

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

BT 50079458

PLEASE INSERT SERIAL NUMBER OF MACHINE

FOR WADKIN SPARE PARTS.

WADKIN P.L.C.

GREEN LANE RD.

LEICESTER.

TEL 0533 769111

FAX 0533 461021

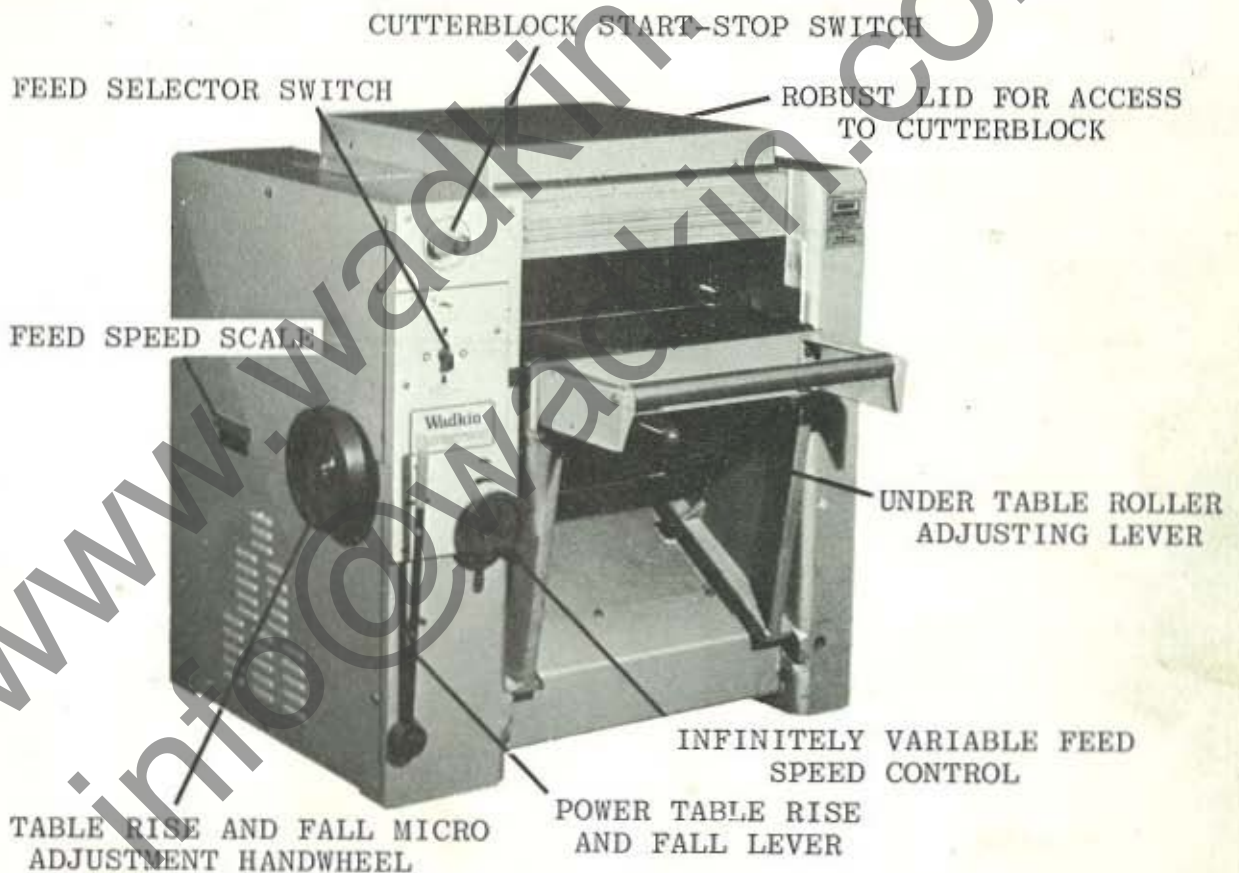
14-10-93.

INSTRUCTION MANUAL FOR

# BT 500

Planer and Thicknesser

MACHINE No BT 550079458



For Replacement Parts, Tools & Accessories,

Contact **Brian Stacey**,

**Bursgreen** (Durham) Ltd.,

Fence Houses, Houghton-le-Spring,

Tyne-Wear DH4 5RQ. England.

Telephone: Fence Houses (5 Lines)

Telex: 53441 (Bursgreen-Durham)

WADKIN

091 3852385

## **SECTIONS**

|                  |                                                  |
|------------------|--------------------------------------------------|
| <b>SECTION A</b> | <b>PRINCIPAL DIMENSIONS<br/>&amp; CAPACITIES</b> |
| <b>SECTION B</b> | <b>INSTALLATION</b>                              |
| <b>SECTION C</b> | <b>DESCRIPTION &amp; OPERATION</b>               |
| <b>SECTION D</b> | <b>MAINTENANCE</b>                               |
| <b>SECTION E</b> | <b>SPARE PARTS LISTS</b>                         |



## HEALTH & SAFETY

### SAFETY OF WOODWORKING MACHINES

Woodworking machines can be dangerous if improperly used. The wide range of work of which they are capable, requires adequate safeguarding arrangements against possible hazards.

Many injuries to machinists are caused by carelessness or failure to use the guards provided or to adjust them correctly.

WADKIN LTD., supply machinery designed for maximum safety which they believe, as a result of thorough testing, minimizes the risks inevitable in their use. It is the user's responsibility to see that the following rules are complied with to ensure safety at work:

1. The operation of the machine should conform to the requirements of the Woodworking Machines Regulations 1974. All guards should be used and adjusted correctly.
2. Safe methods of working only should be adopted as given in the Health and Safety Work Booklet No.41, "Safety in the Use of Woodworking Machines", (obtainable from Her Majesty's Stationery Office) and as advised by Wadkin Ltd.
3. Only personnel trained in the safe use of a machine should operate it.
4. Before making adjustments or clearing chips, etc., the machine should be stopped and all movement should have ceased.
5. All tools and cutters must be securely fixed and the speed selected must be appropriate for the tooling.

*SAFETY IS OUR WATCHWORD BUT THE USER MUST COMPLY WITH THE ABOVE RULES IN HIS OWN INTEREST. WE WOULD BE PLEASED TO ADVISE ON THE SAFE USE OF OUR PRODUCTS.*

oOo

## **SAFETY**

1. Read Instruction Book.
2. Securely Lock Cutters.
3. Set Guards Correctly.
4. Select Correct Speed.
5. Use Feeding Devices Where Possible.
6. Refer To HSW Booklet No.41. (in UK) For Safety In The Use Of Woodworking Machinery.

## SECTION A

### PRINCIPAL DIMENSIONS & CAPACITIES

|                                       |                    |                   |
|---------------------------------------|--------------------|-------------------|
| Capacity of machine -----             | 508 x 230          | 20" x 9"          |
| Feed of machine -----                 | 6 - 18 metres/min  | 20-60ft/min       |
| H.P. of feed motor -----              | .75kw              | 1HP               |
| H.P. of cutterblock motor -----       | 5.5kw              | 7.5HP             |
| Speed of cutterblock -----            | 5,000rpm           | 5,000rpm          |
| Speed of motor : 50 cycle -----       | 3,000rpm(syn)      | 3,000rpm(syn)     |
| : 60 cycle -----                      | 3,600rpm(syn)      | 3,600rpm(syn)     |
| Dia. of cutting circle -----          | 115                | 4½"               |
| Dia. of feed rollers -----            | 75                 | 3"                |
| Yield of complete infeed roller ----- | 10                 | 3/8"              |
| Minimum stock length -----            | 292                | 11½"              |
| Maximum stock removal -----           | 10                 | 3/8"              |
| Length of table -----                 | 765                | 30"               |
| Floor space -----                     | 1205 x 944         | 3'-11½" x 3'-1"   |
| Nett weight approx. -----             | 635 kg             | 1400lb            |
| Gross weight approx. -----            | 749 kg             | 1652lb            |
| Shipping dimensions -----             | 1.47m <sup>3</sup> | 52ft <sup>3</sup> |

#### Bearings Used

|                        |                                |
|------------------------|--------------------------------|
| 1-SKF 6202-2RS -----   | Feed Motor traverse screw      |
| 2-SKF 51205 -----      | Rise and fall cross shaft      |
| 2-SKF 51104 -----      | Rise and fall screw            |
| 4-SKF 6203-2RS -----   | Under table rollers            |
| 2-SKF 6207-2RS -----   | Cutterblock                    |
| 2-Hoffman XLM 18 ----- | Rise and fall screw            |
| 1-INA AXK 2542 -----   | Clutch thrust bearing          |
| 2-INA AS 2542 -----    | Clutch bearing pressure plates |

## SECTION "B" INSTALLATION

### SLINGING

FIG. B1.

1. Manually rise the table by handwheel "A" until the table reaches the stops in its uppermost position. Place sling under table as shown in FIG. B1 ensuring damage will not be caused to the machine during slinging.
2. Move machine to required position.

### CLEANING

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

### MARKING OUT

FIG. B2.

1. Mark out floor and drill to suit 4 foundation bolts. These bolts can be supplied at an additional extra charge.
2. Level table by adjusting the 4 - Simplex adjusting screws situated in bottom corners of machine side frames.

### WIRING DETAILS

FIG. B3.

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

| Voltage | H.P.            |      | Phase | Cycles | SWG Tinned Copper Wire |       |
|---------|-----------------|------|-------|--------|------------------------|-------|
|         | Block           | Feed |       |        | Amps                   | - SWG |
| 380/420 | 7 $\frac{1}{2}$ | 1    | 3     | 50     | 38                     | 19    |
| 380     | 7 $\frac{1}{2}$ | 1    | 3     | 50     | 38                     | 19    |
| 208/220 | 7 $\frac{1}{2}$ | 1    | 3     | 60     | 65                     | 17    |
| 550     | 7 $\frac{1}{2}$ | 1    | 3     | 60     | 24                     | 22    |
| 220     | 7 $\frac{1}{2}$ | 1    | 3     | 50     | 65                     | 17    |
| 440     | 7 $\frac{1}{2}$ | 1    | 3     | 60     | 29                     | 21    |

Fuse capacity should not exceed three times full load current of the machine.  
NOTE: DUST EXHAUST Information is available on request.

