

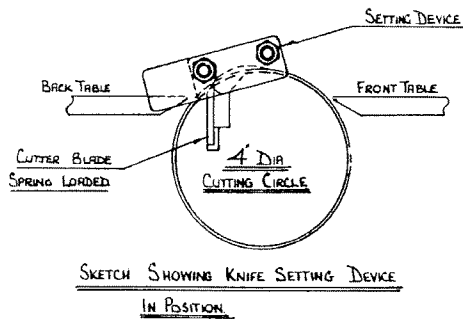
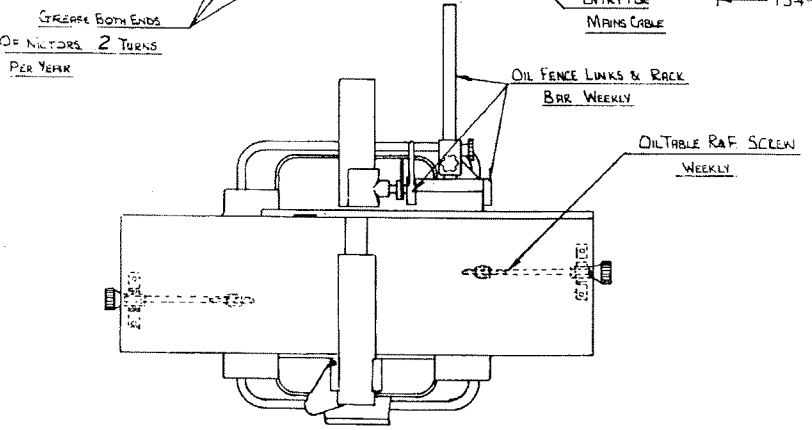
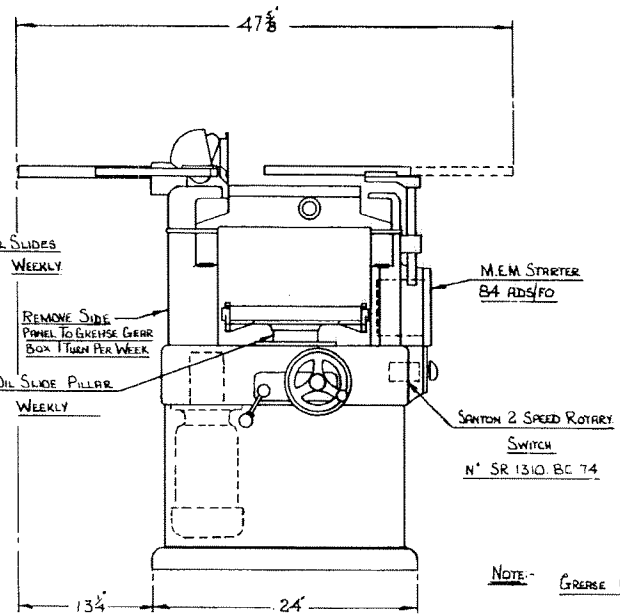
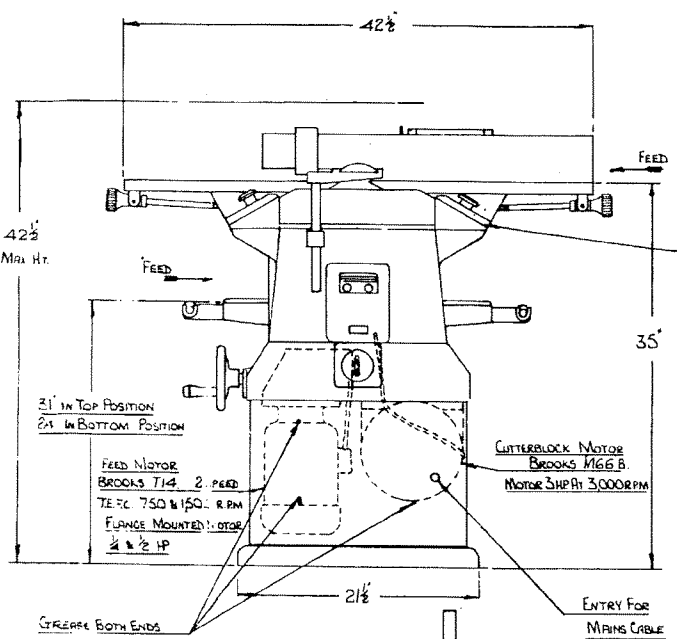


ULTRACARE
At the Cutting Edge of Industry

12"BAO/S

**SURFACE PLANER
And THICKNESSER**

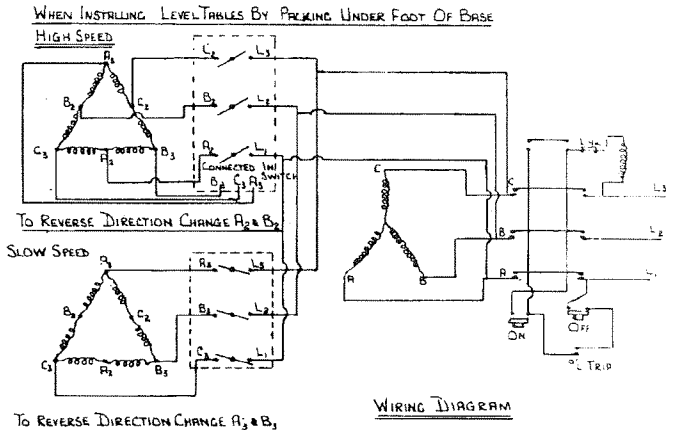
INSTRUCTION MANUAL No.3023



SPECIFICATIONS

| | |
|------------------------------------|---------------------------------|
| CAPACITY OF MACHINE | = 12 1/2" WIDE x 7" DEEP |
| MAX. DEPTH OF REBATE | = 1/2" |
| VERT. ADJUSTMENT OF PLANING TABLES | = 3/8" |
| SPEED OF CUTTERBLOCK | = 5000 R.P.M. |
| HP OF FEED MOTOR | = 1/2 HP & 1/2 HP |
| HP OF CUTTERBLOCK MOTOR | = 3 HP |
| RATES OF FEED | = 15 & 30 FEET/MIN. |
| APPROX. NETT WEIGHT | = 784 lbs |
| GROSS WEIGHT | = 952 lbs |
| CASE SIZE | = 2' 3 1/2" x 2' 6 1/2" x 3' 4" |
| CASE VOLUME | = 23.7 CU. FT. |
| TYPE OF GREASE RECOMMENDED | = SHELL ALVANIA 3 |
| TYPE OF OIL RECOMMENDED | = POWER FLUIDS |
| BEARINGS USED | |
| 6205-2RS Bearing | --- USED ON CUTTERBLOCK |
| 6206-2RS Bearing | --- USED ON UNDER TABLE ROLLERS |
| 4-6200-2RS Bearing | --- USED ON JOCKEY PULLEY |
| 2-SG88503 (S.K.F) BEARINGS | --- USED ON R&F BRACKET |
| 2-EW 3/4" (HOFF) THRUST RACES | |
| 1-EW 1" (HOFF) THRUST RACE | |

NOTE - GREASE CHAINS, FEED GEAR BOX & R&F ASSEMBLY WEEKLY



NOTE - CHECK & ADJUST BELT TENSION DAILY DURING FIRST TWO WEEKS OF RUNNING TO AVOID BELT SLIP WHEN STARTING UP MACHINE.

BAO/S

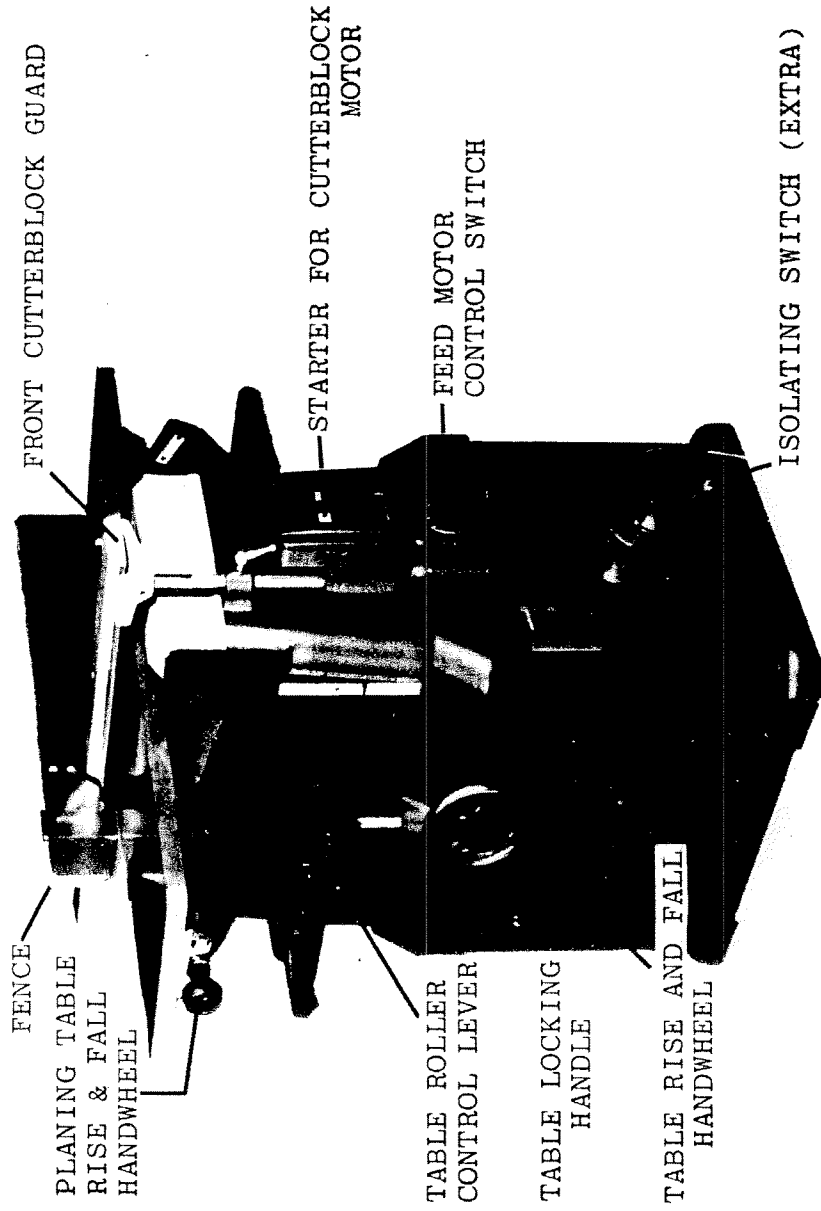
BELTS - 2-A57 VEE ROPES.

| | | | |
|------------------------------------|---|------------|--------------|
| TITLE - 12" PLANING THICKENING M/C | BURSCREEN (DURHAM) LTD FENCE HOUSES CO DURHAM | | |
| OUTLINE Dwg | TYPE BAO/S | MODT NOTES | QUANT PARTS |
| | | | ORDER N° |
| | | | MAT - |
| | | | DATE 26-1-60 |
| | | | DRAWN BY RR |
| | | | DATE 26-1-60 |
| | | | DRC N° |
| | | | C-1032 FN |

