

BOOK No. B415.

Modifications are made to these books from time to time and it is important therefore that only the book sent with the machine should be used as a working manual

PLEASE INSERT SERIAL NUMBER OF MACHINE

## INSTRUCTION MANUAL FOR

# 20" BZB

## 20" Bandsaw

Diameter of Saw Pulleys.	20"	500mm
Width of Saw Pulleys.	1½"	40mm
Maximum width of Saw.	1"	25mm
Maximum length of Saw.	12'9"	3890mm
Minimum length of Saw.	12'2"	3700mm
Maximum depth under Saw Guide.	13"	330mm
Distance Saw to Body.	19½"	495mm
Size of Table.	22" x 24"	560 x 610mm
Table cants.	45° to right.	10° to left.
Height of Table from Floor.	38"	965mm
Overall height of Machine.	79"	2000mm
Speed of Saw.	5210 ft/min.	1590 m/min.
H.P. of Motor (Standard).	2HP	2CV.
Speed of Motor - 50 cycles.	1,000rpm	1000rpm
60 cycles.	1,200rpm	1200rpm
Net Weight.	620 lb.	271 kg.

**For Replacement Parts, Tools & Accessories,**

**Contact Brian Stacey,**

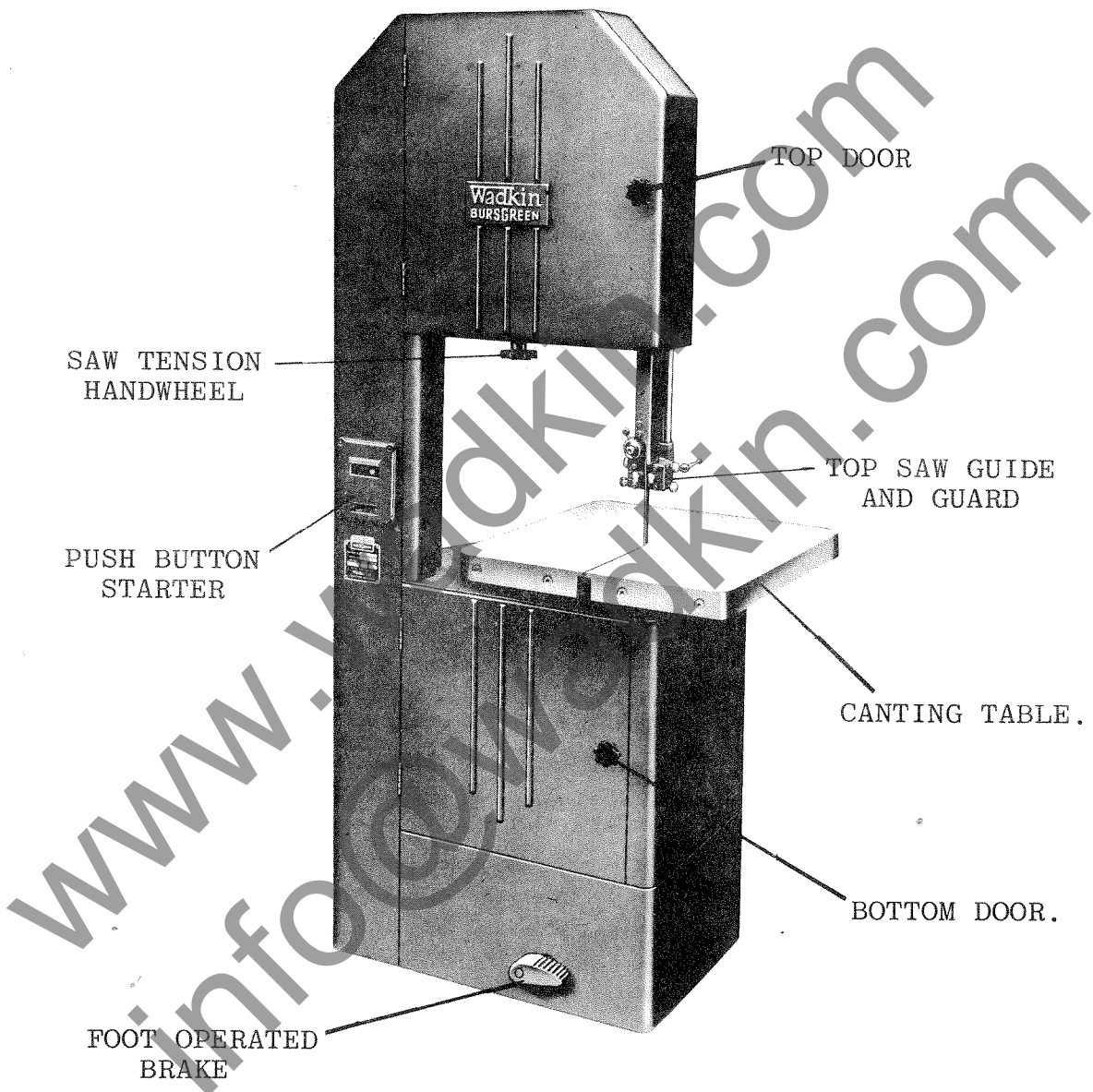
**Bursgreen (Durham) Ltd.,**

**Fence Houses, Houghton ~ le ~ Spring,**

**Tyne ~ Wear DH4 5RQ, England.**

**Telephone : Fence Houses 2385 (5 Lines)**

**Telex : 53441 (Bursgreen Duram)**



TOP DOOR

SAW TENSION  
HANDWHEEL

TOP SAW GUIDE  
AND GUARD

PUSH BUTTON  
STARTER

CANTING TABLE.

BOTTOM DOOR.

FOOT OPERATED  
BRAKE

### INSTALLATION

Remove protective coating from bright parts by applying a cloth soaked in paraffin, turpentine or other solvent.

When the machine is cased for export the table is removed and packed individually. Remove and re-assemble as shown in Fig. 1.

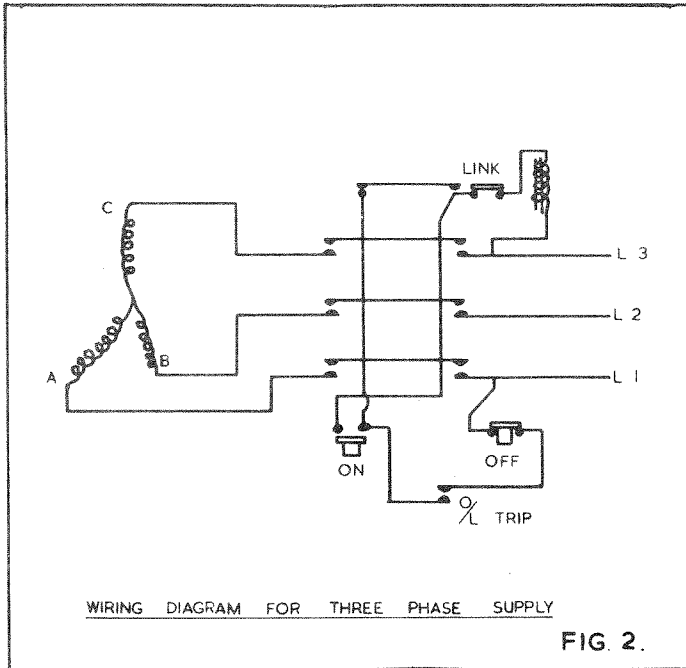


FIG. 2.

### WIRING DETAILS

The motor and control gear have been wired in before despatch. All that is required is to connect the power supply to the starter.

#### Points to note when connecting to power supply:

1. Check the voltage, phase and frequency correspond to those on the motor plate, also the correct coils and heaters are fitted to the starter.
2. It is important that the correct cable is used to give the correct voltage to the starter as running on low voltage will damage the motor.
3. Check the main line fuses are of the correct capacity. See list below.
4. Connect the line leads to the appropriate terminals. See Fig. 2 for three phase supply.
5. Check all connections are sound.
6. Check the rotation of the motor for the correct direction. If this is incorrect reverse any two of the line lead connections.

For single phase supply refer to booklet supplied with the starter for wiring details.

VOLTAGE	PHASE	S.W.G. FINNED COPPER WIRE	AMPS
550, 400/440, 380/420	3	25	15
340/380	3	25	15
220	3	22	24
200/250	1	18	45

### LUBRICATION

It is advisable to keep all bright parts covered with a thin film of oil to prevent rusting. Clean sawdust from inside main frame weekly. See Fig. 3.

TYPE OF OIL RECOMMENDED POWER EM 125.  
TYPE OF GREASE RECOMMENDED SHELL ALVANIA 3.

### FOUNDATION

See Fig. 4 for bolt positions and clearance required. When installing the machine level the table by packing under the base. Foundation bolts are not supplied with the machine except by special order.

### DUST EXTRACTION

The machine has a built in dust chute with a  $3\frac{3}{4}$ " (95 mm) x  $2\frac{1}{2}$ " (64 mm) rectangular exhaust outlet and can be connected to main dust extraction plant if desired.

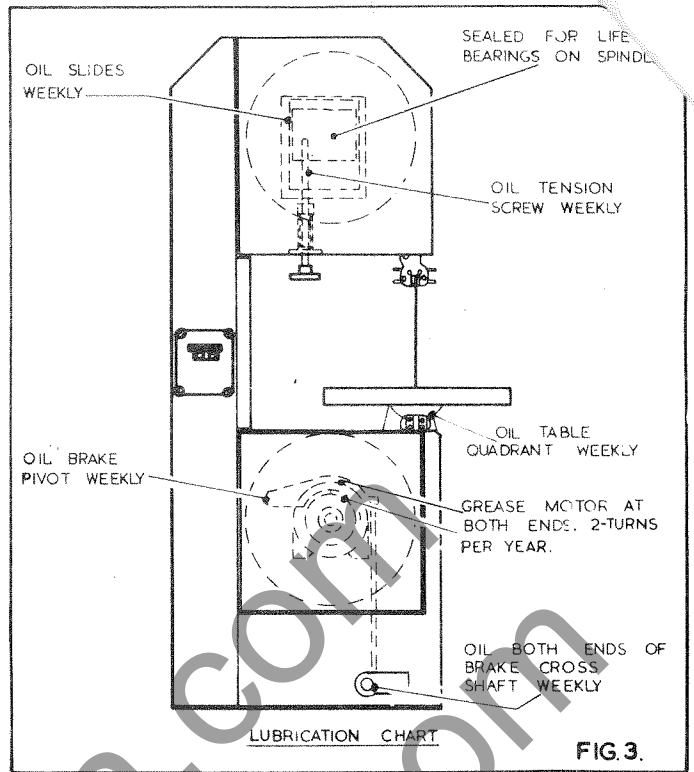


FIG. 3.