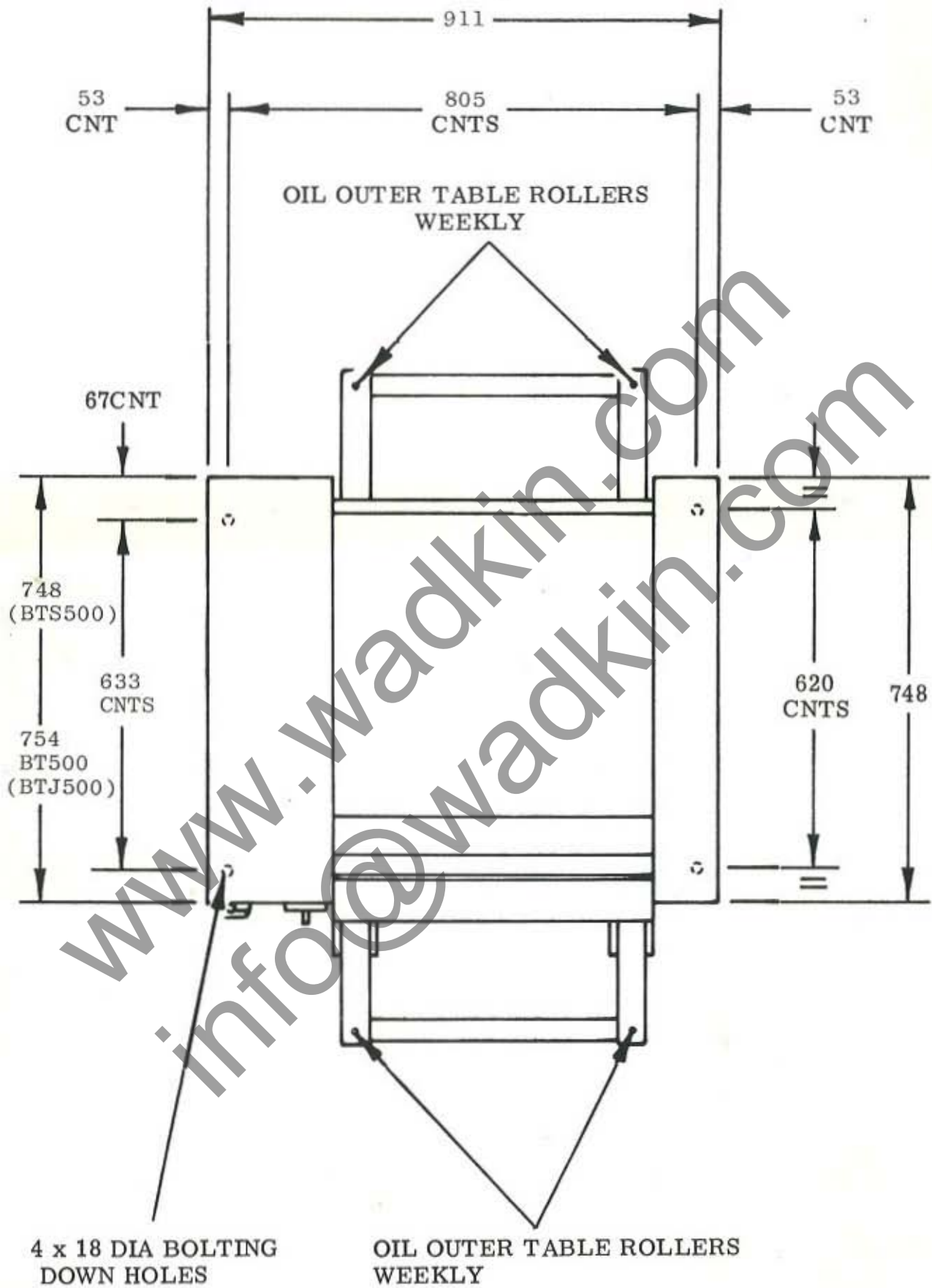
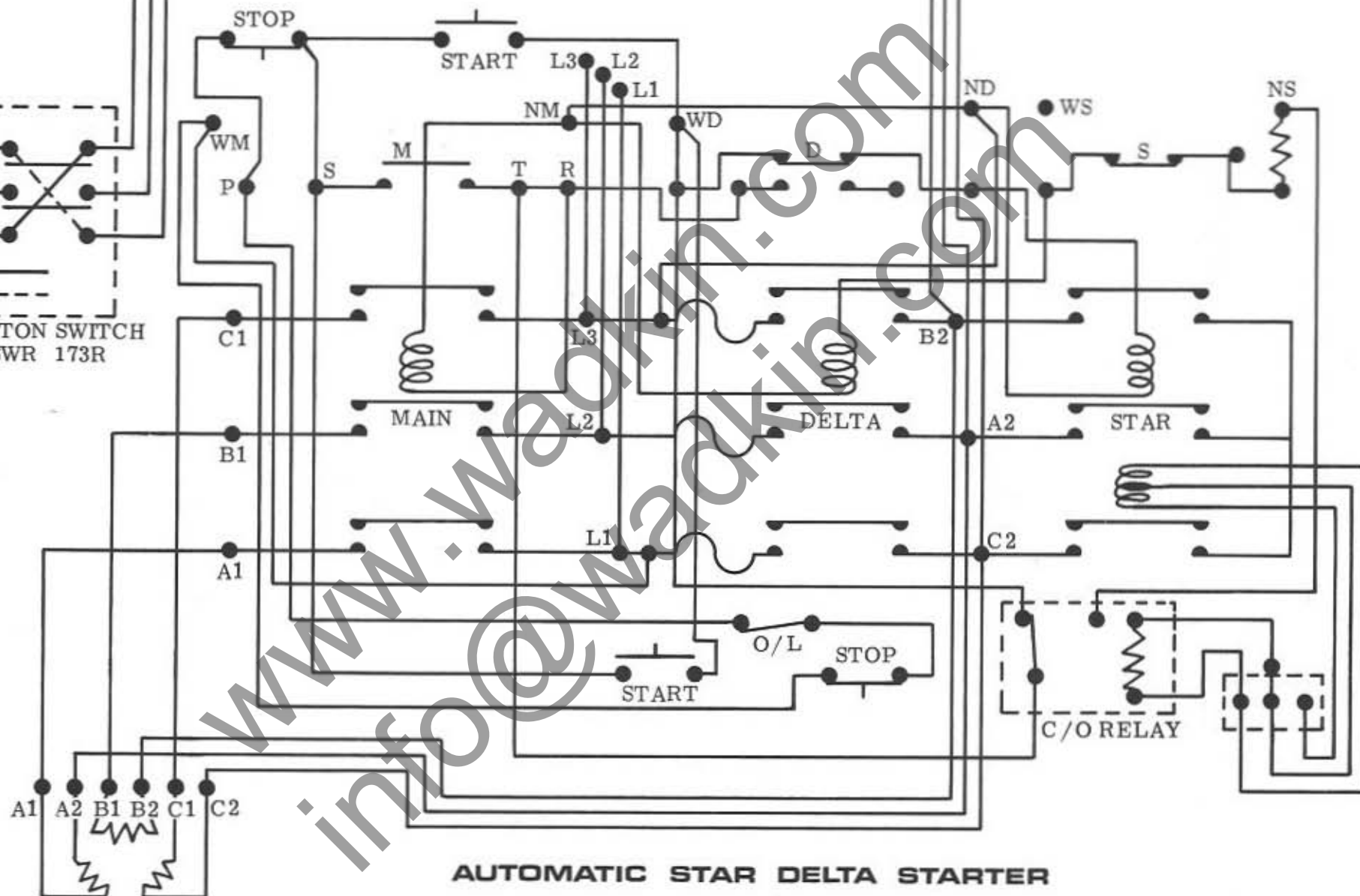


Fig B2

FEED  
MOTOR

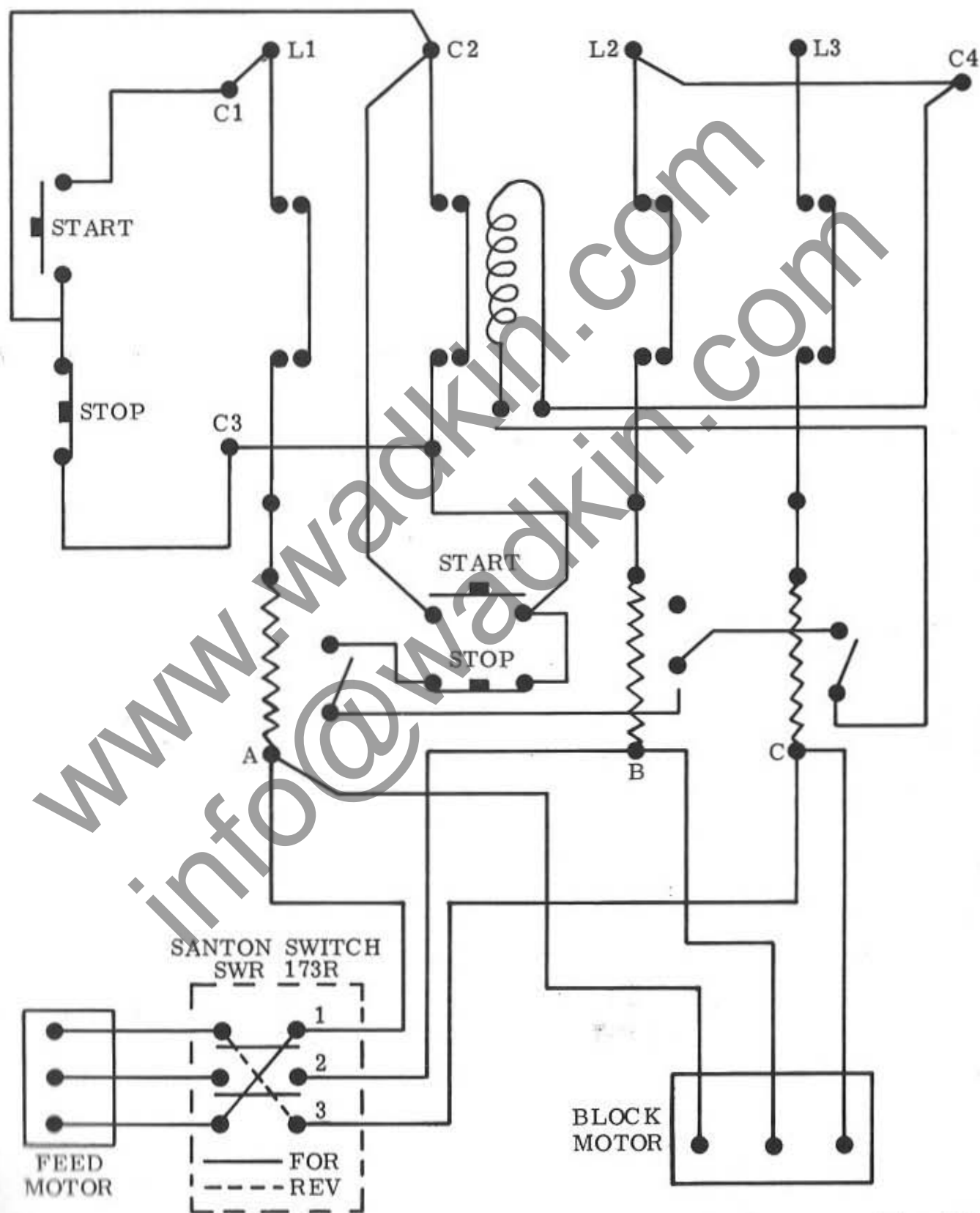
SANTON SWITCH  
SWR 173R



AUTOMATIC STAR DELTA STARTER

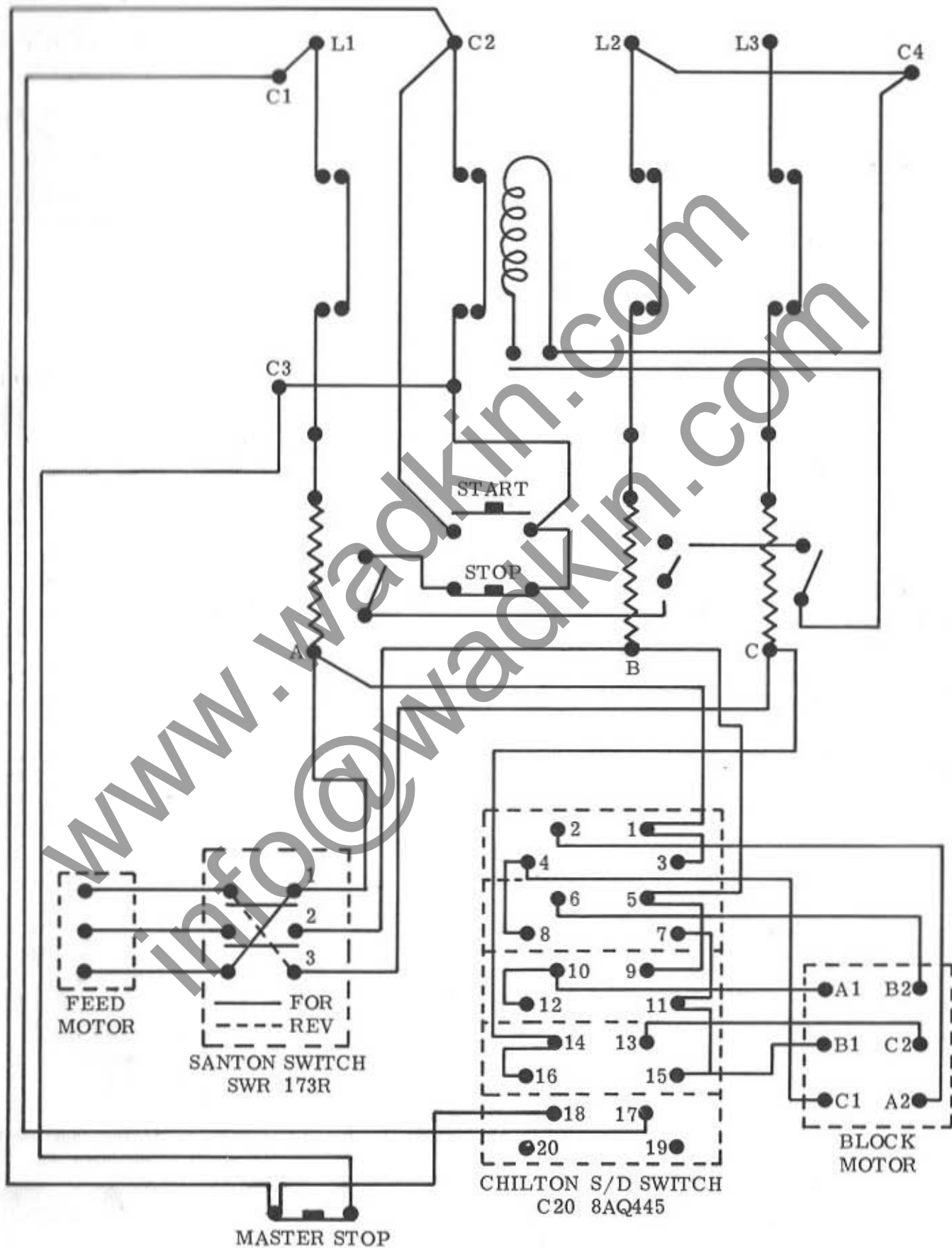
WIRING DIAGRAM

**MEM AUTO LINE ~ DIRECT ON LINE STARTER**  
**STANDARD WIRING DIAGRAM**



**Fig B3**

# STAR DELTA SWITCH ( SPECIAL )



## SECTION "C" DESCRIPTION AND OPERATION

### PREPARATION FOR OPERATION

#### FIG. C1.

1. Remove filler plug "A" from top of reduction gearbox "B" and oil level plug "C" from side of gearbox. Check that the oil is up to the oil level hole "C". Top up if necessary using correct grade of oil. See APPROVED LUBRICANTS, page 12. Replace oil filler plug "A" and oil level plug "C".
2. Remove filler "D" from top of variable pulley "E" and check that oil level is to within  $\frac{1}{2}$ " from top of hole. Top up, if necessary, using correct grade of oil. See APPROVED LUBRICANTS, page 12.
3. FIG. C2 and C3. Lubricate machine according to lubrication operations No's. 1 to 7. See APPROVED LUBRICANTS, page 12.
4. It is advisable to keep all bright parts covered with a thin film of oil to prevent rusting.

