BOOK NO B 540



INSTRUCTION MANUAL

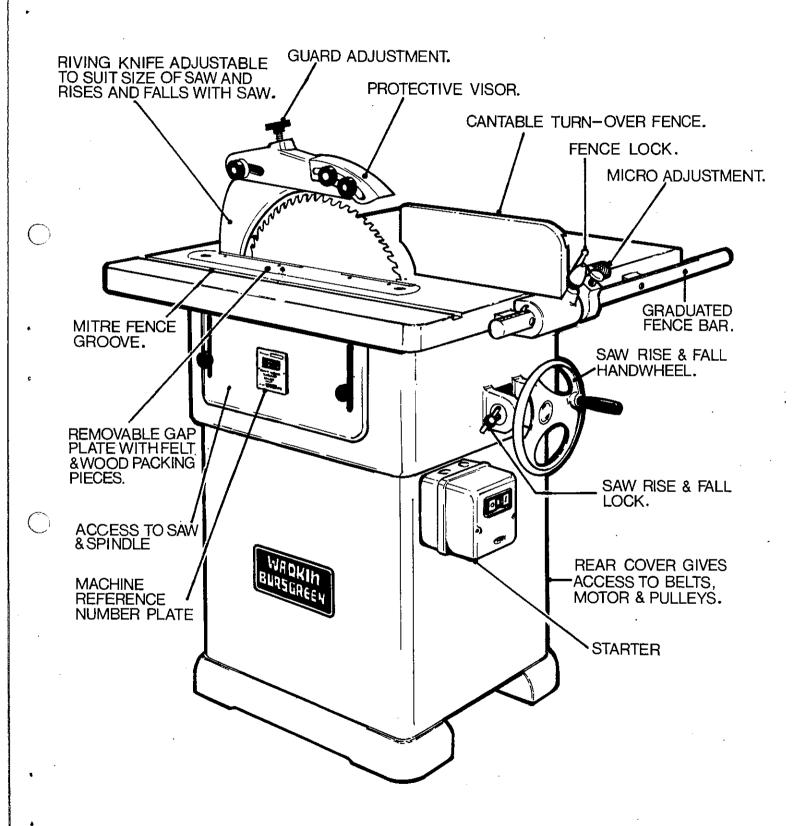
16" BSW CIRCULAR SAW BENCH

PLEASE INSERT SERIAL NUMBER OF MACHINE

T: 0116 2769111 F: 0116 2598138

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

CIRCULAR SAWBENCH TYPE 16"BSW



SECTIONS.

SECTION A. SPECIFICATION. SECTION B. INSTALLATION. SECTION C. DESCRIPTION AND OPERATION. SECTION D. MAINTENANCE. SECTION E. SPARE PARTS LIST. ILLUSTRATIONS. SECTION A. FIG A1. 16" BSW CIRCULAR SAWBENCH. SECTION B. FIG B1. (3 PHASE) WIRING DIAGRAM. FIG B2. (1 PHASE) WIRING DIAGRAM. FIG B3. FOUNDATION PLAN. SECTION C. FIG C1. CANTING & RIP FENCE CONTROLS. FIG C2. SETTING & ALIGNING FENCE. FIG C3. RIVING KNIFE DETAIL FIG C4. RISE AND FALL UNIT ASSEMBLY. FIG C5. MITRE FENCE. FIG C6. MITRE FENCE STOP ROD POSITIONS. FIG C7. SAW PACKINGS. FIG C8-C12. OPERATION OF OPTIONAL FEATURES.

SECTION D.

FIG D1. MAIN SPINDLE ASSEMBLY.

FIG D2. BELT TENSIONING DEVICES.

FIG D3. BELT TENSION.

FIG D4-D12. SAW MAINTENANCE.

FIG D13. LUBRICATION DIAGRAM.

SECTION A

SPECIFICATION:-

| MAXIMUM DIAMETER OF SAW | 16" | 400 mm |
|---------------------------------|----------------------------------|----------|
| MAXIMUM SAW PROJECTION | 5 1 '' | 140 mm |
| SIZE OF TABLE | 28" $\times 36\frac{1}{2}$ " 700 | x 925mm |
| MAXIMUM DISTANCE SAW TO FENCE | 24" | 600mm |
| FENCE DIMENSIONS | 13" x $4\frac{1}{2}$ " 330 | x 115mm |
| FENCE CANTS OVER TO | 450 | 4 50 |
| RISE & FALL OF SAW SPINDLE | <u>t</u> 4 11 | 100mm |
| SPEED OF SAW SPINDLE | 2850 RPM | 2850 RPM |
| MOTOR HORSE POWER | 5.5 HP | 4 Kw. |
| DIAMETER OF SAW BORE (OPTIONAL) | $1\frac{1}{4}$ " or 30mm & 32mm | |
| DIAMETER OF DRIVING PIN | 1 u 2 | 12mm |
| NETT WEIGHT | 500 1bs | 230 Kg. |
| GROSS WEIGHT | 680 1bs | 310 Kg. |
| SHIPPING DIMENSIONS | 35 cu.ft. | 1.0m3 |

SECTION B

Installation: -

Remove protective anti-rust coating from bright parts by applying a cloth soaked in paraffin or other solvent.

Wiring: -

The motor and control gear have been wired in before despatch, therefore all that is required to be done is to connect the mains supply to the starter, or isolator where fitted.

POINTS TO NOTE WHEN CONNECTING TO POWER SUPPLY.

- 1 Check voltage, phase and frequency
- 2 It is important that the correct cable is used to deliver the correct voltage to the starter. RUNNING ON LOW VOLTAGE WILL DAMAGE MOTOR. (SEE LIST).
- 3 Check main line fuses are of correct capacity.
- 4 Connect line leads to correct terminals (SEE WIRING DIAGRAM).
- 5 Check all connections are sound.
- 6 Check spindle rotates in correct direction. If not reverse any two of the line lead connections.

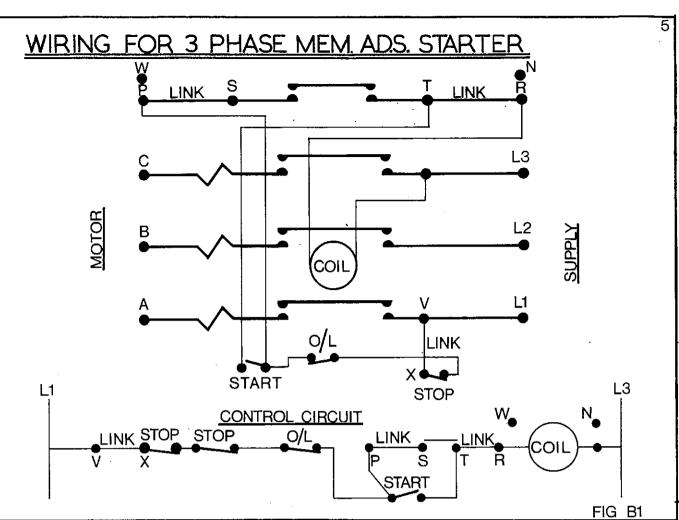
FAILURE TO START:-

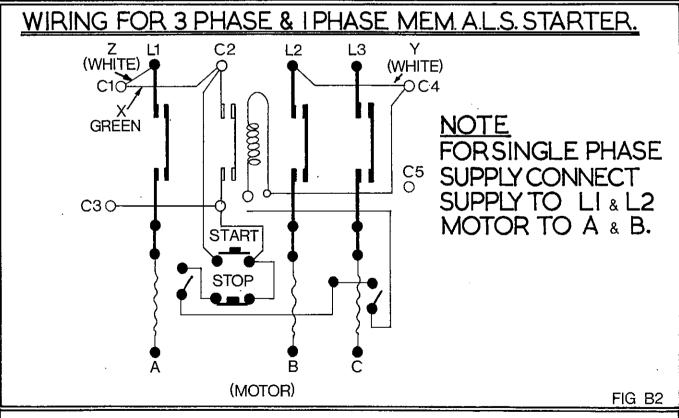
- 1 Fuses have blown or have not been fitted.
- 2 Isolator switch has not been closed.3 Lock off or stop button (when fitted) has not been released.
- 4 Supply not available at machine.

STOPPAGE DURING OPERATION & FAILURE TO RESTART:-

- 1 Overloads have tripped. If hand re-set, set by pressing button. If automatic they will re-set after a short period.
- 2 Fuses have blown.

| VOLTAGE. | PHASE. | CYCLES | HP | S.W.G. TINNED COPPER WIRE. | <u>AMPS</u> |
|---|-----------------------|----------------------------|------------------|----------------------------|------------------------------|
| 220 340/420 200/250 220 400/550 | 3 3 1 3 3 | 50 50 50 60 60 | 1 1 1 1 | 25 30 23 25 30 | 15 8•5 20 15 8•5 |





FOR ANY OTHER TYPE OF STARTING SEE SEPARATE WIRING DIAGRAM ENCLOSED INSIDE STARTER BOX.

Foundation:-

The machine should be levelled and bolted down firmly. For mounting into concrete, 6" to 8" square holes should be cut in the floor and rag bolts fitted, after which the holes should be run with cement. For mounting on wood floors coach bolts will be found adequate. (see Fig. B3.)

SECTION C

CANTING & RIP FENCE CONTROLS

QUICK ADJUSTMENT: -

The fence slides on a round bar with a rule incorp-To adjust the fence follow the under mentioned orated into it. proceedure:-

- 1. Unlock lever 'A' and screw 'B' (Fig. C.1.)
- 2. Slide the fence along the bar until the required dimension is indicated against the pointer on the fence bracket.
- 3. Lock lever 'A' firmly to secure in position.

FINE ADJUSTMENT: -

After adjusting the fence by the above method provision is made for precise setting by operating the fine adjustment feature. To operate follow under mentioned proceedure.

- 1. Ensure lever 'A' is UNLOCKED and screw 'B' is LOCKED firmly. (Fig. C.1.)
- 2. Turn knurled hand screw 'C' in direction required in order to draw the fence along the rule bar to or away from the saw and to the required setting.
- 3. Lock lever A firmly.

CANTING: -

To cant fence follow under mentioned proceedure (Fig.C.1.)

- 1. Unlock lever'D' and allow fence to pivot over to required angle.
- 2. Unlock lever 'E' allowing fence plate to drop down until the lower edge of the plate lies flat on the table surface.

 3. Lock levers D' and E' firmly.

FENCE POSITIONING: -

The fence plate is designed to slide along the table in order to compensate for different sizes of saws which may By unlocking lever 'E' the plate maybe slid alongadovetail slot in the back of the fence to the required position, after which locking lever E'will fix the fence firmly in place.