INSTRUCTION MANUAL FOR

12" BAO/S

Surface Planer and Thicknesser



S P E C I F I C A T I O N

| | | | |
|--|----------------|------------------------|----------------|
| Thickening Capacity | ... | 12 7/8" wide x 7" deep | 310 x 180mm |
| Length of thickening table | ... | 28" | 710mm |
| Overall length of surfacer tables | ... | 42" | 1,075mm |
| Width of surfacer tables | ... | 12 1/4" | 310mm |
| Rise and fall surfacer tables | ... | 7/8" | 15mm |
| Maximum depth of rebate | ... | 1/2" | 12mm |
| Height of surfacer table from floor | ... | 34 1/2" | 880mm |
| Length of fence | ... | 30" | 760mm |
| Fence cants up to | ... | 4 1/4" | 110mm |
| Cutting circle diameter of cutterblock | ... | 450 | 450 |
| Speed of cutterblock | ... | 4" | 100mm |
| Number of cutters | Standard | 5,000 r.p.m. | 5,000 r.p.m. |
| | Optional extra | 2 | 2 |
| | | 3 | 3 |
| Horse Power of cutterblock motor | ... | 3,000 r.p.m. | 3,000 r.p.m. |
| Syn. speed of cutterblock motor | 50 cycles. | 3,600 r.p.m. | 3,600 r.p.m. |
| Diameter of feed rollers | ... | 15 and 30 ft. | 4.5 and 9m. |
| Feed speed per minute | ... | 22ft. | 6.7m. |
| Maximum floor space | ... | 42" x 48" | 1065 x 1220mm. |
| Net weight | ... | 740 lb. | 335 kg. |

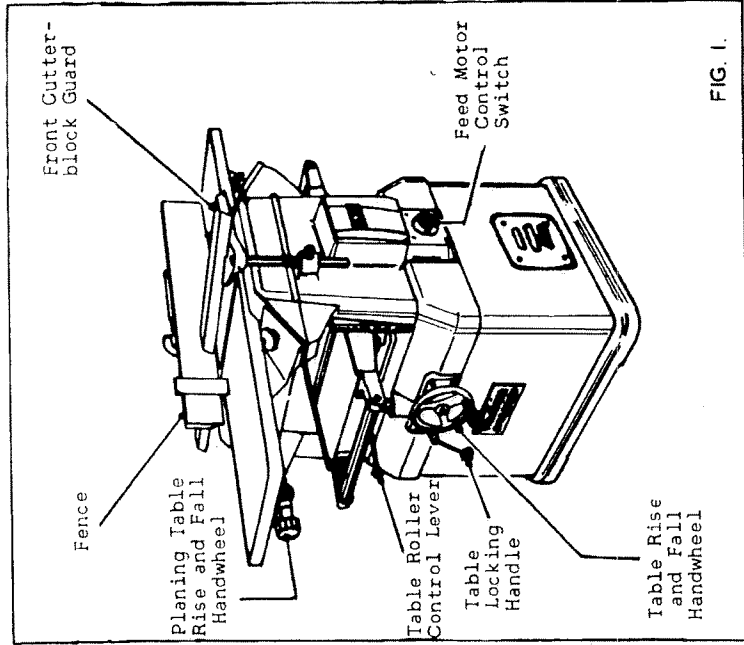


FIG. 1.

INSTALLATION

Remove protective coating from bright parts by applying a cloth soaked in paraffin, turpentine or some other solvent.
 When the machine is cased for export the fence, outer table rollers, rise and fall handwheel and front cutterblock guard are removed and packed individually. Remove and assemble as shown in Fig. 1

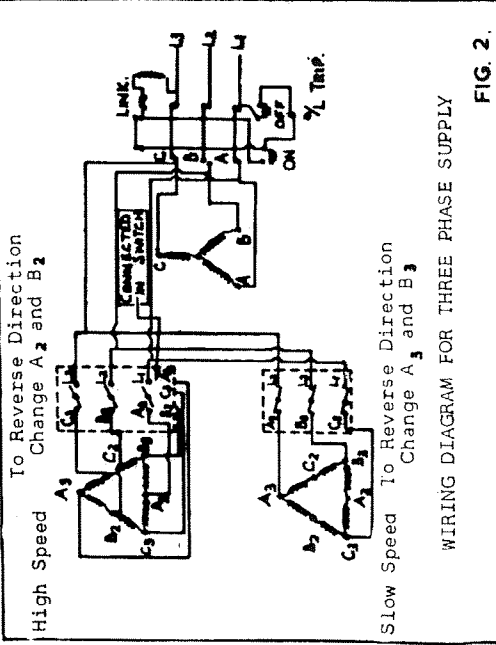


FIG. 2.

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.
 4. Connect the line leads to the appropriate terminals. See Fig. 2 for 3 phase supply.
 5. Check all connections are sound.
 6. Check the rotation of both motors for the correct direction. If these are incorrect reverse any two of the line lead connections.
 For single phase supply refer to booklet supplied with starter for wiring details.

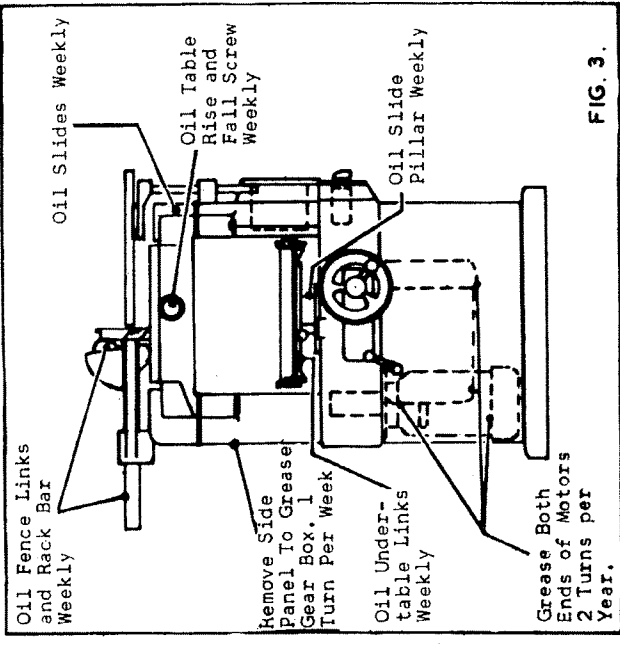


FIG. 3.

LUBRICATION.

It is advisable to keep all bright parts covered with a thin film of oil to prevent rusting. The slideways should also be kept clear of any chippings for ease of operation.
 TYPE OF OIL RECOMMENDED
 POWER EM.125
 SHELL ALVANIA 3.
 TYPE OF GREASE RECOMMENDED

All adjustments and alignments listed below have been carefully set and checked and the whole machine thoroughly tested before despatch from the works. During the first few weeks of operation and at regular intervals afterwards certain items such as belt tension and chain tension should be checked carefully. When the adjustments are necessary proceed in accordance with the relative instructions given.

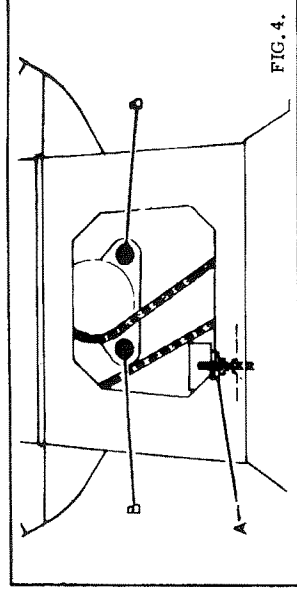


FIG. 4.

BELT TENSION

The cutterblock drive is by two vee belts from a 3HP motor. Tension is effected to these belts by an adjustable jockey pulley. To adjust, remove sheet steel panel from drive side of the machine and turn the knurled nut "A" in Fig. 4 in the direction indicated until required tension is reached. Replace panel before operating machine.

FEED CHAIN TENSION

Drive to feed rollers is by roller chain from a worm gearbox directly coupled to the feed motor. Feed motor on 3 phase machines is 2 speed giving feed speeds of 15 and 30 ft/min (4.5 and 9 m/min) and on single phase, single speed giving a feed speed of 22 ft/min (6.7 m/min) only.

The feed chain must be run with sufficient slack to allow the front or serrated feed roller to freely lift $\frac{1}{4}$ " from rest position. To adjust, remove drive side panel, loosen the two nuts "B" in Fig. 4 and move idler sprocket as required. Check feed roller lift as above, tighten nuts and replace panel.

TABLE ROLLERS

The anti-friction table rollers or bed rollers revolve on sealed for life ball bearings which require no lubrication. On machines prior to serial No. 63710 rollers were individually adjusted by set screws under the bearing blocks and should be adjusted to suit the relevant working conditions. On all machines after this number the rollers are automatically adjusted in relation to the table surface by a single operating lever at the infeed end of the table.

A calibrated scale (0-3) above the lever indicates the relevant positions, a guide to which is as follows:

At Min 0

Rollers are level with table surface and only very fine cuts on selected pre-machined timber are generally possible in this position. Feed permitting, however, very accurate step free planing can be carried out in this position.

Positions 1 and 2

Are the normal working positions for general use, combining good feeding with first class results.

Position 3 maximum

This is for use with wet, twisted or roughly sawn material where feeding is most important feature.

In all cases the lowest position consistent with good and regular feeding should be used as this will give the best possible results. Should the table rollers be removed for any reason care must be taken to replace them exactly as before otherwise the settings will be disturbed.

It must be emphasised that a really good surface finish from a thicknessing machine is only possible when the face of the timber resting on the machine table is flat and has a reasonable finish. Wherever practicable this face should be pre-machined on an overhead jointer or surfacer to remove twist and other irregularities.

FEED ROLLER AND PRESSURE BAR SETTING

These are pre-set at works in accordance with Fig. 5 and vertical adjustment relative to the cutterblock is neither possible nor necessary provided the cutters are correctly set with the special setting gauge supplied with each machine. Should replacement feed rollers or pressure bars be fitted at any time the settings should be very carefully checked with Fig. 5.

Some slight advantage in finish or feeding may on occasions be obtained by increasing or decreasing the tension of the pressure bar or feed roller springs. Spring pressures should be set by trial and error to give satisfactory feed.

The springs should never be compressed to a point where the feed rollers and pressure bars cannot lift sufficient to allow the maximum cut to be taken.

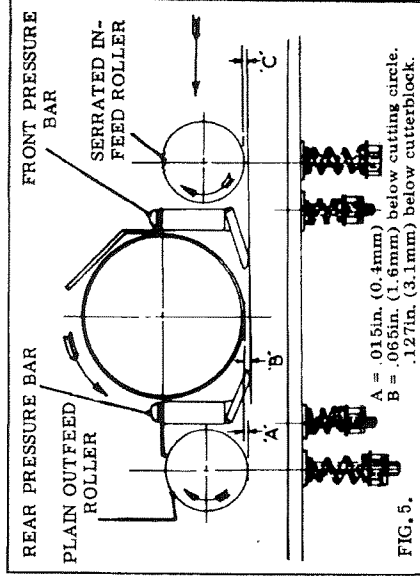


FIG. 5.

A = .015in. (0.4mm)
B = .065in. (1.6mm) below cutting circle.
.127in. (3.1mm) below cutterblock.

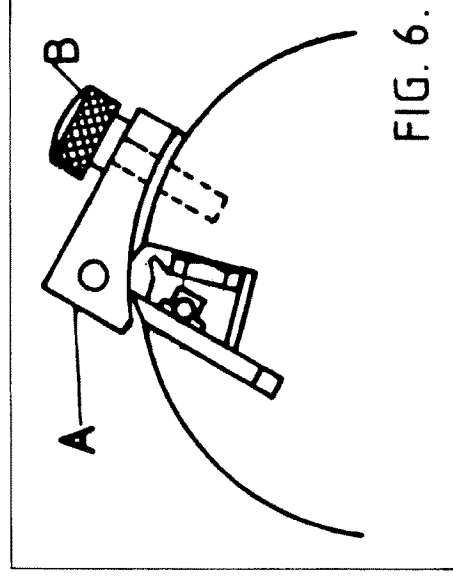


FIG. 6.

CUTTER SETTING

The knife is held in the cutterblock by a wedge, into which is fitted spring loaded balls, these balls hold the knife finger tight whilst the 5-M12 hexagon head screws are loose. This allows both hands to be free to adjust the blade and ensure that it will not slip back during setting or move whilst the wedge screws are being tightened up. Should any other method of cutter setting be employed the amount of cutter projection must correspond exactly with that given by the setting gauge supplied and failure to observe this instruction will result in bad feeding and poor finish.