### CONTROLS AND OPERATION

#### FIG. C3.

1. The control panel is situated on the front left side of the machine with the following controls incorporated in a grouped layout:-
  - A. CUTTERBLOCK START-STOP SWITCH.
  - B. FEED SELECTOR SWITCH.
  - C. TABLE RISE AND FALL MICRO ADJUSTMENT HANDWHEEL.
  - D. LOCK FOR TABLE RISE AND FALL MICRO ADJUSTMENT HANDWHEEL.
  - E. POWER TABLE RISE AND FALL LEVER.
  - F. INFINITELY VARIABLE FEED SPEED CONTROL.
  - G. UNDER TABLE ROLLER ADJUSTING LEVER.

#### IMPORTANT NOTES:-

The FEED SELECTOR SWITCH works in conjunction with the POWER TABLE RISE AND FALL LEVER. When the switch is pointing in the upward position and the power table lever operated, the table will rise until the power table lever is released.

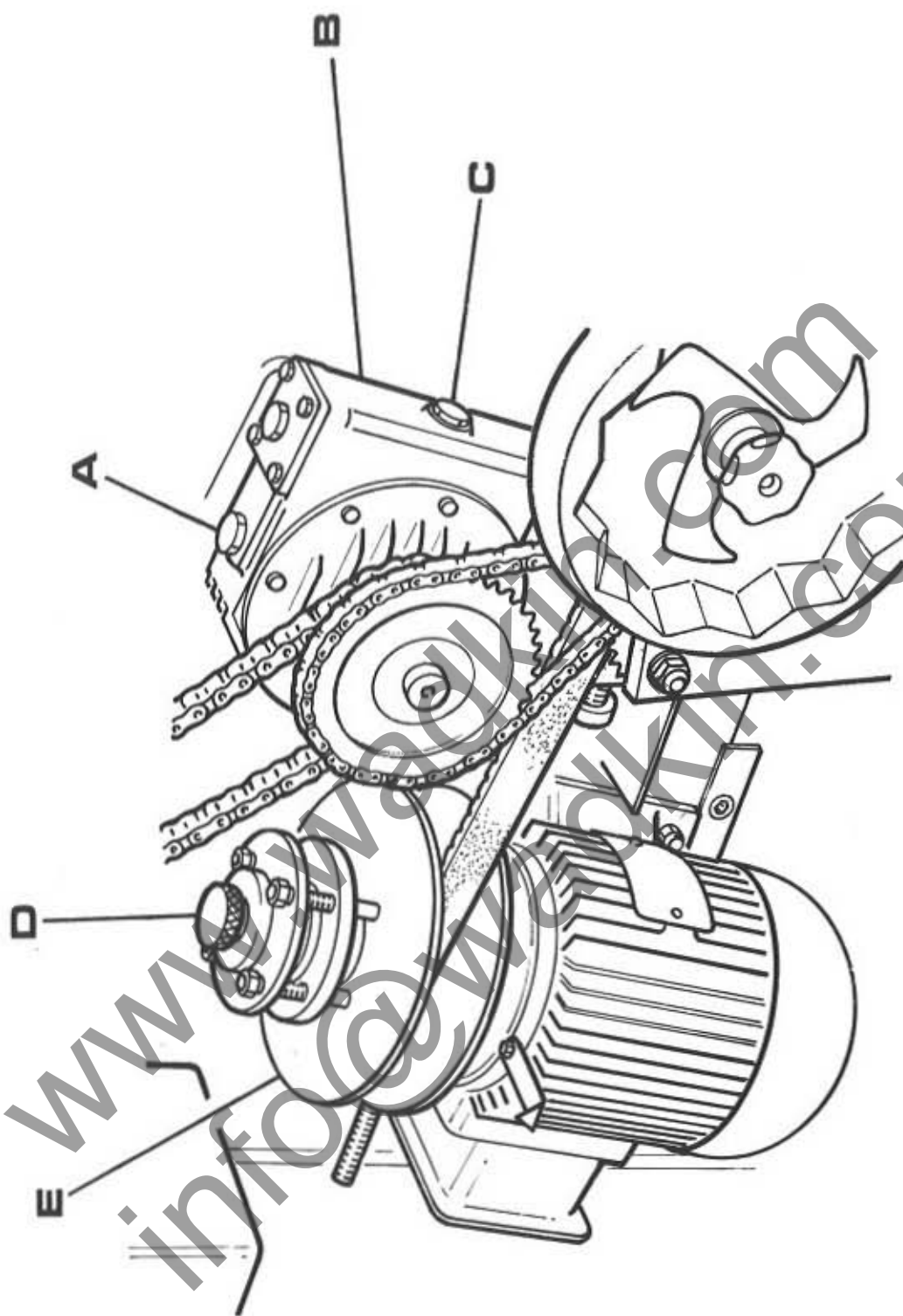
With the switch in the downward position the procedure is the same only the table falls.

Normal feeding is attained with the feed selector switch in the up position.  
NOTE : The feed is reversed when the feed selector switch is in the down position. The feed is OFF when the switch is in the horizontal position.

When altering the INFINITELY VARIABLE FEED SPEED CONTROL, the feed motor must be running.

The UNDER TABLE ROLLER ADJUSTING LEVER readily selects the correct roller position for maximum traction.

Fig C1



TYPE FV HOLROYD REDUCTION BOX  
(20.5 : 1 REDUCTION). USE CASTROL ALPHA 617 (OR EQUIVALENT)  
**5** CHECK OIL IN REDUCTION BOX MONTHLY

**4**  
CHECK OIL IN VARIABLE PULLEY  
MONTHLY

**3**  
OIL OUTER TABLE ROLLERS WEEKLY

1342.5

FEED

982.5

869.5  
CNT

1205

**1** GREASE RISE/FALL  
GEARS AND NUTS  
WEEKLY

**2** GREASE JOCKEY SPROCKET  
WEEKLY

**7**  
FEED MOTOR - BROOKS D80a  
(1HP - .75KW) 1,500 RPM  
GREASE BOTH ENDS OF  
MOTOR 2 TURNS EVERY  
6 MONTHS

Fig C2

NOTE: WITH MACHINE RUNNING, TURN VARIABLE FEED SPEED HANDWHEEL "F" THROUGH COMPLETE SPEED RANGE ONCE DAILY TO ENSURE PULLEY IS FULLY LUBRICATED.

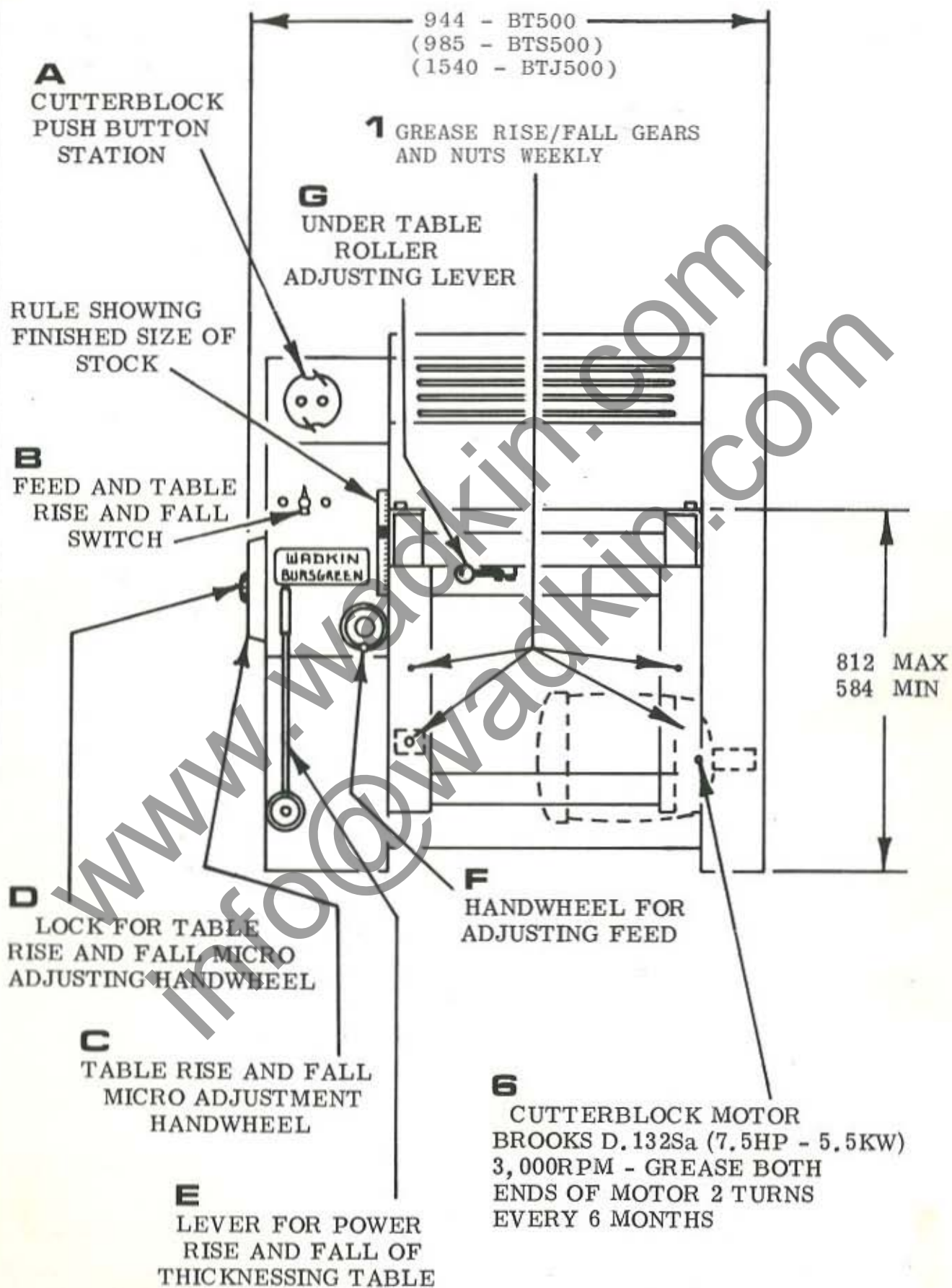


Fig C3

## SECTION "D" MAINTENANCE

All adjustments and alignments following have been carefully set and checked and the complete 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 adjustments are necessary, proceed in accordance with the relative instructions given.

### LUBRICATION

FIG. C2 & C3.

#### WEEKLY

1. GREASE RISE/FALL GEARS AND NUTS
2. GREASE JOCKEY SPROCKET
3. OIL OUTER TABLE ROLLERS.

#### MONTHLY

4. CHECK OIL IN VARIABLE PULLEY IS TO WITHIN  $\frac{1}{2}$ " FROM TOP OF FILLER. TOP UP IF NECESSARY.
5. CHECK OIL IN REDUCTION GEARBOX IS UP TO OIL LEVEL HOLE. TOP UP IF NECESSARY.

#### 6 MONTHLY

6. GREASE BOTH ENDS OF CUTTERBLOCK MOTOR:- 2 TURNS.
7. GREASE BOTH ENDS OF FEED MOTOR:- 2 TURNS.

TYPE OF OIL RECOMMENDED FOR GENERAL USE:- CASTROL MAGNA ED  
 TYPE OF OIL RECOMMENDED FOR REDUCTION GEARBOX } CASTROL ALPHA  
 TYPE OF OIL RECOMMENDED FOR VARIABLE PULLEY } 617 (OR EQUIV').  
 TYPE OF GREASE RECOMMENDED:- CASTROL SPHEEROL AP3.

### TYPE FV HOLROYD REDUCTION BOX

NOTE: After about 200 hours running with a new gear it is desirable to drain and flush out the original charge of oil and refill with clean oil, after which the oil need only be changed after long intervals. Regular inspection of oil level and topping up when necessary is however important.

### TABLE ROLLERS

FIG. D1.

The anti-friction table rollers or bed rollers revolve on sealed for life bearings which require no lubrication. These rollers are automatically adjusted in relation to the table surface by a single operating lever "A" at the infeed end of the table.