NOTE: For crosscutting swing fence over the rule bar to clear the table

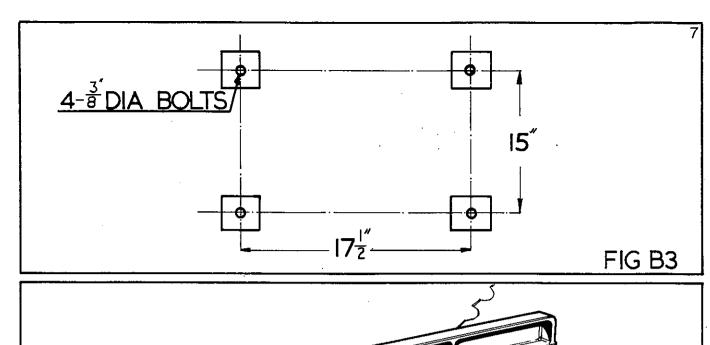
FENCE SETTING AND ALIGNING: -

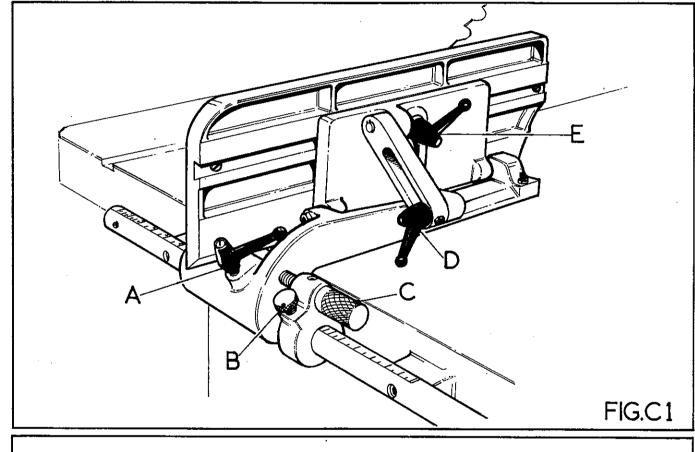
On despatch from the works the movements of the fence have been finely adjusted for accurate cutting by the provision of the setting screws at points F.G.H.I. (FIG C2). These adjustments have seperate uses, and should only be re-set to compensate for wear which may take place from constant use. The seperate uses of these points are as outlined underneath:-

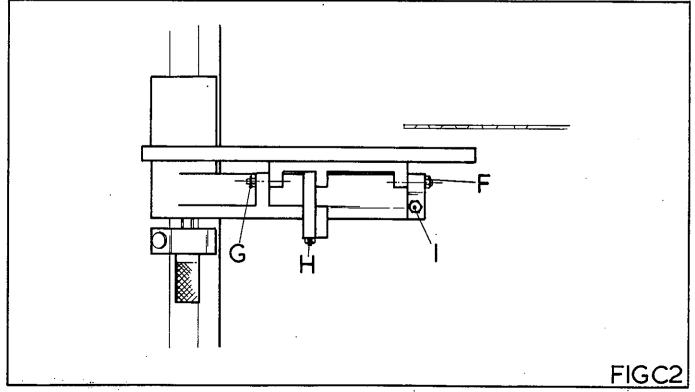
POINT Fe- is an eccentrically turned centre which allows the fence to be set paralell to the saw, or to be set in or out as required. POINT G:is a true centre which allows slackness to be removed between centres F and G.

POINT H:is a jacking point which provides a positive stop which will not allow the fence to be pulled up further than 90 degrees to the table when set correctly.

POINT |:is also a jacking point which brings centres F and G parallel to the table for true canting action of the fence. SET ALIGNMENT ONLY WITH CENTRE F. DO NOT PACK BETWEEN BACK PLATE AND FENCE AS THIS CAN CRACK THE CASTINGS.







RISE AND FALL CONTROLS: -

By turning handwheel 'J' (fig. C4) the saw may be raised or lowered between the maximum and minimum position as given in section 'A' specification. Under no circumstances should this dimension be varied. It is important after operating the rise and fall that lever handle 'K' is locked firmly before running the saw.

The rise and fall handwheel is connected through pivoted yolks at points A. & B. (FIG C4.) At the handwheel end of the screw a thrust race C is fitted to give free rotation when in use. It is therefore important that the pivots and screw are cleaned and lubricated regularly and that the thrust race is oiled according to the maintenance schedule.

RIVING KNIFE PLATE:-

The riving knife plate is situated behind the saw in the saw compartment 'D' (fig. C4.) and allows the riving knife to rise and fall with the saw at a set clearance to the saw teeth. It is important that the area surrounding the radial slot cut in the plate be kept clean and well lubricated to give free movement.

RIVING KNIFE HOLDER DETAIL

The riving knife is supplied in the inverted position. Remove and fit upright adopting the following proceedure:-(figC3)

- 1. Fit knife into grooved packing piece 'E' and bolt up to solid packing piece 'F' with the $\frac{3}{4}$ " nuts 'G' provided.
- 2. With saw in place set knife to clear around saw teeth approximately $\frac{1}{4}$ " (6mm) and lock firmly in place with nuts 'G'.
- 3. If the knife is not in line with the saw, partially slacken nuts 'G' and jack packing piece 'F' out with grub screws 'H' until the knife has equal overhand either side of the saw blade. Lock nuts 'G' firmly.

NOTE: - BEFORE RUNNING, ADJUST SAW GUARD TO GIVE MAXIMUM PROTECTION AND TO CLEAR SAW BLADE. DO NOT RUN MACHINE WITHOUT GUARD IN POSITION.

IMPORTANT: - ENSURE THAT RIVING KNIFE BLADE IS CORRECT THICKNESS FOR SAW USED

MOUNTING SAWBLADES: -

When mounting saws the undermentioned proceedure should be followed:-

- 1. Isolate machine
- 2. Remove table insert and raise the saw spindle housing into the top position.
- 3. Remove spindle nut (left hand thread) and front saw flange from spindle.
- 4. Select blade required depending on type of work which is to be done. Check the blade is in good condition and free from dirt, sawdust and gum, especially where it will be gripped by the saw flange. Mount saw on the spindle checking that the face of the back saw flange is clean and that the saw bore and pin hole centres fit correctly onto those on the flange.
- 5. Check that the saw teeth point towards the front of the machine before replacing the flange and locking up firmly with the spindle nut.

 IMPORTANT: ENSURE SPINDLE RUNS IN CORRECT DIRECTION, REFER TO SECTION

 B (ELECTRICS)

 NOTE: IF THE FLANGE OR SAW FACES ARE NOT CLEAN THIS CAN CAUSE VIBRATION

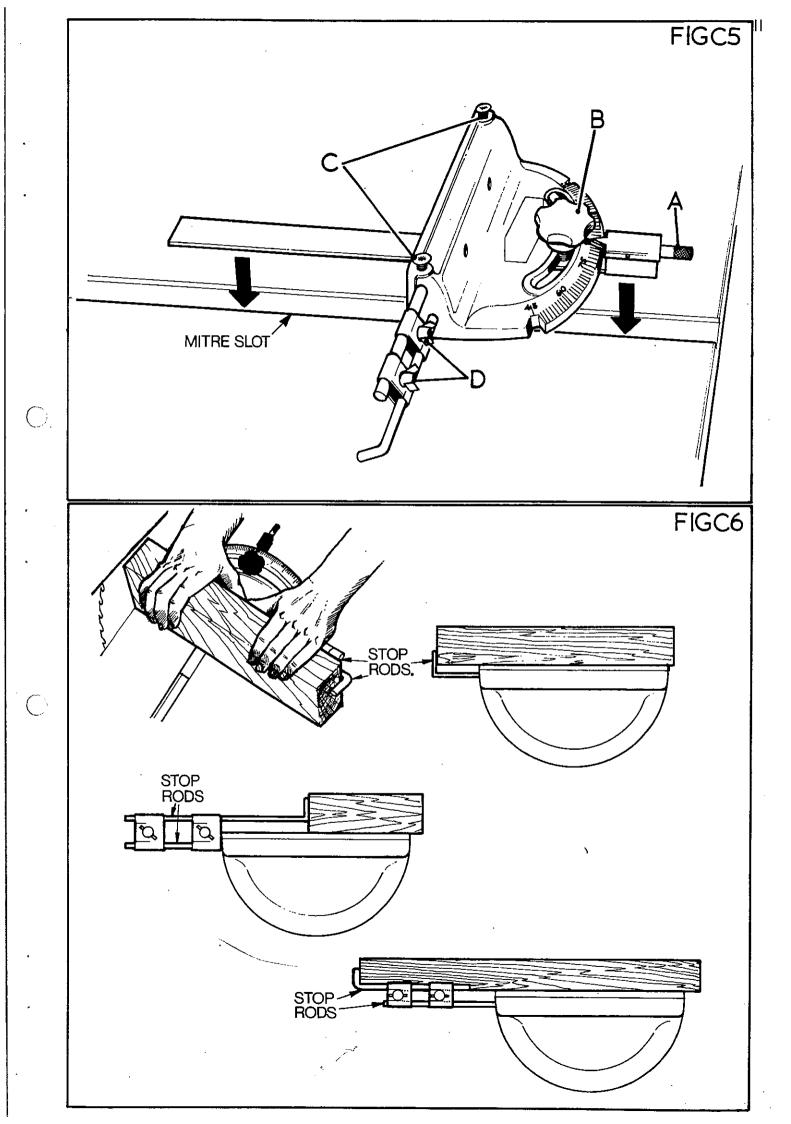
DUE TO THE SAW RUNNING OUT-OF-TRUE.

MITRE FENCE (fig. C5) (EXTRA.)

The mitre fence is fitted into the groove provided on the saw table, which should be kept clean. A scale is provided to indicate accurate setting, and a positive stop 'A' is incorporated in the scale to give quick setting at 90° and 45° to the saw. The plastic handwheel 'B' locks the mitre fence firmly in any position.

Accurate repetitive cutting can be obtained by use of the stop rods (fig. C5.)

The rods are held in the fence with the thumbscrews 'C' and the stop rods by the two clamps 'D'. To adjust the stop rods slacken clamps 'C' and 'D' and slide the rods into the position required as illustrated in (fig. C6.)



SAW PACKING.

