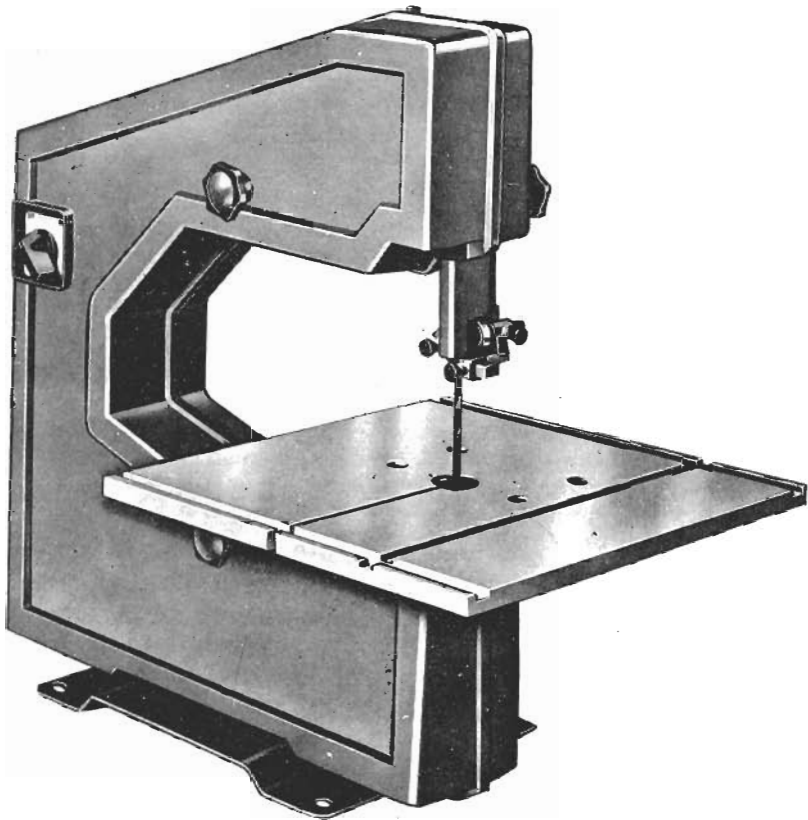


BANDSAW

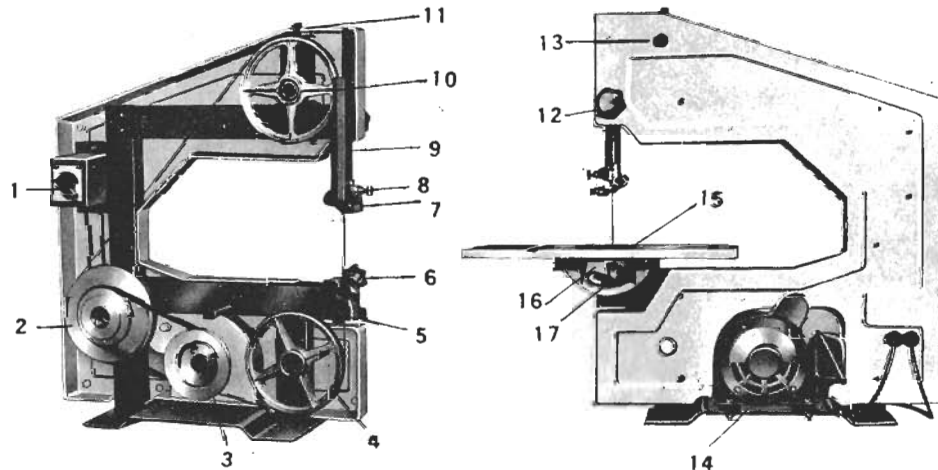
Owners Manual



CONGRATULATIONS

You have just purchased one of our growing family of Bench Power Tools. Each is engineered and manufactured to the highest standards of quality. You will find your new Bandsaw a very versatile tool. With the correct combination of speed and blade it will cut metals, wood, plastics, felt, rubber, acrylics and many other materials, and can also be fitted with a sanding belt for sanding and shaping.

This Bandsaw is a self-contained power tool not requiring the purchase of a separate motor.