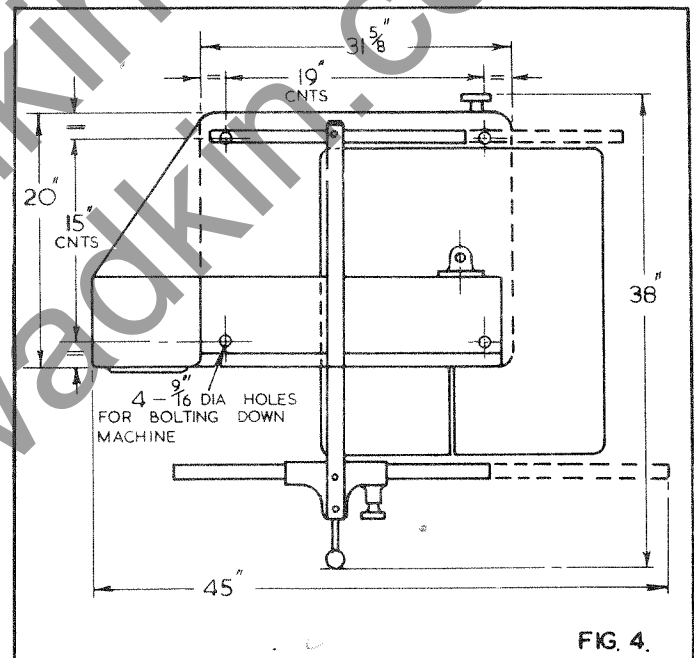


FIG. 4.

### FITTING BANDSAW BLADES

Proceed as follows:

1. Open top and bottom doors of the main frame and ensure the table is in the horizontal position.
2. Loosen the wingnuts on the underside of the table directly below the slot at the front of the table. Swing table keep plate clear of the slot so the sawblade can be inserted.
3. Remove sawguard and move the top and bottom guides to the extreme rear position by loosening the locking screws "A" for top guide in Fig. 6 and "A" for bottom guide in Fig. 8.
4. Lower top wheel assembly sufficient to allow the blade to be placed on both wheels easily.
5. Insert sawblade through the slot in front of table and position blade on top and bottom wheels. Care should be taken to ensure that the blade is free in the guides. Check the cutting rake of teeth are positioned downwards at the cutting point. To reverse direction of cutting rake turn blade inside out. Turn tensioning headwheel until blade is just held on the wheels.

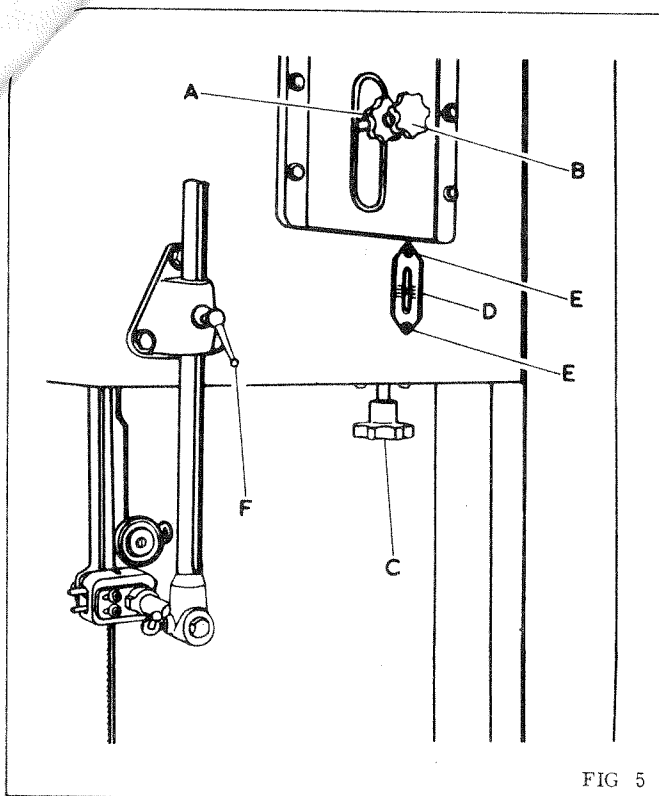


FIG 5

### TRACKING OF SAWBLADE ON WHEELS

Every sawblade has slightly different running characteristics on a bandsaw machine due to the condition of the steel ribbon it is made from, the blade joints and the tension in the blade ribbon. This is compensated by using a crowned or slightly curved rubber face on the wheels and providing the top wheel with a slight titling movement.

To check the tracking of the sawblade the undermentioned procedure should be followed.

1. Rotate the top wheel slowly by hand in a clockwise direction and check the blade is running central on the wheels.
2. If not running central loosen handwheel "A" in Fig. 5 and adjust handwheel "B" until the saw is tracking correctly i.e. in the centre of both wheels.
3. When tracking correctly re-lock handwheel "A". This adjustment is most important as when the sawblade is tracking correctly it passes in a straight line between the top and bottom wheels and does not snake. When the latter occurs the back of the sawblade keeps hitting the back guide roller and woodwork resulting in damaged guides.

### TENSIONING

To tension the sawblade turn the handwheel "C" in Fig. 5 until the correct tension is reached according to the scale "D". The scale gives the correct tension for the width of blade which is being used irrespective of the length of the blade.

Incorrect tension or tightness of the sawblade over the wheels will result in saw breakages so always use tension indicator to achieve maximum blade life.

The scale and pointer are accurately set before despatch from the works. Should this be displaced for any reason check the scale by the undermentioned procedure.

1. Tension the sawblade as previously described until it can be pulled  $\frac{1}{4}$ " (6mm) from its true line at a central point between the two wheels.
2. Check whether the scale indicates the correct sawblade width. If scale is incorrect loosen the two screws "E" in Fig. 5 and position scale correctly. When set tighten all screws. After the scale has been set in this manner it will read correctly for any width of blade within the range of the machine without further alteration, even if the length of sawblade varies for any given width.

For a  $\frac{1}{2}$ " blade the pointer should read  $\frac{1}{2}$ " etc. If the machine is left standing for a period e.g. overnight, the tension should be reduced, and the blade re-tensioned before putting the machine into operation again.

### SETTING GUIDES

On this machine, guides are fitted above and below the table and are similar in design. Each guide is fitted with long life roller bearings.

After the blade is tracking perfectly proceed to set the guides as follows :

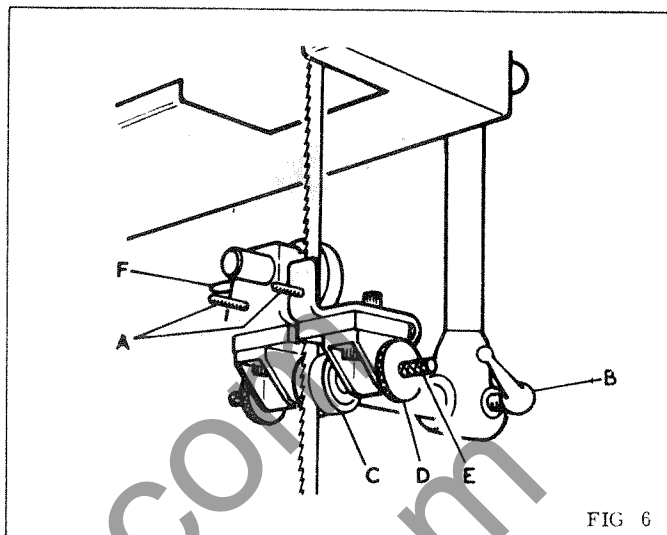


FIG 6

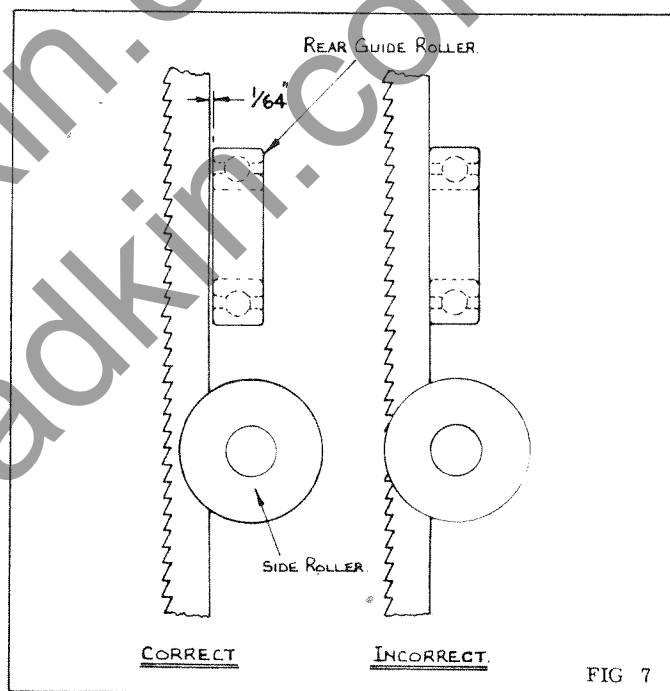


FIG 7

### TOP GUIDE ASSEMBLY

1. Loosen 2 knurled nuts from studs "A" in Fig. then remove sawguard.
2. Bring guide assembly forward by loosening ball lever screw "B" until side roller guides "C" are positioned just behind the gullet of the sawblade as shown in Fig. Relock complete guide assembly in this position
3. Set the side roller guides "C" just clear of the sawblade by loosening the knurled locknuts "D" positioning guides by means of knurled adjusting screws "E", then relock locknuts "D".

Positioning the side roller guides as above ensures that support is given to the sawblade but guides do not nip blade.

NOTE: Care should be taken when setting guides so as not to displace sawblade from its true vertical position.

4. Loosen thumbscrew "F" and position rear roller guide "G" to within  $\frac{1}{64}$ " (0.4mm) from the back of the sawblade in its free position. Relock in position by thumbscrew "F".
5. Replace sawguard complete with 2 knurled nuts on studs "A".

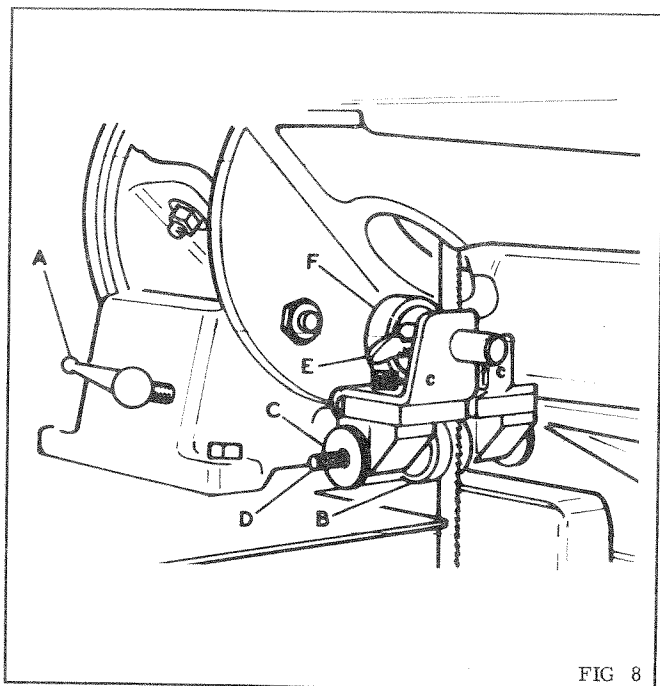


FIG 8

#### BOTTOM GUIDE ASSEMBLY

1. Bring guide assembly forward by loosening ball lever screw "A" in Fig. 8 until side roller guides "B" are positioned just behind the gullet of the sawblade as shown in Fig.

Relock complete guide assembly in this position.