To remove the knives and re-set with the 'BURSGREEN' knife setting gauge, proceed as follows:—

1. Move the fence to rear of the table and lower both planing tables to their lowest position.
2. Turn the cutterblock to approximately the position shown in FIG. 6 and loosen the 5-M12 hexagon head screws, carefully remove knife from cutterblock.

NOTE: When grinding it is important that knives are ground dead straight and balanced in pairs or sets.

An efficient re-grinding service is available, charges are moderate and service prompt. To avail yourself of this service, return knives to BURSGREEN (DURHAM), FENCE HOUSES, TYNE & WEAR.

3. To re-set the knives the cutterblock should be in the approximate position as shown in FIG. 6. Place knife in between wedge and cutterblock with the blade drawn forward slightly.

4. Carefully secure the knife setting device 'A' FIG. 6 to the cutterblock with the two knurled locking screws 'B' as shown in FIG. 6.

5. Whilst turning these locking screws 'B', FIG. 6, knife will be lowered to correct setting which is reached when knurled screws are locked in position and knife just touches knife setting device.

6. When the knife is correctly set tighten 5-M12 hexagon head screws, remove knife setting device then securely lock the 5-M12 hexagon head screws.

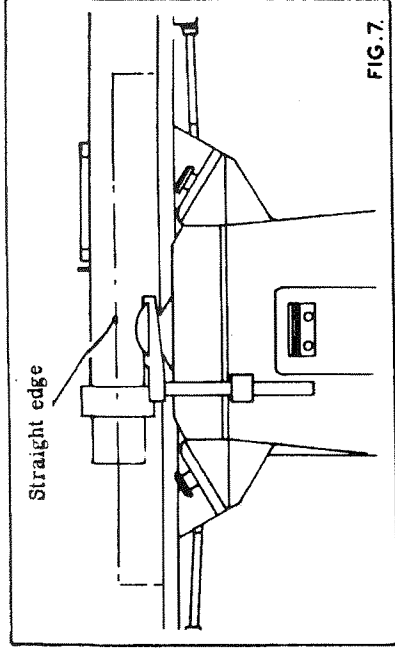


FIG. 7.

7. Rotate cutterblock until the next knife is in position and repeat the procedure until all the knives have been set.
8. When changing knives it is advisable to check that all the locking screws are adequately lubricated and quite free. Periodically examine for damage or cracks. Any doubtful screws should be replaced and all screws well lubricated with 'Moly slip' or similar oil, before replacing.
9. To check the setting of the knives, raise the back planing or 1/16 in. above the outer surface of the cutterblock. Place a straight edge on the table as shown in FIG. 7 and rotate the cutterblock by hand until the knife just touches the straight. Repeat this check in various positions over the width of the table to ensure the knife is parallel. Repeat this procedure for all knives.

Keep the cutters sharp when in position by using a fine grade oil stone dipped in paraffin. Allow the stone to rest lightly and flat on the bevel and pass over the cutter with a rotating action a few times. Give about two strokes on the full length of each knife on the face side to remove all burrs from the cutting edge.

Do not allow a heel greater than 1/32" wide on the bevel before removing and regrinding. When the heel becomes too wide the knives may heat up or have a hammering effect on the wood and more than normal power will be required to run the cutterblock.

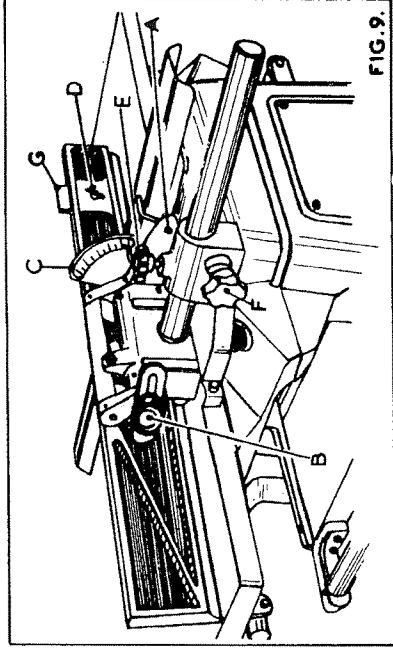


FIG. 9.

FENCE ADJUSTMENTS

The fence cants by means of a lever "A" in Fig. 9. The angle is shown on the graduated scale "C".

To cant the fence loosen handwheel "B" and lift handle "A" until the required angle is shown on scale "C", then re-lock handwheel "B".

The fence front plate is fitted with an insert "G" that is adjustable depending on the depth of cut being taken. To adjust loosen wingnut "D" and move the insert until it touches rear table then re-lock wingnut "D". The insert should be loosened at all times before lowering the table.

The fence is adjustable across the table by the handwheel "F". To move across the table loosen handwheel "E" and turn handwheel "F" until required position is reached then relock handwheel "E".

The fence should be locked in both positions at all times when the machine is in operation.

The fence has positive stops at 90° and 45°. These are accurately set before despatch.

To check, the undermentioned procedure should be followed:

1. Move the fence towards the rear of the table as shown in Fig. 10.
2. Check the 90° positive stops by means of a steel square as in Fig. 10. If adjustment is necessary adjust the hexagon head bolts "A" until fence is at right angles to the table when hard up against the stops and the handwheel "B" in Fig. 9 locked.
3. Check the 45° positive stop by means of an adjustable square. If adjustment is necessary adjust the socket head grub screw "B" in Fig. 10 until the fence is 45° to the table when hard up against the stop and the handwheel "B" in Fig. 9 locked.
4. If adjustment is made to the positive stops check the graduated scale for accuracy. This is secured to the support bar by a socket head grub screw and to adjust, loosen the grub screw and accurately position the scale to the pointer.

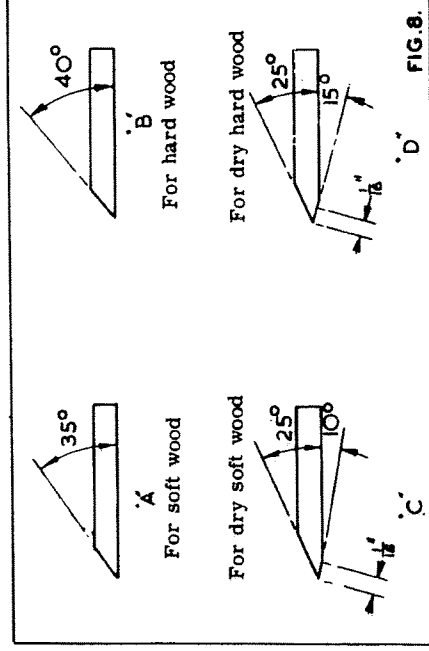


FIG. 8.

CUTTER CARE

The cutters supplied are 12¼" (310mm) long x 1¼" (32mm) wide x 1/8" (3mm) thick in balanced sets. They should be kept in balanced sets by ensuring that the cutters have equal dimensions after grinding and that the cutter edge is straight and parallel to the back edge.

For general work knife angles for soft and hard woods are recommended as in Fig. 8 (a) and (b).

When a very fine finish is required in dry soft and hard woods a slight front bevel is given as in Fig. 8 (c) and (d). For wet or green timber the cutting bevel may be decreased five degrees, but the front bevel should not be given.

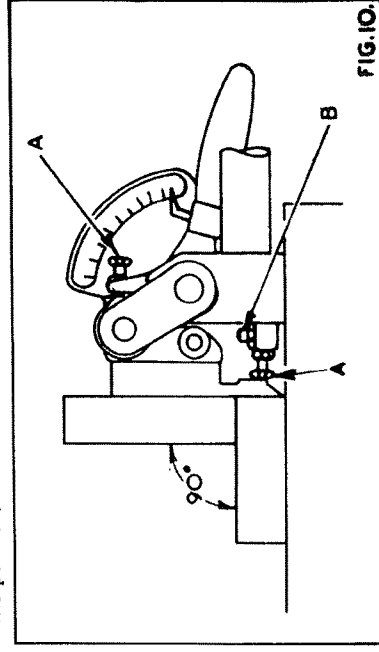


FIG. 10.

SETTING THICKENING TABLE PARALLEL TO CUTTERBLOCK

The machine table is accurately set parallel to cutterblock before despatch but should it be disturbed for any reason it must be carefully checked and made parallel to the cutterblock, if necessary, by the following procedure.

1. Feed a short length of timber approximately 2" square (50 mm) x 18" long (460 mm) through the machine to one side of the thickening table.
2. Without adjustment to the height of the table feed the timber through the machine again on the opposite side of the table to that in item 1.
3. If a cut is taken or it does not touch the wood adjust the fine thread adjusters on the under-side of the table to suit and when set tighten all screws.

As the knife setting device sets the knives parallel to the cutterblock it is vitally important that the table is set dead parallel to the cutterblock.

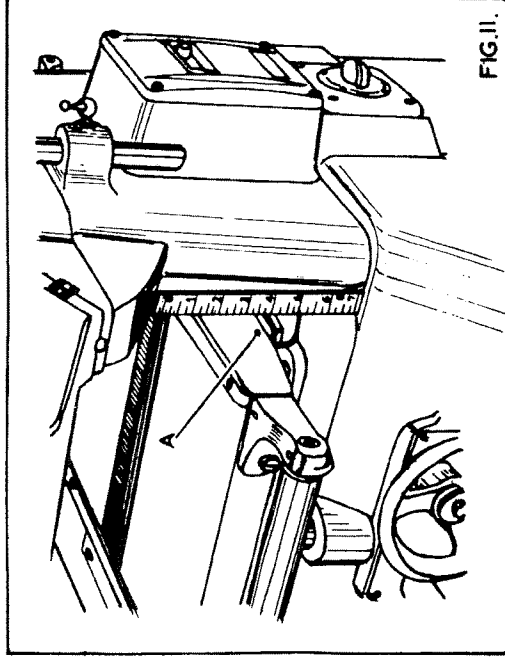


FIG. 11.

THICKENING RULE

The pointer on the machine table is pre-set before despatch. Should it be disturbed, feed a piece of timber through the machine and measure the thickness accurately. Check that the reading given by the pointer corresponds to the thickness of timber machined. Should adjustment be necessary slacken the screw "A" in Fig. 11 and set pointer to the correct thickness.

GENERAL HINTS

For Thickening

1. When thickening long lengths of timber always support after the machine table, otherwise a step will appear on either or both ends.

See Fig. 15 for suggested support which can be easily made.

2. When a smooth finish is required use the slow feed speed. For roughing when the finish is not important use the fast feed speed.
3. For the best results always feed the timber to cut with the grain.
4. Should the timber stick when thickening two probable causes are given below:
 - (a) The table rollers are set too low in the table.
 - (b) The spring pressure is too great on the pressure bars and too little on the feed rollers.