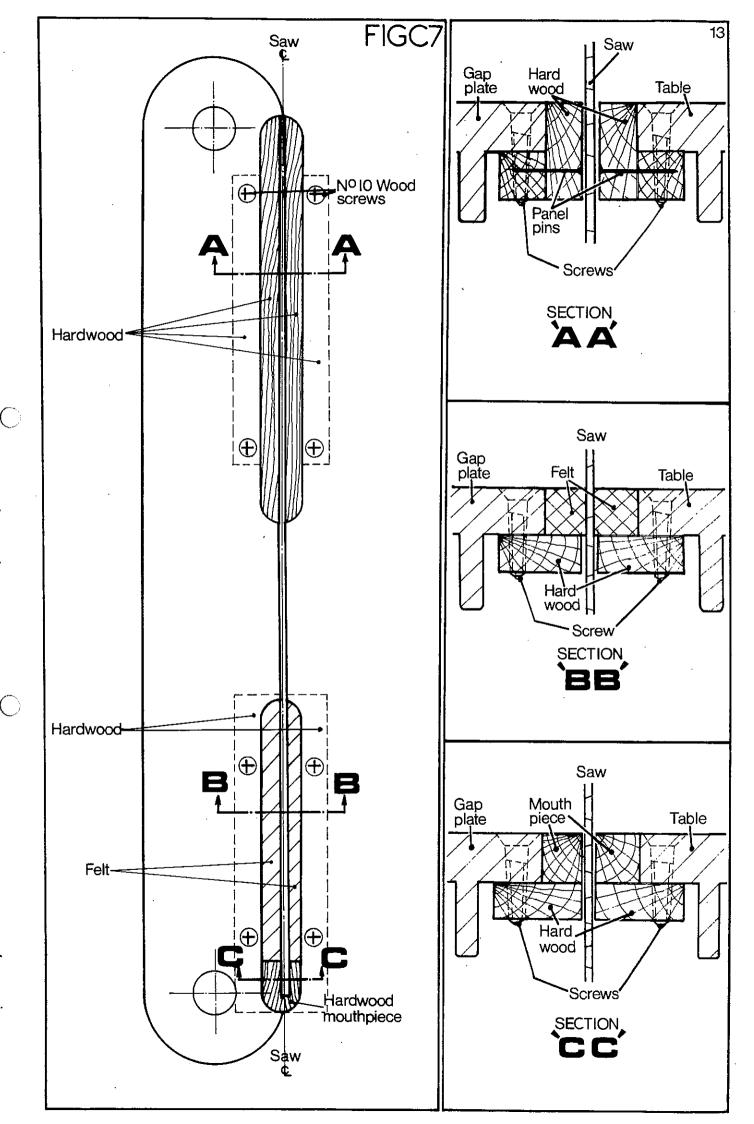
It is usual to provide a saw blade with some form of packing, but it is not intended that this packing be used as a guide for buckled or out-of-true saws. The idea of fitting packing pieces into the table and gap plate is to steady the saw, but it should be noted that the packing must not be tight as this will generate heat, resulting in a consequent loss of tension in the blade.

The arrangement of the saw packings are in such a way that a hard-wood mouthpiece of a length extending beyond the depth of the saw teeth retains the felt packing pieces in place. Also wood strips secured to the underside of the table and to the front of the gap plate support the felt in position. At the rear of the gap plate and table similar wood strips close the saw gap and provide a guide for the saw. (SEE DIAGRAMS OPPOSITE.)

It should be noted that after some time, the packings will need to be renewed, and should not be allowed to fall into bad condition.

The provision of the felt inserts allow application of a small amount of lubricating oil, which not only cleans the saw, but also reduces heat and burning whilst running. It is therefore important that, at every opportunity, the felt pieces are lubricated.

NOTE: - REPLACEMENT LENGTHS OF FELT 1/2 x 7/16" x 4".



EXTRA EQUIPMENT: -

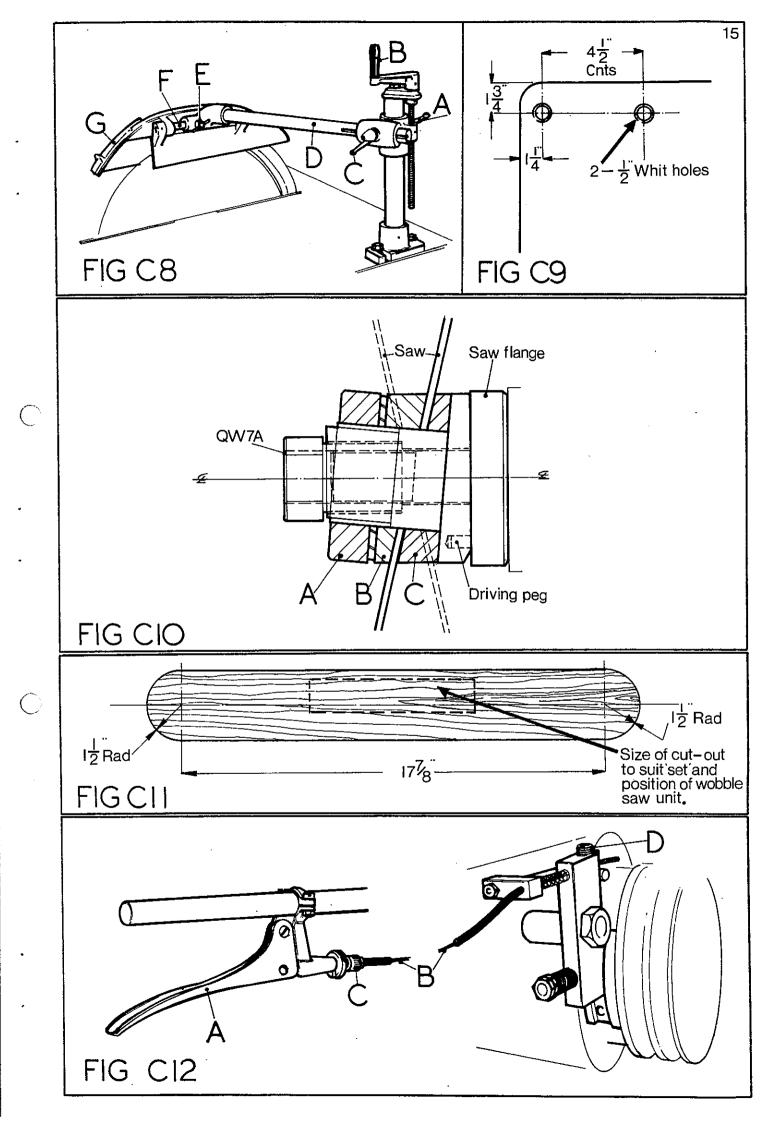
The following items are supplied to special order and are fitted and operated as underlined below.

PILLAR SAW GUARD ASSEMBLY: If this unit is supplied to be added to the standard machine, holes should be drilled in the table as detailed in (FIG C9) To raise and lower the guard, unlock lever 'A' and turn handle 'B' (FIG C8) To position the guard on centre with the saw, unlock lever 'C' and slide the guard pillar 'D' until the guard is in the correct position. To centralize the guard to clear saw and riving knife, unlock lever 'E' and slide guard back or forward along bar 'F' until correctly positioned. When operating, ensure visor 'G' is set to clear timber by approximately '8" (3mm) To gain access to saw, the guard cover will hinge up and over to reveal blade.

<u>WOBBLESAW:-</u> To fit a wobble saw, the undermentioned proceedure should be followed - (SEE FIG C10.)

- 1. Remove table gap plate spindle nut (LH thread) and loose saw flange.
- 2. Ensure spindle and saw flange are free from dirt, and slide wobble saw unit onto spindle and locate on driving peg.
- 3. Screw special nut QW7A onto spindle and lock firmly.
- It. To adjust the amount of wobble, unlock collar 'A' on wobble unit with special 'C' spanner QS71, and move saw complete with inner collars 'B' & 'C' to the required position. When set, re-lock with spanner QS71 and re-fit special gap plate which can be supplied to order manufactured from steel, or made to suit by the owners of the machine as shown in (FIGCH) from wood.

SPINDLE BRAKE: This device is operated from the brake lever 'A' situated next to the rise and fall handwheel. It is connected to the brake pad by means of a cable 'B' leading from the operating lever, and is spring-loaded to relieve tension when hand pressure is relieved. To tension the cable, turn the knurled nut 'C' on the lever. Where excessive slackness is to be removed, unlock the grub screw 'D' on the pillar at the spindle end and pull cable through, re-lock grub screw and tension cable as mentioned above with knurled screw. When replacing brake pad it is important that new rivets are used and that the rivet heads are below the surface of the pad material. Do not allow brake pad to wear down to rivets as this will score the surface of the special pulley. (FIG CI2)



SECTION D. - MAINTENANCE: -

During the operating life of the sawbench it may be found necessary to replace worn or damaged parts (i.e. ball races.) To undertake this proceedure follow the undermentioned instructions. (SEE FIG D 1.)

- 1. ISOLATE MACHINE ELECTRICALLY BEFORE ATTEMPTING ANY WORK.
- 2. REMOVE GAP PLATE, SAW AND SAW SPINDLE FRONT AND REAR COVERS FROM THE MACHINE.
- 3. SLACKEN AND REMOVE V-ROPES FROM PULLEYS AND REMOVE TURNBUCKLE AND TENSION STUDS AFTER PACKING MOTOR UP AS SHOWN IN (FIG D.2.)
- 4. WIND SAW CARRIAGE INTO MIDWAY POSITION.
- 5. REMOVE COUNTERSUNK SCREW AND WASHER 'A' AND SLACKEN GRUB SCREWS 'B' IN PULLEY 'C' AND REMOVE.
- 6. REMOVE KEY 'D' AND DISTANCE PIECE 'E'.
- 7. REMOVE CIRCLIP 'F' AND MOTOR TENSION BRACKET 'G' AND UNSCREW AND REMOVE DUSTCAP 'H'.
- 8. WORKING AT THE FRONT OF THE SAW SPINDLE, REMOVE NUT 'I' (L.H.THREAD) AND SAW FLANGE 'J'.
- 9. UNSCREW SAW FLANGE 'K' (L.H. THREAD.)
- 10. REMOVE RIVING KNIFE PLATE*AND LINK, AND UNSCREW AND REMOVE DUST CAP
- 11. PLACE A WOODEN DRIFT ON THE PULLEY END OF THE SPINDLE AND DRIVE THE SHAFT THROUGH THE HOUSING. BY DOING THIS THE SPINDLE WILL EMERGE FROM THE HOUSING WITH THE SAW END BEARING ON IT. DRIVE THIS BEARING FROM THE SHAFT AND RE-INSERT SHAFT INTO HOUSING KNOCKING SPINDLE THROUGH WITH HAMMER AND DRIFT TO REMOVE THE PULLEY END BEARING.

To re-assemble, reverse above proceedure ensuring all original parts are thoroughly cleaned out.

It should also be noted that the two locknuts on the radial slot in the riving knife plate should only be tightened enough to provide a guide for the motion of the plate and not to clamp or lock the plate in position.

BELT TENSION: -

On the standard machine the drive from the 5.5HP motor (4KW) to the saw spindle is by means of two ALPHA 500 type "V" Belts. To ensure maximum efficiency and life of these belts, it is important that the correct belt tension is maintained at all times from new, especially in the "running in" period. To tension the belts follow the undermentioned proceedure. (SEE FIG. D.2.)