2. Set the side roller guides "B" just clear of the sawblade by loosening the knurled locknuts "C", positioning guides by means of the knurled adjusting screws "D" then relock locknuts "D".

Positioning the side roller guides as above ensures that support is given to the sawblade but guides do not nip blade.

NOTE : Care should be taken when setting guides so as not to displace the sawblade from its true vertical position.

3. Loosen thumbscrew "E" and position rear roller guide "F" to within  $1/64$ " (.4mm) from the back of the sawblade in its free position. Relock in position by thumbscrew "E".

#### BRAKE

The brake is operated by depressing the foot pedal as shown in Fig. 1. This actuates the brake rod and forces the brake shoe against the bottom wheel hub.

The brake should only be applied after the stop button has been pressed.

#### TABLE

The table cants  $45^{\circ}$  to the right and  $10^{\circ}$  to the left.

#### FOR RIGHT HAND CANT :-

1. Loosen the table locking lever "A" in Fig. 9
2. Cant table until required angle is reached. The locking lever locks both front and rear trunion plates simultaneously, this gives perfect rigidity to the table.

#### FOR LEFT HAND CANT :-

1. Loosen wingnut "B" in Fig. 9 and swing stop bracket clear of the stop screw in the table.
2. Loosen the table locking lever "A" and cant table until required angle is reached. Lock table in position.

The table is set square to the sawblade, from front to rear, before despatch from the works. Should this setting be disturbed for any reason check by the undermentioned procedure.

1. Ensure the top and bottom guides are clear of the blade so that it is not restricted in any way.
2. Check the blade is tracking correctly i. e. running in the centre of each wheel. (See instructions under "Tracking of Sawblade").

3. Check the blade for square to the table by means of a steel square.

If adjustment is necessary loosen the  $4-3/8$ " whit bolts "C" in Fig. 9 and adjust the two fine thread adjusters "D" until table is correctly set. When set tighten all screws.

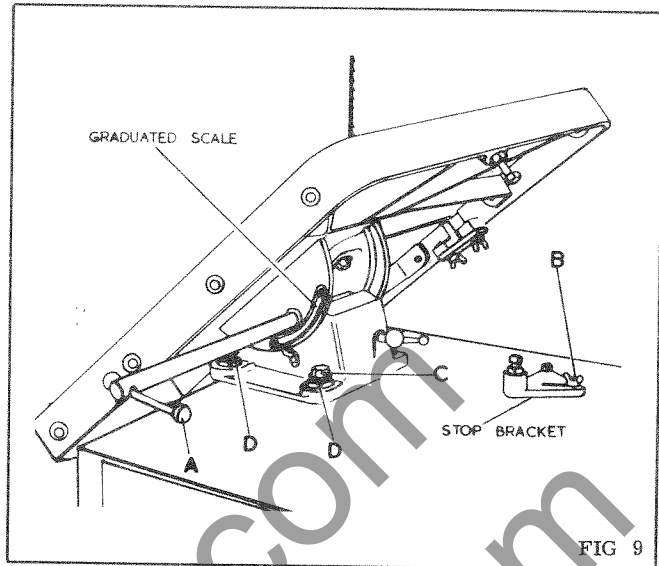


FIG 9

To check the  $90^{\circ}$  positive stop follow the undermentioned procedure.

1. Ensure the top and bottom guides are clear of the blade so that it is not restricted in any way.
2. Check the blade is square to the table by means of a steel square after ensuring that the stop bracket is in the correct position and the adjustable stop screw in the table is hard up against this bracket. If necessary adjust the bolt in the table and re-check. When set tighten all screws. Check the pointer is correct to the graduated scale and adjust if necessary.

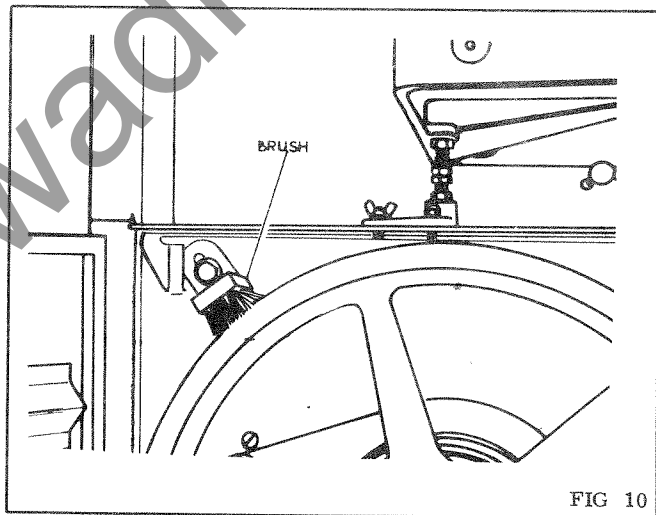


FIG 10

#### SAW WHEELS

A brush as shown in Fig. 10 is provided on the bottom pulley to remove sawdust, whilst the rubber on the top pulley should be cleared daily to prevent accumulation of sawdust which could cause the blade to run out of a true line.

Badly worn pulleys should be replaced by new ones. If the machine is used with badly worn pulleys the saw will vibrate, resulting in bad sawing and saw breakages.

We have a service arrangement, which we recommend whereby newly rubbered pulleys can be supplied against the return of existing pulleys. An appropriate charge being made for re-rubbering only. To avail yourself to this service return existing pulleys to :

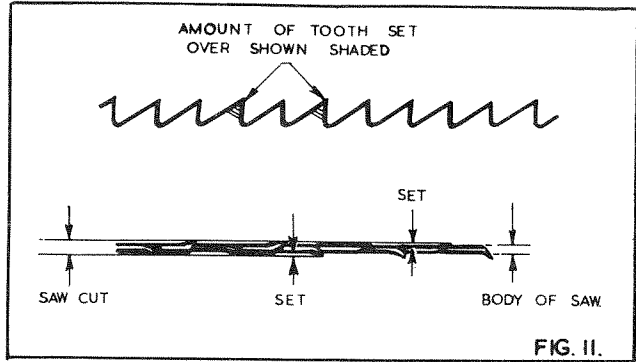
BURSGREEN (DURHAM) LIMITED  
FENCE HOUSES TRADING ESTATE, HOUGHTON-LE-SPRING  
CO. DURHAM.

**REMOVAL OF SAW WHEELS**

The top and bottom wheels are identical. To remove a wheel for re-rubbing unscrew the four 3/8" whit. nuts around the hub and remove wheel complete leaving the hub on the machine.

**MAINTENANCE OF BANDSAW BLADES**

A properly sharpened bandsaw blade will give clean, accurate cutting and this is achieved by proper setting and sharpening of the teeth. Always set the teeth before sharpening.



**SETTING**

In order to cut satisfactorily bandsaw teeth must be set by bending the teeth alternately out of the line of the blade. This presents alternate pairs of teeth, wider than the thickness of the ribbon and prevents the ribbon rubbing in the wood being cut and getting hot.

There are two usual ways of setting bandsaw teeth depending generally upon the amount of work to be done.

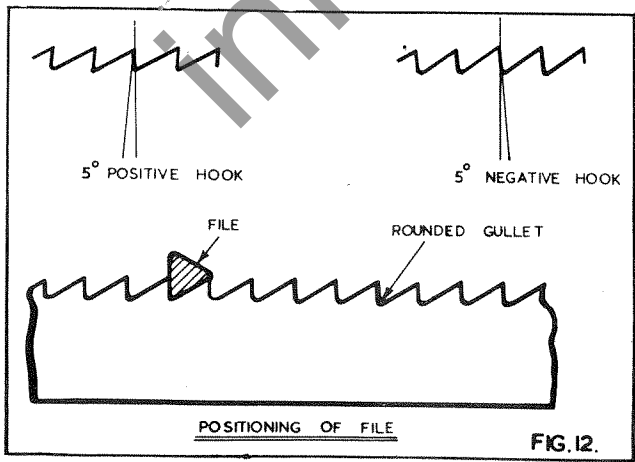
**1. HAND SETTING**

The points of the teeth are set by using a hand setting tool of the plier type. The points only of the teeth must be set and as a general rule the set on each side is .010" (.3 mm). Set is applied in opposite directions for each alternate tooth.

Where hand setting is employed it cannot be ensured that all the teeth are cutting and in order to overcome this the teeth should be stoned occasionally. An ordinary fine grit stone is used and the back runner guides should be temporarily brought forward until it is in contact with the back of the blade. The blade should then be run and the stone carefully applied to the teeth each side of the blade. When the saw is subsequently sharpened it will be noted that each tooth has not been marked with the stone, and such teeth should only be filed very slightly. The remainder of the teeth which have actually been stoned should be filed in the normal manner until the flat caused by the stone disappears. Bandsaws may require stoning approximately once to every six sharpenings.

**2. MACHINE SETTING**

A setting attachment can be supplied to special order for fitting to the standard grinding machine as shown in Fig. 23. Also recommended is the separate inexpensive setting machine as shown in Fig. 25. A feature of this machine is that the strikers which push the teeth over are arranged on opposite sides of the blade, and strike adjacent teeth simultaneously. In this way the shock of the two strikers cancel each other out, and does not damage the body of the band ribbon.



**SHARPENING**

This is normally done by using a triangular section file. Again this operation can be done by hand or machine.

**HAND FILING**

It is essential to employ an efficient and quick acting vice and round cornered triangular file, both as illustrated in Fig. 20 and 21.

The face of each tooth should be filed across and with the same stroke the back of the following tooth should be filed at the same time. One stroke of the file should be sufficient to sharpen each tooth, and this stroke should be as light as possible in order to avoid producing a burr. The shape of the gullet is automatically maintained at 60° by the file, which the angle of the hook on the tooth is dependable on the position of the file. For general work approximately 5° of positive hook should be given. A greater or smaller hook should be applied for soft or harder woods respectively. In the case of particularly hard woods a negative rake may be necessary, while a wider tooth pitch than standard may be required for sawing timbers of an abrasive nature, and those containing gum.

Always sharpen square across the face of each tooth and NOT on the bevel, otherwise the saw will vibrate violently, which shatters the steel, and cracks appear causing saw breakages.

Use a file with rounded corners and of triangular section. It is important to keep the gullet of each tooth rounded otherwise cracks will soon appear. Saws must be sharpened at regular intervals and should never be forced to cut with teeth which have become blunt.

**NOTE:**

When reconditioning bandsaw blades it is necessary to set the teeth first before sharpening. This ensures that the face of the tooth is square. If the sharpening was carried out first, the subsequent setting would result in an angular tooth shape being obtained.

**MACHINE FILING**

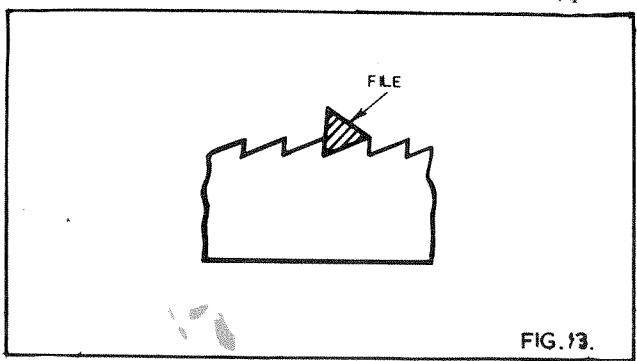
A sketch of the automatic machine for filing blades is given in Fig. 22. Further details of this machine will be forwarded on request.