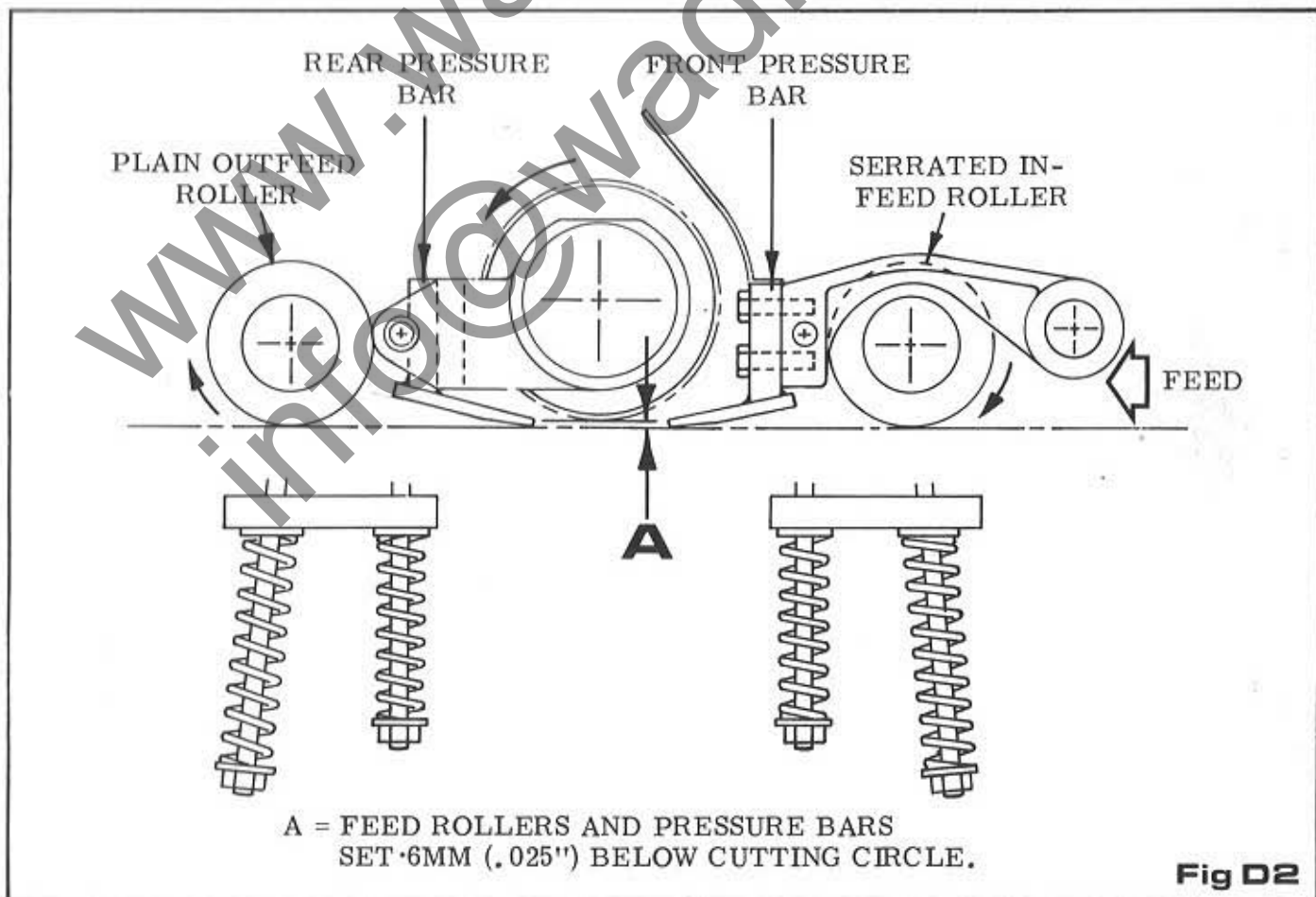
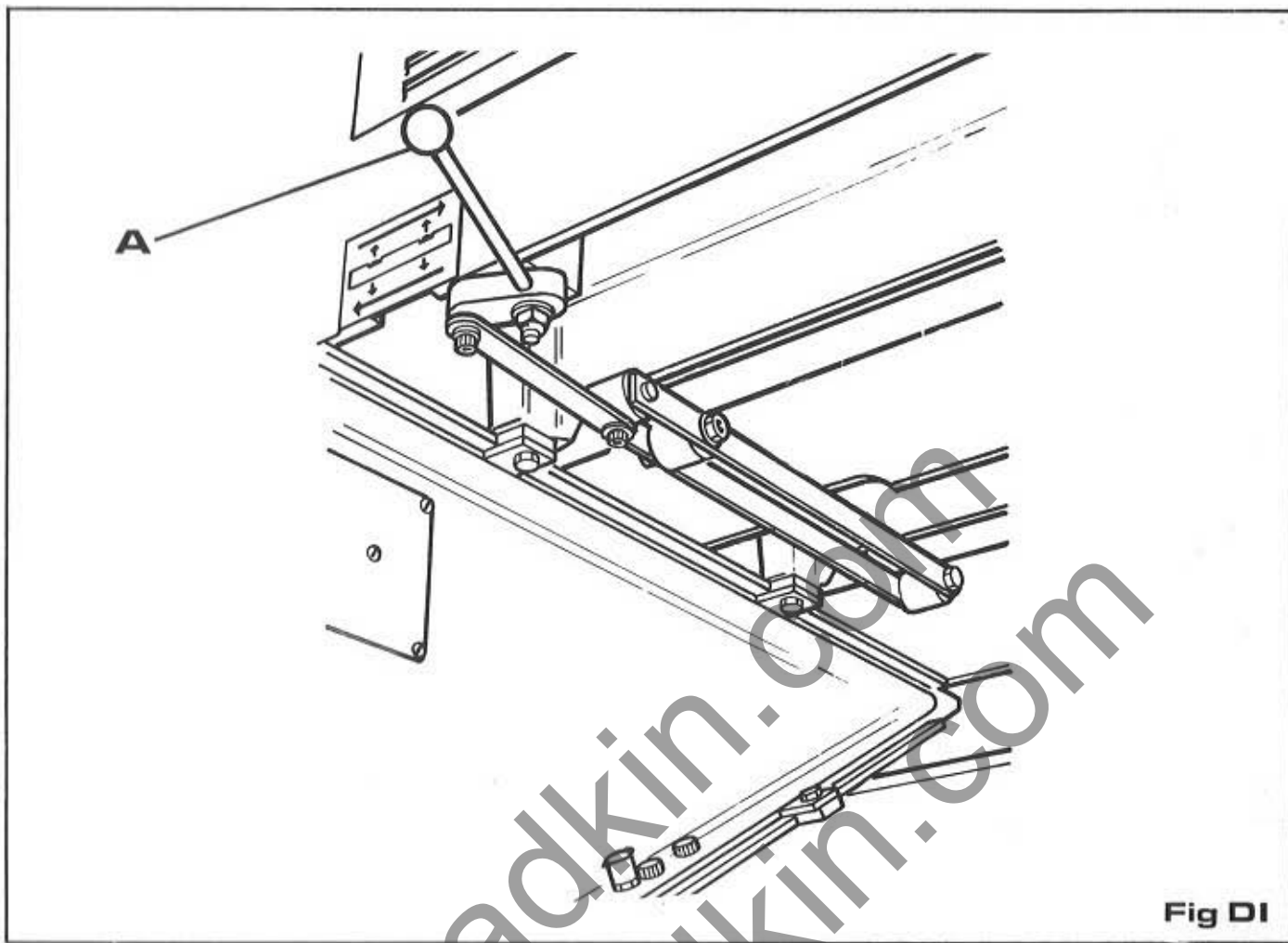
Under table roller height depends on the stock being machined.

The extremes of height being for narrow wet and soft material which allow the rollers to sink into the material considerably and still allow the bottom of the stock to ride on the table surface.

The level position of the rollers caters for the opposite extremes of wide hard dry material which will not permit the rollers to sink into it.

Infinite variation therefore permits correct setting for all classes of timber.

The general rule for setting being that the bottom rollers should be high enough to relieve the friction between table and stock WITHOUT the material losing contact with the table surface.



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 setting will be disturbed.

It must be emphasised that a really good surface finish from a thickening 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 a overhand jointer, or surfacer to remove twist and other irregularities.

## FEED ROLLER AND PRESSURE BAR SETTINGS

### FIG. D2.

These are pre-set at the works and vertical adjustment relative to the cutter-block is neither possible nor necessary provided the cutters are correctly set with the special setting guage 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. D2.

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.

NOTE: 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.

## BELT TENSION

### FIG. D3.

The cutterblock drive is by three Vee belts from a  $7\frac{1}{2}$ HP motor. Tension is effected to these belts by adjusting motor. To adjust, loosen four aerotight nuts "A" then proceed to turn hexagon head nut "B" until required tension is reached then relock nuts "A".

## FEED CHAIN TENSION

### FIG. D4.

The drive to feed rollers is by roller chain from a worm reduction gearbox which is in turn driven by a variable pulley from a 1HP motor, giving variable feed speeds of 6 - 18 METRES/MIN (20 - 60 FT/MIN).

To adjust chain tension on top feed roller chain, proceed as follows:-  
Loosen two aerotight nuts "A" and hexagon head locknut "B". Adjust square head screw "C" until required tension is reached, i.e. chain should not be run either too slack or too tight. When chain is correctly tensioned relock aerotight nuts "A" and locknut "B".

## TABLE RISE AND FALL CHAIN TENSION

### FIG. D5 & FIG. D6.

Tension adjustment to the manual table rise and fall chain is as follows:-  
Power rise table to uppermost position. Turn handwheel "A" in FIG. D5 until the hole in the handwheel boss lines with the hole in the handwheel shaft, then locate 6mm DIA toggle bar into handwheel shaft. Loosen aerotight nut "A" in FIG. D6 then move toggle bar until required chain tension is reached i.e. chain should not be run either too slack or too tight. When chain is correctly tensioned hold toggle bar in position and re-tighten aerotight nut "A", then remove toggle bar.