MAIN FEATURES

- | | |
|-----------------------|---------------------------|
| 1. ON/OFF SWITCH | 10. TRACKING WHEEL |
| 2. DRIVE WHEEL | 11. TENSION BOLT |
| 3. MOTOR PULLEY | 12. BLADE GUARD LOCK KNOB |
| 4. IDLER WHEEL | 13. TRACKING BOLT |
| 5. LOWER BACK BEARING | 14. MOTOR |
| 6. LOWER BLADE GUIDES | 15. WORK TABLE |
| 7. UPPER BLADE GUIDES | 16. TILT INDICATOR |
| 8. UPPER BACK BEARING | 17. TABLE LOCK KNOB |
| 9. BLADE GUARD | |

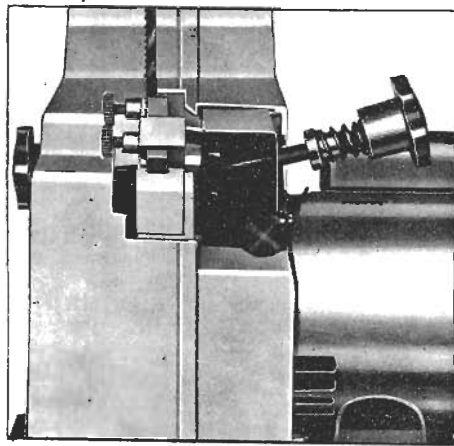
Safety Rules For All Power Tools

1. **READ AND BECOME FAMILIAR** with the entire operating manual.
2. **KEEP GUARDS AND COVER** in place and in working order.
3. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operations is dusty. Everyday eye-glasses only have impact resistant lenses; they are not safety glasses.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **DON'T FORCE TOOL.** It will do a better and safer job at the rate for which it was designed.
6. **AVOID ACCIDENTAL STARTING.** Make sure switch is in "OFF" position before plugging in cord.
7. **DISCONNECT TOOLS BEFORE SERVICING** and when changing accessories such as blades, bits, cutters.
8. **DON'T OVERREACH.** Keep your proper footing and balance at all times. For best footing wear rubber soled footwear. Keep floor clear of oil, scrap wood, etc.
9. **WEAR PROPER APPAREL.** Loose clothing or jewelry may get caught in moving parts. Wear protective hair covering to contain long hair.
10. **MAKE WORKSHOP KIDPROOF.** Place a padlock on the workshop door when not in use and store the key in a safe location.
11. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
12. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations. Keep your work area well illuminated. *DO NOT*
USE in explosive atmosphere (around paint, flammable liquids, etc.).
13. **KEEP CHILDREN AWAY.** All visitors should be kept a safe distance from work area, especially while operating unit.
14. **USE THE PROPER TOOL.** Don't force tool or attachment to do a job for which it was not designed.
15. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **SECURE WORK.** Use clamps or a vise to hold work, when practical. It's safer than using your hand and prevents round or irregularly shaped pieces from turning.
17. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be checked to assure that it will operate properly and perform its intended function — check for alignment of moving parts, breakage of parts, mounting, any other conditions that may affect its operations. A guard or other part that is damaged should be properly repaired or replaced.
18. **USE RECOMMENDED ACCESSORIES** — Consult Owner's Manual. Use of improper accessories could be hazardous.
19. **NEVER STAND ON TOOL.** Injury could occur from a fall.
20. **NEVER LEAVE TOOL RUNNING AND UNATTENDED.**
21. **ALWAYS REMOVE CORD PLUG** from electrical outlet when adjusting, changing parts or working on tool.