**GENERAL CAUSES OF SAW TROUBLE**

1. Crystallisation of the ribbon, produced by the back of the saw rubbing against the back runner guide. The disc should revolve only by contact with the back edge of the saw when actually cutting.
  2. Using a blade that is too wide for the radii being cut. In attempting to cut a small curve with a saw too wide the blade tends to twist against the guides causing friction and overheating which destroys the temper in the steel.
  3. Not enough set.
  4. Sharpening with a sharp cornered file. See Fig. 13.
  5. Bad brazing due to dirty joints or badly prepared laps or incorrect positioning of the laps, causing a bump on the back of the blade at the joint.
- See Fig. 24 for an efficient bandsaw brazer.

**SMALLEST RADII WHICH MAY BE SAWN WITH GIVEN WIDTH OF BLADE**

WIDTH OF BLADE	1/8"	3/16"	1/4"	3/8"
MINIMUM RADIUS	1/8"	5/16"	5/8"	1.7/16"
WIDTH OF BLADE	1/2"	5/8"	3/4"	1"
MINIMUM RADIUS	2 1/2"	3 3/4"	5.7/16"	7 1/4"



**FOLDING BANDSAW BLADES**

Bandsaw blades are folded in thirds. This is done by holding the blade firmly in both hands with the palms upwards as shown in Fig. 14(a). Turn the hands over, this will twist the blade, as shown in Fig. 14(b). Don't let the blade slip or turn in the hands. The blade will almost automatically fall into three loops.

The blade should be kept in a safe dry place.

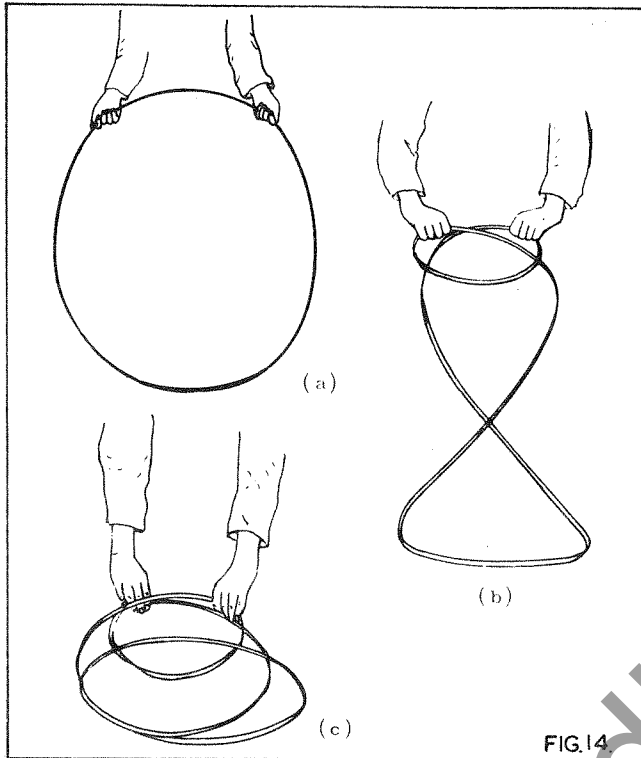


FIG. 14

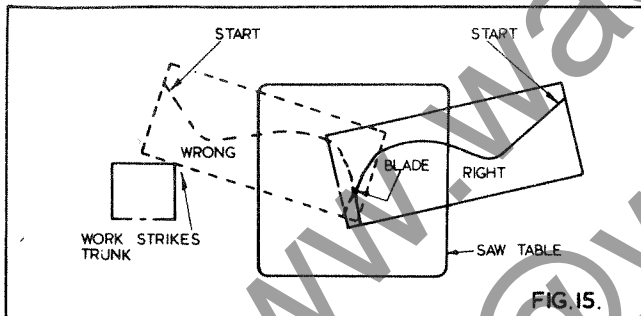
**HINTS ON CUTTING**

FIG. 15

- (a) **WATCH FEED DIRECTIONS** - See Fig. 15. Mentally follow the path of the cut before actually cutting the work. If not started properly many pieces of work will foul against the trunk of the machine.

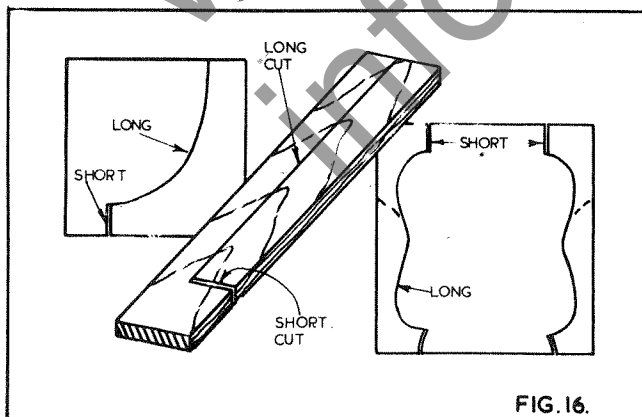


FIG. 16

- (b) **MAKE SHORT CUTS FIRST** - See Fig. 16. When a choice of starting points is offered always make short cuts first. Back tracking out of a short cut can be done much more quickly than backing out of a long cut.

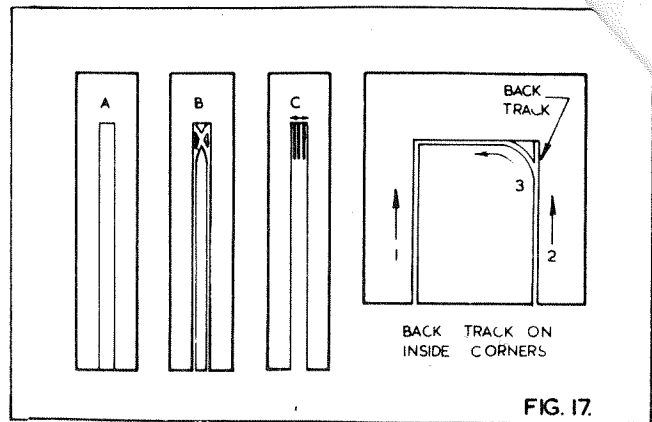


FIG. 17

- (c) **BACKTRACK ON CORNERS** See Fig. 17. Very narrow grooves must be nibbled as shown at A, B, C. On other inside corners, cut to the corner and then backtrack to lead the blade over to second line.

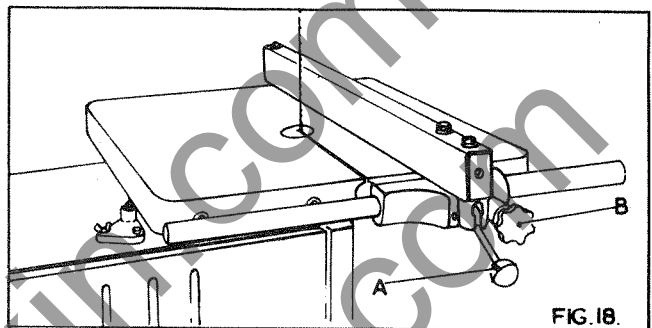


FIG. 18

**PLAIN FENCE (TO SPECIAL ORDER)**

The fence can be used on either side of the saw depending on the position of the slide bars and is provided with rapid or micro-adjustment.

For rapid adjustment lift lever "A" in Fig. 18 and pull handwheels "B" out of the fence bracket and position fence where required. Re-lock fence by depressing lever "A".

For micro-adjustment lift lever "A" and push handwheel "B" into the fence bracket. This engages the pinion in the rack. Turn handwheel "B" until the required position is reached and re-lock fence in position.

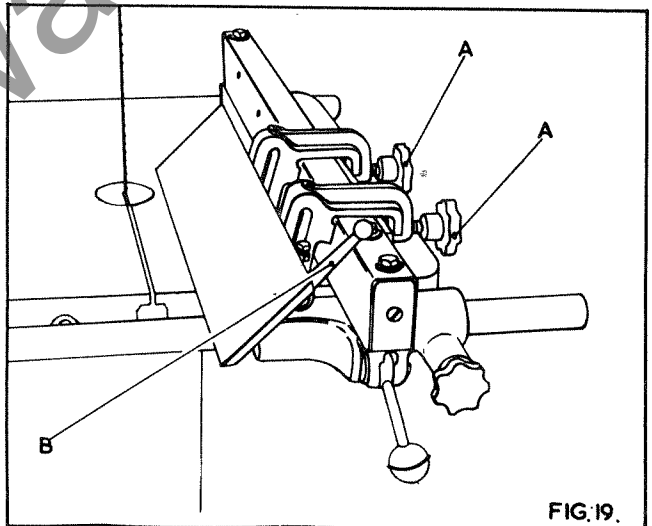


FIG. 19

**CANTING FENCE (TO SPECIAL ORDER)**

This type of fence can be used on either side of the saw. It is fitted to the body of the standard plain fence, by two handwheels "A" shown in Fig. 19. Care should be taken not to lock the handwheels too tightly so the plain fence is not damaged.

To cant fence loosen lever "B", cant to required angle and then lock lever "B".

To reverse fence for opposite side of saw remove lever "B" and washer, slide out pivot stud complete with airtight nut and special flanged washer. Slide into opposite end and replace lever "B" and washer.

**BANDSAW BLADES**

Spare bandsaw blades of the correct length, ready set and sharpened, for wood cutting are available from stock. Where it is preferred bandsaw blading in strip form can be supplied for customers to make up their own blades. This bandsaw strip is offered either toothed only or toothed, sharpened and set.

In addition to woodcutting we can supply bandsaw blades for plastics, bonded wood, non-ferrous metals, meat, etc. provided that the correct machine speeds are available.

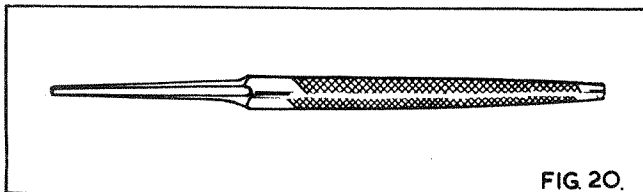


FIG. 20.

**TAPER TRIANGULAR FILES FOR HAND USE**

LENGTH ..... 6", 8", 10".

The edges of these files have rounded corners to produce the round gullet which prevents saw cracks.

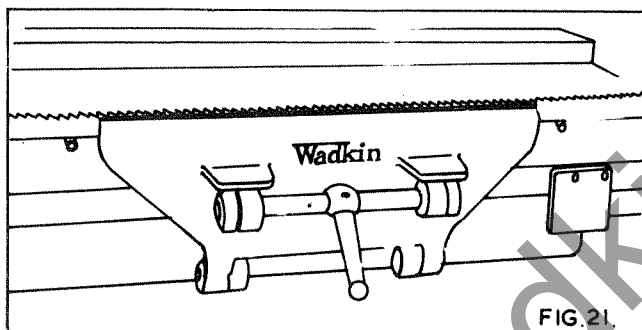


FIG. 21.

**BANDSAW FILING VICE**

A specially designed vice for holding band or fret saws also handsaws. Jaws are 17" (430 mm) long and will take saws up to 2 1/2" (64 mm) wide. Jaws open instantaneously by lever handle.