For Surface Planing

1. To obtain the best surface finish always check the direction of the grain, which should run with the cutter as in Fig. 12.
2. To obtain a perfectly flat surface especially with warped stock always put maximum pressure on the back table at "A" in Fig. 13 and as little as possible on the front table at "B".
3. Greater pressure will be required when surfacing bad grained timber otherwise chattering will take place resulting in a coarse finish near each knot.
4. When planing four sides of timber square turn the timber anti-clockwise after each cut so that there will always be a machined face next to the fence as in Fig. 14. The fence locates accurately at 90°

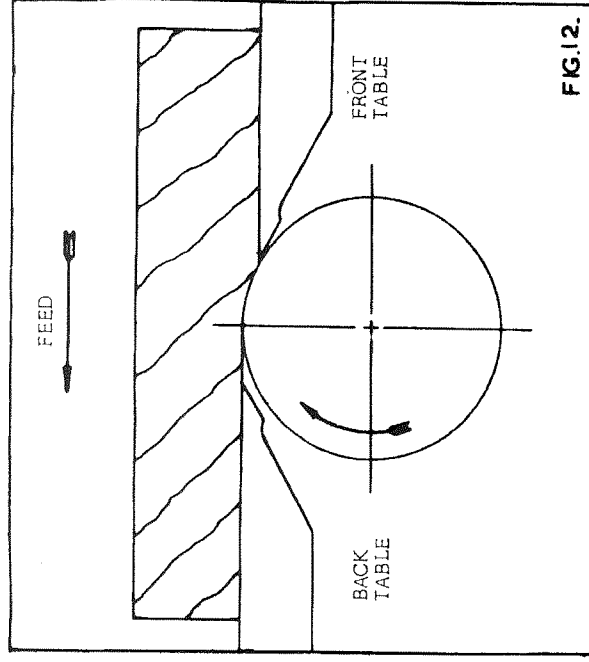


FIG. 12.

CORRECT RUN OF GRAIN

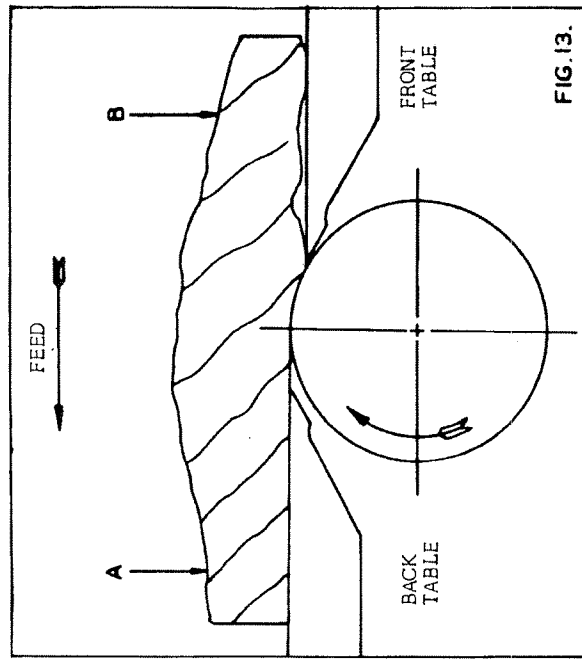


FIG. 13.

FEEDING WARPED TIMBER

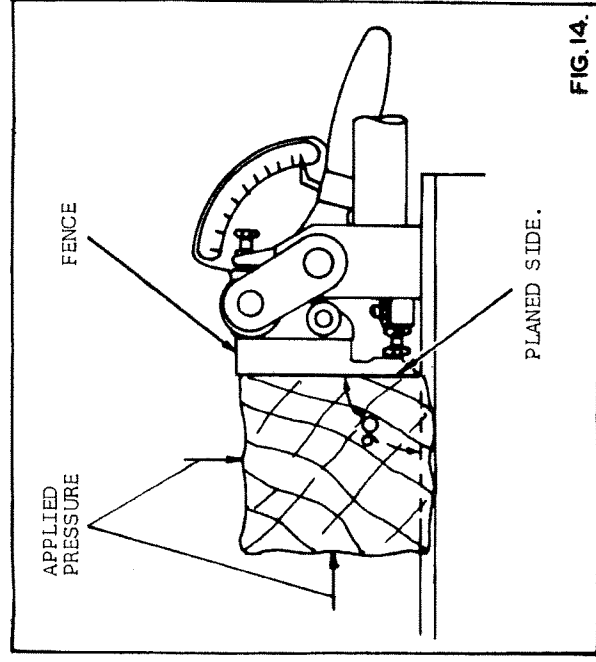
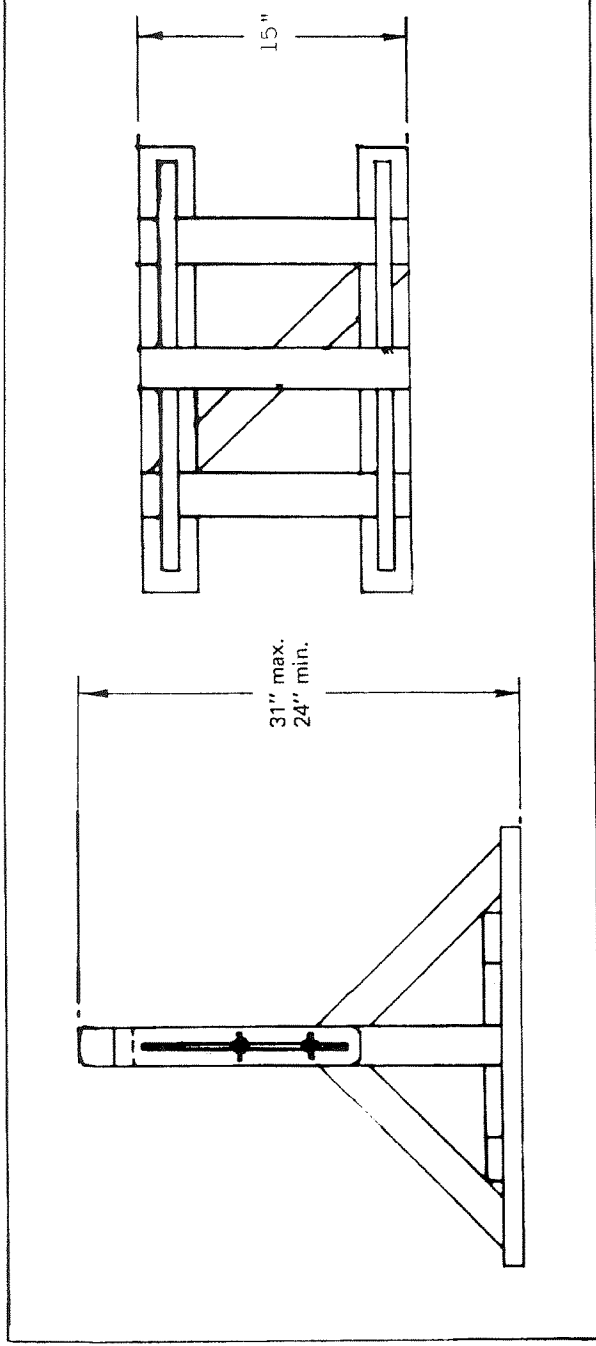
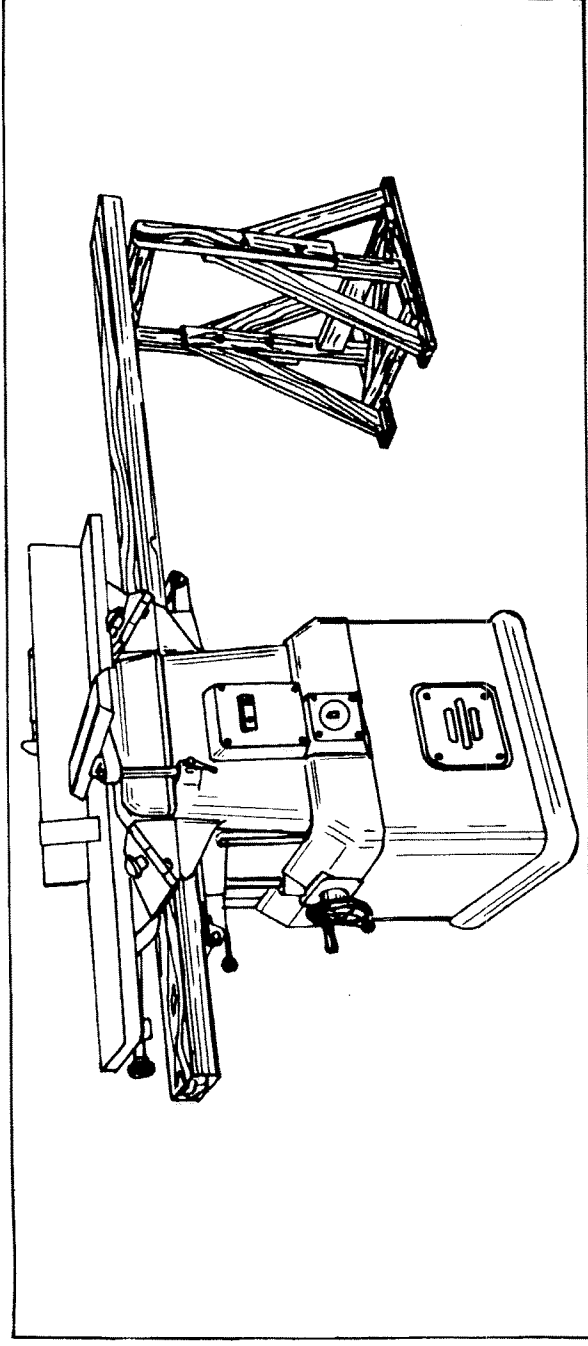


FIG. 14.