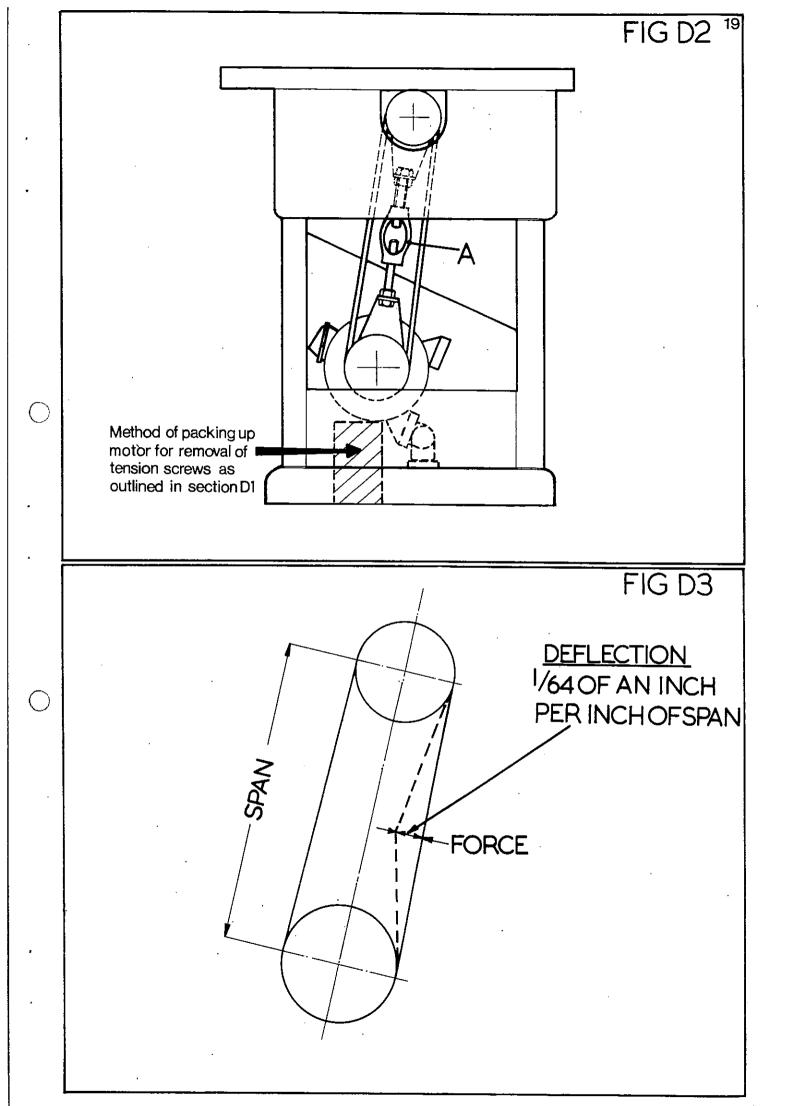
By turning turnbuckle 'A' linking the tension studs, the centre distance of the pulleys can be increased to provide greater tension on the belts. To achieve the correct tension, measure the centre distance of the pulleys (FIG D3.) and adjust with the turnbuckle until, whilst applying a force at right angles and central along the belt, the deflection is not greater than 1/64" per inch of span - (e.g. 23" span = 23/64" deflection.)

REPLACING BELTS: -

To replace belts, decrease pulley centre distance by screwing turn-buckle and thus relieving tension on the belts for their removal. Afterwards retension as given above.

POINTS TO NOTE WHEN MAINTAINING BELT DRIVES:-

- 1. ALWAYS MAINTAIN CORRECT BELT TENSION.
- 2. REPLACE WORN BELTS WITH SAME TYPE AS SPECIFIED.
- 3. ALWAYS REPLACE WORN OR DAMAGED BELTS IMMEDIATELY.
- 4. ENSURE PULLEYS ARE CORRECTLY ALIGNED.
- 5. DO NOT PRISE BELTS OVER PULLEYS WITH SCREW DRIVERS OR OTHER SHARP IMPLEMENTS AS THIS CAN DAMAGE BELTS.
- 6. ENSURE PULLEY GROOVES AND BELTS ARE CLEAN AND REMOVE ANY OIL, GREASE RUST OR BURRS WHICH ARE PRESENT.



SAW MAINTENANCE: -

Efficient operation of a circular saw depends on true running of the saw spindle, and the saw flanges being perfectly square to the axis of the spindle. The saw must also run at the correct peripheral speed to ensure straight cutting.

RANGING: -

'Ranging down' should be done on a new saw or any saw after the fourth or fifth sharpening. To range down, feed a square-edged abrasive block in a wooden holder (FIG D4.) lightly against the saw teeth whilst running. The saw should then be removed and the tops of the teeth filed lightly to remove the ranging marks.

SAW SHARPENING: -

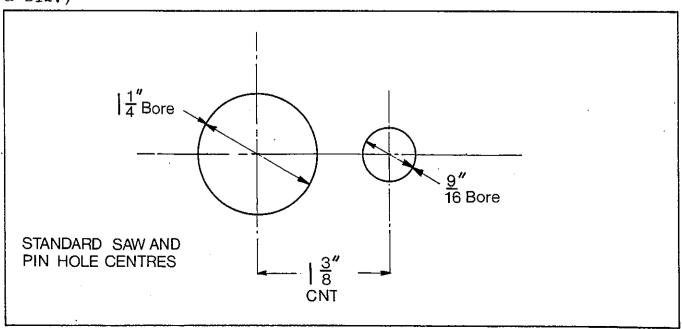
Do not run a saw when blunt. To re-sharpen by hand, hold the saw in a vice as shown in (FIG D5.) With rip saw teeth, chisel edges and square faces are required (FIG D6.) Sharpen by giving each tooth an equal number of strokes with a flat file. At the same time, file the gullet of the saw in the same manner, taking care to keep the gullet well rounded. With cross cut saws points are needed with back and front bevels as in (FIG. D7.) In the course of repeated filing, saws lose their original shape and the gullets become shallow. To restore the original profile, it is necessary to grind the saw on a saw-sharpening machine.

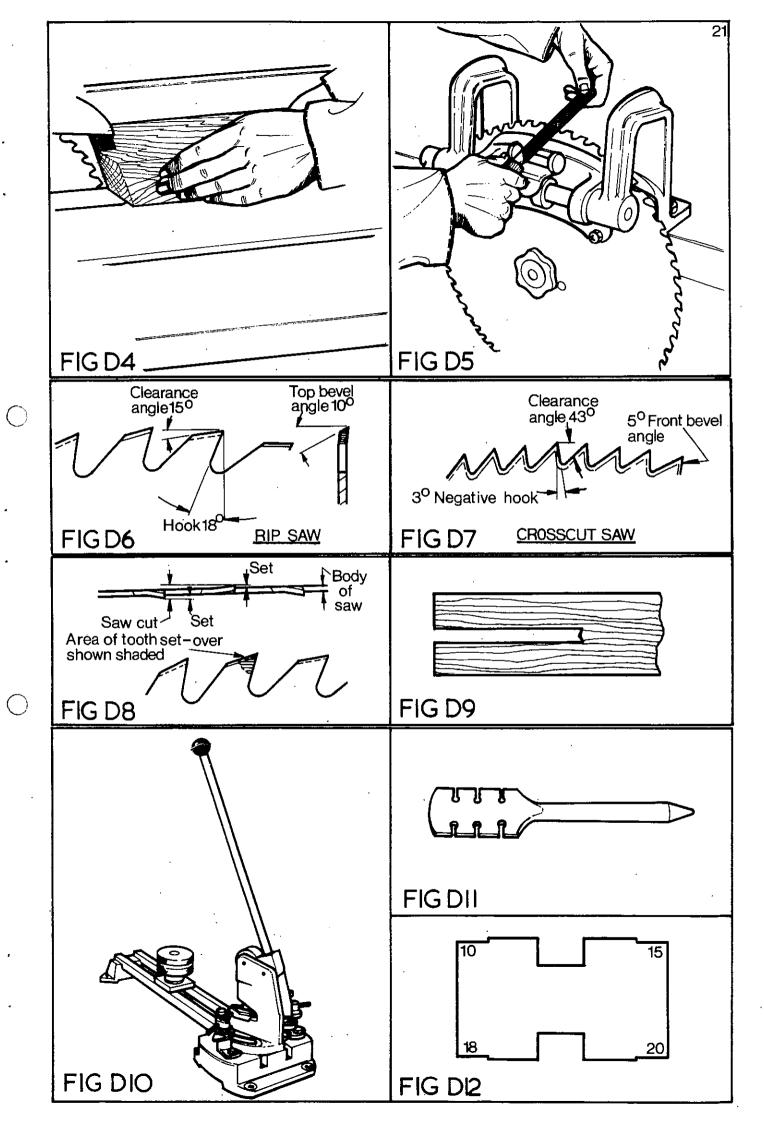
SETTING: -

The amount of set should be sufficient to give clearance to the saw body so there is freedom from friction. Saw teeth are generally 'spring set' (i.e.) the teeth are bent alternately to the right or left as shown in (FIG D8) for good sawing, this amount of set should be equal at each side or else the saw will run to one side. To check the set, cut into a piece of timber where the result should be a small, even triangle, as seen in (FIG. D9) The amount of set varies according to the timber being cut, but is usually 010" to 015" (.3mm. .4mm)

We can supply a small machine for precisely setting saws as shown in (FIG D10) This device will accept saws up to 36" in diameter, and indicates the amount of set by micrometer dial.

For hand setting, small devices can be supplied where it is felt that the number of saws used does not warrant a machine (SEE FIGs.D11 & D12.)