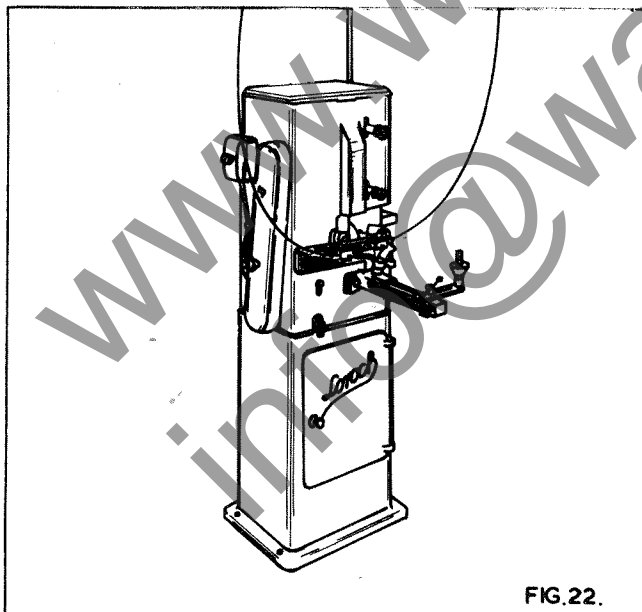


FIG. 22.

**WADKIN "LOROCH" BANDSAW GRINDER TYPE "HH"**

This machine is fully automatic and ensures that each tooth is sharpened to the correct shape and depth.

Any length of saw can be filed up to a maximum width of 2.3/8" (60 mm) with teeth up to 1.3/16" (30 mm) pitch and 3/4" (19 mm) deep.

A setting attachment can be supplied to special order for fitting to the machine as shown in Fig. 23. Bandsaws of any length up to 2" (50 mm) wide and 5/8" (16 mm) pitch can be set using this attachment.

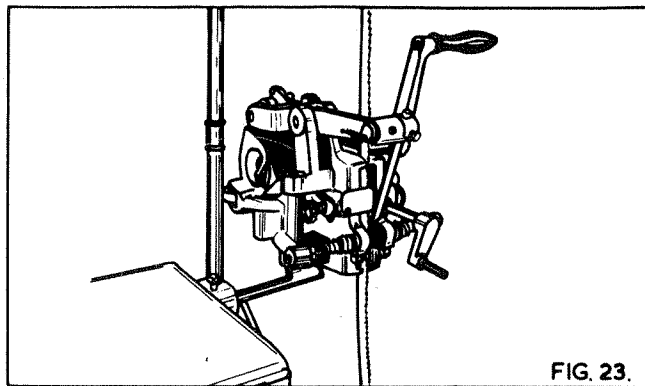


FIG. 23.

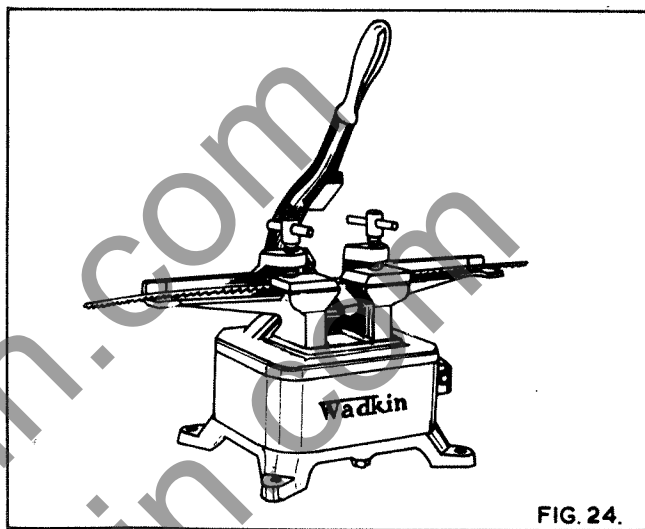


FIG. 24.

**WADKIN ELECTRIC BANDSAW BRAZER TYPE "HE"**

This machine efficiently brazes bandsaws, from 1/4" (6 mm) to 1" (25 mm) wide which have been broken. The two ends of the saw are firmly held by the clamps, and controlled heat applied electrically. A small quantity of solder and brazing compound are supplied with the machine. The actual brazing takes from 25 to 45 seconds according to the width of blade. Before brazing the ends of the sawblade must be carefully bevelled.

A separate instruction chart is used with the brazer.

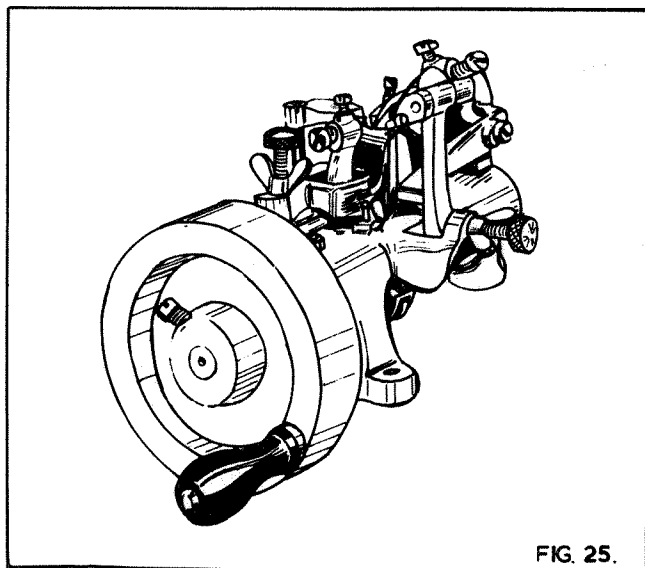


FIG. 25.

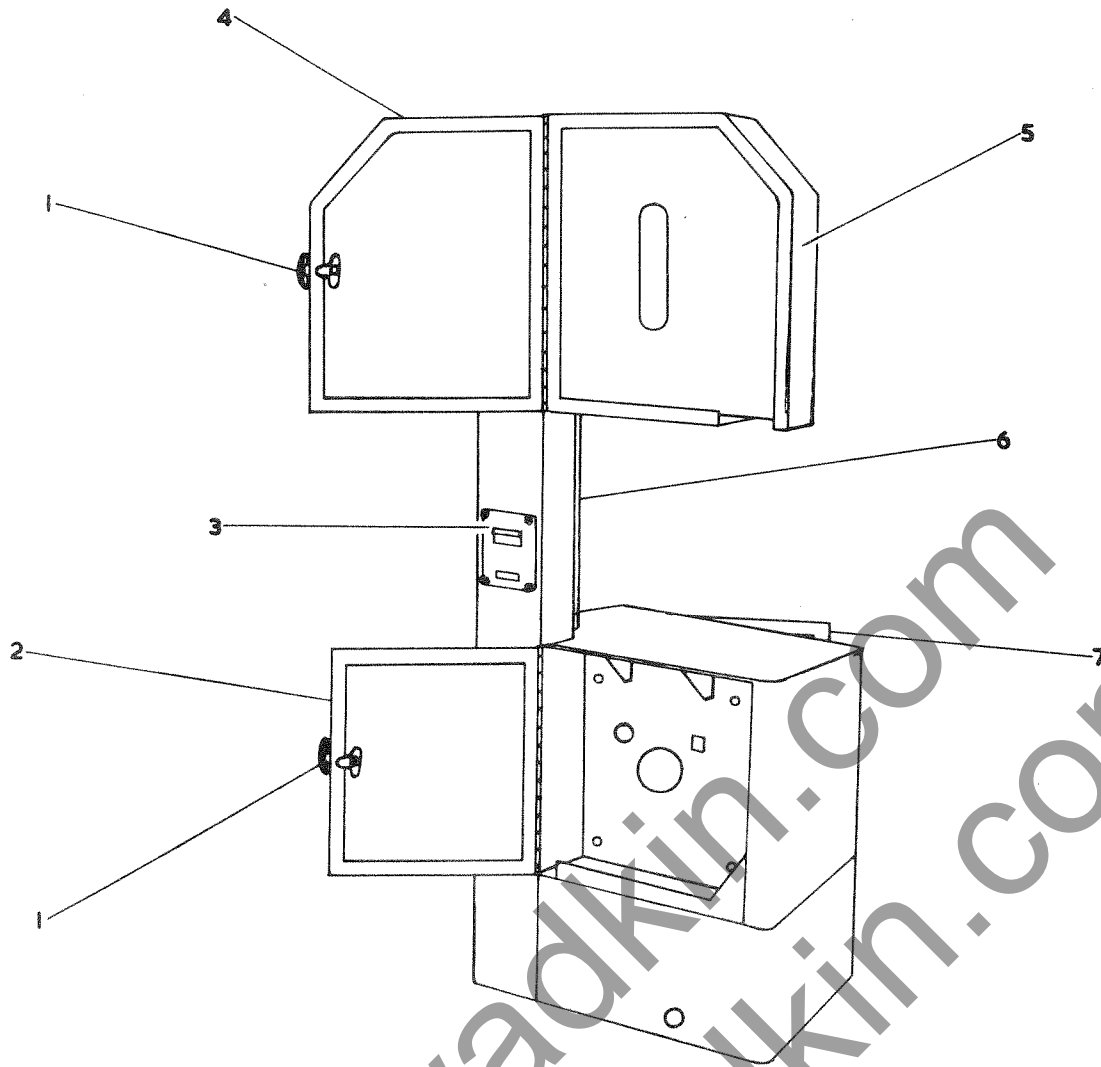
**WADKIN BANDSAW SETTING MACHINE TYPE B/SS**

For bandsaws up to 1 1/4" (32 mm) wide x 1/2" (13 mm) pitch.

All adjustments are quickly and easily made to this robust and thoroughly practical tool. It is usually operated by hand and setting is at the rate of two teeth per revolution of wheel. When preferred the machine may be power driven by a flat belt on the pulley face of the handwheel.