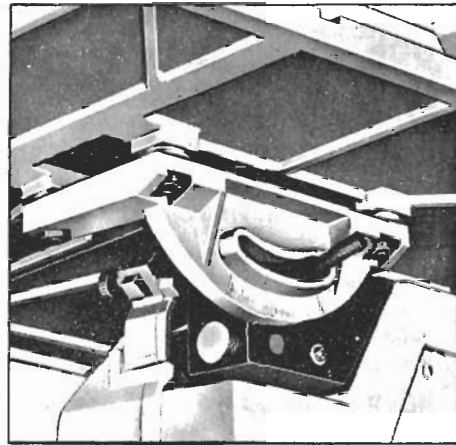
ASSEMBLY

Your Bandsaw is shipped completely assembled except for the work table. To assemble the table to the Bandsaw:

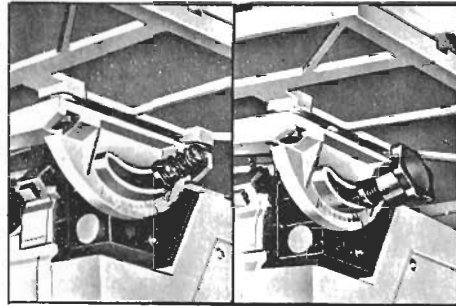
1. Remove the table lock knob, spring and spring support bush from the table support at the rear of the Bandsaw. (FIG. 1)
2. Standing at the rear of the Bandsaw with the slot of the table facing towards the machine, mount the table so that the blade passes through the table slot, and the table support rod goes through the curved slot in the tilt indicator. (FIG. 2)
3. Replace the spring support bush with the large flanged end facing towards the tilt indicator.
4. Place the spring over the spring support bush.
5. Screw the lock knob onto the table support. (FIG. 3)



(FIG. 1)



(FIG. 2)



(FIG. 3)

INSTALLATION

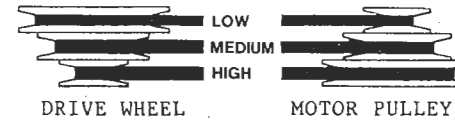
Your Bandsaw should be bolted to a solidly built work bench. Mounting holes are provided in the base of the machine. Large flat washers should be used between the bolt heads and the base to fasten more securely and to prevent any damage to the Bandsaw. Tighten snugly but do not overtighten.

SPEEDS

Your Bandsaw is equipped with pulley steps for three speeds, adequate for all normal working requirements. Always use low speed for cutting metals, medium is used for cutting wood, and high speed is used for sanding.

CHANGING SPEEDS

1. Turn the power off at the main switch.
2. Remove the front cover.
3. Check which pulley steps to use for the desired speed according to the diagram:

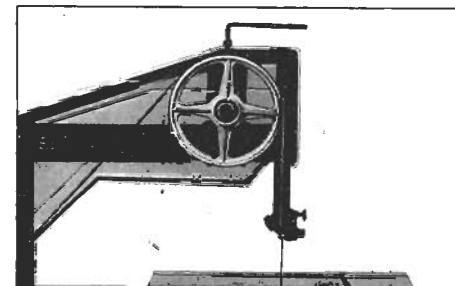


Actual speeds are shown on the Bandsaw nameplate.

4. Change the belt on the pulley or drive wheel which allows you to move it from a larger diameter step to a smaller step. Now move the belt on the other pulley to the corresponding step.
5. Replace the front cover.

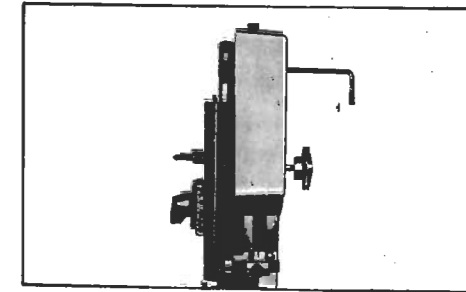
CHANGING BLADES

1. Turn the power off at the main switch.
2. Remove the front cover.
3. Remove the upper blade guides, push the back bearing away from the blade, and remove the blade guard.
4. Move the lower blade guides and back bearing away from the blade.
5. Using the hex key supplied turn the tension bolt clockwise to release the blade tension. (FIG. 4)



(FIG. 4)

6. Remove the old blade. Slip the new blade over the three wheels, placing the blade as close as possible to the centre of the wheels.
7. Turn the tension bolt anti-clockwise until the blade is tensioned again.
8. Rotate the idler wheel by hand until the blade centres correctly on all three wheels. If the blade does not track correctly, adjust the tracking bolt while rotating the idler wheel until it does so. (FIG. 5)



(FIG. 5)

9. Replace the blade guard and upper blade guides.
10. Adjust upper and lower blade guides so that there is a gap of 1 to 2mm between the guides - almost touching the blade.
11. Adjust the upper and lower back bearings so that they are just lightly touching the blade.
12. Replace the front cover.