SECTION E

SPARE PARTS LISTS

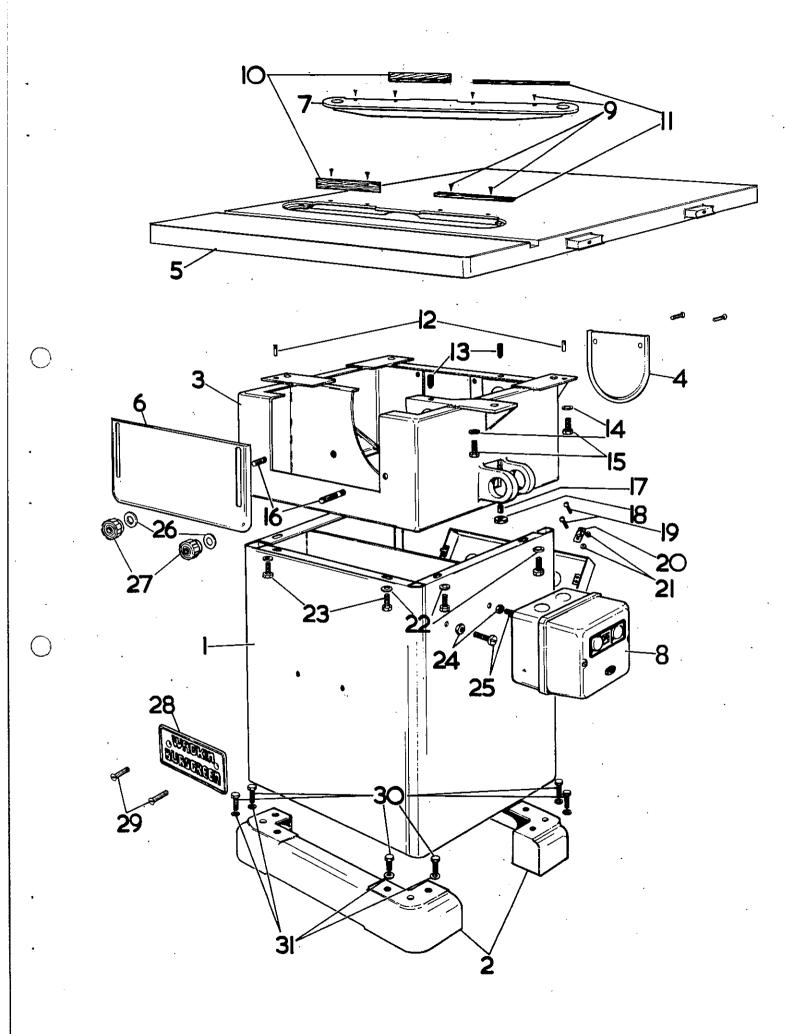
MAIN BASE ASSEMBLY

| REF.NO. | PART NO. | QUANTITY. | DESCRIPTION. |
|---------|------------|-----------|--------------------------|
| 1 | BSW 536. | ı | BASE. |
| 2 | 1026/10. | 2 | BASE FEET. |
| 3 | BSW 562. | 1 | FABRICATED BODY SECTION: |
| 4 | BSW 503. | 1 | PULLEY REAR COVER. |
| 5 | BSW 560. | 1 | TABLE. |
| 6 | BSW 504. | 1 | FRONT COVER. |
| 7 | BSW 501. | 1 | GAP PLATE. |
| 8 | (MEM | | 220VOLTS - MEM 816 ADS) |
| | (A.D.S. | | 230VULTS - MEM 826 ADS) |
| | (STARTERS. | | 380VOLTS - MEM 836 ADS) |
| | (| | 415VOLTS - MEM 846 ADS) |

FOR SINGLE PHASE MACHINES OR MACHINES WITH SPECIAL ELECTRICAL GEAR PLEASE GIVE FULL DETAILS WHEN ORDERING SPARES.

| · · · · · · · · · · · · · · · · · · · | | |
|---------------------------------------|-----|---|
| 9 | 8 | No. 10. WOODSCREWS. |
| 10 | 2 | REAR WOOD SAW PACKINGS. |
| . 11 | 2 | FRONT WOOD SAW PACKINGS. |
| 12 | 2 | l"LONG x है" DIA. DOWELS. |
| 13 | 2 | 흄"WHIT x 운" LONG ALLEN PIP SCREWS. |
| 14 . | 4 | 1 WASHERS. |
| 15 | 4 | $\frac{1}{2}$ " WHIT x $\frac{1}{2}$ " LONG HEXAGON BOLTS. |
| 16 | 2 | 3" WHIT x 14" LONG STUDS. |
| 17 | 1 . | 1" WHIT x 1" LONG ALLEN PIP SCREWS. |
| 18 | 1 | 1" WHIT LOCKNUT. |
| 19 | 4 | $\frac{1}{2}$ " WHIT $\times \frac{1}{2}$ " LONG ROUND HEAD SCREWS. |
| 20 | 2 | SPRING LOOR CATCHES. |
| 21 | 4. | 4" WHIT NUTS. |
| 22 | 6 | 5/16" WASHERS. |
| 23 | 6 | $5/16$ " Whit $\times \frac{3}{4}$ " Long Hexagon Bolts. |
| 24 | 2 | 4" WHIT NUTS. |
| 25 | 2 | $\frac{1}{4}$ " WHIT $\times \frac{3}{4}$ " LONG ROUND HEAD SCREWS. |
| 26 | 2 | 3" WASHERS. |
| 27 | 2 | 3" WHIT PLASTIC HANDWHEELS. |
| 28 | 1 | WADKIN BURSGREEN NAMEPLATE. |
| . 29 | 2 | ¼"WHIT x ¾" LONG COUNTERSUNK SCREWS. |
| 30 | 8 | 중"WHIT x 초" LONG HEXAGON BOLTS. |
| 31 | 8 | 3" WASHERS. |

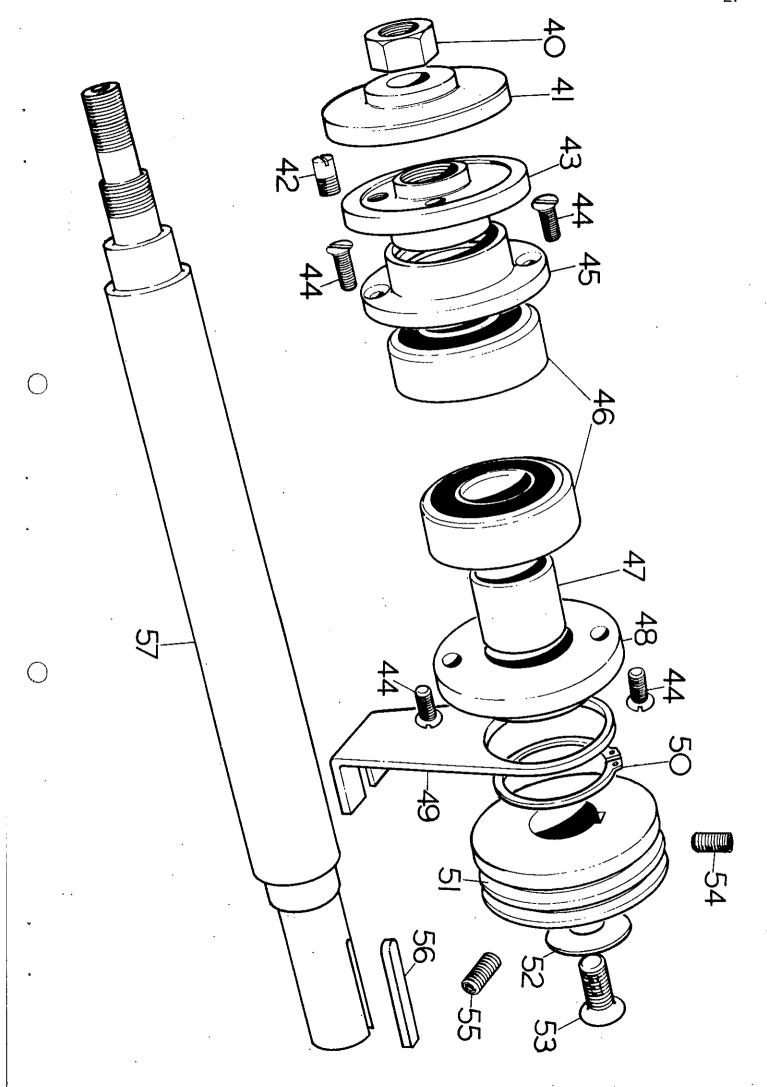
NOTE:- WHEN ORDERING SPARE PARTS, QUOTE SERIAL NUMBER OF MACHINE ALSO PART NUMBER.



SAW SPINDLE ASSEMBLY

| | | | " | |
|------|-------------|------|---|---|
| REF. | PART NO. | QTY. | DESCRIPTION. | |
| 40 | | 1 | $1\frac{1}{4}$ WHIT FORM LEFT HAND NUT 7 T.P.I. | |
| 41 | BSW 50 5 | 1 | LOOSE SAW FLANGE. | |
| 42 | BSW80 | 1 | DRIVING PEG. | |
| 43 | BSW 506 | 1 | FIXED SAW FLANGE. | |
| 44 | | 4 | 5/16" WHIT $x \frac{3}{4}$ "LONG COUNTERSUNK SCREWS. | |
| 45 | BSW558 | 1 | SPINDLE ENDCAP (SAW SIDE.) | |
| 46 | | 2 | SKF6308-2RS SEALED FOR LIFE BEARINGS. | |
| 47 | BSW515 | 1 | PULLEY SPACING COLLAR. | |
| 48 | BSW517 | 1 | SPINDLE ENDCAP (PULLEY SIDE.) | (|
| 49# | BSW519 | 1 | TENSION BRACKET. | |
| 50 | 400 top 400 | 1 | $2\frac{1}{2}$ " EXTERNAL CIRCLIP. | |
| 51 | BSW527 | 1 | SPINDLE PULLEY. | |
| 52 | BSW61 | 1 | SPINDLE PULLEY RETAINER WASHER. | |
| 53 | | 1 | 1"LONG $\propto \frac{3}{8}$ "WHIT COUNTERSUNK "SELF-LOK" ALLEN SCREW. | |
| 54 | | 1 | $5/16$ WHIT x $\frac{3}{4}$ "LONG ALLEN GRUB SCREW. | |
| 55 | | 1 | 5/16"WHITx 1"LONG ALLEN GRUB SCREW. | |
| 56 | | 1 | $\frac{7}{8}$ "LONG x 5/16"WIDE x $\frac{1}{4}$ " THICK ROUNDED ENDS KEY. | (|
| 57 | BSW514 | 1 | SPINDLE. | |

^{# -} TENSION BRACKET NO. BSW519. 2 OFF PER MACHINE. SEE MOTOR RISE AND FALL GEAR ILLUSTRATION ON PAGE REFERENCE NO. 127.