Application	Approved Lubricant					
	Castrol	B. P.	Shell	Esso	Texaco / Caltex	Wadkin
Worm Boxes	Alpha 617	Energol CS425	Vitrea 75	Pen-O-Led E. P.3	Regal Oil J	L. 2.
General Lubrication	Magna ED	Energol HP. 20	Vitrea 33	Esstic 50	Ursa Oil P. 20	L. 4.
Pneumatic Lubricators	Hyspin AWS 32	Energol HL 65	Tellus 27	Nuto H 44	Rando Oil HDA	
Grease	Spherol AP. 3	Energrease LS. 3	Alvania 3	Beacon 3 Starfak Premium 3	Regal	L. 6.
Brake Cables	Brake cable grease	Energrease L21M	Alvania 3	Multi-purpose grease H		

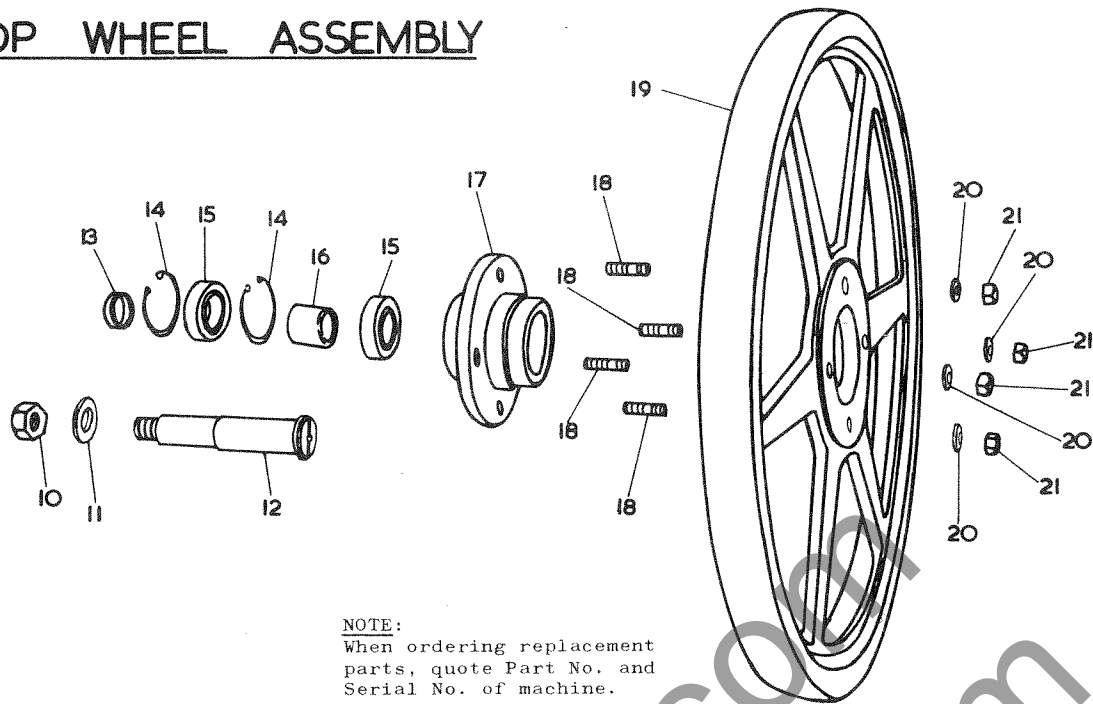


## MAIN FRAME ASSEMBLY

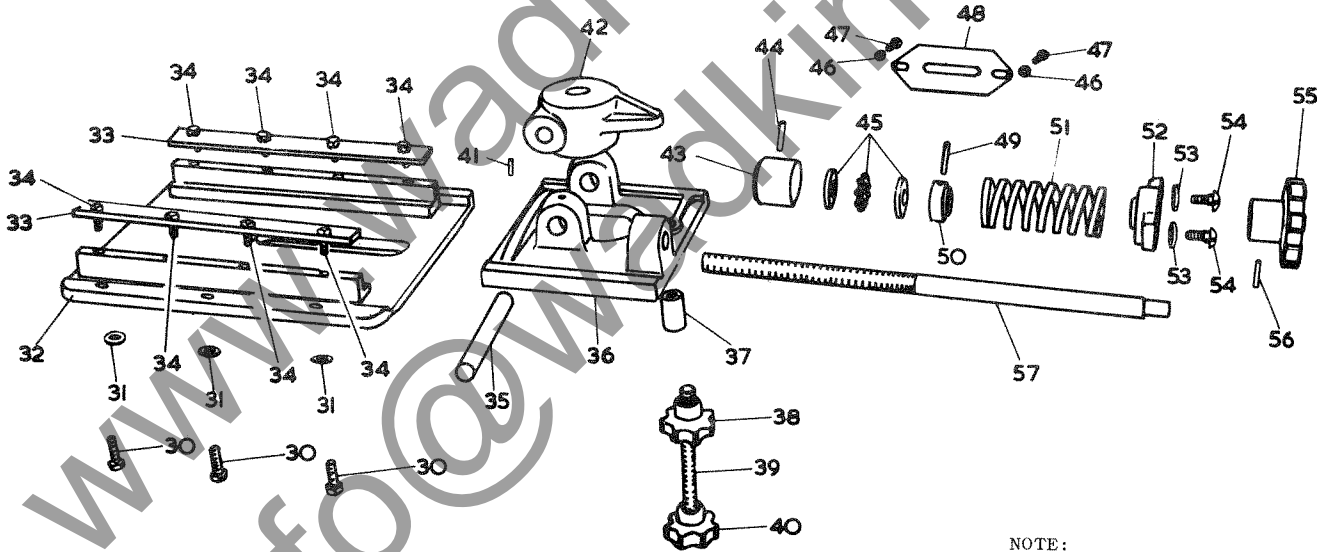
<u>Ref.No.</u>	<u>Part No.</u>	<u>No.off</u>	<u>Description</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>No.off</u>	<u>Description</u>
1	T.44.RE Non locking.	2	Handle for door (top and bottom door).	4		1	Top door.
	T.44.LE Non locking.	1	Handle for door (rear door).	5	E-1042/1	1	Main frame.
2		1	Bottom door.	6		1	Cover for saw
3	44ADS/FO	1	MEM starter (standard 50 cycle; 2HP, TEFC, 50 cycle).	7		1	Rear door (special on 1PH machines).
	84ADS/FO	1	MEM starter (3HP drip proof 50 cycle; 3HP, TEFC 50 cycle).				
	ZT3	1	Brook starter (2HP, 1PH, 50 cycle; 2HP, 1PH 60 cycle).				
	AT3	1	Brook starter (2HP, Drip proof, 3HP, 60 cycle; 3HP, Drip proof, 3PH 60 cycle; 2HP TEFC, 3PH, 60 cycle; 3HP, TEFC, 3PH, 60 cycle).				

**NOTE:**  
When ordering replacement parts, quote Part No. and Serial No. of machine.

# TOP WHEEL ASSEMBLY

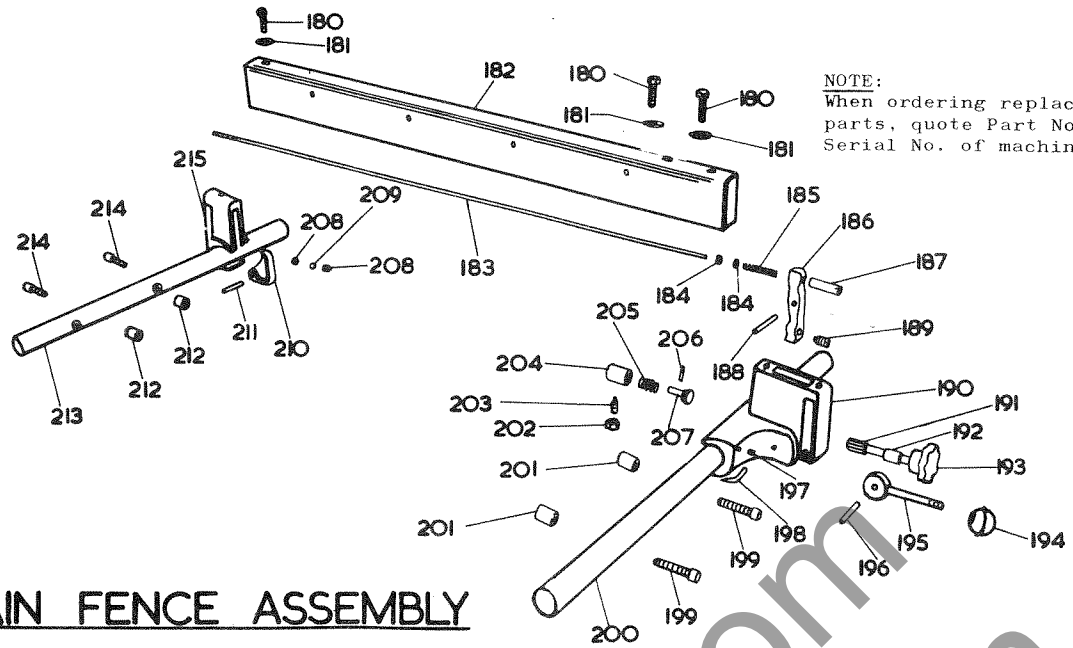


Ref.No.	Part No.	No.off	Description.	Ref.No.	Part No.	No.off	Description
10		1	5/8" whit. nut.	16	A 1042/20	1	Top wheel distance piece (1 1/4" long)
11		1	5/8" whit. washer.	17	B-1042/9	1	Top wheel hub.
12	A-1042/21	1	Top wheel spindle.	18		4	3/8" whit. x 1.3/8" long stud.
13	A-1042/20	1	Top wheel distance piece (3/8" long)	19	D 1042/2	1	Wheel.
14		2	52 m/m internal circlip.	20		4	3/8" washer.
15	DN.205	2	Fischer sealed for life bearings.	21		4	3/8" whit. nut.



# SLIDE ASSEMBLY

Ref.No.	Part No.	No.off	Description	Ref.No.	Part No.	No.off	Description
30		6	5/16" whit. x 1" long hexagon head bolt.	45	W.5/8"	1	Hoffmann Thrust race.
31		6	5/16" washer.	46		2	3/16" washer.
32	D-1042/36	1	Top wheel slide frame.	47		2	3/16" whit. x 1/2" long round head screw.
33	D-1797/32	2	Top wheel slide strip.	48	A-1042/69	1	Saw tension indicator plate (standard).
34		8	1/4" whit. x 3/4" long hexagon head bolt.		A-1042/74	1	Saw tension indicator plate (metric).
35	D-1797/29	1	Top wheel pivot shaft.	49	A-1042/70	1	Saw tension indicator pin.
36	D-1797/5	1	Tracking and tension slide.	50	A-1042/61	1	Saw tension spring seating.
37	D-1797/47	1	Tracking distance piece.	51	A-1024/35B	1	Saw tension spring.
38	Patt.No.14	1	2" dia. plastic handwheel	52	B-1042/63	1	Saw tension screw bearing.
39	D-1797/31	1	3/8" whit. TRT.	53		2	3/8" washer.
40	D-1797/31	1	Saw tracking screw.	54		2	3/8" whit. x 1" long round head screw.
41		1	2" dia. plastic handwheel, 1/2" whit.	55	Patt.No.14.	1	3" dia. plastic handwheel, 1/2" bore.
42		1	1/4" whit. x 1/2" long socket head grubscrew.	56		1	No. 3 taper pin.
43	D-1797/4	1	Tracking boss.	57	B-1042/62	1	Saw tension screw.
44	D-1797/4	1	Tracking boss.				
45	A-1042/60	1	Tension screw shroud.				
46		1	3/16" dia. x 1 1/4" long groverlok dowel.				