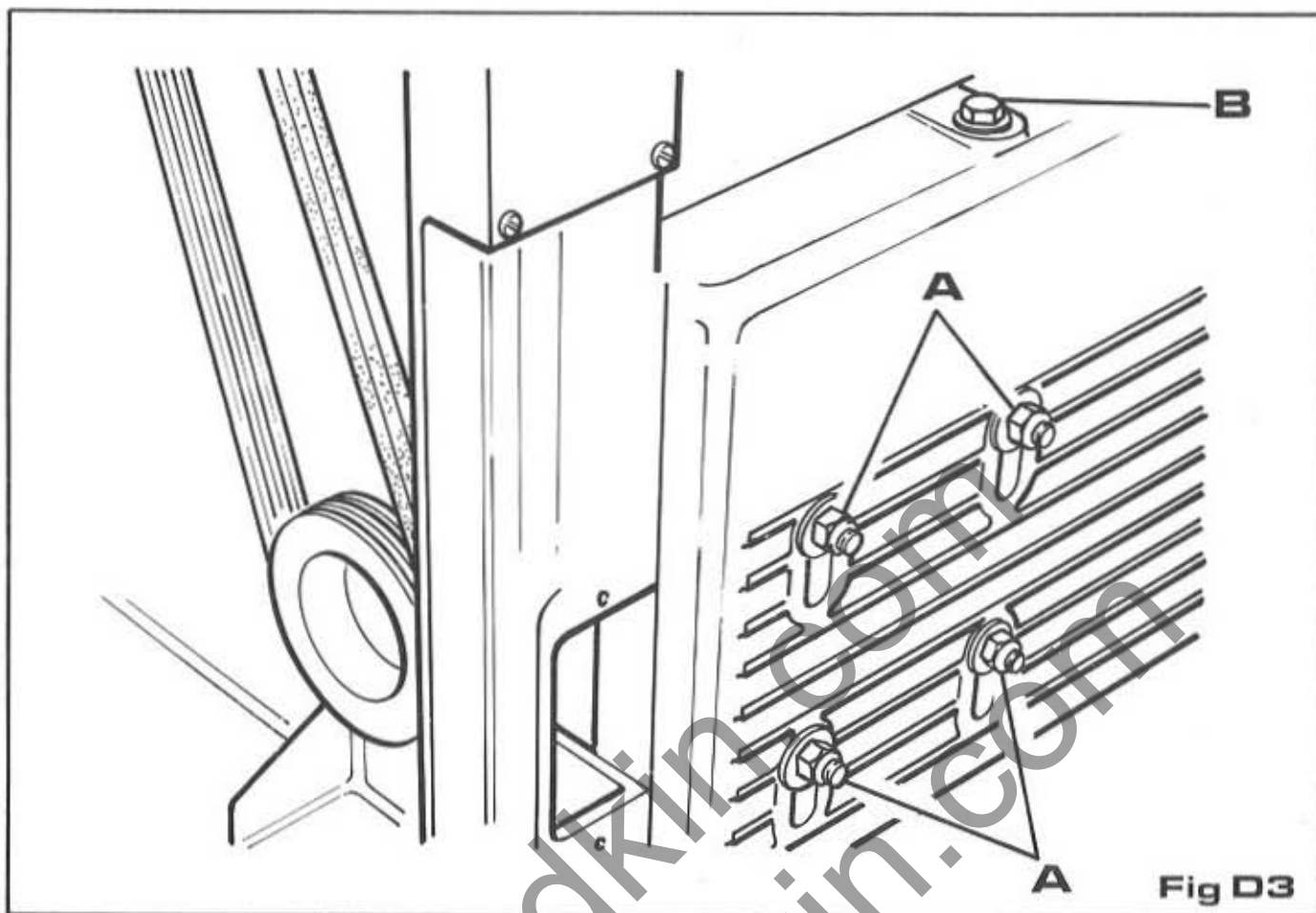


Fig D3

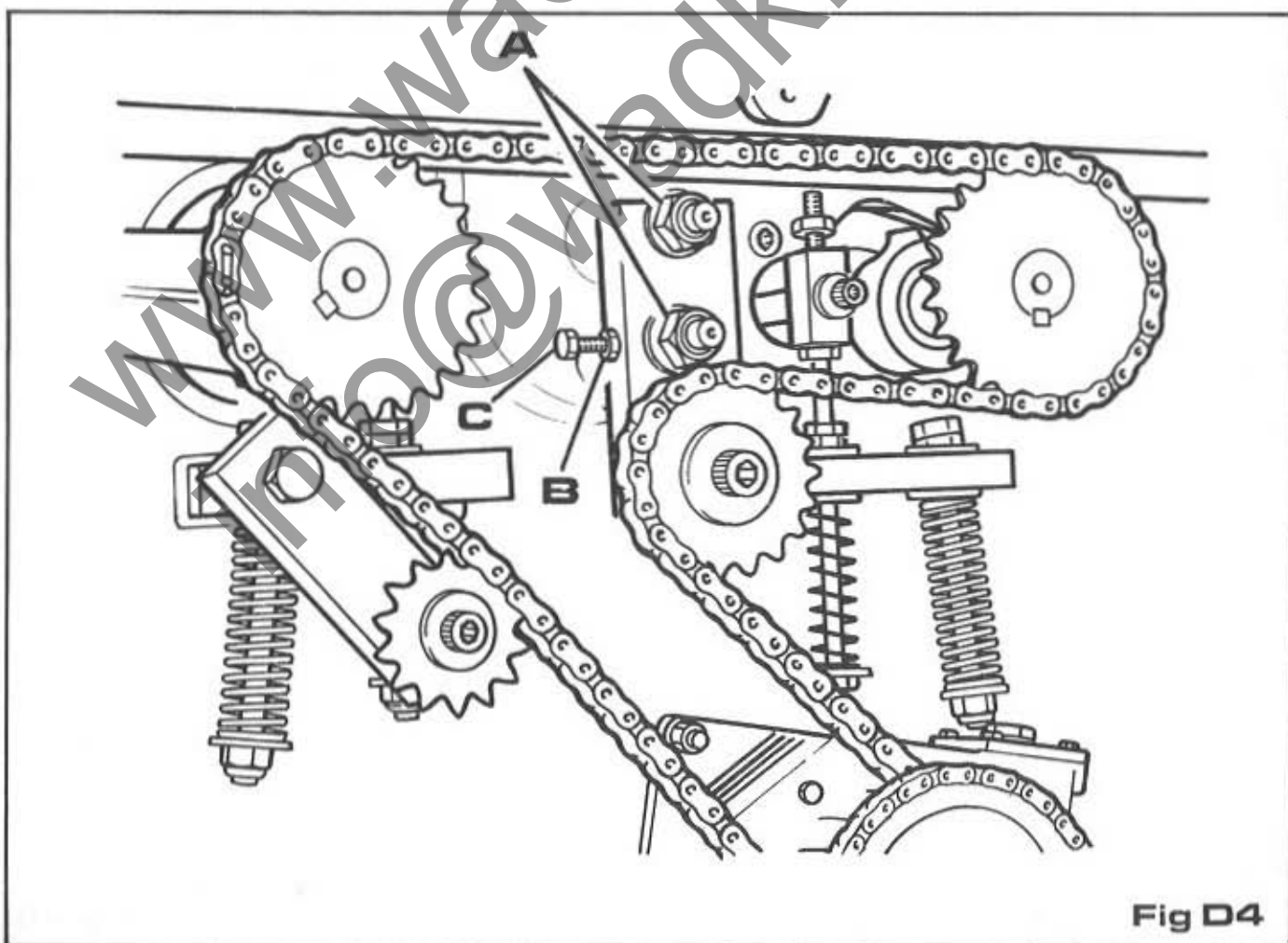
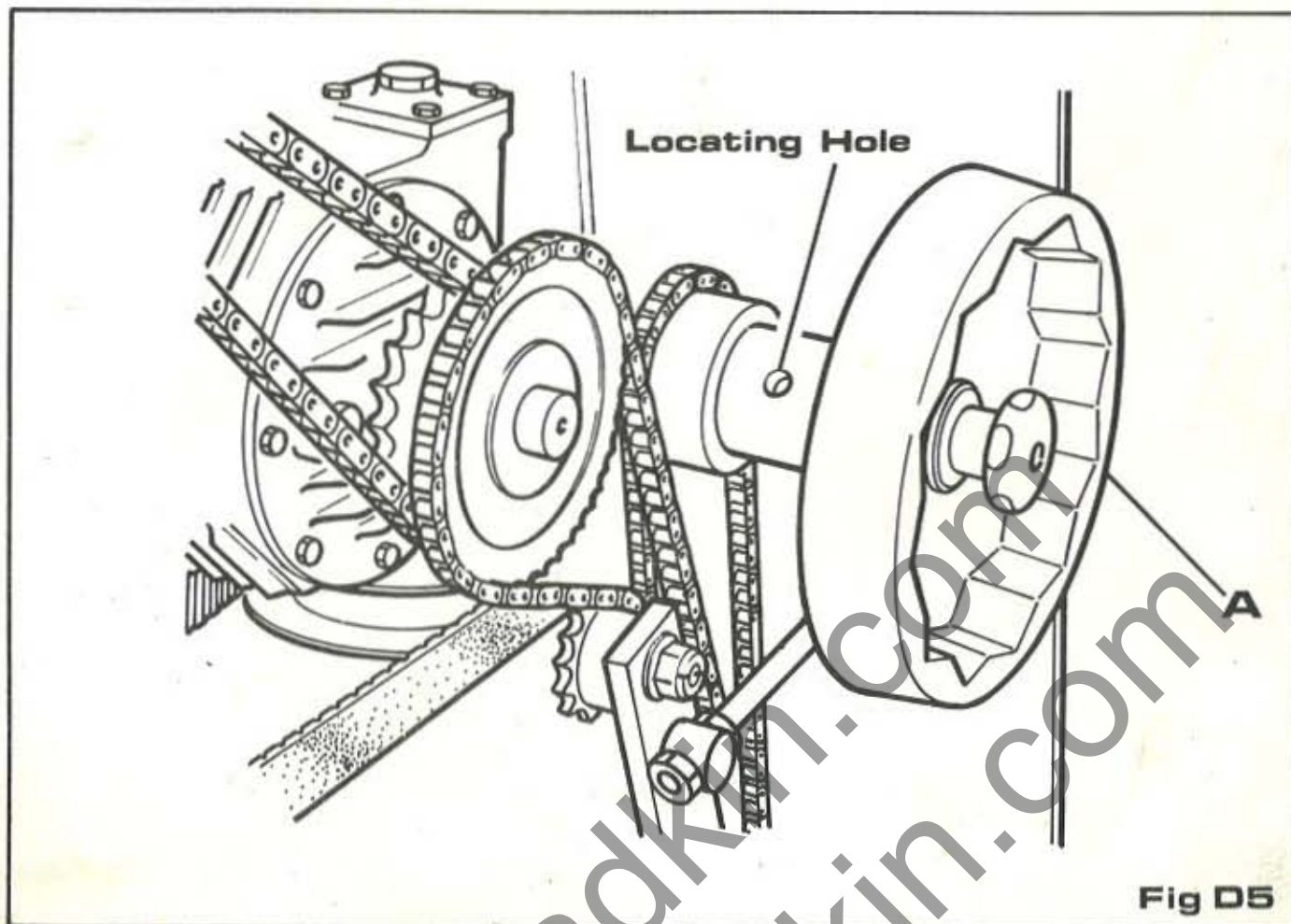


Fig D4



## WORM GEARBOX TO CLUTCH CHAIN TENSION

### FIG. D7.

Slacken hexagon locknut "A" and adjust hexagon locknut "B" until chain tension is correct, i.e. chain should not be run either too slack or too tight.

When chain is correctly tensioned relock hexagon locknuts "A" and "B".

## CUTTER SETTING

### FIG. D8.

The cutters are held in the cutterblock by a steel clamping bar secured with 7 - 10mm heat treated socket head screws. As the amount of cutter projection is vital to the correct operation of the machine it is most important that the actual setting gauge supplied with the machine should be used. 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 cutters and re-set with the "BURSGREEN" cutter setting guage, proceed as follows:-

1. Turn the cutterblock to approximately the position shown in FIG.D8. and slacken the 7 - 10mm knife locking screws until the knife is just free of the cutterblock.

The knives can now be removed for grinding or replacing. When grinding it is most important that knives are ground dead straight and balanced in pairs or sets.

An efficient regrinding service is available, charges are moderate and service prompt. To avail yourself with this service, return cutters to:  
BURSGREEN (DURHAM) LTD., FENCE HOUSES, HOUGHTON-LE-SPRING,  
CO. DURHAM

2. To re-set the knives the cutterblock should be in approximately the position as shown in FIG.D8. Place the knife in the slot ensuring that all faces are clean and the clamping bar free from burrs.
3. Ensure that the three socket head jacking screws upon which the knife rests, are at their lowest positions by means of a 6mm allenkey.
4. Secure the knife setting device "A" (which when not in use is normally secured to the rear of the machine table) to the cutterblock by the three knurled locking screws "B" as shown in FIG.D8.
5. Adjust the three socket head jacking screws until the knife just touches the knife setting device at three points "C".  
**IMPORTANT** Care should be taken to ensure that the knife only just touches the knife setting device, as over-adjusting will damage the knife.
6. When the knife is correctly set, securely lock the 7 - 10mm knife locking screws.
7. Rotate cutterblock until the next knife is in position and repeat the procedure until all the knives have been set.

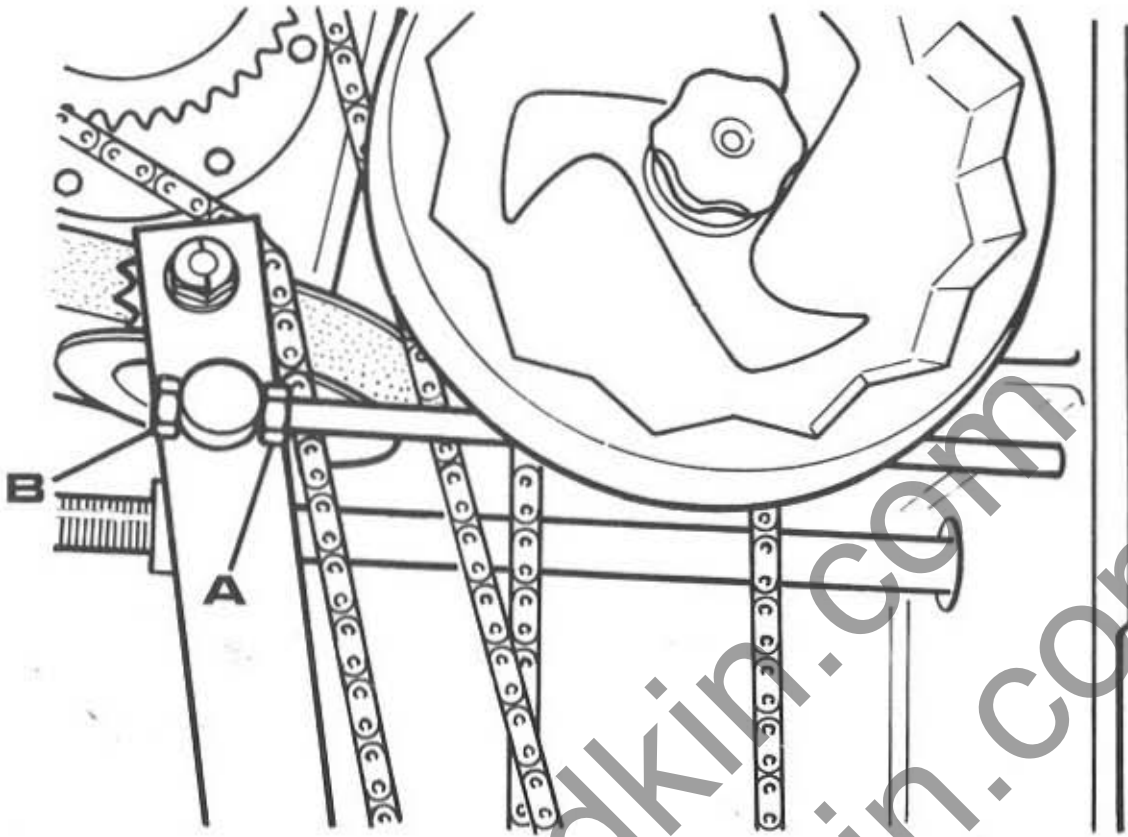


Fig D7

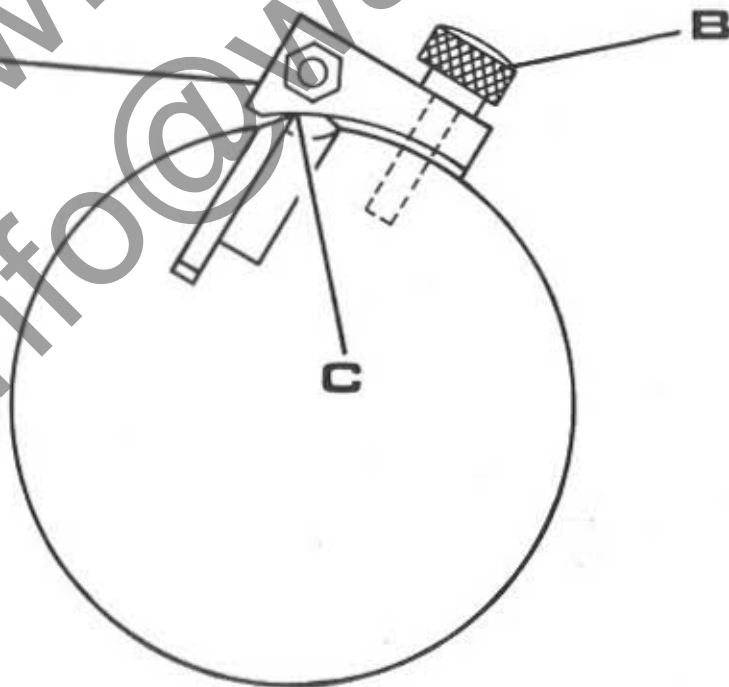


Fig D8

8. When changing cutters it is advisable to check that all the locking screws are adequately lubricated and quite free. Periodically examine for damage or cracks particularly in the hexagon hole. Any doubtful screws should be replaced and all screws well lubricated with "Molyslip" or similar oil, before replacing.