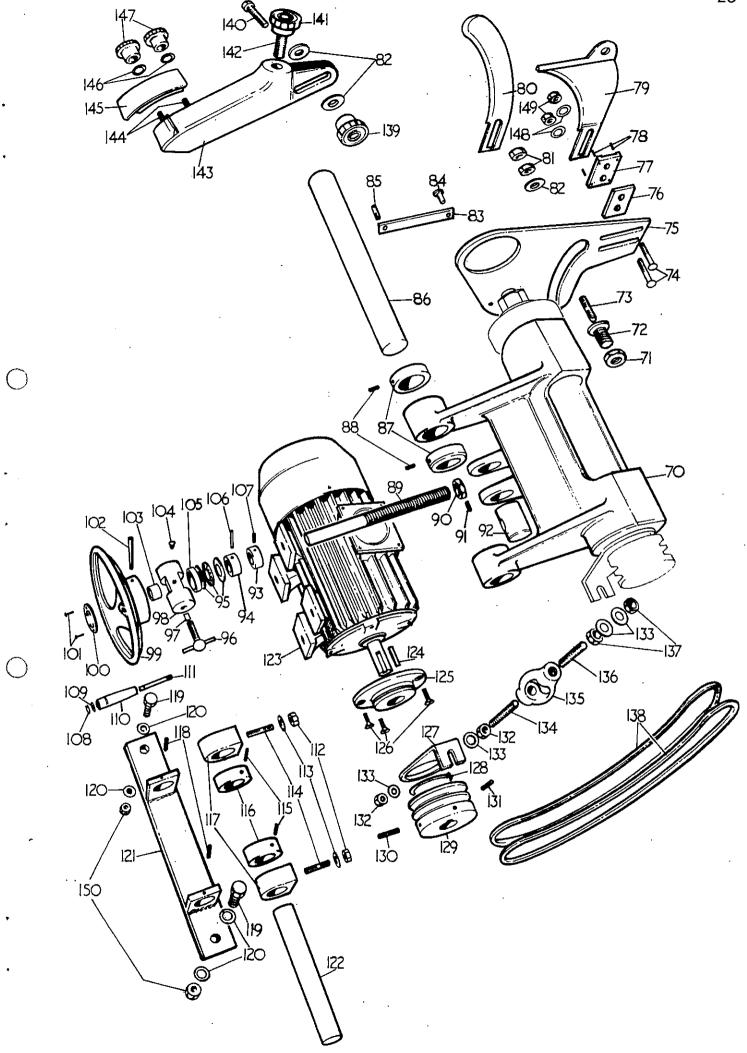


SAW RISE&FALL ASSEMBLY (SHEET ONE)

| REF. | PART NO. | QTY. | DESCRIPTION. |
|------------|-------------|------|---|
| 70 | BSW 502 | 1 | SPINDLE HOUSING. |
| 71 | | 1 | 58"WHIT LOCKNUT. |
| 72 | BSW563 | 1 | BOLT FOR RIVING KNIFE PLATE. |
| 73 | | 1 | $\frac{3}{8}$ "WHIT x $1\frac{1}{4}$ " LONG STUD. |
| 74 | | 2 | $\frac{3}{8}$ "WHIT x $1\frac{3}{4}$ "LONG SPECIAL COACH BOLTS. |
| 75 | BSW538 | 1 | RIVING KNIFE SUPPORT PLATE. |
| 76 | BSW 564 | 1 | RIVING KNIFE HOLDER PACKING PIECE. |
| 77 | BSW513 | 1 | RIVING KNIFE HOLDER. |
| 78 | | 4 | 3/16"WHITx3"LONG ALLEN GRUB JACK SCREWS. |
| 7 9 | BSW532 | 1 | STANDARD RIVING KNIFE. |
| 80 | BSW546 | 1 | SPECIAL RIVING KNIFE FOR OVER TABLE GUARD. |
| 81 | | 2 | 3"WHIT NUTS. |
| 82 | BSW 534 | 3 | SPECIAL WASHER. |
| 83 | BSW539 | 1 | RIVING KNIFE PLATE LINK. |
| 84 | BSW49/A. | 1 | RIVING KNIFE PLATE PIN. |
| 85 | BSW51 | 1 | RIVING KNIFE PLATE LINK PIN. |
| 86 | BSW 510 | 1 | SPINDLE HOUSING PIVOT SHAFT. |
| 87 | BSW42 | 2 | HOUSING PIVOT SHAFT COLLARS. |
| 88 | | . 2 | 3"WHITx1"LONG ALLEN GRUB SCREWS. |
| 89 | BSW511 | 1 | RISE AND FALL SCREW. |
| 90 | | 1 | $\frac{3}{4}$ "WHIT LEFT HAND RISE AND FALL SCREW LOCKNUT. |
| 91 | | 1 | $\frac{1}{4}$ "WHIT x $\frac{1}{2}$ "LONG ALLEN GRUB SCREW. |
| 92 | BSW31 | T | RISE AND FALL NUT. |
| 93 | BSW 565 | 1 | RISE AND FALL SCREW STOP COLLAR. |
| 94 | BSW34 | 1 | RISE AND FALL SCREW COLLAR. |
| 95 | | 1 | SKF 0.6RISE AND FALL SCREW THRUST RACE. |
| 96 | S122A | 1 | RISE AND FALL SCREW TEE LOCK HANDLE. |
| | | | |

CONT,→

NOTE:- WHEN ORDERING SPARE PARTS QUOTE SERIAL NUMBER OF MACHINE AND PART NUMBER OR REFERENCE.



SAW RISE&FALL ASSEMBLY(SHEET TWO)

| REF. | PART NO. | QTY. | DESCRIPTION. |
|------|----------------------------|-----------|---|
| 97 | | 1 . | RISE AND FALL SCREW LOCK BRASS PAD. |
| 98 | BSW 509 | 1 | RISE AND FALL HANDWHEEL TRUNION. |
| 99 | BSW 535 | 1 | 8"DIA, ALUMINIUM HANDWHEEL. |
| 100 | | 1 | RISE AND FALL INDICATOR PLATE. |
| 101 | | 2 . | 3/32 BRASS RIVETS. |
| 102 | | 1 | NO. 4. TAPER PIN. |
| 103 | | 1 | $\frac{3}{4}$ "i/d.x $\frac{7}{8}$ "o/d. x $\frac{7}{8}$ "LONG OILITE BUSH. |
| 104 | . | 1 | SPRING LID OIL CUP FOR RISE AND FALL SCREW. |
| 105 | BSW46 | 1 . | THRUST RACE DUST SHROUD. |
| 106 | | 1 | $3/16$ "DIA.x $1\frac{1}{2}$ "LONG GROOVELOCK DOWEL. |
| 107 | | 1 | $\frac{1}{4}$ "WHIT $\times \frac{1}{4}$ "LONG ALLEN GRUB SCREW. |
| 108 | | 1 | 3" EXTERNAL CIRCLIP. |
| 109 | STOCK ITEM | 1 | PLASTIC RISE & FALL HANDLE SPECIAL WASHER. |
| 110 | 6698/A. | 1 | $\frac{3}{8}$ "BORE x $2\frac{7}{8}$ "LONG PLASTIC RISE AND FALL HANDLE. |
| 111 | STOCK ITEM. | 1 | HANDWHEEL SPINDLE. |
| 112 | | 2 | 3" WHIT NUTS. |
| 113 | | 2 | 3" WASHERS. |
| 114 | | 2 . | $\frac{3}{8}$ "WHIT x $1\frac{1}{2}$ " LONG STUDS. |
| 115 | | 2 | $5/16$ "WHIT x $\frac{1}{2}$ "LONG ALLEN GRUB SCREWS. |
| 116 | BSW134 | 2 | MOTOR PIVOT SHAFT COLLARS. |
| 117 | BSW7 | 2 | MOTOR PIVOT BLOCKS. |
| 118 | · · | 2 | 1 WHITx 1 LONG ALLEN GRUB SCREWS. |
| 119 | | 2 | $\frac{3}{8}$ "WHIT BOLTS x $1\frac{1}{4}$ " LONG. |
| 120 | | 4 | 3" WASHER. |
| 121 | BSW507 | 1 | MOTOR PLATFORM. |
| 122 | BSW508 | 1 | MOTOR PIVOT SHAFT. |
| 123 | 5 1 нР (4кw)мот | OR, FRAME | D112M, 3000 RPM, 380/420v. STANDARD. |

NOTE:- WHEN ORDERING SPARE PARTS QUOTE SERIAL NUMBER OF MACHINE AND PART NUMBER OR REFERENCE.

SAW RISE&FALL ASSEMBLY(SHEET THREE)

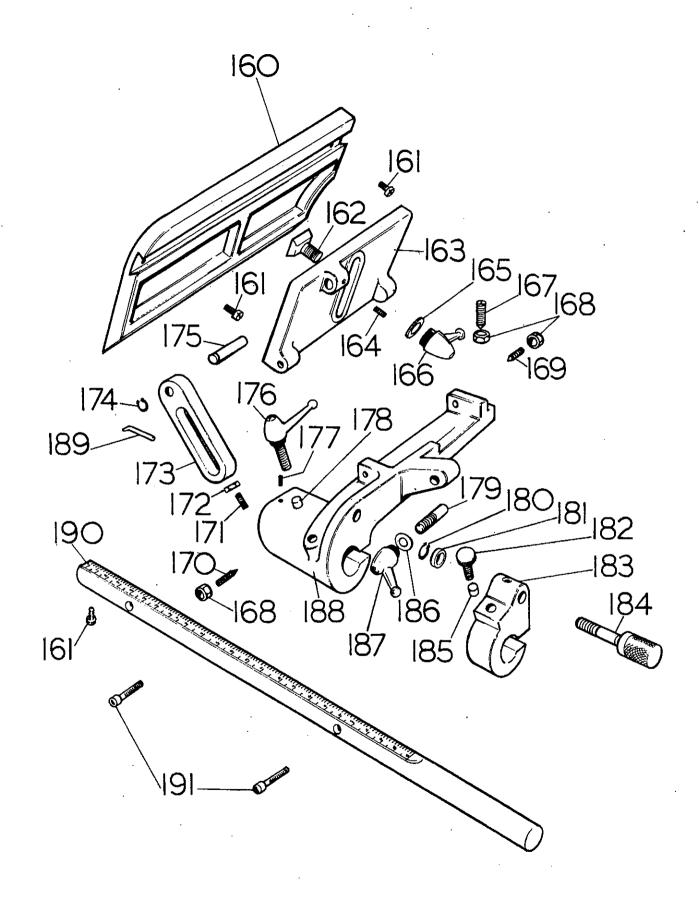
| ı | REF. | PART NO. | QTY. | DESCRIPTION. |
|------------|------|---|------|---|
| • | 124 | - | | 8mm WIDE x 7mm DEEP x 40mm LONG MOTOR SHAFT KEY. |
| • | 125 | BSS 58 | 1 | MOTOR SPIGOT. |
| | 126 | | 3 | $\frac{1}{4}$ "WHIT x $\frac{3}{4}$ "LONG COUNTERSUNK SCREWS. |
| | 127 | BSW519 | 1 | MOTOR TENSION BRACKET. |
| | 128 | | 1 | 2½" EXTERNAL CIRCLIP. |
| | 129 | BSW527 | 1 | MOTOR PULLEY. |
| | 130 | | . 1 | 5/16"WHIT x 1"LONG ALLEN GRUB SCREW. |
| _ | 131 | .=== ' | 1 | $5/16$ "WHIT $\times \frac{3}{4}$ "LONG ALLEN GRUB SCREW. |
| \bigcirc | 132 | ~~~ | 2 | 1 WHIT LEFT HAND THREAD NUTS. |
| | 133 | | 4 | ½" WASHERS. |
| | 134 | BSW142 | 1 | $\frac{1}{4}$ "WHIT LEFT HAND $4\frac{1}{4}$ "LONG MOTOR TENSION SCREW. |
| | 135 | BSW135 | 1 | TURNBUCKLE. |
| • | 136 | BSW537 | 1 | $\frac{1}{2}$ "WHIT RIGHT HAND 7"LONG MOTOR TENSION SCREW. |
| | 137 | | 2 | ½"WHIT NUTS. |
| | 138 | | 2 | ALPHA 500 "V"-ROPES. |
| | 139 | | 1 | %"WHIT NO.32 PLASTIC HANDWHEEL. |
| \bigcirc | 140 | | 1 | $\frac{3}{8}$ "WHIT x $2\frac{3}{4}$ "LONG CHEESE HEAD SCREW. |
| | 141 | | 1 | 3"PLAIN BORE NO 32 PLASTIC HANDWHEEL. |
| | 142 | BSW548 | 1 | GUARD ADJUSTMENT SCREW. |
| | 143 | BSW528 | 1 | ALUMINIUM SAW GUARD. |
| | 144 | | 2 | 3"WHIT x 14"LONG STUDS. |
| | 145 | BSW 529 | 1 | SAW GUARD VISOR. |
| | 146 | | 2 | 14" WASHERS. |
| | 147 | | 2 | 1 WHITPLASTIC HANDWHEELS FOR GUARD VISOR |
| • | 148 | = → 49 | . 2 | an washers. |
| | 149 | | 2 | 38" NUTS. |
| | 150 | *************************************** | 2 | 3"NUTS. |