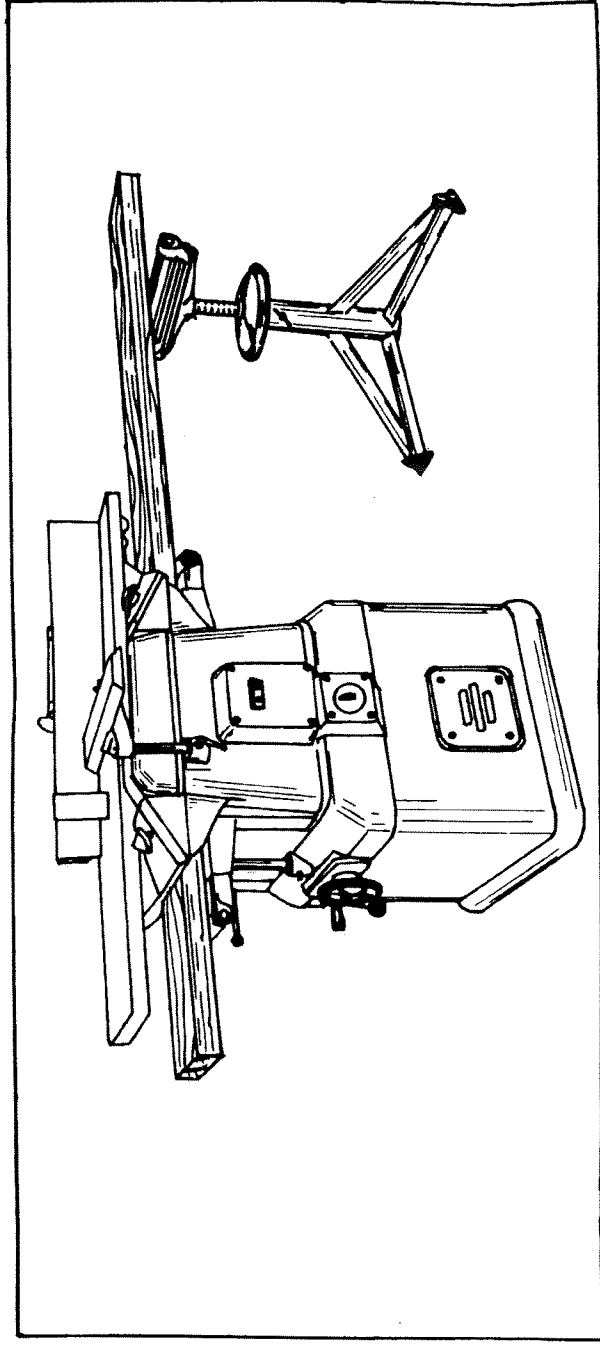
WORKING WITH FENCE



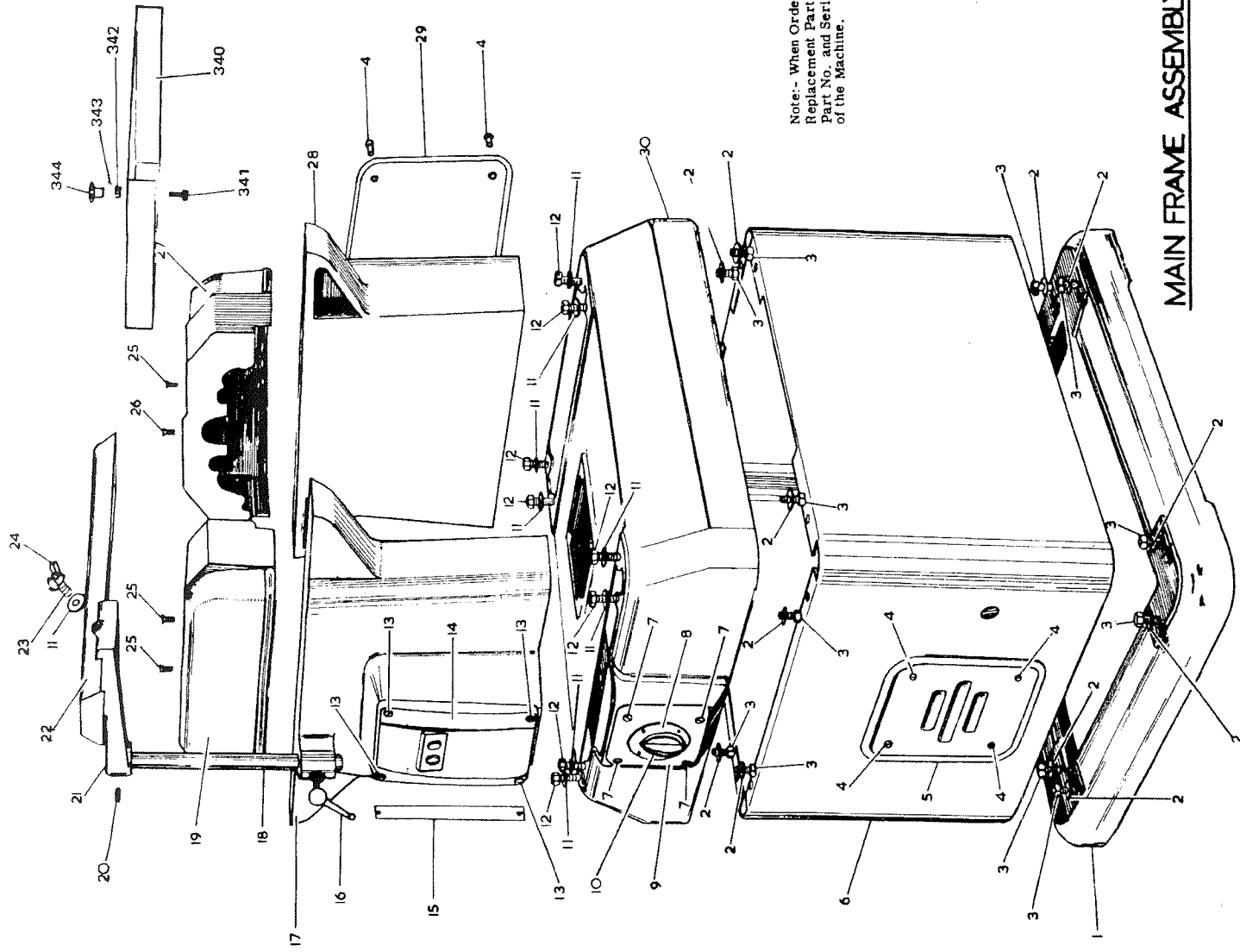
OVERALL DIMENSIONS OF SUGGESTED SUPPORT



SKETCH SHOWING WOOD SUPPORT IN POSITION



SKETCH SHOWING WADKIN/BURSGREEN ROLLER STAND TYPE VW IN POSITION.



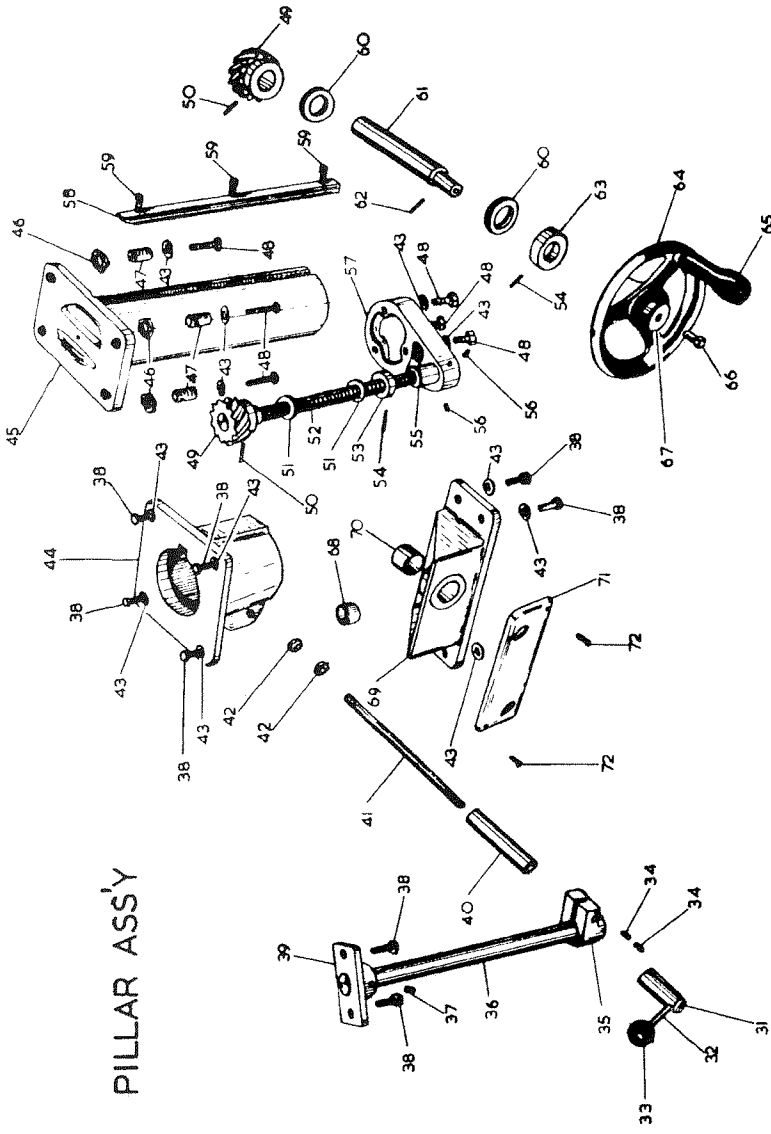
Note:- When Ordering
Replacement Parts Quote
Part No. and Serial No.
of the Machine.

MAIN FRAME ASSEMBLY

| Ref. No. | Part No. | No. Off | Description | Ref. No. | Part No. | No. Off | Description |
|----------|-----------------|---------|---|----------|------------|---------|--|
| 1 | D1031M/5 | 1 | Foot for base | 15 | B-1031/25 | 1 | Thickening table rule (English) |
| 2 | | 16 | 10 washer | 16 | B-1031/65 | 1 | Thickening table rule (Metric) |
| 3 | | 16 | M10 x 20 long hexagon head bolt | 17 | B-S-1-B | 1 | 3/8" whit. ball lever screw |
| 4 | | 12 | M6 x 10 long round head screw | 18 | D-1032M/18 | 1 | Rebate side frame |
| 5 | B-1031/53 | 2 | Panel for base | 19 | A-1028/20 | 1 | Front cutterblock guard adjustment bar |
| 6 | E-1031M/7 | 1 | Base (Standard) | 20 | D-1032/7 | 1 | Rebate side guard |
| 7 | C-1031M/97 | 1 | Base (Single phase) | 21 | C-1032M/8 | 1 | M8 x 12 long socket head grub screw |
| 8 | B-1031/67 | 4 | M6 x 20 long countersunk head screw | 22 | A-1032/17 | 1 | Front cutterblock guard bracket |
| | | 1 | Escutcheon plate for rotary switch (Standard) | 23 | A-1029M/51 | 1 | Front cutterblock guard |
| | | 1 | Escutcheon plate for rotary switch (Single phase) | 24 | | 1 | Cutterblock guard locking pin |
| 9 | B-1031M/16 | 1 | Faceplate for rotary switch | 25 | | 3 | M10 wing nut |
| 10 | SR. 1310.BG.74 | 1 | Santon 2 speed rotary switch(3 phase, 50 cycle) | 26 | | 1 | M8 x 20 long countersunk head screw |
| | | 1 | Santon rotary switch(1 phase, 50cycle) | 27 | D-1032/20 | 1 | Drive side guard |
| | | 1 | Santon 2 speed rotary switch (3 phase, 60 cycle) | 28 | D-1032M/19 | 1 | Drive side frame |
| | SR. 123 | 1 | | 29 | B-1031/52 | 1 | Drive side frame panel |
| | SR. 1316. AR.65 | 1 | | 30 | E-1031M/1 | 1 | Main frame |
| | | 1 | | 340 | D-1032/43 | 1 | Tunnel guard |
| 11 | | 9 | 10 washer | 341 | | 1 | M8 x 40 long hexagon head bolt |
| 12 | | 8 | M10 x 25 long hexagon head bolt | 342 | | 1 | M8 nut |
| 13 | | 4 | M6 x 25 long cheese head screw | 343 | | 1 | 8 washer |
| 14 | 84ADS/FO | 1 | MEM starter | 344 | | 1 | 1 1/2" dia. plastic handwheel M8 |

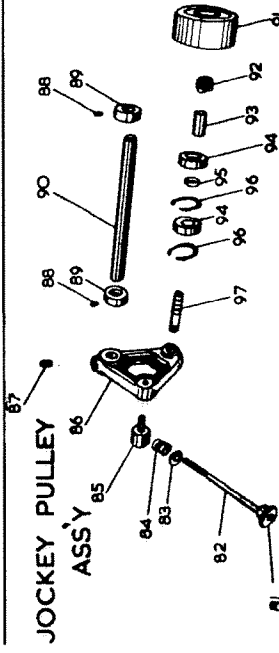
NOTE: 1 phase and 60 cycle supplies have separate push button controls for full details refer to manufacturer.