OTHER FEATURES WORK TABLE

The work table is a 400mm x 400mm aluminium die casting. It supports the material being cut and is grooved to accept a mitre guide and rip fence. The rip fence can be attached to both the

front and rear of the table. The table can be tilted to any angle from 0 to 45 degrees making possible a large variety of bevel and compound angle cuts. The tilt indicator beneath the table shows the angle setting. The centre of the work table is protected with a table insert, easily and economically replaced if damaged.

MOTOR

A ball-bearing induction motor is provided with the Bandsaw - powerful enough for all your operating needs.

INTERNAL CONSTRUCTION

The three-wheel construction of this Bandsaw makes possible the large 360mm throat and 140mm depth of cut capacity within a compact bench mounted unit.

The drive wheel is powered by a belt from the motor pulley. Both the drive wheel and idler wheel are fixed in position and do not require adjustment. With this Bandsaw blade tension is set automatically with no operator adjustment required.

The tracking wheel can be adjusted to centre the blade on the three wheels when running. Because of the self-tensioning feature of this Bandsaw frequent tracking adjustments are not required.

Each wheel is fitted with a rubber tyre to prevent the blade from slipping and to protect the sharp edges of the blade teeth. These tyres are easily replaced if they become torn or worn.

TIPS ABOUT BANDSAW BLADES

The size of a bandsaw blade is denoted by width, length and thickness. This Bandsaw uses blades which are 1783mm long, 0.4mm thick and from 6mm to 13mm

wide. The number of teeth per inch and the type of tooth determines the application of the blade.

A wide choice of blades is available for different jobs. There is no general purpose bandsaw blade which is suitable for all operations. Narrow blades will cut to a tighter radius than wider blades. Finer tooth blades will make a smoother, but slower, cut than coarse blades. As a wide blade has more contact with the blade guides it is easier to cut a true straight line than with a narrow blade. This is particularly important in rip-cutting when the blade has a natural tendency to follow the grain of the wood.

Blades for cutting hard materials have more teeth per inch. For cutting thin hard materials the number of teeth per inch needs to be much greater than for thicker material. If the distance between each tooth is greater than the thickness of the material being cut, the teeth may grab in the work and break off.

The following chart shows recommended blade widths for cutting curves:

Width of Blade		Min. Radius of Curve	
1/4"	6mm	1/2"	13mm
3/8"	10mm	1"	25mm
1/2"	13mm	2"	50mm

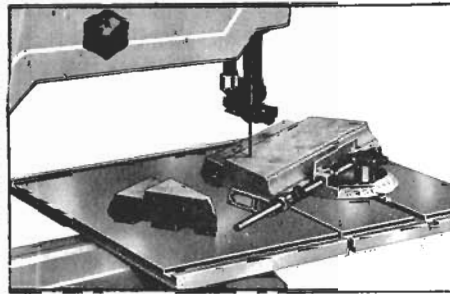
Since it is nearly impossible to sharpen blades, discard all dull blades. Never attempt to use a bent or cracked blade.

USE OF ACCESSORIES

MITRE GUIDE (FIG. 6)

Most crosscut work, especially with small pieces is more easily controlled with the use of a mitre guide. The mitre guide is also essential for accurate mitre and compound mitre cuts. The guide is graduated to 45 degrees for both left and right hand angles.

A stop rod attachment adds to the usefulness of the guide for repetitive cut off work.

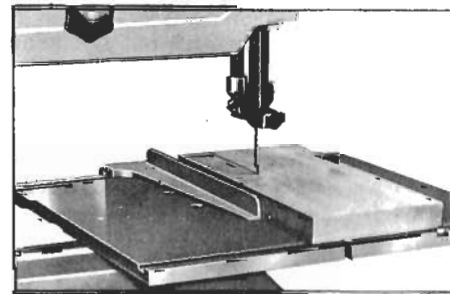


(FIG. 6)

RIP FENCE (FIG. 7)

True straight line ripcutting is best done by guiding the work against the rip fence. On this Bandsaw the fence can be attached to both the front and rear of the work table. The fence can also be used for cutting off to exact widths.