NOTE:- WHEN ORDERING SPARE PARTS QUOTE SERIAL NUMBER OF MACHINE AND PART NUMBER OR REFERENCE.

CANTING FENCE ASSEMBLY.

| REF. | PART NO. | NO. OFF. | DESCRIPTION. | ı |
|-------------|-------------|-------------|---|---|
| 160 | BSW524 | - | DDAME DENGE DI LEE | |
| 161 | DS# 524 | 1 | FRONT FENCE PLATE. | |
| 162 | BSW8 | 3 1 | ¹ / ₄ "WHIT x ¹ / ₄ "LONG CHEESE HEAD SCREWS. | |
| 163 | BSW523 | 1 | DOVETAIL BOLT. | |
| 164 | 15 m y z y | 1 | BACK FENCE PLATE. | |
| 165 | | 1 | ¼"WHIT x ¾"LONG ALLEN GRUB SCREW. ⅓" WASHER. | |
| 166 | | î | y WHIT LEVER - LOCK HANDLE. | |
| 167 | BSW83 | 1 | TURNOVER BRACKET SCREW. | |
| 168 | === | 3 | F"WHIT LOCKNUTS. | |
| 169 | BSW66 | í | FENCE PIVOT SCREW (ECCENTRIC.) | |
| 170 | BSW65 | ī | FENCE PIVOT SCREW (TRUE.) | |
| 171 | | ī | 5/16"WHIT x ½"LONG ALLEN GRUB SCREW. | |
| 172 | | ī | 5/16"WHIT LOCKNUT. | |
| 173 | BSW525 | _ 1 | FENCE LINK. | 1 |
| 174 | | ī | 3" EXTERNAL CIRCLIP. | ż |
| 175 | BSW17 | 1 | FENCE LINK PIVOT PIN. | |
| 176 | | ī | "WHIT LEVER LOCK HANDLE. | |
| 177 | | 1 | 3/16"WHIT x 1/4"LONG ALLEN GRUB SCREW. | |
| 178 | STOCK ITEM. | 1 | BRASS LOCK LEVER PAD. | |
| 17 9 | | 1 | $\frac{1}{2}$ "WHIT x 2" LONG STUD. | |
| 180 | | · 1 | 8"EXTERNAL CIRCLIP. | |
| 181 | BSW123 | 1 | FINE ADJUSTMENT SCREW COLLAR. | |
| 182 | BSW58 | 1 | FINE ADJUSTMENT BRACKET THUMB SCREW. | |
| 183 | BSW526 | 1 | FINE ADJUSTMENT BRACKET. | |
| 184 | BSW63 | 1 | FENCE FINE ADJUSTMENT SCREW. | |
| 185 | STOCK ITEM | 1 | FINE ADJUSTMENT BRACKET BRASS | |
| | | | LOCKING PAD. | |
| 186 | | 1 | $\frac{1}{2}$ " WASHER. | |
| 187 | | 1 | $\frac{1}{2}$ " WHIT LEVER - LOCK HANDLE. | |
| 188 | BSW522 | 1 | TURNOVER BRACKET. | |
| 189 | BSW56 | 1 | RULE POINTER. | |
| 190 | BSS88 | 1 | FENCE BAR (IMPERIAL/METRIC GRAD- UATED.) | |
| 191 | | 2 | $\frac{3}{8}$ "WHIT x $1\frac{1}{4}$ "LONG ALLEN SCREWS. | |

NOTE:-- WHEN ORDERING SPARE PARTS QUOTE SERIAL NUMBER OF MACHINE AND PART NUMBER OR REFERENCE.



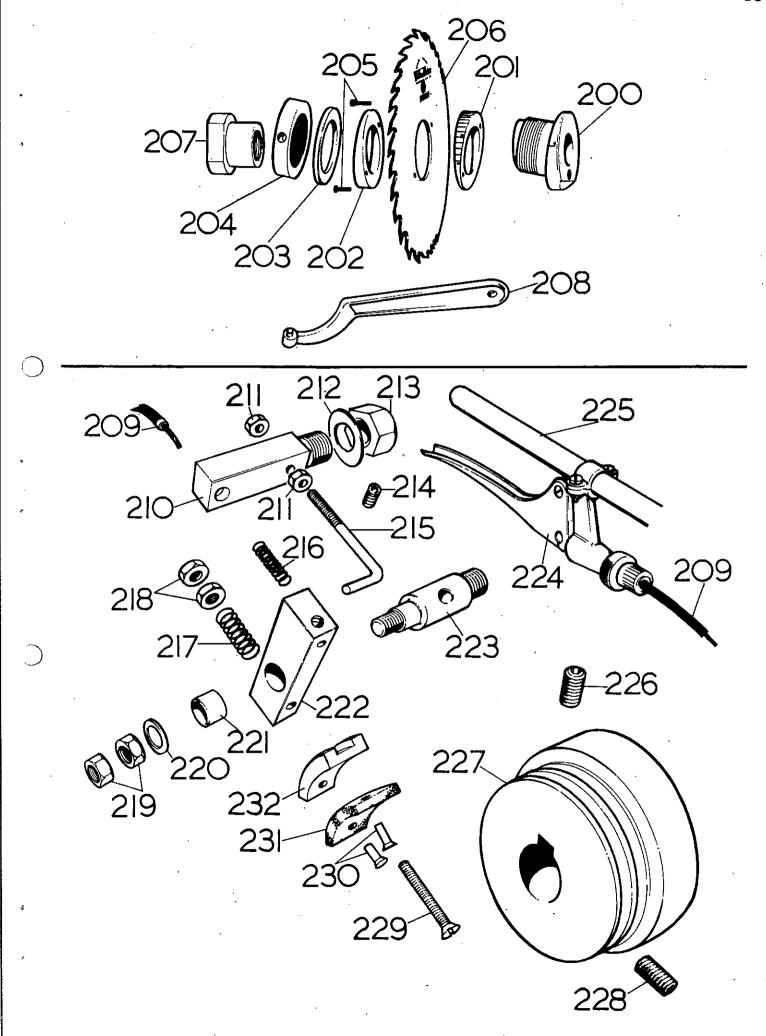
WOBBLE SAW UNIT (EXTRA)

| NO. | PART NO. | QTY. | DESCRIPTION. |
|-----|-------------|------|----------------------------------|
| 200 | QM40 | 1 | WOBBLE UNIT SLEEVE. |
| 201 | QM11 | 1 | GRADUATED SAW COLLAR. |
| 202 | QM12 | 1 | PLAIN SAW COLLAR. |
| 203 | QM13 | 1 | WASHER. |
| 204 | QM14 | 1 | LOCKING NUT. |
| 205 | QM20 | 2 | WOBBLE UNIT COLLAR SCREWS. |
| 206 | QS117 | 1 | WOBBLE SAW BLADE 10" (254mm)DIA. |
| 207 | QW7A. | 1 | SPINDLE NUT. |
| 208 | QS71 | 1 | "C" TYPE LOCKING SPANNER. |

SPINDLE BRAKE ASSEMBLY (EXTRA)

| 209 | 16" CABLE. | 1 . | BRAKE CABLE AND FITTINGS. |
|-----|------------------|-----|---|
| 210 | BSW552 | 1 | BRAKE POST. |
| 211 | | 2 | 3/16" WHIT LOCK NUTS. |
| 212 | | 1 | ½" WASHER. |
| 213 | 4 - 4 | 1 | ½" WHIT NUT. |
| 214 | | 1 | ¼"WHIT x ¾"LONG ALLEN GRUB SCREW. |
| 215 | BSW148 | 1 | STOP SCREW FOR SPINDLE BRAKE. |
| 216 | | 1 | BRAKE RETURN SPRING $1\frac{1}{8}$ " LONG. |
| 217 | BSW145 | 1 | PAD ALIGNMENT SPRING. |
| 218 | | 2 | 1" WHIT LOCKNUTS. |
| 219 | | 2 | 5/16"WHIT LOCKNUTS. |
| 220 | | 1 | SPECIAL 5/16" WASHER. |
| 221 | | 1 | $\frac{7}{8}$ " o/d x $\frac{3}{8}$ " 1/d x $\frac{1}{2}$ " LONG OILITE BUSH. |
| 222 | BSW132 | 1 | BRAKE ARM. |
| 223 | BSW551 | ī | BRAKE PIVOT PIN. |
| 224 | 107.PA.7RH. | 1 | BRAKE LEVER COMPLETE. |
| 225 | BSW128 | 1 | BRAKE LEVER ARM. |
| 226 | | 1 | $5/16$ "WHIT $\times \frac{1}{2}$ "LONG ALLEN GRUB SCREW. |
| 227 | BSW550 | 1 | SPINDLE BRAKE PULLEY. |
| 228 | | 1 | $5/16$ "WHIT $\times \frac{5}{8}$ "LONG ALLEN GRUB SCREW. |
| 229 | | 1 | 1 WHIT x 2"LONG COUNTERSUNK SCREW. |
| 230 | | 2 | in DIA. COPPER RIVETS. |
| 231 | | 1 | SPECIAL BRAKE PAD LINING MATERIAL. |
| 232 | BSW553 | 1 | BRAKE PAD BACKING QUADRANT. |