#### CUTTER CARE

##### FIG. D9.

The cutters supplied are 511mm long x 30mm wide x 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 cutting edge is straight and parallel to the back edge.

For general work, knife angles for soft and hard woods are recommended as in FIG. D9. (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. D9. (c) and (d). For wet or green timber the cutting bevel may be decreased five degrees, but the front bevel should not be given.

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.

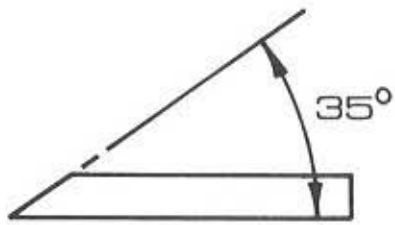
Do not allow a heel greater than .79mm (1/32") wide on the bevel before removing and regrinding. When the heel becomes too wide the knives may heat up or have a hammering effect on the wood and more than normal power will be required to run the cutterblock.

#### SETTING THICKNESSING TABLE PARALLEL TO CUTTERBLOCK

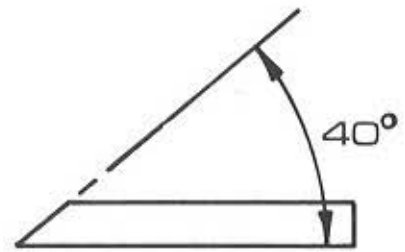
The machine table is accurately set parallel to cutterblock before despatch but should it be disturbed for any reason it must be carefully checked and made parallel to the cutterblock, if necessary, by the following procedure.

1. Feed a short length of timber approximately 50mm (2" square) x 460mm (18" long) through the machine to one side of the thicknessing 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 underside 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 parallel to the knives for accurate thicknessing.

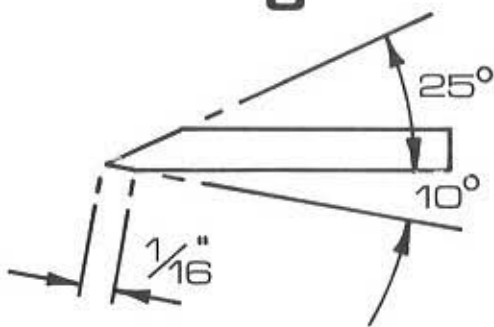
**A**

for soft wood

**B**

for hard wood

for dry soft wood

**C**

for dry hard wood

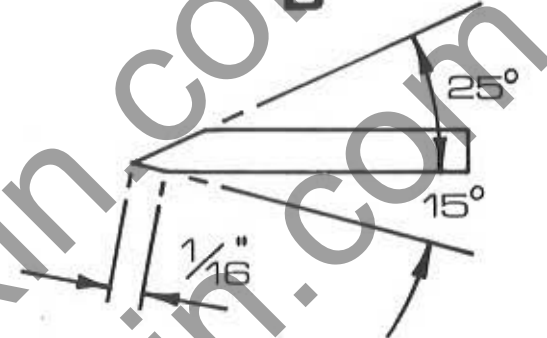
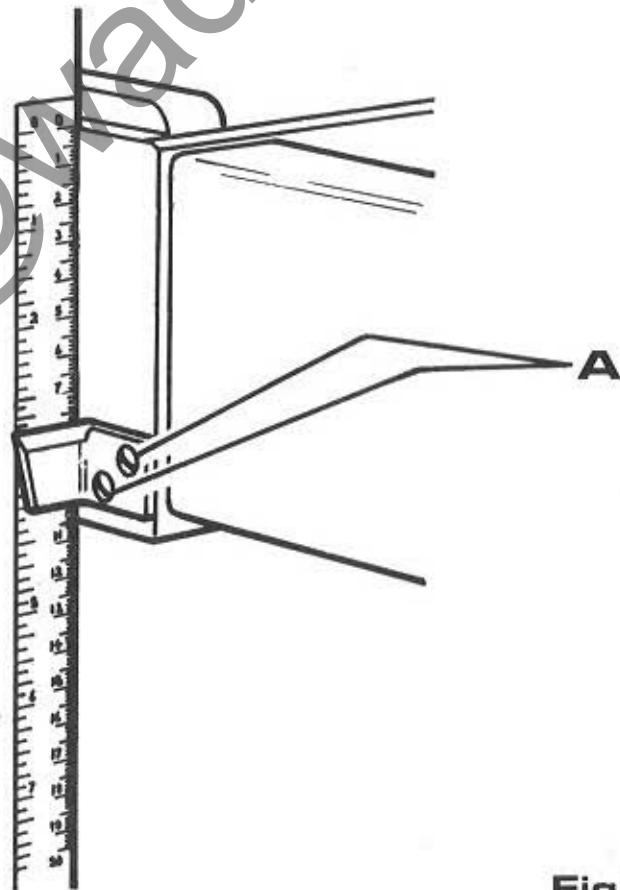
**D**

Fig D9



**DKIN  
REEN**

Fig D10

## THICKNESSING RULE

### FIG. D10.

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 screws "A" in FIG. D10. and set pointer to the correct thickness.

### GENERAL HINTS

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

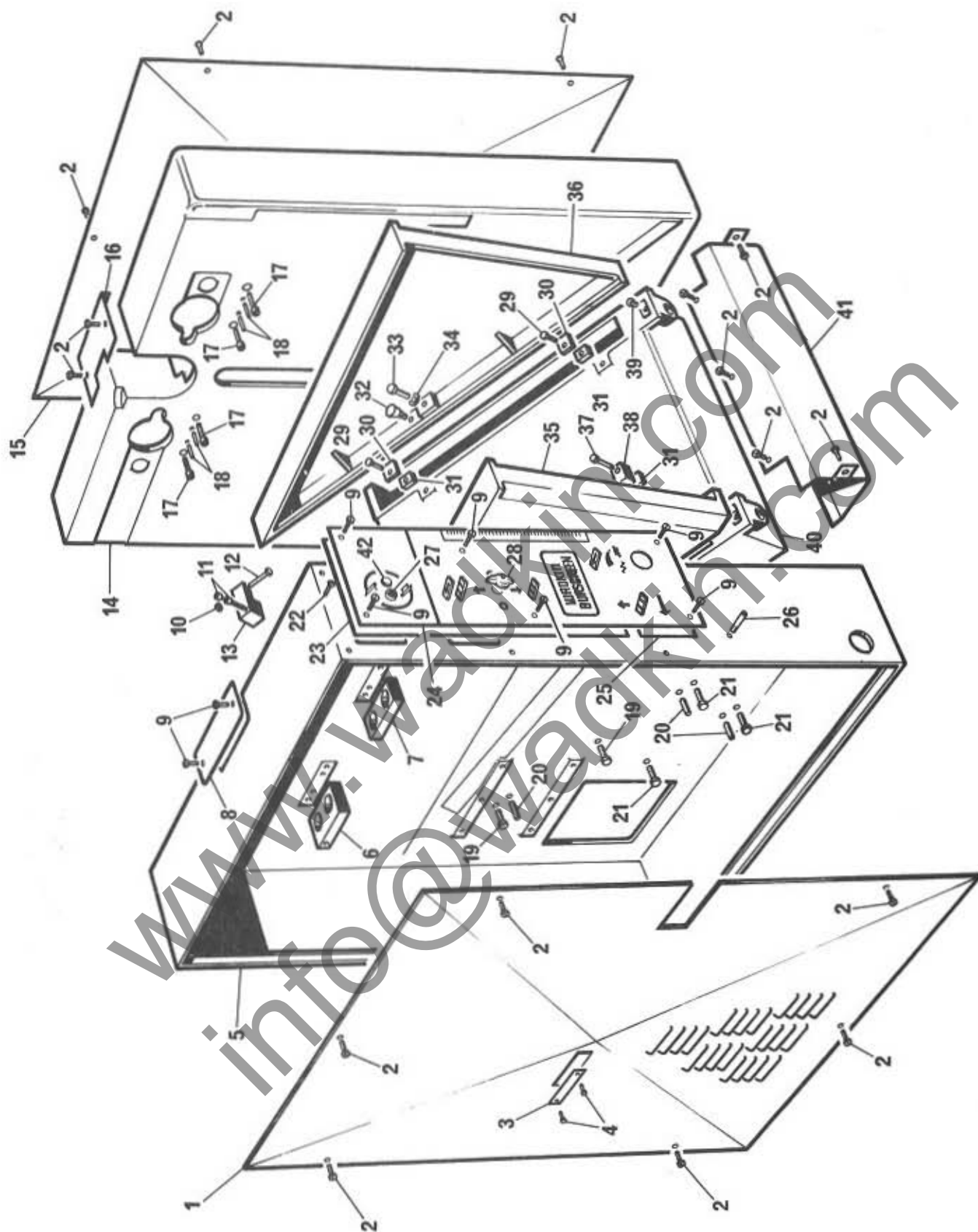
BURSGREEN (DURHAM) LIMITED  
APPROVED LUBRICANTS

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

**SECTION E**  
**SPARE PARTS LISTS**

[www.wadkin.com](http://www.wadkin.com)  
[info@wadkin.com](mailto:info@wadkin.com)

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



## MAIN FRAME ASSEMBLY

| Ref.<br>No. | Part No. | No.<br>Off | Description                                        |
|-------------|----------|------------|----------------------------------------------------|
| 1           | 1069/208 | 1          | Drive side cover                                   |
| 2           |          | 19         | 8mm x 10mm pan head screw                          |
| 3           | 1069/136 | 1          | Feed scale                                         |
| 4           |          | 2          | 1/8" dia x 1/4" long self tapping screw            |
| 5           | 1069/235 | 1          | Drive side frame                                   |
| 6           | 1069/162 | 1          | Spring and jockey pressure plate                   |
| 7           | 1069/48  | 3          | Spring pressure plate                              |
| 8           | 1069/84  | 1          | Cover for belt aperture                            |
| 9           |          | 8          | 6mm x 10mm pan head screw                          |
| 10          |          | 1          | 8mm nut                                            |
| 11          |          | 2          | 8mm x 25mm socket head capscrew                    |
| 12          |          | 1          | 8mm x 50mm hexagon head bolt                       |
| 13          | 1069/186 | 1          | Thicknessing table stop                            |
| 14          | 1069/236 | 1          | Rebate side frame                                  |
| 15          | 1069/243 | 1          | Rebate side cover                                  |
| 16          | 1069/276 | 1          | Spindle pulley cover                               |
| 17          |          | 8          | 10mm x 25mm socket head capscrew                   |
| 18          |          | 8          | 1/4" dia. x 1 1/4" long fluted dowel               |
| 19          |          | 2          | 12mm x 30mm hexagon head bolt                      |
| 20          |          | 6          | 12mm x 28mm hardened ground dowel                  |
| 21          |          | 8          | 12mm x 35mm hexagon head bolt                      |
| 22          |          | 4          | 6mm x 10mm countersunk socket head screw           |
| 23          | 1069/89  | 1          | Front panel back plate                             |
| 24          | 1069/204 | 1          | Control plate                                      |
| 25          | 1069/241 | 1          | Front panel back plate                             |
| 26          | 1069/295 | 1          | Stop peg                                           |
| 27          |          | 1          | Brooks "STOP" push button unit                     |
| 28          |          | 1          | Chilton switch No. C6 - A292 with tear drop handle |
| 29          |          | 3          | 10mm x 25mm hexagon head bolt                      |
| 30          | 1069/93  | 9          | Wedge keeps                                        |
| 31          | 1069/92  | 4          | Wedge keep locking piece                           |
| 32          | WF 1920  | 2          | Spring lid oil cup wick feed (1/8" gas)            |
| 33          |          | 2          | 10mm x 35mm socket head capscrew                   |
| 34          | 1032/22  | 2          | Washer for rise and fall nut                       |
| 35          | 1069/171 | 1          | Wedge (left hand)                                  |
| 36          | 1069/171 | 1          | Wedge (right hand)                                 |
| 37          |          | 1          | 10mm x 45mm hexagon head bolt                      |
| 38          | 1069/187 | 1          | Thicknessing table stop block                      |
| 39          | PC 2     | 2          | Grease nipple (1/8" gas)                           |
| 40          | 1069/168 | 1          | Base                                               |
| 41          | 1069/37  | 1          | Cover for rise and fall gears                      |
| 42          |          | 1          | Brooks "START" push button unit                    |