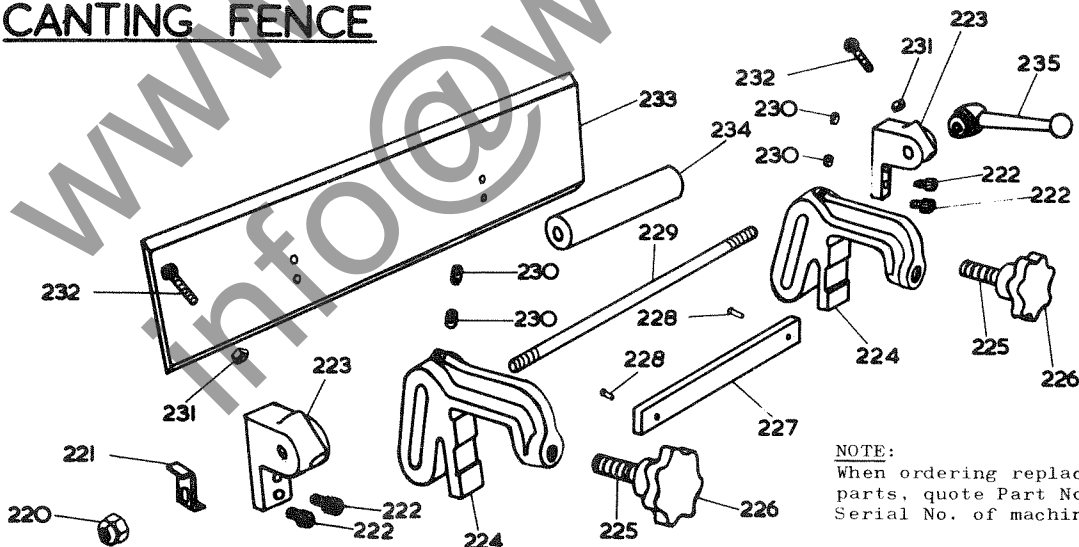


NOTE:  
When ordering replacement parts, quote Part No. and Serial No. of machine.

### PLAIN FENCE ASSEMBLY

Ref.No.	Part No.	No.off	Description	Ref.No.	Part No.	No.off	Description
180		3	3/8" whit. x 3/4" long hexagon head cadmium bolt.	198	A-1026/54	1	Fence pointer.
181		3	3/8" cadmium washer.	199		2	3/8" whit. x 2" long socket head cap screw.
182	C-1042/34	1	Rip fence body.	200	B-1042/32	1	Rip fence front slide bar.
183	A-1042/31	1	Rip fence connecting rod.	201	A-1042/64	2	Front fence slide bar distance piece.
184		2	1/4" whit. lock nut.	202		1	3/8" whit. locknut.
185	A-1044/69	1	Spring for fence locking bar.	203	A-1026/50	1	Fence locking plunger pip screw.
186	A-1026/38	1	Rip fence front locking lever.	204	A-1026/48	1	Fence locking plunger bush
187	A-1026/46	1	Fence connecting rod nut.	205	A-1026/49	1	Fence locking plunger spring
188	A-1026/55	1	Fence front locking lever pivot.	206		1	3/16" dia. x 1/4" long groverlok dowel.
189	A-1026/44	1	Fence locking lever adjusting screw.	207	A-1026/47	1	Fence locking plunger.
190	D-1026/35	1	Rip fence front bracket.	208		2	1/4" whit. aerotight nut.
191	A-1026/42	1	Fence pinion.	209		1	5/16" bore x 1/2" O/D x 1/2" long oilite bush.
192		1	2" plastic handwheel. 5/16" bore.	210	B-1026/37	1	Rip fence back lock.
193	Patt.No.14	1	1 1/4" dia. Plastic ball, 3/8" whit.	211		1	1/4" dia. x 1 1/2" long groverlok dowel.
194	Patt.No.28	1	Fence locking cam complete with handle.	212	A-1026/51	2	Fence slide bar distance piece.
195	A-1026/43	1	Fence cam pivot pin.	213	B-1042/33	1	Rip fence back slide bar.
196	A-1026/56	1	1/4" whit. x 1/4" long socket head grub screw.	214		2	3/8" whit. x 1 1/4" long socket head cap screw.
197		1		215	B-1026/36	1	Rip fence back bracket.

### CANTING FENCE

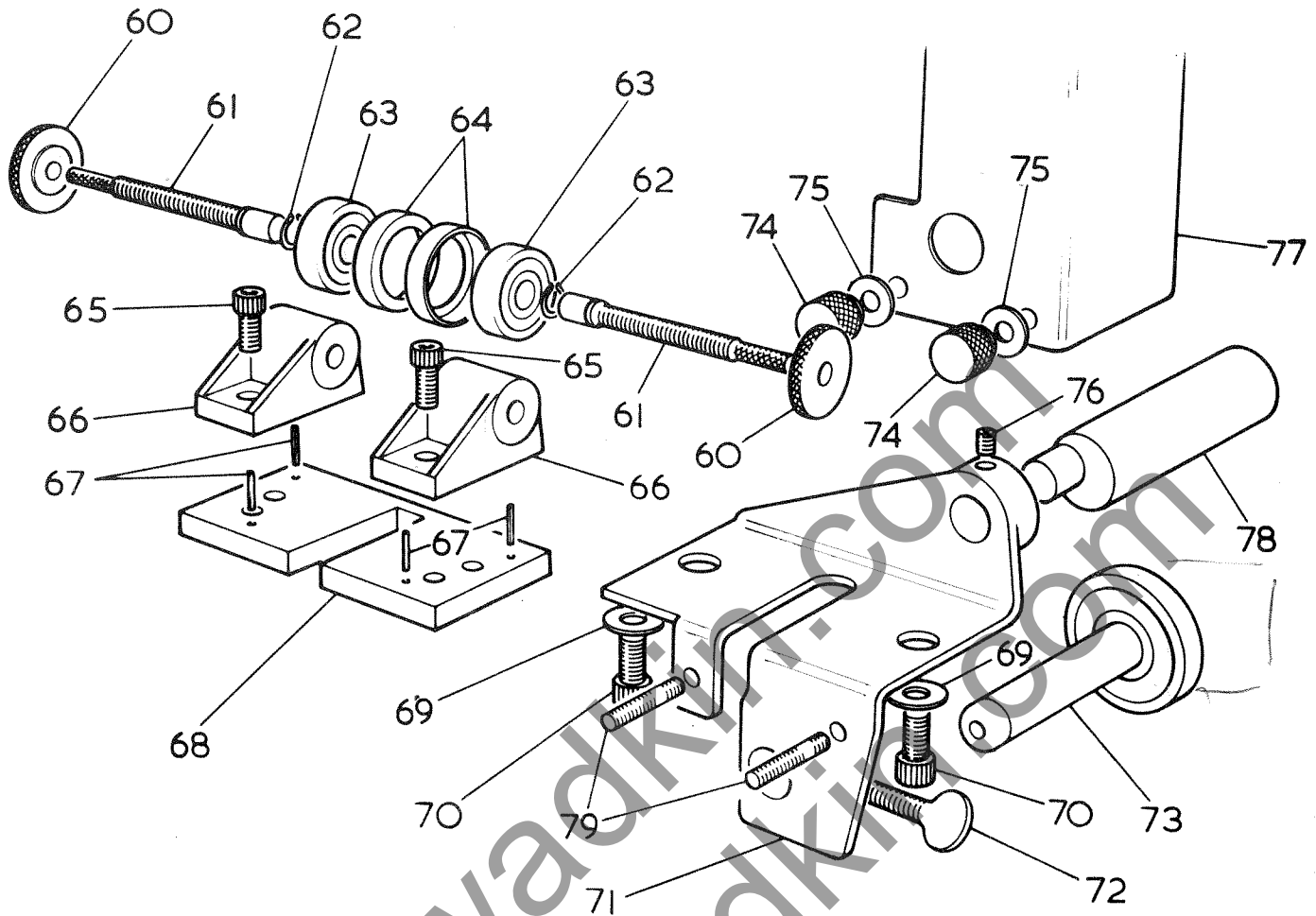


NOTE:  
When ordering replacement parts, quote Part No. and Serial No. of machine.

Ref.No.	Part No.	No.off	Description	Ref.No.	Part No.	No.off	Description
220		1	3/8" whit. aerotight nut.	229	A-1024/106	1	Fence pivot stud.
221	A-1024/110	1	Lugged washer.	230		4	1/4" whit. x 3/8" long socket head grub screw.
222		4	5/16" whit. x 3/4" long socket head cap screw.	231		2	1/4" whit. nut.
223	B-1024/100	2	Fence plate bracket.	232		2	1/4" whit. x 1 1/4" long hexagon head bolt.
224	B-1024/101	2	Fence canting bracket.	233	A-1024/111	1	Fence plate.
225	A-1024/109	2	Fence clamp screw.	234	A-1024/105	1	Fence canting bracket distance piece.
226	Patt.No.14	2	2" dia. plastic handwheel 1/2" whit.	235		1	3/8" whit. kipp handle.
227	A-1024/108	1	Fence clamp bar.				
228		2	1/8" dia. x 1/2" long fluted rivet.				

1 5/8" 158/RS

2" 200/RS

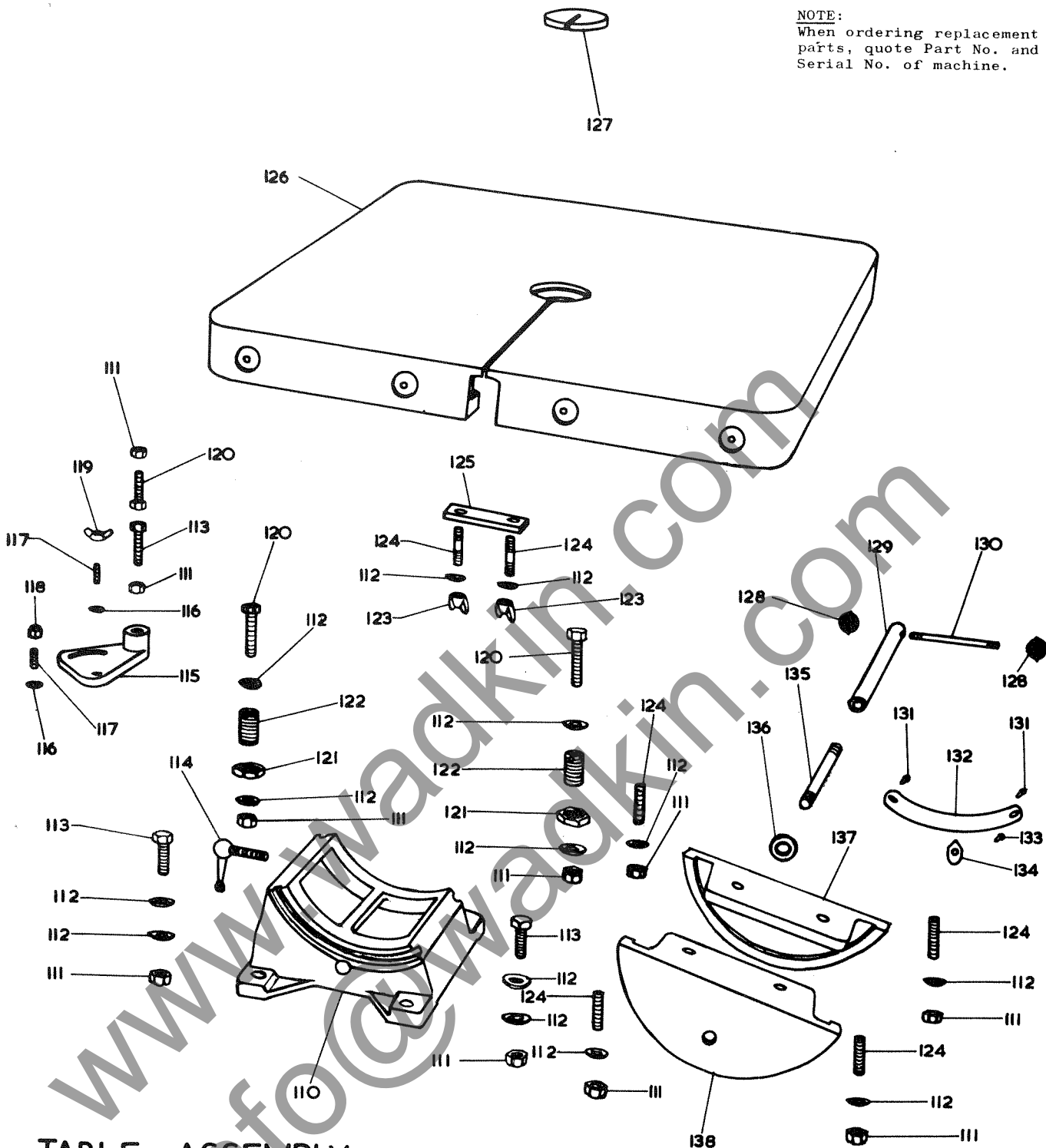
**NOTE:**

When ordering replacement parts, quote Part No. and Serial No. of machine.