A width of cut indicator on the work table of the Bandsaw shows accurately the cut to the right hand side of the blade.

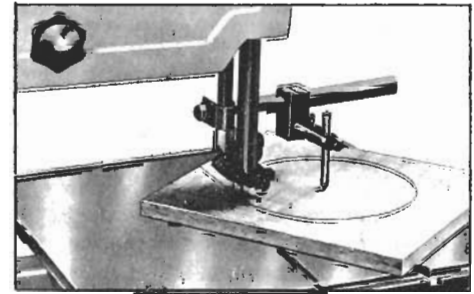


(FIG. 7)

CIRCLE CUTTING ATTACHMENT (FIG. 8)

The circle cutting attachment mounts on the arm of the upper guide block. Accurate circles can be cut with a radius of 50mm to 200mm.

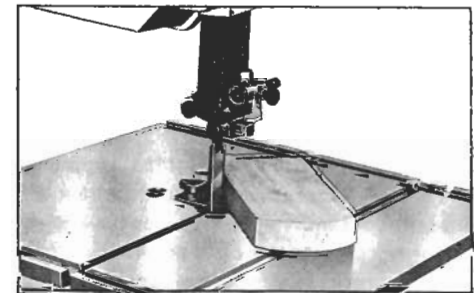
Make the first cut to the perimeter of the circle freehand before setting the pivot pin of the attachment into the work. The pivot pin must be aligned exactly to the right of the blade tips. If the pivot is too far back the blade will run outside the desired circumference - if too far forward, inside.



(FIG. 8)

USING YOUR BANDSAW AS A POWER SANDER (FIG. 9)

Remove the blade and fit a sanding belt as explained in CHANGING BLADES. However, make sure that the back bearings and blade guides, both upper and lower, are well clear of the abrasive sanding belt. Two sanding platens are available, one straight and one slightly curved. Screw the platen into the threaded hole in the work table near the table insert with the small lock knob provided with the sanding kit. Adjust the platen so that the belt just rests against it.



(FIG. 9)

Note: Although virtually any hard enough material can be sanded on this Bandsaw, sanding of iron or steel is not recommended. Ferrous metals give off sparks which can be carried to sawdust inside the saw. This can smoulder for a considerable time before catching flame, possibly when the workshop is unattended.

MAINTENANCE

CHANGING TYRES

Eventually the rubber tyres on the Bandsaw wheels will wear due to the constant contact of the sharp teeth of the blade. Lift the edge of the tyre with a small screwdriver and the tyre can be worked off the wheel easily. We recommend that all three tyres be changed at the same time.

BLADE GUIDES

Blade guides should be inspected regularly for wear or chipping. When replacing guides replace all guides at the same time, both upper and lower.

BEARINGS

All bearings used in the construction of your Bandsaw and its motor are sealed and lubricated for life.

CLEANOUT

Accumulated dust and chips should be removed from inside the Bandsaw frequently. Remove the front cover and use a brush or vacuum cleaner. At the end of every work session clean sawdust away from the motor vents.

TIPS ON USING YOUR BANDSAW

For all cutting operations the upper blade guard should be adjusted to just clear the work being cut. Not only does this provide the best operator safety but it also brings the blade guides closer to the work giving more accurate results and easier control.

Use both hands to feed the workpiece to the blade. The work must be held flat on the table at all times to prevent binding of the blade. Use a steady even pressure just sufficient to keep the blade cutting.

Always use a rip fence or mitre guide where possible to eliminate any sideways slip of the work. This is most important when the table is tilted to an angle.

Always plan work ahead. The tradesmans' rule is "measure twice, cut once". It is best to finish a cut in one continuous operation, but frequently backtracking will be necessary. Turn off the motor and allow the blade to come to a complete stop before backing the blade out of the cut.