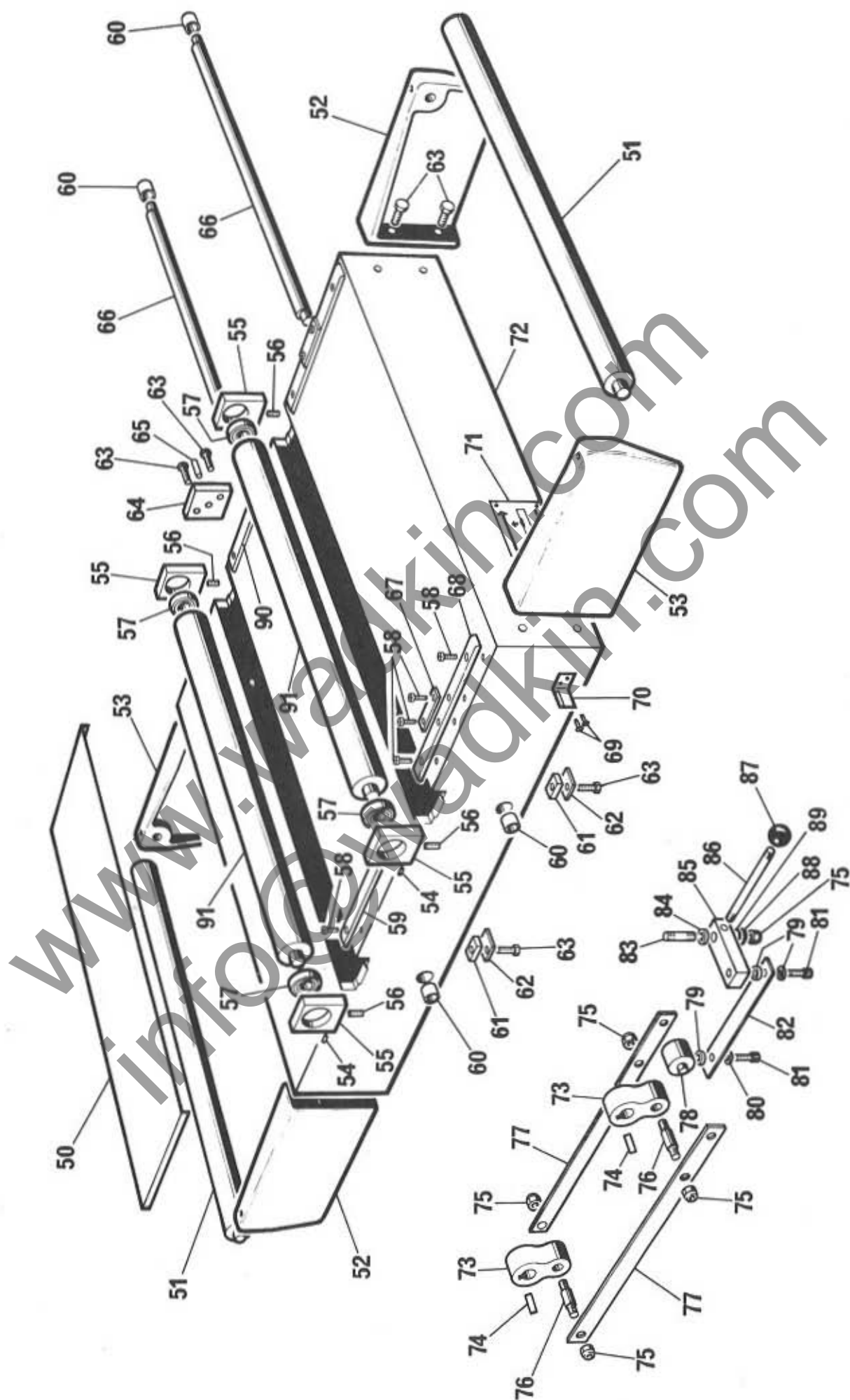
STOP START BUTTON PT NO 517300  
CONTACT BLOCK PT NO 5117314

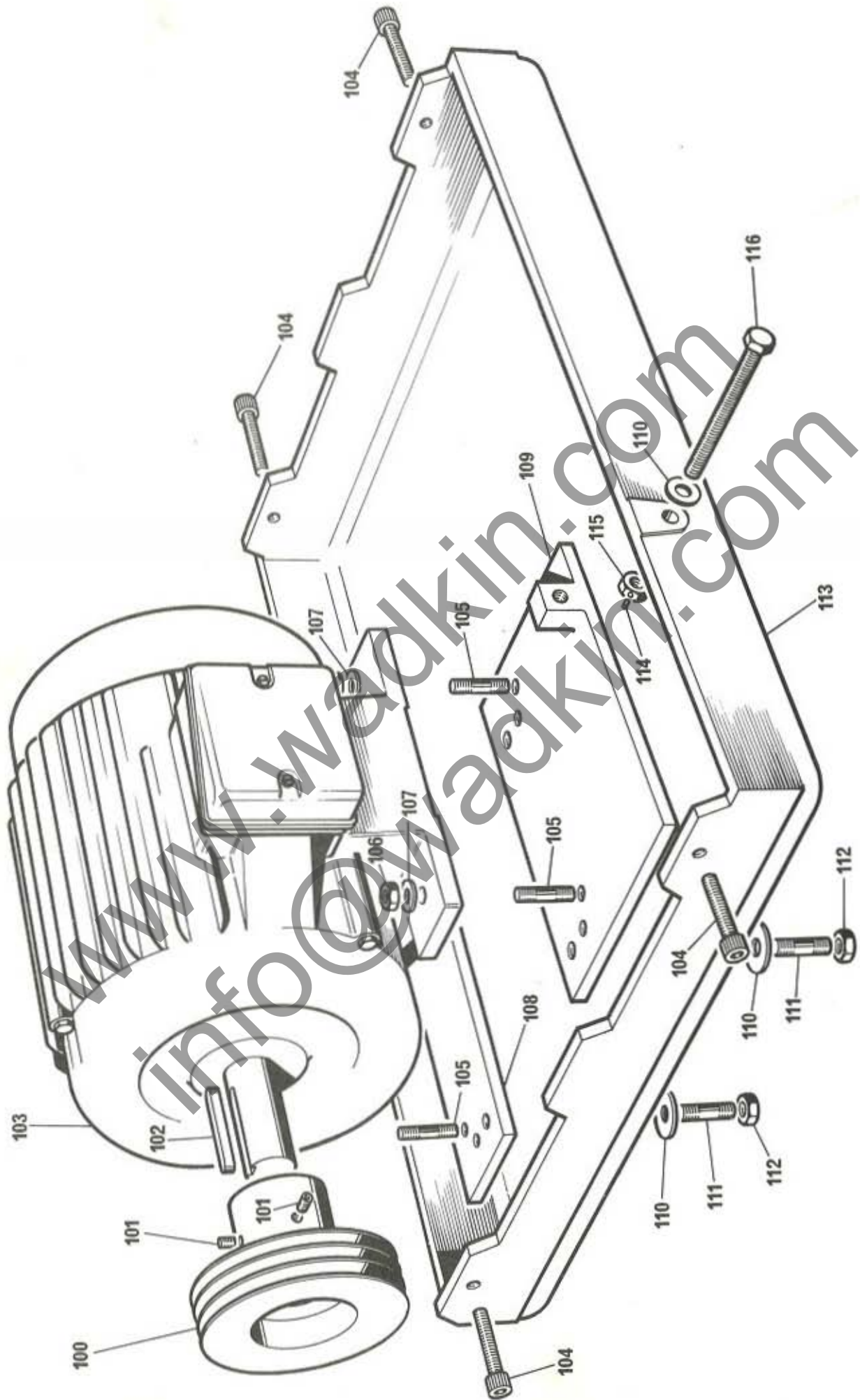
NOTE :- When ordering replacement parts quote  
Part No. and Serial No. of the machine

**TABLE ASSEMBLY**

| Ref.<br>No. | Part No.    | No.<br>Off | Description                              |
|-------------|-------------|------------|------------------------------------------|
| 50          | 1069/193    | 1          | Cover for outfeed roller                 |
| 51          | 1069/35     | 2          | Outer table roller                       |
| 52          | 1069/18     | 2          | Outer table roller bracket (right hand)  |
| 53          | 1069/18     | 2          | Outer table roller bracket (left hand)   |
| 54          |             | 4          | 6mm x 16mm long socket head grubscrew    |
| 55          | 1069/77     | 4          | Under table roller bearing block         |
| 56          | 1069/239    | 4          | Under table roller adjusting screw       |
| 57          | SKF 62032RS | 4          | Bearing                                  |
| 58          |             | 12         | 6mm x 12mm long cheese head screw        |
| 59          | 1069/210    | 1          | Left hand inner table strip              |
| 60          | 1069/78     | 4          | Under table roller bushes                |
| 61          | 1069/92     | 4          | Wedge keep locking piece                 |
| 62          | 1069/93     | 4          | Wedge keep                               |
| 63          |             | 14         | 10mm x 25mm hexagon head bolts           |
| 64          | 1069/51     | 1          | Table key                                |
| 65          |             | 1          | 3/8" dia. x 1" long fluted dowel         |
| 66          | 1069/34     | 2          | Under table roller eccentric             |
| 67          | 1069/228    | 2          | Depth stop control plate                 |
| 68          | 1069/97     | 2          | Front table strip                        |
| 69          |             | 2          | 1/8" dia. x 3/8" long self tapping screw |
| 70          | 1069/292    | 1          | Thickening pointer                       |
| 71          | 1069/137    | 1          | Table roller instruction plate           |
| 72          | 1069/5      | 1          | Table                                    |
| 73          | 1069/72     | 2          | Under table roller links                 |
| 74          |             | 2          | 8mm x 7mm x 32mm feather key             |
| 75          |             | 5          | 10mm nut                                 |
| 76          | 1067/76     | 2          | Under table roller link pin              |
| 77          | 1069/74     | 2          | Under table roller adjusting link        |
| 78          | 1069/75     | 1          | Under table roller swivel nut            |
| 79          | 1069/147    | 3          | Roller link swivel                       |
| 80          |             | 1          | 8mm washer                               |
| 81          |             | 2          | 8mm x 25mm socket head capscrew          |
| 82          | 1069/145    | 1          | Roller control link                      |
| 83          | 1069/231    | 1          | Stud for under-table mechanism           |
| 84          |             | 1          | 10mm fibre washer (thick)                |
| 85          | 1069/148    | 1          | Under table swivel block                 |
| 86          | 1069/32     | 1          | Under table control lever                |
| 87          |             | 1          | 10mm x 32mm dia. plastic ball            |
| 88          |             | 1          | 10mm washer                              |
| 89          |             | 1          | 10mm fibre washer (thin)                 |
| 90          | 1069/209    | 1          | Right hand inner table strip             |
| 91          | 1069/33     | 2          | Under table roller                       |