PILLAR ASS'Y



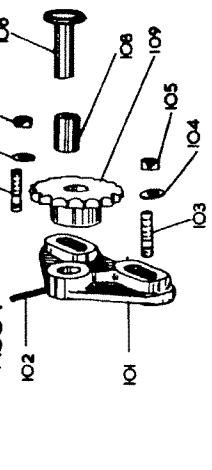
| REF NO | PART NO. | DESCRIPTION | NO OFF | REF NO | PART NO. | NO OFF | DESCRIPTION |
|--------|-------------|--|--------|--------|-------------|--------|--|
| 31 | A-1031M/84 | Undertable support locking handle | 1 | 53 | A-1031M/94 | 1 | Collar for thickening table rise and fall screw. |
| 32 | A-1031M/141 | Table rise and fall locking handle | 1 | 54 | A-1031/58 | 2 | 5 dia x 40 long groverlok spring dowel |
| 33 | Pat. No.30 | 1" dia. plastic ball, M10 | 1 | 55 | B-1031M/15 | 1 | Nut for thickening table rise and fall |
| 34 | A-1031/M/83 | M6 x 12 long socket head grub screw | 2 | 56 | A-1031/44 | 2 | M8 x 12 long socket head grub screw |
| 35 | A-1031/87 | Undertable support bar | 1 | 57 | EW1 | 1 | Pillar end cap |
| 36 | A-1031/87 | Undertable support bar | 1 | 58 | A-1031M/41 | 3 | Thickening table pillar key |
| 37 | A-1031/87 | M10 x 10 long socket head grub screw | 1 | 59 | A-1031M/114 | 1 | M8 x 20 long socket head cap screw |
| 38 | A-1031/M/89 | M10 x 25 long hexagon head bolt | 10 | 60 | Pat. No. 4 | 2 | Hoffman thrust race |
| 39 | A-1031/86 | Undertable support bar bracket | 1 | 61 | A-1031/70 | 1 | Thickening table rise and fall shaft |
| 40 | A-1031/86 | Undertable support locking bush | 1 | 62 | C-1031/11 | 1 | Rise and fall handwheel |
| 41 | A-1031M/85 | Undertable support locking stud | 1 | 63 | B-1031/17 | 1 | Thickening table rise and fall handle |
| 42 | A-1031/85 | M12 locknut | 2 | 64 | | 2 | M6 x 20 long round head screw |
| 43 | D-1031M/10 | 10 washer | 15 | 65 | | 1 | |
| 44 | D-1031M/8 | Pillar slide bracket | 1 | 66 | | 1 | |
| 45 | A-1031/51 | Pillar | 1 | 67 | | 1 | |
| 46 | A-1031/51 | 3/4" simplex locknut | 4 | 68 | | 1 | |
| 47 | A-1031/95 | Thickening table adjusting screw | 4 | 69 | | 1 | |
| 48 | A-1031/95 | M10 x 45 long hexagon head bolt | 7 | 70 | | 1 | |
| 49 | CK.187 | Spiral gear for rise and fall | 2 | 71 | | 1 | |
| 50 | EW2" | 5 dia x 50 long groverlok spring dowel | 2 | 72 | | 2 | |
| 51 | B-1031/42 | Hoffman thrust race | 2 | | | | |
| 52 | B-1031/42 | Thickening table rise and fall screw | 1 | | | | |

JOCKEY PULLEY ASS'Y



| REF NO | PART NO. | DESCRIPTION | NO OFF | REF NO | PART NO. | NO OFF | DESCRIPTION |
|--------|------------|---|--------|--------|------------|--------|--|
| 81 | A-1002/87 | Jockey pulley adjusting nut | 1 | 101 | C-1031/6 | 1 | Bracket for jockey sprocket |
| 82 | A-1031/46 | Belt tension screw | 1 | 102 | | 1 | 5 dia x 40 long groverlok spring dowe |
| 83 | A-1024/21 | 10 washer | 1 | 103 | | 2 | M10 x 40 long stud |
| 84 | A-1031/40 | Spring for belt tensioner | 1 | 104 | | 2 | 10 washer |
| 85 | A-1031/40 | Belt tensioner pivot nut | 1 | 105 | | 2 | M10 nut |
| 86 | C-1031M/9 | Lever for belt tensioner | 1 | 106 | A-1031/131 | 1 | Jockey sprocket bearing pin |
| 87 | A-1031M/69 | 1/8" gas x 1/2" long socket head grub screw | 1 | 108 | | 1 | 5/8" bore x 7/8" O/D x 1.1/8" long oilite bush |
| 88 | A-1031M/69 | M6 x 12 long socket head grub screw | 2 | 109 | A-1031/59 | 1 | Jockey sprocket (19 teeth) |
| 89 | A-1031/47 | Jockey pulley pivot shaft collar | 2 | | | | |
| 90 | A-1031/20 | Belt tension pulley | 1 | | | | |
| 91 | A-1031/48 | M12 aerotight nut | 1 | | | | |
| 92 | A-1031/48 | Bearing bush for belt tension pulley | 1 | | | | |
| 93 | 6203F | Fischer single seal bearings | 2 | | | | |
| 94 | A-1031/78 | Jockey pulley distance piece | 1 | | | | |
| 95 | 6008-156 | "Truarc" 40mm internal circlip | 2 | | | | |
| 96 | 6008-156 | M12 x 65 long stud | 2 | | | | |
| 97 | | | 1 | | | | |

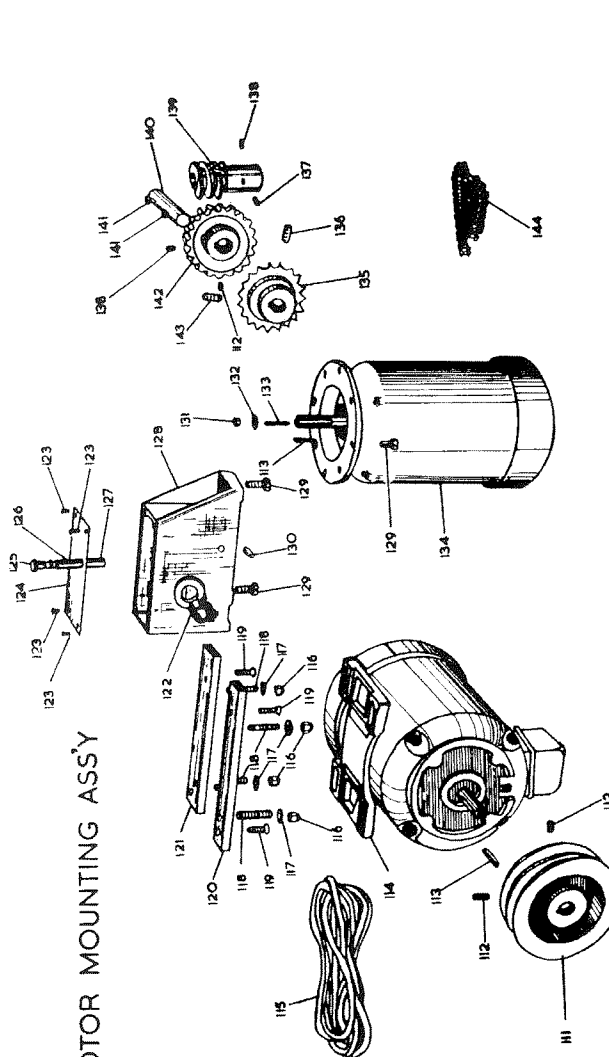
JOCKEY SPROCKET ASS'Y



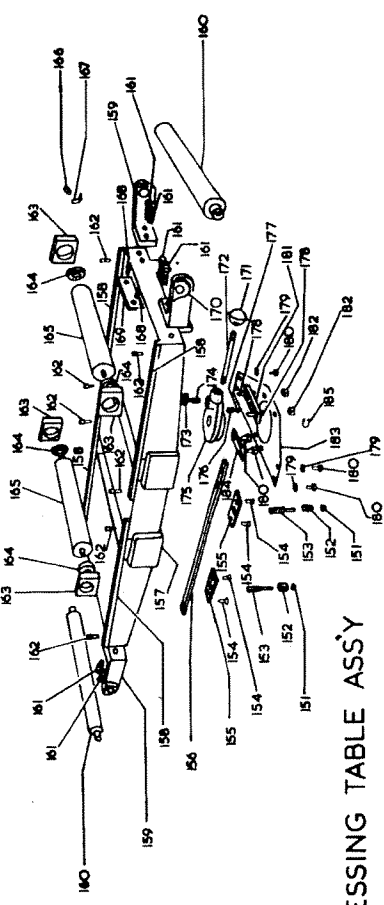
| REF NO | PART NO. | DESCRIPTION | NO OFF | REF NO | PART NO. | NO OFF | DESCRIPTION |
|--------|------------|--|--------|--------|------------|--------|--|
| 101 | C-1031/6 | Bracket for jockey sprocket | 1 | 101 | C-1031/6 | 1 | Bracket for jockey sprocket |
| 102 | | 5 dia x 40 long groverlok spring dowe | 1 | 102 | | 1 | 5 dia x 40 long groverlok spring dowe |
| 103 | | M10 x 40 long stud | 2 | 103 | | 2 | M10 x 40 long stud |
| 104 | | 10 washer | 2 | 104 | | 2 | 10 washer |
| 105 | | M10 nut | 2 | 105 | | 2 | M10 nut |
| 106 | A-1031/131 | Jockey sprocket bearing pin | 1 | 106 | A-1031/131 | 1 | Jockey sprocket bearing pin |
| 108 | | 5/8" bore x 7/8" O/D x 1.1/8" long oilite bush | 1 | 108 | | 1 | 5/8" bore x 7/8" O/D x 1.1/8" long oilite bush |
| 109 | A-1031/59 | Jockey sprocket (19 teeth) | 1 | 109 | A-1031/59 | 1 | Jockey sprocket (19 teeth) |

NOTE:-
WHEN ORDERING REPLACEMENT PARTS QUOTE PART NO AND SERIAL NO. OF THE MACHINE.