## TOP OR BOTTOM SAW GUIDE ASSEMBLY

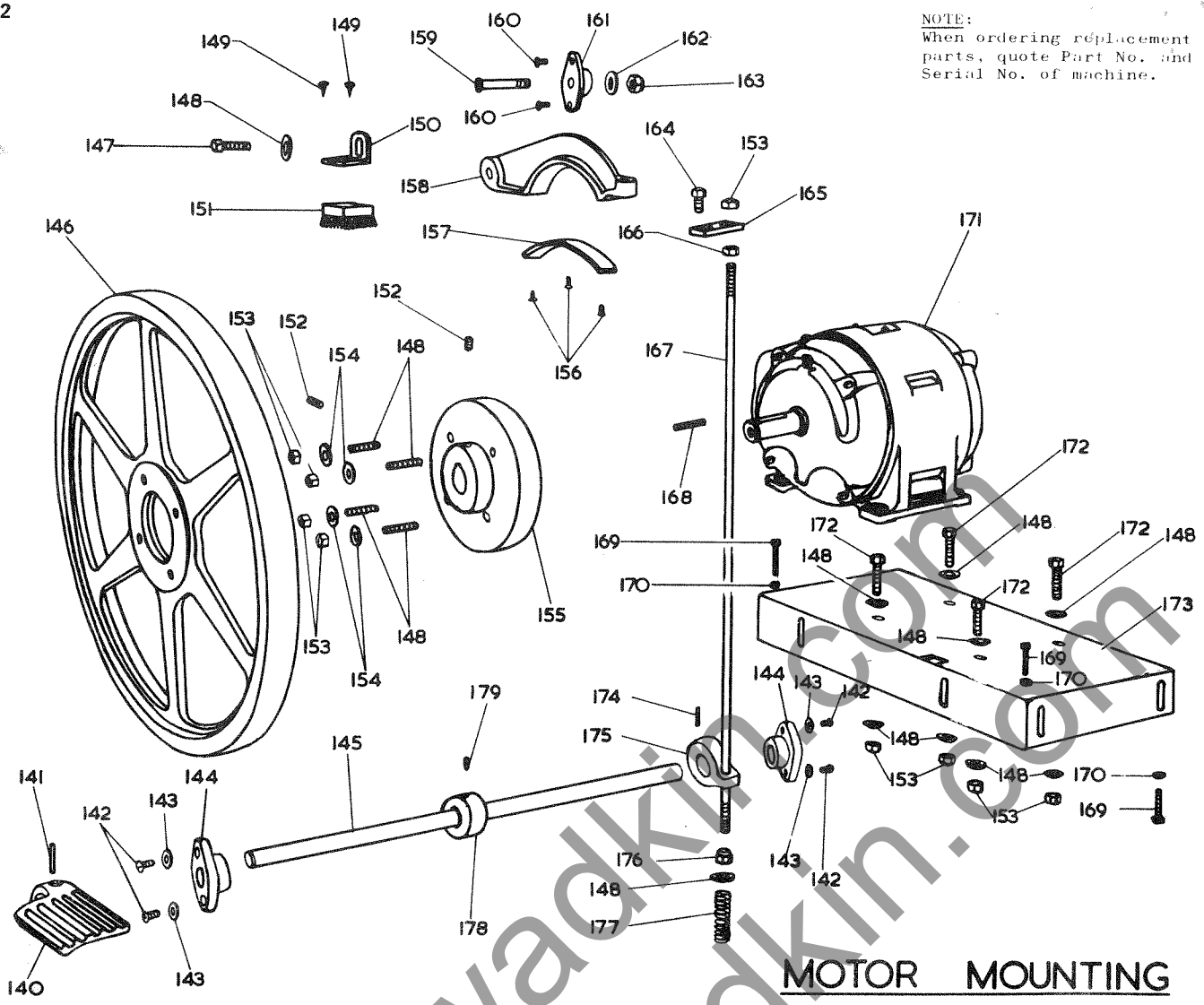
Ref. No.	Part No.	No. off	Description	Ref. No.	Part No.	No. off	Description
60	A-1062/32	1	Guide locknut (right hand)	70		2	5/16" whit x 5/8" long socket head capscrew
		1	Guide locknut (left hand)	71	C-1062/25	1	Saw guide bracket
61	A-1062/27 ✓	1	Saw guide side roller spindle (right hand)	72		1	5/16" whit x 1 1/4" long thumbscrew
		1	Saw guide side roller spindle (left hand)	73	A-1062/52	1	Runner Spindle Assembly
62		2	Truarc External Circlip No. 5100-39	74	A-1042/66	2	Knurled knob for saw guide
63		2	Fischer DN200 Sealed for life bearing	75		2	1/4" washer (Top Guide Assembly)
64	A-1062/30	2	Guide side roller shroud	76		1	5/16" dia. x 3/8" long socket head grub screw
65		2	5/16" whit x 1/2" long socket head capscrew	77	B-1042/82	1	Saw guard (Top Guide Assembly)
66	A-1062/26	2	Saw guide adjustment block	78	A-1062/37	1	Top guide shaft
67		4	1/8" dia. x 5/8" long groverlok spring dowel		A-1042/80	1	Bottom guide shaft
68	A-1062/42	1	Packing piece for guide	79		2	1/4" whit x 1" long stud (Top Guide Assembly)
69		2	5/16" washer				

NOTE:  
When ordering replacement parts, quote Part No. and Serial No. of machine.



### TABLE ASSEMBLY

Ref.No.	Part No.	No.off	Description	Ref.No.	Part No.	No.off	Description
110	D-1042/4	1	Table quadrant slide bracket.	126	D-1042/3	1	Table.
111		10	3/8" whit. nut.	127		1	Wood table insert.
112		14	3/8" washer.	128	Patt.No.30	2	3/4" dia. plastic ball, 5/16" whit.
113		3	3/8" whit. x 1" long hexagon head bolt.	129	A-1042/25	1	Quadrant locking handle.
114	B-S-1-B	1	3/8" whit. ball lever screw	130	A-1042/30	1	Toggle bar for quadrant lock.
115	A-1042/15	1	Stop bracket for table.	131		2	1/8" dia. x 1/2" long fluted rivet.
116		2	1/4" washer.	132	B-1042/16	1	Table angle indicator rule.
117		2	1/4" whit. x 1 1/4" long stud.	133		1	1/4" whit. x 1/2" long round head screw.
118		1	1/4" whit. aerotight nut.	134	A-1026/72	1	Pointer.
119		1	1/4" whit. wingnut.	135	A-1042/24	1	Quadrant locking stud.
120		3	3/8" whit. x 1 1/2" long hexagon head bolt.	136		1	1/2" washer.
121		2	3/4" simplex nut.	137	B-1042/5	1	Quadrant side plate (17/32" hole).
122	A-1031/95	2	3/4" simplex adjuster.	138	B-1042/5	1	Quadrant side plate (1/2" whit)
123		2	3/8" whit. wingnut.				
124		6	3/8" whit. x 1 1/4" long stud.				
125	D-1797/41	1	Keep plate for table.				



**MOTOR MOUNTING**

Ref.No.	Part No.	No.off	Description	Ref.No.	Part No.	No.off	Description
140	A-1042/12	1	Brake pedal.	170		4	1/4" whit. locknut.
141		1	3/16" dia. x 1 1/2" long groverlok dowel.	171	Std. 50 cycle	1	Brook motor, 2 HP, 1,000 rpm, D184, TEFC, 3 phase.
142		4	5/16" whit. x 3/4" long round head screw.	3 HP TEFC		1	Brook motor, 3 HP, 1,000 rpm, D213, TEFC, 3 phase.
143		4	5/16" washer.	50 cycles		1	Brook motor, 2 HP, 1,200 rpm, D184, TEFC, 3 phase.
144	A-1042/13A	2	Pivot bracket for brake.	1 phase		1	Brook motor, 2 HP, 1,000 rpm, ED 213 L TEFC 1 phase.
145	A-1042/29	1	Foot pedal pivot bar.	60 cycles		1	Brook motor, 2 HP, 1,200 rpm, D184, TEFC, 3 phase.
146	D-1042/2	1	Wheel.	3 HP TEFC		1	Brook motor, 3 HP, 1,200 rpm, D213 TEFC, 3 phase.
147		1	3/8" whit. x 3/4" long hexagon head bolt.	60 cycles		1	Brook motor, 2 HP, 1,200 rpm, ED 213L, TEFC, 1 phase
148		14	3/8" washer.	172		4	3/8" whit. x 1 1/2" long hexagon head bolt.
149		2	No. 8 x 3/4" long round head wood screw.	173	C-1042/1A	1	Standard motor platform.
150	B-1042/72	1	Bracket for brush.	C-1042/75		1	Single phase motor platform
151		1	Brush.	174		1	3/16" dia. x 1 1/4" long groverlok dowel.
152		2	1/8" gas x 1/2" long socket head grubscrew.	175	A-1042/14	1	Brake lever.
153		9	3/8" whit. nut.	176		1	3/8" whit. aerotight nut.
154		4	3/8" whit. x 1.3/8" long stud	177	A-1042/68	1	Brake release spring.
155	B-1042/10	1	Bottom wheel hub.	178	A-1026/29	1	Collar.
156		3	3/16" dia. countersunk head copper rivet.	179		1	3/8" whit. x 3/8" long socket head grubscrew.
157		7" long	Perodo brake lining.				
158	C-1042/73	1	Brake shoe.				
159	A-1042/28	1	Brake shoe pivot pin.				
160		2	5/16" whit. x 3/4" long countersunk head screw.				
161	A-1042/13	1	Pivot bracket for brake.				
162		1	1/2" washer.				
163		1	1/2" whit. aerotight nut.				
164		1	3/8" whit. x 1" long hexagon head bolt.				
165	A-1042/26	1	Brake rod connecting link.				
166		1	3/8" whit. locknut.				
167	A-1042/27	1	Brake rod.				
168		1	5/16" wide x 2 1/2" long key.				
169		4	1/4" whit. x 1 1/2" square head bolt.				

