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 at 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 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 belt or disc.
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 on back of belts facing correct direction. Belts with lap joints must be fitted facing correct direction. See sketch below.



MACHINERYHOUSE

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 manufacture 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 action and also it does not overheat, making it more suitable to any application where heat could damage the work, for example, grinding leather, plastics, tool sharpening etc.

BELT APPLICATIONS

ALL METALS	COARSE FINISH	Use 40 to 80 Grit Aluminum Oxide Belts.
	MEDIUM TO FINE	Use 100 to 180 Grit
	VERY FINE	Use 240 to 400 Grit
	MICROFINISHING	Use 3M Trizact 600 to 2000 Grit
	HEAVY GRINDING OR THIN SECTIONS	Use Zirconia Belts 40,60,80 Grits
ALUMINUM	Always use belt grease to prevent clogging.	
WOOD	Use Aluminum Oxide Resin Bond open or Close Cote 40,60,80,100,120 Grits	

PLASTICS, GLASS CERAMIC, GENERAL LAPIDARY
Use Silicon Carbide Resin Bond Close Cote 40 to 600 Grit

ACCESSORIES AVAILABLE

- **ADJUSTABLE ANGLE WORK TABLE** for Disc Grinding
- **SHARPENING JIG** - for sharpening chisels to 2" (51mm) plane blades to 2 3/8" (60mm) power planer blades to 3 1/4" (82mm) and re-tipping screwdrivers - professional results. Fits all Multitool models except 8CW.
- **BELT GREASE** - to prevent clogging on aluminum and other soft metals.
- **BELT CLEANING STICK** - removes wood or grease built up - prolongs belt life
- **POLISHING COMPOUND** - for use with Scotchbrite type T Belts

OPERATING INSTRUCTIONS

BELT CHANGING
To remove belt simply push down on underside of belt to compress belt tensioning spring. Catch automatically holds slide in retracted position. When refitting belt simply release catch O Fig 3. Always make sure belt lap faces in correct direction (see diagram at left).

BELT TRACKING
Always ensure belt entirely covers rubber contact wheel. Adjustment is made when running or when belt 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 Figs 5 & 6(N) of fitting instructions on reverse side.

PLATEN GRINDING (HORIZONTAL OR VERTICAL)
It is important that platen P Fig 4 is not set too high. If belt is deflected and rides up over platen it creates an undue strain on grinder especially when starting. If platen is not often used it is better to set it a little clear of belt. A simple method to adjust platen is to place a straight edge on top of belt between contact wheel and drive pulley 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 sawn edges of wood from short pieces up to lengths of several metres. Never grind or sand on platen unless you are sure belt lap is facing in correct direction (See diagram at left).

DISC GRINDING
Whenever possible remove belt when using disc facility. The disc grinding facility is a very useful and versatile part of the attachment. It is very useful for dressing small castings and components, patterns, models, etc... eliminating costly machining. Tool and cutter sharpening is a simple task... chance of burning edges. With the addition of the optional tab... easy to adjust. Dressing end grain flat and square has... it is a simple and quick operation, making ped... ould be used regularly to prevent built up ...ble in abrasive discs. 1. Self-Adhesive. 2. Fur ... an optional hook and loop backing pad. 3. Plain paper ...en must be attached with a contact adhesive. When changing a ... any remaining adhesive with a solvent, eg. Lacquer thinner, acetone (nail ...lover). Do not use household cleaners.

CONTACT WHEEL GRINDING POLISHING AND SANDING
Using the front contact wheel avails the user of material removal many times faster than a conventional grinding wheel. The unique smooth cutting action is cooler, faster as 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, 60 or 80 grit belt. Remove grinding marks - 240 grit belt. Change ground finish to smooth, brushed finish for plating - Scotchbrite super fine. 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.

FREE STRAPPING
Free strapping 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. It is ideally suited to narrow belt widths as small as 1/2" (13mm). Belt grades of 180 to 400 are recommended because of the rapid cutting action of narrow belts.

SPECIFICATIONS

MULTITOOL 362
Belt size 36" x 2" (915 x 50) Disc size 7" (178) Contact Wheel 3 1/2" (89) dia. Suits most 6" (150) or 8" (200) bench grinders with minimum 1/3 H.P. (248W) and Shaft sizes of 1/2", 5/8" 3/4" and metric 14mm, 15mm, 16mm. **RATING:** Continuous Industrial

MULTITOOL 482 & MULTITOOL 8CW
Belt size 48" x 2" (1220 x 50) Disc size 7" (178) Contact Wheel 3 1/2 on 8CW Model. Suited to 8" (200) bench grinders with minimum 1/2 H.P. (373W) and Shaft sizes of 5/8, 3/4 and metric 15mm and 16mm.

BELT SPEED - ALL MODELS

AUSTRALIA	4200 Ft/min (1280 metres/min)
USA	5000 Ft/min (1524 metres/min)