MOTOR MOUNTING ASSY

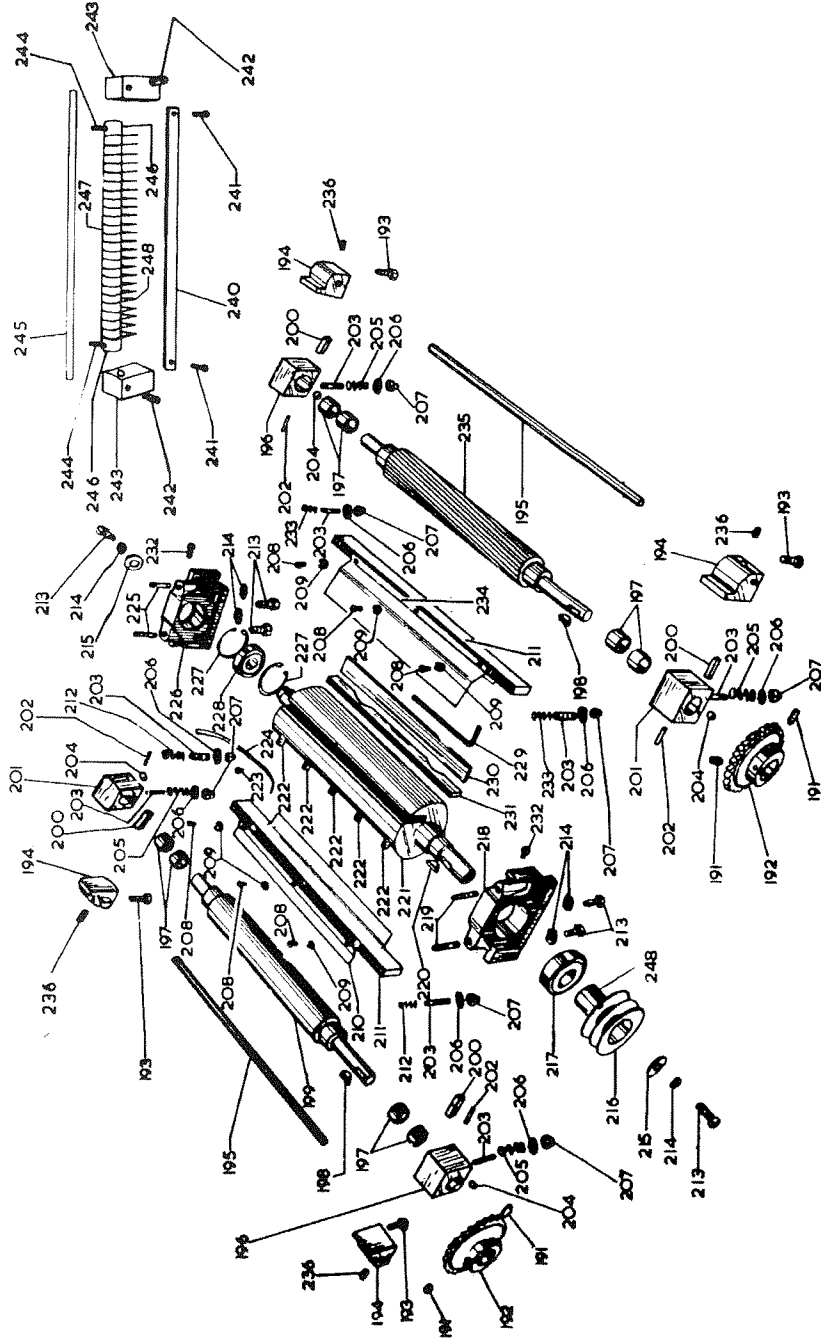


| REF. NO. | PART NO. | NO. OFF. | DESCRIPTION | REF. NO. | PART NO. | NO. OFF. | DESCRIPTION |
|----------|-------------|----------|--|------------|------------|-----------------------------|--|
| 111 | B-1031M/80 | 1 | Motor pulley (50 cycle) | 123 | A1031/56 | 4 | M5 x 12 long round head screw |
| 112 | B-1031M/91 | 1 | Motor pulley (60 cycle) | 124 | No. | 1 | Feed gear box core |
| 113 | | 3 | M6 x 12 long socket head grub screw | 125 | A-1031/82 | 1 | Grease tube for gearbox |
| 114 | | 1 | 8mm wide x 40 long leather key | 126 | C-1031/83 | 1 | Nut for grease tube |
| | | 1 | Brook 90L 3HP 3600rpm TEFC motor | 127 | C-1031M/12 | 4 | Feed gearbox |
| | | 1 | Foot mounted terminal box at 12 O'clock | 128 | | 1 | M10 x 20 long hexagon head bolt |
| | | 1 | Brook 90L 3HP 3600 rpm TEFC Foot mounted terminal box at 12 O'clock 3 phase 60 cycle | 129 | | 1 | 1/8" gas x 3/8" long socket head grub screw |
| | | 1 | Brook, D100LB, 3HP, 3600rpm TEFC 1 phase 50 cycle | 130 | | 1 | M6 acrofit nut |
| | | 1 | Foot mounted terminal box at 3 O'clock | 131 | A-1031/71 | 1 | Retaining washer for worm |
| | | 1 | Brook, D100LB 3HP 3000 rpm TEFC | 132 | | 1 | M6 x 30 long stud |
| | | 1 | Foot mounted terminal box at 3 O'clock | 133 | | 1 | Brook T14, 2 speed TEFC motor 750rpm and 1500 rpm Flange mounted 3 PH 50 cycle |
| A.57 | | 2 | Phase 90 bolt (red type) | 134 | | 1 | Brook T14, 3 speed TEFC motor, 900 rpm and 1800 rpm flange mounted 3 PH 60 cycle |
| 115 | | 4 | M10 acrofit nut | 135 | A-1031m/60 | 1 | Brook C12 TEFC motor, 3000 rpm Flange mounted 1PH 60 cycle |
| 116 | | 4 | 10mm washer | A-1031M/92 | 1 | Flange mounted 1PH 90 cycle | |
| 117 | | 4 | M10 x 40 long stud | | | 1 | Gearbox sprocket 15 teeth 1 phase |
| 118 | | 4 | M10 x 40 countersunk socket head screw (50 cycle) | | | 1 | M10 25 long socket head grub screw |
| 119 | | 4 | M10 x 55 countersunk socket head screw (60 cycle) | | | 1 | M6 x 4 long socket head grub screw |
| 120 | B-1031M/138 | 1 | Motor plate (1" thick) 3 phase 50 cycle | | | 2 | M8 x 10 long socket head grub screw |
| | B-1031M/139 | 1 | Motor plate (1.5/8" thick) 3 phase 60 cycle | | | 1 | Worm for feed gearbox, 3 phase supply |
| | B-1031M/132 | 1 | Packing piece for 1 phase, 50 cycle (5/8" thick) | | | 1 | Worm for feed gearbox 1 phase supply |
| | B-1031M/132 | 1 | Packing piece for 1 phase, 60 cycle (1 1/2" thick) | | | 1 | Feed wormwheel bearing shaft |
| 121 | B-1031M/137 | 1 | Motor plate (1" thick) 3 phase 50 cycle | | | 2 | 3/16" wide x 3/4" long woodruff key |
| | B-1031M/137 | 1 | Motor plate (1.5/8" thick) 3 phase 60 cycle | | | 1 | Wormwheel for feed gearbox, 3 phase supply |
| | B-1031M/132 | 1 | Packing piece for 1 phase, 50 cycle, (5/8" thick) | | | 1 | Wormwheel for feed gearbox 1 phase supply |
| | B-1031M/132 | 1 | Packing piece for 1 phase, 60 cycle (1 1/2" thick) | | | 1 | Supply 12 long socket head grub screw |
| 122 | | 2 | 1/4" bore x 1" O/D x 7/8" long oilite bush | | 110946 | 112 | Remold chain |



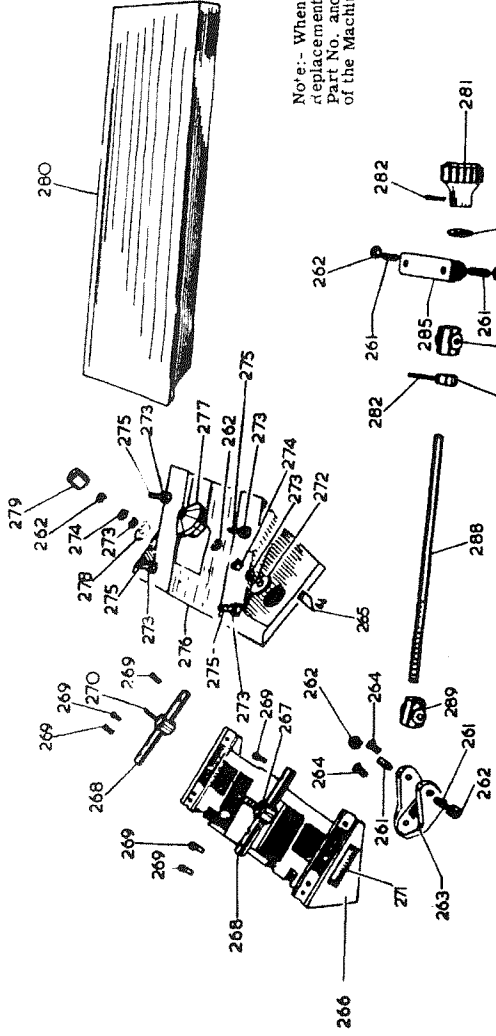
THICKNESSING TABLE ASSY

| REF. NO. | PART NO. | NO. OFF. | DESCRIPTION | REF. NO. | PART NO. | NO. OFF. | DESCRIPTION |
|----------|-------------|----------|---|----------|-------------|----------|---|
| 151 | A-1031M/115 | 4 | M8 locknut | 169 | A-1031/117 | 1 | Undratable roller adjustment plate |
| 152 | A-1031M/116 | 4 | Pinion | 170 | B-1031M/24 | 2 | Thicknessing table roller bracket (Lt. Hd.) |
| 153 | | 6 | Adjusting screw for pinion | 171 | | 1 | 1" dia plastic ball M10 |
| 154 | | 6 | M6 x 12 long countersunk head screw | 172 | A-1031M/103 | 1 | Undratable roller adjustment handle |
| 155 | A-1031/101 | 2 | Block trapping plate | 173 | | 1 | M10 locknut |
| 156 | D-1031M/100 | 2 | Adjusting rack | 174 | B-1031M/99 | 1 | Undratable roller adjustment cam |
| 157 | B-1031M/4 | 1 | Thicknessing table | 175 | A-1031/118 | 1 | Undratable roller adjustment spring |
| 158 | A-1031/36 | 4 | Thicknessing table strip | 177 | A-1031/106 | 2 | 5/16" dia steel ball |
| 159 | B-1031M/24 | 2 | Thicknessing table roller bracket (RT. Hd.) | 178 | | 4 | Stop screw for cam |
| 160 | B-1031/68 | 2 | Outer table roller | 179 | | 4 | 6 washer |
| 161 | | 8 | M10 x 25 long cheese head screw | 180 | A-1031M/104 | 6 | M6 x 12 long hexagon head bolt |
| 162 | A-1031/38 | 4 | Undratable roller bearing block | 181 | | 2 | 6000-2RS bearing plate |
| 163 | K06-01-172 | 4 | Undratable roller bearing block | 182 | C-1031/98 | 1 | M6 nut |
| 164 | B-1031/37 | 2 | Undratable roller | 183 | A-1031M/105 | 2 | Undratable adjusting bracket |
| 165 | | 1 | M6 x 12 long socket head grub screw | 184 | | 1 | Cam inner bearing plate |
| 166 | | 1 | Thicknessing table rise and fall pointer | 185 | | 1 | 1" external circlip |
| 167 | A-1031/43 | 1 | 3 dia x 12 long fluted rivets | | | | |



CUTTERBLOCK ASS'Y

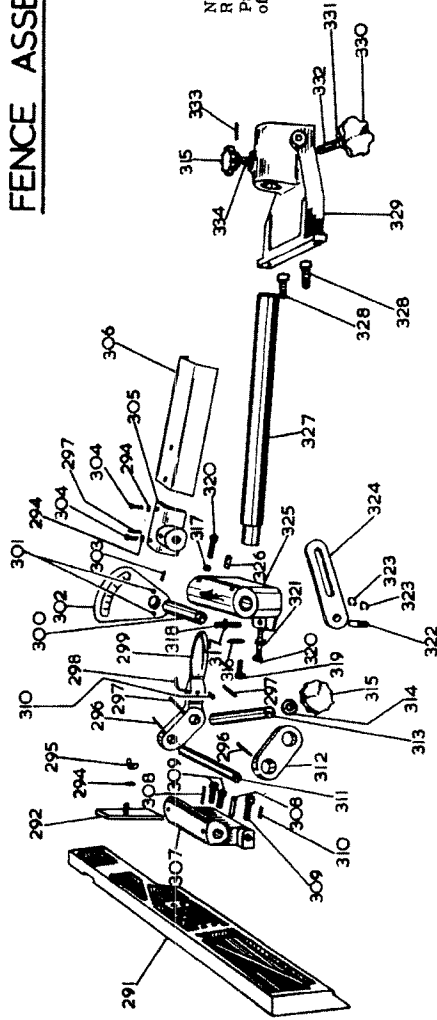
| Ref. No. | Part No. | No. Off | Description | Ref. No. | Part No. | No. Off | Description |
|----------|-------------|---------|---|----------|-------------|---------|---|
| 191 | A-1031M/61 | 4 | M10 x 20 long socket head grubscrew | 220 | No. 155 | 1 | 5/16" wide x 1" woodruff key |
| 192 | A-1031M/23 | 2 | Feed roller sprocket 25 teeth | 221 | C-1031M/72A | 1 | Cutterblock |
| 193 | A-1031M/30 | 4 | M10 x 20 long hexagon head bolt | 222 | | 10 | M12 x 30 long dog pointed socket head grubscrew |
| 194 | B-1031M/28B | 2 | Tie bar block | 223 | A-S-41 | 2 | 2 dia x 12 long fluted rivet |
| 195 | | 2 | Side frame tie bar | 224 | A-1031M/144 | 2 | Cutterblock spring |
| 196 | | 2 | Feed roller bearing block | 225 | B-1031M/14 | 2 | Stud for rebate side guard |
| 197 | | 8 | 7/8" bore x 1.1/8" O/D x 3/4" long olive bush | 226 | 5000-206 | 2 | Rebate side bearing housing |
| 198 | No. 150 | 2 | 1/4" wide x 1" woodruff key | 227 | K06-01-207 | 1 | Truarc internal circlip |
| 199 | C-1031/189 | 1 | Feed roller (plain) | 228 | B-S-55 | 1 | 6205-2KS bearing rebate side |
| 200 | 3" long | 4 | 1/2" sq. black "Tesamol" type 770 | 229 | D-1810/110 | 1 | 6 across flats, long arm hexagon wrench |
| 201 | B-1031M/28A | 2 | Feed roller bearing block | 230 | B-S-55 | 2 | Cutterblock knife (12 1/2" long) |
| 202 | | 4 | 6 dia x 25 long fluted dowel | 231 | | 2 | Strip for cutterblock |
| 203 | A1031M/142 | 8 | Stud for feed roller block | 232 | | 2 | M6 x 12 long cheese head screw |
| 204 | A-1031/39 | 4 | Feed roller stop | 233 | A-1031/50 | 2 | Pressure bar spring |
| 205 | A-1031/49 | 4 | Feed roller spring | 234 | A-1031/32 | 1 | Baffle plate |
| 206 | | 8 | 8 washer | 235 | C-1031/27 | 1 | Feed roller |
| 207 | | 8 | M8 aerotight nut | 236 | A-1031/164 | 4 | M10 x 10 long socket head grubscrew |
| 208 | | 6 | M6 x 12 long round head screw | 238 | A-1031M/165 | 2 | Knife setting device blocks |
| 209 | A-1031/33 | 6 | 6 spring Washer | 239 | A-1031M/165 | 1 | Knife setting device tie bar |
| 210 | C-1031M/29 | 1 | Scraper plate | 240 | A-1031/76 | 1 | Stop bar |
| 211 | A-1031/50 | 2 | Pressure bar | 241 | | 2 | M6 x 12 long countersunk head screw |
| 212 | | 2 | Pressure bar spring | 242 | | 2 | M10 x 12 long socket head grubscrew |
| 213 | | 6 | M10 x 25 long hexagon head bolt | 243 | | 2 | Kick back finger tie bar block |
| 214 | | 6 | 10 spring washer | 244 | | 2 | M6 x 10 long socket head grubscrew |
| 215 | A-1032/22 | 2 | Cutterblock washer | 245 | B-1031/75 | 1 | Kick back finger tie bar |
| 216 | B-1031/81 | 1 | Cutterblock pulley | 246 | B-1031/75 | 2 | Thick tie bar collar |
| 217 | K06-01-214 | 1 | Cutterblock pulley | 247 | A-1031/136 | 24 | Kick back finger |
| 218 | B-1031M/13 | 1 | 6206-2RS bearing driveside | 248 | A-1031/155 | 1 | C/block bearing spacer |
| 219 | A-1031M/143 | 2 | Stud for drive side guard | | A-1069/184 | 2 | Knife setting device screws |