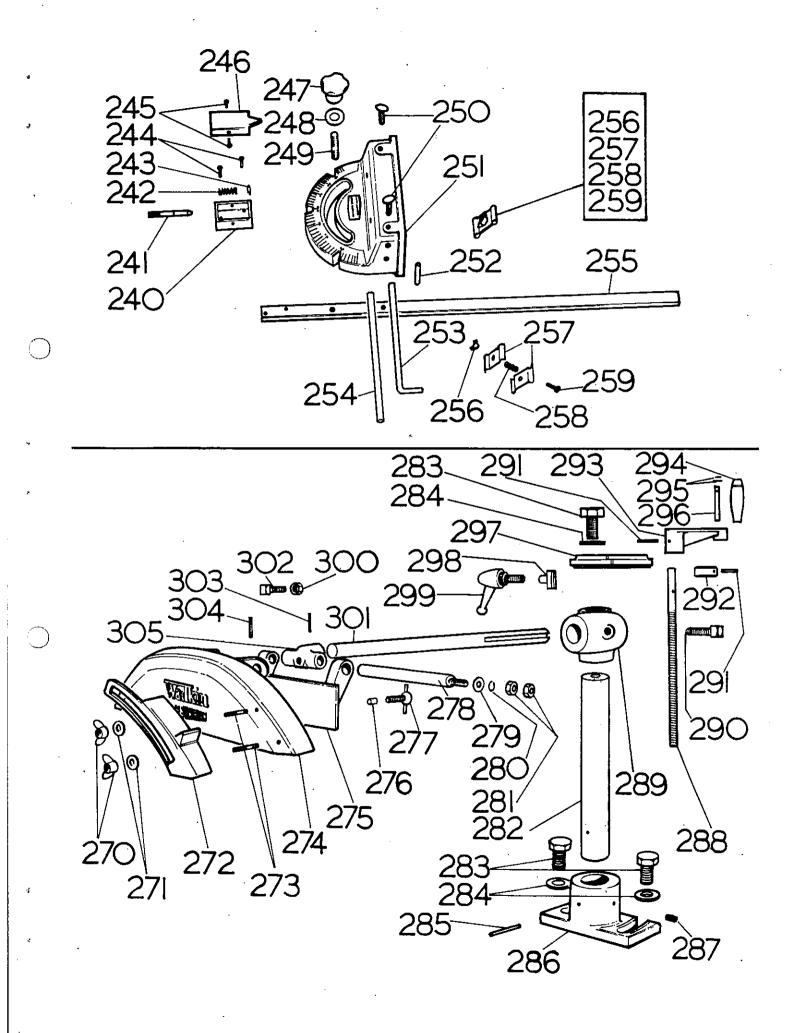
WHEN ORDERING REPLACEMENT PARTS QUOTE SERIAL NUMBER OF MACHINE AND PART NUMBER OR REFERENCE.



MITRE FENCE ASSEMBLY

| | | • | <u>· · · · · · · · · · · · · · · · · · · </u> |
|------|---------------------|---|---|
| REF. | PART NO. | QTY. | DESCRIPTION. |
| 240 | A-1026/220 | 1 | MITRE FENCE PLUNGER BRACKET. |
| 241 | A-1026/226 | 1 | MITRE FENCE LOCATION PIN. |
| 242 | ETS 30 | ĺ | PLUNGER SPRING. |
| 243 | 5103-25 | ī | PLUNGER CIRCLIP. |
| 244 | | 2 | 3/16"WHIT X 3"LONG SCREWS. |
| 245 | Z4 | 2 | TONG SELF TAPPING SCREWS. |
| 246 | A-1026/227 | 1 | PLUNGER BRACKET COVER. |
| 247 | R-1020/22/ | i | 5/16"whit x 12"DIA. PLASTIC HAND- |
| 27/ | | -1 , | WHEEL. |
| 248 | A-1026/174 | 1 | 5/16" WASHER FOR MITRE FENCE. |
| | A=1020/1/4 | 1 | 5/16"WHIT X 13" LONG STUD. |
| 240 | | 1 | |
| 250 | | 2 | 4" WHIT THUMB-SCREWS. |
| 251 | D - 1026/219 | <u>1</u> | MITRE FENCE BODY. |
| 252 | | <u></u> | PIVOT PIN FOR MITRE FENCE. |
| 253 | в1026/69 | 1 | MITRE FENCE STOPROD (CRANKED.) |
| 254 | B - 1026/69 | 1 | MITRE FENCE STOPROD (STRAIGHT) |
| 255 | | 1 | MITRE FENCE TABLE STRIP. |
| 256 | | 2 | 4" WHIT WING NUTS. |
| 257 | a-1026/68 | 4 | MITRE FENCE STOP PLATES. |
| 258 | A-1026/73 | 2 | MITRE FENCE STOP PLATE SPRINGS. |
| 259 | and such delta | 2 | 1"WHIT X 2"LONG COACH BOLTS. |
| | ĊU I | | |
| | PIL! | LAK GUA | RD ASSEMBLY |
| 270 | | 2 | 1" WHIT WING NUTS. |
| | | | 4" WASHERS. |
| 271 | 50 | 2 | · |
| 272 | SQ | Ţ. | SAW GUARD VISOR. |
| 273 | DOLL 50 | 2 | 4"WHIT X 1" LONG STUDS. |
| 274 | BSW 72 | Ţ | SAW GUARD. |
| 275 | BSW 73 | 1 | SAW GUARD REAR COVER. |
| 276 | BSW 57 | 1 | 5/16"DIA. BRASS LOCKING PAD. |
| 277 | | 1 | 3"WHIT TEE LOCK HANDLE. |
| 278 | BSW 79 | 1 | SAW GUARD SHAFT. |
| 279 | | 1 | ਨੂੰ" WHIT WASHER. |
| 280 | | 1 | ਰੰ" SPRING WASHER. |
| 281 | | 2 | a" whit locknuts. |
| 282 | BSW 75 | 1 | SAW GUARD COLUMN. |
| 283 | | | $\frac{1}{2}$ " WHIT x $1\frac{1}{2}$ " LONG BOLTS. |
| 284 | ~~~ | 3 3 1 | اً" WASHERS. |
| 285 | | í | 1 DIA. x 21 LONG GROOVELOCK DOWEL. |
| 286 | BSW 67 | ī | SAW GUARD BASE CASTING. |
| 287 | | ī | 14" WHIT x 3" LONG GRUB SCREW. |
| 288 | BSW 76 | ì | SAW GUARD RISE AND FALL SCREW. |
| 289 | BSW 68 | ĺ | SAW GUARD RISE AND FALL BOSS. |
| - | (BSW STOCK) | 1 | LOCKING BOLT 3"WHIT x 12" LONG SQUARE |
| 290 | (DOW DIOOK) | 1 | ₩ |
| 207 | | 7 | HEAD. |
| 291 | Day 88 | Ţ | 3/16"DIA. X 1" LONG GROOVELOCK DOWEL. |
| 292 | BSW 77 | 1 | SAW GUARD RISE AND FALL SCREW COLLAR. |
| 293 | BSW 70 | 1 | SAW GUARD RISE AND FALL HANDLE. |
| 294 | | 1 | PLASTIC HANDLE FOR GUARD RISE & FALL. |
| 295 | STOCK ITEMS. | 1 EACH. | SAW GUARD RISE AND FALL HANDLE WASHER |
| 206 | פתירות בשביות | ו | AND CLIP. |
| 296 | STOCK ITEM. | <u> </u> | SAW GUARD RISE AND FALL HANDLE SPINDLE. |
| 297 | BSW 69 | 1 | SAW GUARD RISE AND FALL CAP. |
| 298 | BSW 82 | 1 | LOCKING KEY. |
| 299 | | 1 | d" WHIT LEVER LOCK HANDLE. |
| 300 | | 1 | 5/16" WHIT LOCKNUT. |
| 301 | BSW 78/A. | 1 | SAW GUARD SUPPORT ARM. |
| 302 | | 1 | 5/16" WHIT X 2" LONG SQUARE HEAD BOLT. |
| 303 | | 1. | 1" DIA. X 2" LONG GROOVELOCK DOWEL. |
| 304 | | 1 | 3/16" DIA. X 13" LONG GROOVELOCK DOWEL. |
| 305 | BSW 71 | ī | BRACKET FOR SAW GUARD. |
| 7-7 | —— · 1 ···· | _ | |

NOTE:- WHEN ORDERING REPLACEMENT PARTS QUOTE SERIAL NUMBER OF MACHINE, ALSO PART NUMBER OR REFERENCE.



RECOMMENDED SPARE PARTS.

| | | | |
|-------------------------------|-----|-------------|-----------------------|
| PART | | QTY | REF |
| SPINDLE BEARINGS | | 2 | s.k.f. 6308 zz |
| RISE & FALL SCREW THRUST RACE | • | 1. | и 0·6 |
| VEE-BELTS | | 2 2 | ALPHA 500 |
| FELT SAW PACKINGS | | 2 | 1/2 × 7/6 × 4 |
| ELECTRICS 380/440-3Ph-50Cyc | | | |
| FIXED & MOVING CONTACTS | RP4 | Set | MEM ADS STARTER |
| NO VOLT COIL | | | 11 11 11 |
| OVERLOAD UNIT | | Set | 11 11 11 |
| FIXED & MOVING CONTACTS | | Set | BROOK RT3 STARTER |
| NO VOLTCOIL | | | 11 11 11 |
| OVERLOAD UNIT UI6 | | Set | 11 (1)1 |
| FIXED & MOVING CONTACTS | | Set | BROOK RYD STARTER |
| NO VOLT COIL | | | 11 11 11 |
| OVERLOAD UNIT | | | 11 11 11 |
| TIMER | | | 11 11 11 |
| | | | |
| | | | 1 |
| | * | | |

STANDARD STOCK SAWS.

| BC15 | 16" (400mm) DIAMETER ALLOY CROSSCUT SAW. | vvvv |
|-----------|--|-------|
| BC16 | 16"(400mm) DIAMETER GENERAL PURPOSE ALLOY RIP SAW. | m |
| BC17 | 16"(400mm) DIAMETER CHROME PLATED RIP SAW. | ww |
| BC 122 | 16 (400mm) DIAMETER TUNGSTEN CARBIDE TIPPED RIP SAW. | verez |

OTHER TYPES OF SAWS FOR CUTTING PLASTICS & PLYWOOD ARE AVAILABLE, DETAILS OF WHICH CAN BE APPLIED FOR OR BE SEEN IN THE WARRIN SMALL TOOLS CATALOGUE.