Remember that the blade removes material during the cut. This gap created by the blade is called the kerf and must be allowed for when cutting to exact sizes. Plan your cut so that the kerf is to the scrap side of the line you wish to cut. If necessary, allow a little more for finish sanding.

RIP SAWING

This term refers to the cutting of timber with the grain rather than at a right angle to the grain. You can rip wood freehand to a previously drawn line, but best results are obtained by using the rip fence. If the table is set at a level angle set the

rip fence to the left hand side of the blade. This allows you to use your right hand to hold the work firmly against the fence. The width of cut indicator on the front of the work table shows the distance between the blade and the right hand edge of the timber.

When cutting a bevel rip, with the table tilted at any angle up to 45 degrees, set the rip fence to the right hand side of the blade if the width of the workpiece allows it.

With the fence on the downhill side of the table it will help support the work against slip. The width of cut indicator shows the distance between the blade and the rip fence.

CROSS CUTTING

This term refers to cutting of timber at right angles to the grain. This type of cut can also be made freehand but the mitre guide is used to ensure accurate results. The mitre guide can be adjusted to a 45 degree angle to produce mitre cuts, or with the table tilted as well, compound mitre cuts.

Make sure the work is held firmly against the table and against the face of the mitre guide. Be careful to keep your fingers away from the blade, particularly at the end of the cut.

The stop rod can be attached to the mitre guide to provide an end stop for cross-cutting many pieces to the same width. The end stop is also very useful in supporting work when cutting with the table tilted.

FREEHAND SAWING

The ease with which many different and varied shapes can be cut is one of the

most important features of the bandsaw. Select a blade suitable for cutting the smallest radius in the work you have planned.

When freehand cutting always feed the work slowly so that the blade can follow the line you wish to saw. Make sure not to drag the work off line forcing the blade sideways, or twisting it.

In many cases it is helpful to rough cut about 6mm away from the line in difficult curves and corners. In the case of very sharp curves which may be too tight for the blade, make relief cuts onto the face of the curve so that these scraps will fall as the final radius is sawn.