PLANING TABLE ASSEMBLY.

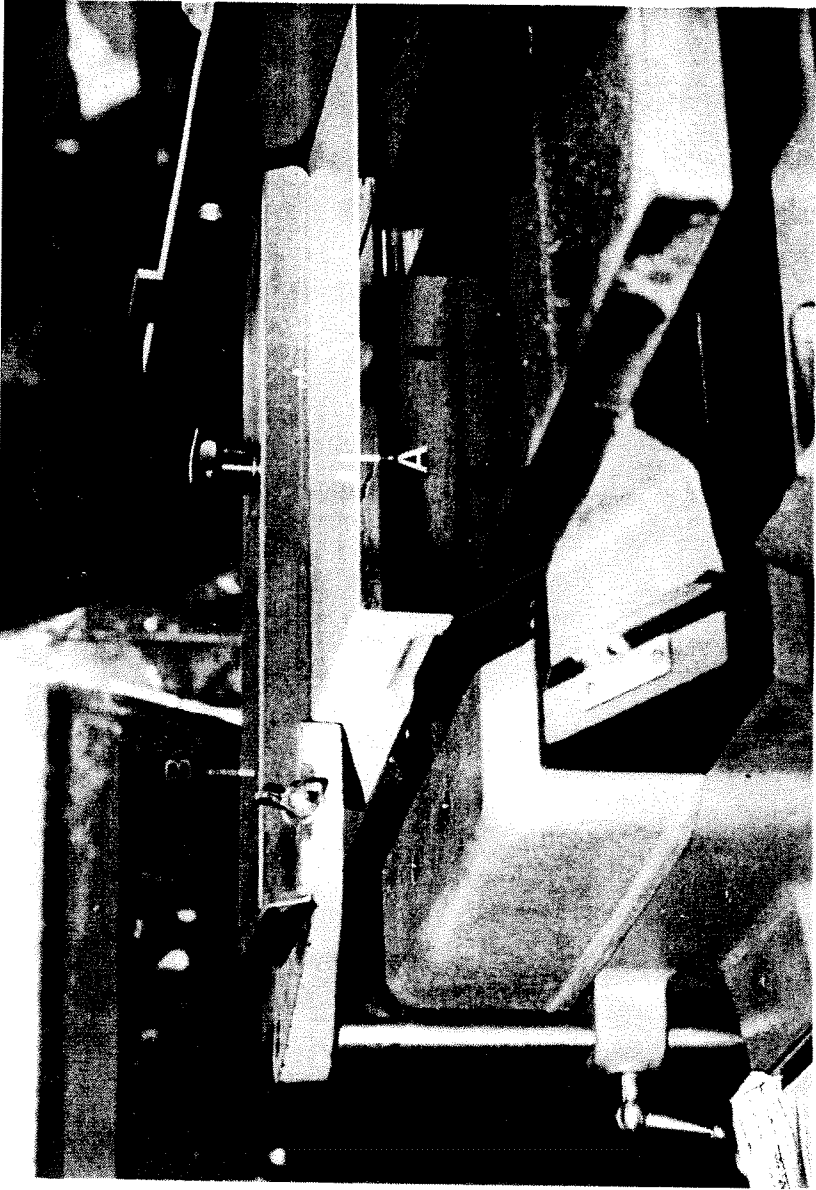
| Ref. No. | Part No. | No. Off | Description | Ref. No. | Part No. | No. Off | Description |
|----------|-----------|---------|--|----------|--------------|---------|---|
| 261 | | 8 | M10 x 30 long cone point socket head grubscREW | 275 | | 8 | M10 x 25 long hexagon head bolt |
| 262 | | 12 | M10 locknut | 276 | D-1032/24 | 2 | Planing table intermediate slide bracket |
| 263 | A-1032/34 | 2 | Planing table rise and fall nut pivot bracket | 277 | A-1032M/10 | 2 | Rebate side locking handwheel |
| 264 | | 4 | M8 x 20 long countersunk socket head screw | 278 | A-1032/22 | 2 | Drive side table locking washer |
| 265 | | 2 | Table rise and fall rule indicator | 279 | A-1032M/11 | 2 | Planing table |
| 266 | | 2 | Planing table slide bracket | 280 | C-1032M/23 | 2 | Planing table |
| 267 | | 2 | Rebate side planing table lock screw | 281 | Part. No. 24 | 2 | 2" dia. plastic handwheel 12 bore |
| 268 | | 4 | Planing table slide rod | 282 | | 4 | 3 dia. x 25 long groverlok spring dowel |
| 269 | | 12 | M6 x 16 long socket head capscREW | 283 | | 4 | 12 washer |
| 270 | A-1032M/9 | 2 | Drive side planing table lock screw | 284 | B-1032M/28 | 4 | M8 x 20 long hexagon head bolt |
| 271 | A-1032/36 | 1 ea. | Table rise and fall rule | 285 | A-1032/25 | 2 | Planing table bezelhead pivot bracket |
| 272 | | 2 | Rebate side table locking washer | 286 | | 2 | Planing table rise and fall screw pivot nut 3/4" ream |
| 273 | A-1032/22 | 12 | 10 spring washer | 287 | A-1032/29 | 2 | Collar for planing table rise and fall screw |
| 274 | | 4 | M10 nut | 288 | A-1032M/28 | 2 | Planing table rise and fall screw |
| | | | | 289 | A-1032/25 | 2 | Planing table rise and fall nut, 3/4" whit. |

FENCE ASSEMBLY.



| Ref. No. | Part No. | No. Off | Description | Ref. No. | Part No. | No. Off | Description |
|----------|------------|---------|---|----------|--------------|---------|---|
| 291 | D-1032M/82 | 1 | Fence front plate | 313 | | 1 | Fence bottom pivot bar |
| 292 | A-1029M/40 | 3 | Adjustable fence plate | 314 | 1032M/47 | 1 | 10 washer |
| 293 | | 3 | 6 washer | 315 | Part. No. 32 | 2 | 1 1/4" dia. plastic handwheel, M10 |
| 294 | | 1 | M6 wing nut | 316 | A-1032/64 | 1 | Fence locking washer |
| 295 | | 2 | 5 dia. x 30 long groverlok spring dowel | 317 | | 2 | M6 locknut |
| 296 | | 3 | 5 dia. x 40 long groverlok spring dowel | 318 | | 1 | M6 x 20 long socket head grubscREW |
| 297 | | 1 | Fence pointer | 319 | | 1 | M10 x 25 long hexagon head bolt |
| 298 | A-1029/76 | 1 | Fence link with handle | 320 | | 2 | M6 x 25 long hexagon head bolt |
| 299 | B-1032M/56 | 1 | Back cutterblock guard support bar | 321 | | 1 | M6 nut |
| 300 | A-1032M/57 | 1 | M5 x 12 long round head screw | 322 | A-1002/67 | 1 | Fence locking link pivot pin |
| 301 | | 2 | Angle indicator plate and boss | 323 | 5100-37 | 2 | 3/8" dia. external circlip |
| 302 | B-1032/53 | 1 | M6 x 12 long socket head grubscREW | 324 | A-1032/50 | 1 | Fence locking link |
| 303 | | 1 | M6 x 12 long round head screw | 325 | D-1032M/61 | 1 | Fence canting bracket |
| 304 | | 1 | Back cutterblock guard bracket | 326 | | 1 | 1/8" gas x 3/4" long socket head grubscREW |
| 305 | A-1032/16 | 1 | Back cutterblock guard | 327 | A-1032M/15 | 2 | Fence rack bar |
| 306 | C-1032M/60 | 1 | Fence front plate bracket | 328 | | 2 | M8 x 25 long socket head capscREW |
| 307 | | 2 | 6 dia x 20 long fluted dowel | 329 | D-1032/5 | 1 | Fence adjusting bracket |
| 308 | | 3 | M8 x 20 long hexagon head bolt | 330 | Part. No. 14 | 1 | 2" dia. plastic handwheel, 5/16" plain bot |
| 309 | | 2 | M6 x 10 long socket head grubscREW | 331 | | 1 | 5/16" bore x 3/4" O/D x 1/4" long oilite bush |
| 310 | | 1 | Fence top pivot bar | 332 | A-1032/46 | 1 | Fence pinion |
| 311 | A-1032M/48 | 1 | Plain fence link | 333 | | 1 | 3 dia. x 20 long groverlok spring dowel |
| 312 | B-1032/55 | 1 | | 334 | | 1 | M10 x 40 long brass stud |

TUNNEL GUARD



When thickening ensure tunnel guard 'A' is fitted to bridge guard 'B' with hexagon bolt, nut, washer and handwheel provided (page 7).

Failure to comply with instructions in this book may invalidate the guarantee

FUSE LIST

| Voltage | Phase | KW | SWG Tinned Copper Wire | Amps | Direct on Line |
|---------|-------|------|------------------------|------|----------------|
| 220 | 3 | 2.37 | 16 | 62 | |
| 380 | 3 | 2.37 | 18 | 39 | |
| 415 | 3 | 2.37 | 19 | 35 | |
| 240 | 1 | 2.37 | 15 | 84 | |

USA/CANADA

| Voltage | Phase | HP | Cartridge Fuse Amps |
|---------|-------|----|---------------------|
| 220/230 | 3 | 3 | 67 |
| 440 | 3 | 3 | 33 |
| 575 | 3 | 3 | 20 |

BE CAREFUL

**THIS MACHINE CAN BE DANGEROUS
IF IMPROPERLY USED**

Always Use Guards

Keep Clear Until Rotation Has Ceased

**Always Operate As Instructed And
In Accordance With Good Practice**

Read Instruction Manual