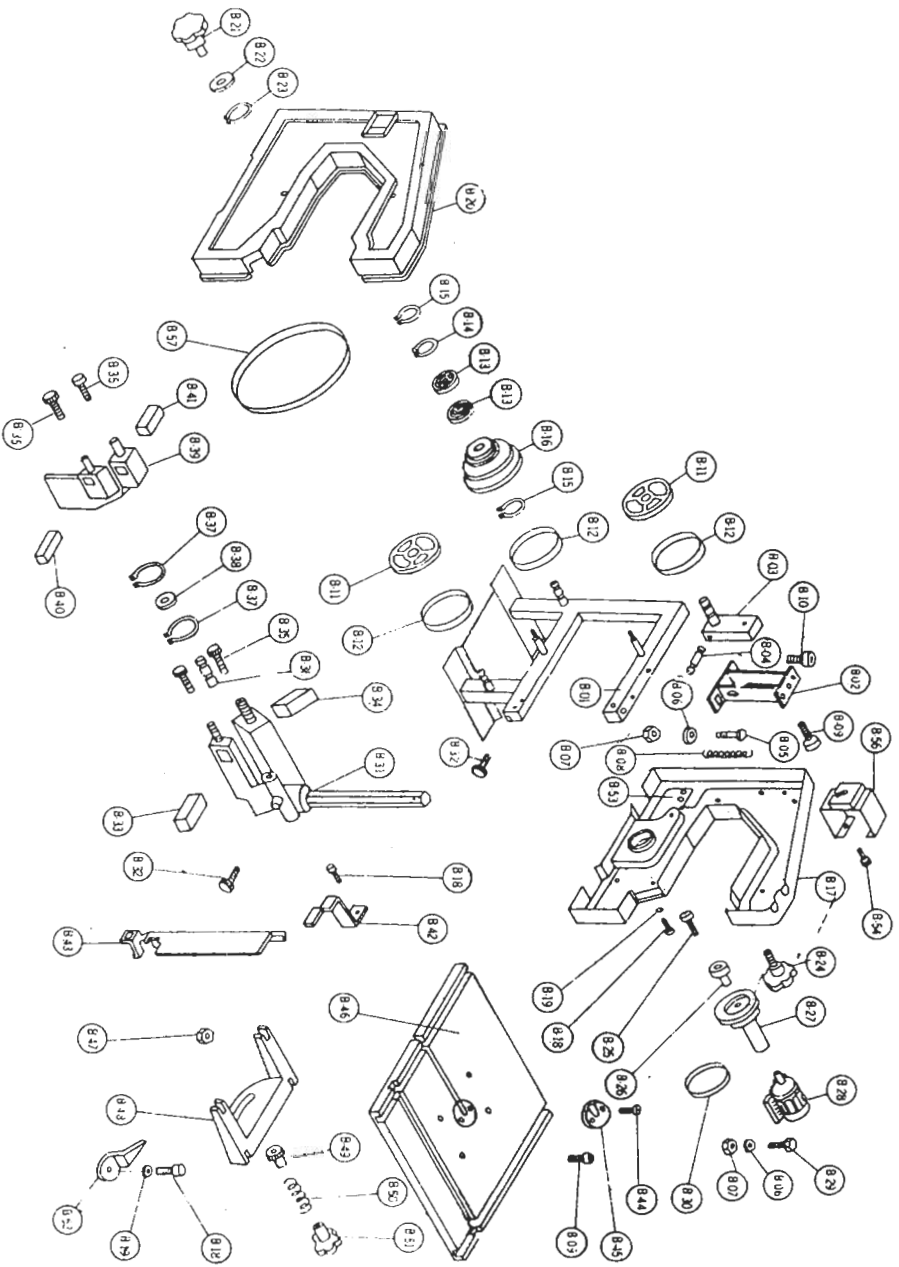
CUTTING METAL

Metal must only be cut at the lowest speed on your Bandsaw. Never attempt metal sawing at wood cutting speed - your blade will burn up very quickly.

Other than speed and correct blade selection, metal sawing is much the same as wood sawing. However, the rate at which you feed the work into the blade must be reduced to only as fast as the blade can cut.

Also, metals do not have the 'give' that timber has, so the work must be held very firmly to prevent twisting or misalignment of the blade while feeding.

PARTS LIST



PARTS LIST

KEY	DESCRIPTION	KEY	DESCRIPTION
B01	FRAME	B30	DRIVE BELT
B02	WHEEL SUPPORT	B31	UPPER GUIDE BLOCK
B03	AXLE BLOCK	B32	THUMBSCREW
B04	PIN	B33	BLADE GUIDE
B05	BOLT	B34	BLADE GUIDE
B06	WASHER	B35	THUMBSCREW
B07	NUT	B36	BEARING SHAFT
B08	TENSION SPRING	B37	CIRCLIP
B09	TRACKING BOLT	B38	BALL BEARING
B10	TENSION BOLT	B39	LOWER GUIDE BLOCK
B11	IDLER WHEEL	B40	BLADE GUIDE
B12	WHEEL TYRE	B41	BLADE GUIDE
B13	BALL BEARING	B42	BLADE GUARD SUPPORT
B14	CIRCLIP	B43	BLADE GUARD
B15	CIRCLIP	B44	SCREW
B16	DRIVE WHEEL	B45	TABLE INSERT
B17	REAR COVER	B46	WORK TABLE
B18	SCREW	B47	NUT
B19	WASHER	B48	TILT INDICATOR
B20	FRONT COVER	B49	SPRING SUPPORT BUSH
B21	LOCK KNOB	B50	SPRING
B22	WASHER	B51	LOCK KNOB
B23	CIRCLIP	B52	POINTER
B24	LOCK KNOB	B53	CABLE CLAMP (Not Shown)
B25	SOCKET HEAD BOLT	B54	SCREW
B26	PULLEY HUB	B55	SWITCH (Not Shown)
B27	MOTOR PULLEY	B56	SWITCH BOX
B28	MOTOR	B57	BLADE
B29	BOLT	B58	CORD AND PLUG (Not Shown)