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





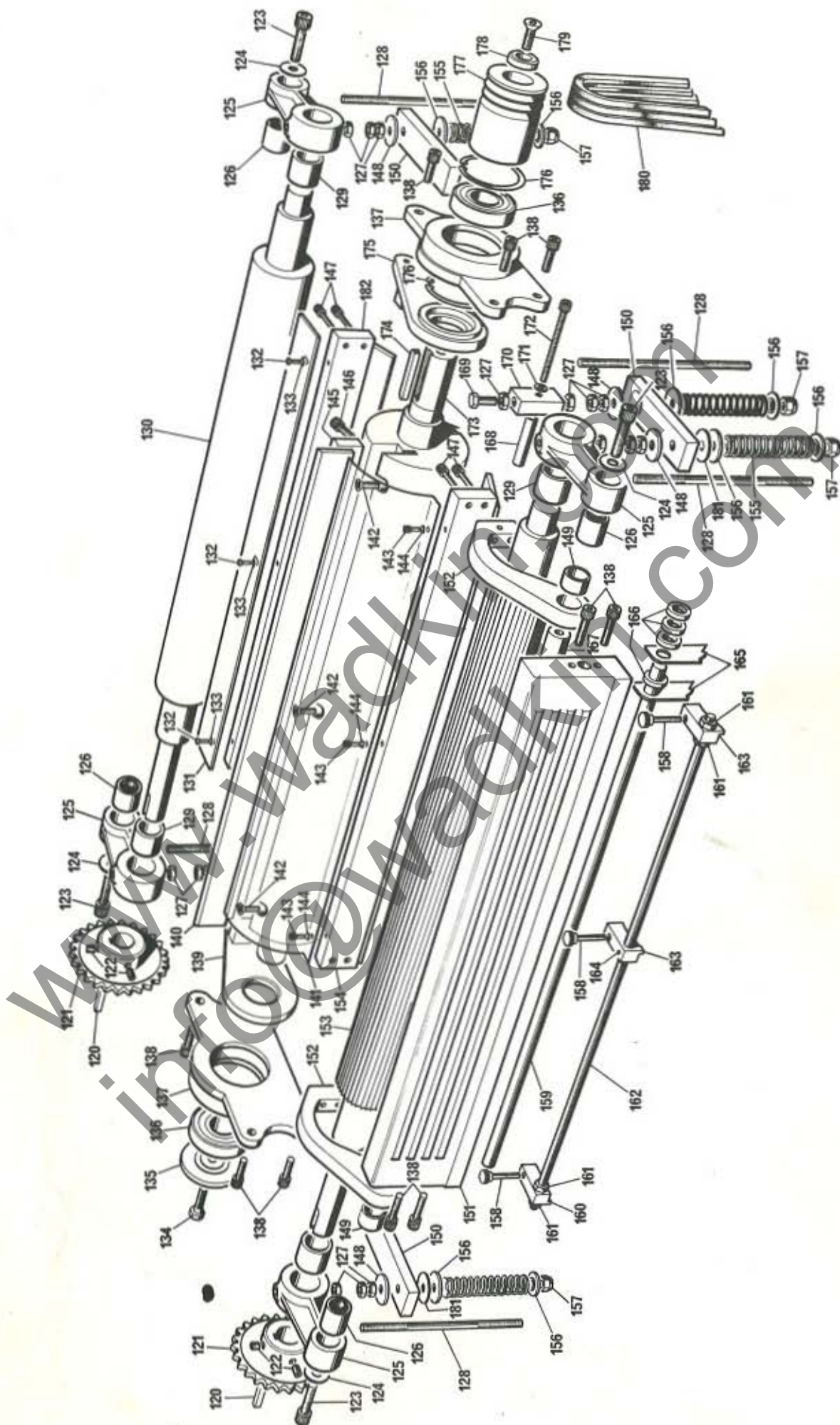
## MOTOR MOUNTING ASSEMBLY

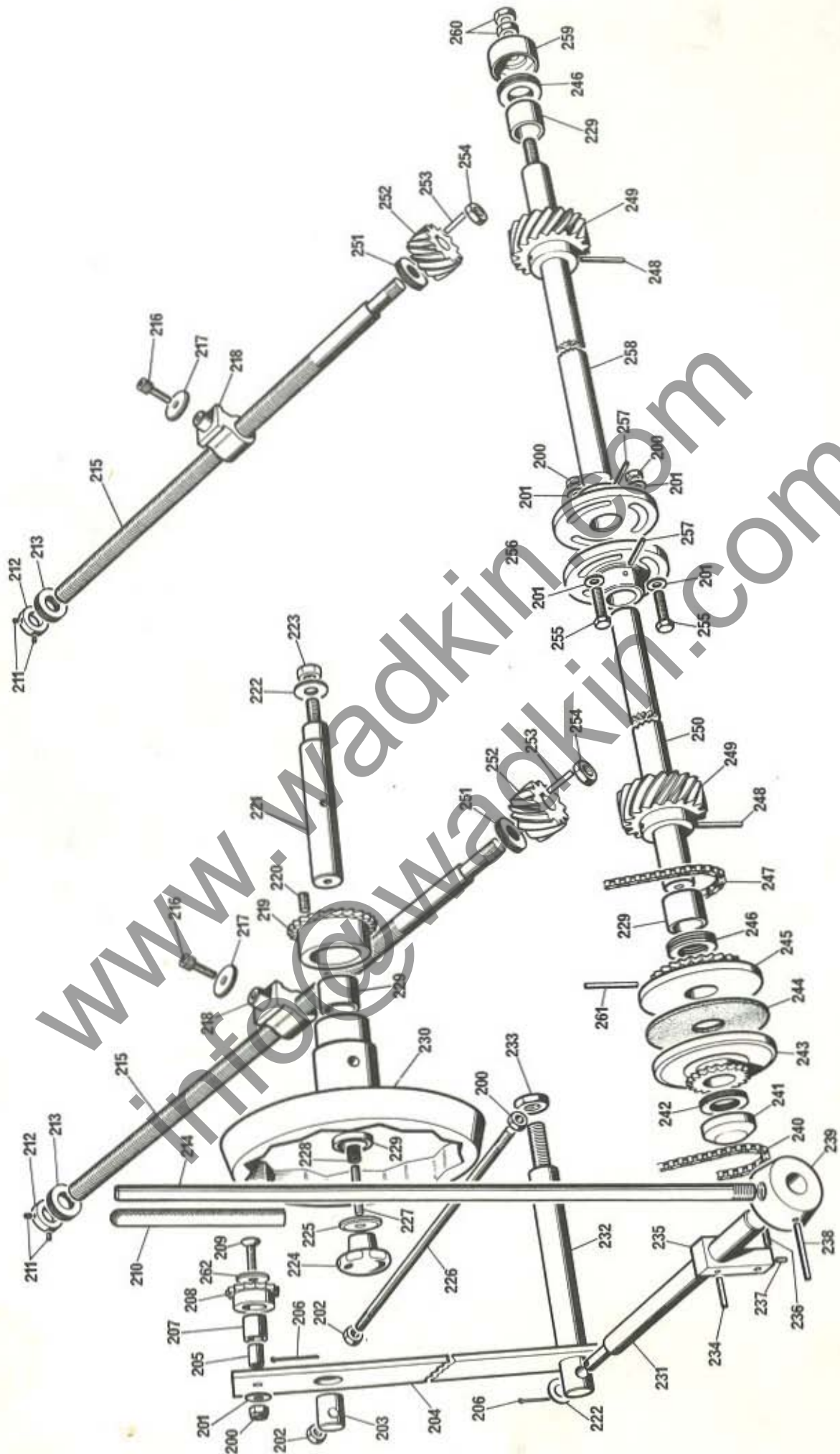
| Ref.<br>No. | Part No. | No.<br>Off | Description                                                                                                                                  |
|-------------|----------|------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 100         | 1069/23  | 1          | Block motor pulley                                                                                                                           |
| 101         |          | 2          | 10mm x 12mm socket head grubscrew                                                                                                            |
| 102         |          | 1          | 8mm x 10mm x 60mm feather key (ground to size)                                                                                               |
| 103         |          | 1          | Brook motor, 7.5HP, 3,000RPM, T.E.F.C. Frame D.132SA, Foot mounted star delta wound, 3PH, 50 cycles, Terminal box in std. position.          |
|             |          | 1          | Brook motor, 7.5HP, 3,600RPM, T.E.F.C. Frame D.132SA, Foot mounted star delta wound, 3PH 60 cycles. Terminal box in std. position. (SPECIAL) |
| 104         | 1069/233 | 4          | 12mm x 35mm socket head capcrew                                                                                                              |
| 105         |          | 4          | Stud for motor platform                                                                                                                      |
| 106         |          | 4          | 10mm nut                                                                                                                                     |
| 107         |          | 4          | 10mm washer                                                                                                                                  |
| 108         | 1069/58  | 1          | Plate for motor feet                                                                                                                         |
| 109         | 1069/79  | 1          | Motor adjustment plate                                                                                                                       |
| 110         | 1069/234 | 5          | 12mm washer                                                                                                                                  |
| 111         |          | 4          | Stud for motor platform                                                                                                                      |
| 112         |          | 4          | 12mm nut                                                                                                                                     |
| 113         | 1069/6   | 1          | Motor platform                                                                                                                               |
| 114         |          | 1          | 6mm x 6mm socket head grubscrew                                                                                                              |
| 115         |          | 1          | 12mm nut (with 6mm tapped hole)                                                                                                              |
| 116         |          | 1          | 12mm x 100mm hexagon head bolt                                                                                                               |

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

## CUTTERBLOCK ASSEMBLY

| Ref.<br>No. | Part No.        | No.<br>Off  | Description                                       |
|-------------|-----------------|-------------|---------------------------------------------------|
| 120         |                 | 2           | 8mm x 6mm x 30mm feather key                      |
| 121         | 1069/131        | 2           | Feed roller sprocket                              |
| 122         |                 | 4           | 10mm x 10mm socket head grubscrew                 |
| 123         |                 | 4           | 12mm x 80mm socket head capscrews                 |
| 124         | 1069/141        | 4           | Washer for "Metalastic" bush                      |
| 125         | 1069/11         | 4           | Feed roller pivot arm                             |
| 126         |                 | 4           | "Metalastic" bush                                 |
| 127         |                 | 25          | 10mm locknut                                      |
| 128         | 1069/68         | 8           | Stud for pressure bar spring                      |
| 129         | 1069/78         | 4           | Under table roller bush                           |
| 130         | 1069/28         | 1           | Outfeed roller                                    |
| 131         | 1069/240        | 1           | Scraper plate                                     |
| 132         |                 | 3           | 6mm x 10mm hexagon head bolt                      |
| 133         |                 | 3           | 6mm washer                                        |
| 134         |                 | 1           | 12mm x 30mm hexagon head bolt                     |
| 135         | 1069/38         | 1           | Washer for cutterblock                            |
| 136         | 6207-2RS        | 2           | Cutterblock bearing                               |
| 137         | 1069/7          | 2           | Bearing housing                                   |
| 138         |                 | 12          | 10mm x 30mm socket head capscrew                  |
| 139         | 1069/9          | 1           | Back pressure bar bracket (left hand)             |
| 140         |                 | as required | Cutterblock knives (state quantity required)      |
| 141         | 1069/86         | 1           | Chip deflector                                    |
| 142         | 9 No A4m Screws | 6           | 8mm x 30mm countersunk socket head screw          |
| 143         |                 | 3           | 6mm x 10mm socket head capscrew                   |
| 144         |                 | 3           | 6mm spring washer                                 |
| 145         | 1069/178        | as required | Cutterblock wedge (state quantity required)       |
| 146         | 1069/183        | as required | Cutterblock screw                                 |
| 147         |                 | 8           | 8mm x 30mm socket head capscrew                   |
| 148         | 1069/70         | 8           | Washer for feed roller spring                     |
| 149         | BS 99           | 2           | Oilite bush                                       |
| 150         | 1069/48         | 3           | Spring pressure plate                             |
| 151         | 1069/10         | 1           | Front tie piece                                   |
| 152         | 1069/8          | 2           | Front pressure bar bracket                        |
| 153         | 1069/28         | 1           | Infeed roller                                     |
| 154         | 1069/29         | 1           | Front pressure bar                                |
| 155         | ETS 194         | 4           | Feed roller spring                                |
| 156         | 1069/69         | 16          | Spring guide                                      |
| 157         |                 | 8           | 10mm aerotight nut                                |
| 158         | 1069/184        | 3           | Knife setting device fixing screw                 |
| 159         | 1069/82         | 1           | Anti kick back fingers bar                        |
| 160         | 1069/175        | 1           | Knife setting device block (left hand)            |
| 161         |                 | 4           | 10mm nut                                          |
| 162         | 1069/185        | 1           | Knife setting tie bar                             |
| 163         | 1069/175        | 2           | Knife setting device block (right hand)           |
| 164         |                 | 1           | 6mm x 6mm socket head grubscrew                   |
| 165         | 1069/40         | 62          | Knife back finger                                 |
| 166         | 1069/41         | 68          | Spacer for kick back finger                       |
| 167         | 1069/81         | 1           | Tie bar                                           |
| 168         | 1069/50         | 4           | Pressure bar tie rods                             |
| 169         |                 | 1           | 10mm x 45mm hexagon head bolt                     |
| 170         | 1069/49         | 4           | Pressure bar block                                |
| 171         |                 | 4           | 8mm washer                                        |
| 172         |                 | 4           | 8mm x 90mm socket head capscrew                   |
| 173         | 1069/198        | 1           | Cutterblock                                       |
| 174         |                 | 1           | 10mm x 7.2mm x 60mm feather key.                  |
| 175         | 1069/9          | 1           | Back pressure bar bracket (right hand)            |
| 176         | 5000/283        | 2           | 72mm internal circlip                             |
| 177         | 1069/22         | 1           | Cutterblock pulley                                |
| 178         | 1069/39         | 1           | Washer for cutterblock pulley                     |
| 179         |                 | 1           | 12mm x 35mm countersunk "nylok" socket head screw |
| 180         | ALPHA 630       | 3           | Vee belts                                         |
| 181         | 1069/254        | 2           | Washer for spring guide                           |
| 182         | 1069/30         | 1           | Rear pressure bar                                 |





# TABLE RISE & FALL ASSEMBLY

| Ref.<br>No. | Part No.     | No.<br>Off | Description                                            |
|-------------|--------------|------------|--------------------------------------------------------|
| 200         |              | 5          | 10mm nut                                               |
| 201         |              | 7          | 10mm washer                                            |
| 202         |              | 2          | 10mm locknut                                           |
| 203         | 1069/251     | 1          | Pivot for rise and fall chain tension bar              |
| 204         | 1069/207     | 1          | Table rise and fall chain tension bar                  |
| 205         | 1069/64      | 1          | Jockey sprocket bush                                   |
| 206         |              | 2          | 2.5mm x 30mm split pin                                 |
| 207         | CT264A       | 2          | 16mm ID x 22mm OD x 20mm long oilite bush              |
| 208         | 1069/134     | 1          | Jockey sprocket                                        |
| 209         |              | 1          | 10mm x 50mm countersunk slotted screw                  |
| 210         |              | 1          | 14mm dia rubber handle                                 |
| 211         |              | 4          | 6mm x 6mm socket head grubscrew                        |
| 212         | 1069/56      | 2          | Stop for rise and fall screw                           |
| 213         | SKF 51104    | 2          | Rise and fall screw bearing                            |
| 214         | 1069/102     | 1          | Clutch control lever                                   |
| 215         | 1069/173     | 2          | Rise and fall screw                                    |
| 216         |              | 2          | 10mm x 35mm socket head capscrew                       |
| 217         | 1032/22      | 2          | Washer for rise and fall nut                           |
| 218         | 1069/172     | 2          | Rise and fall nut                                      |
| 219         | 1069/25      | 1          | Handwheel sprocket                                     |
| 220         |              | 1          | 10mm x 20mm socket head grubscrew                      |
| 221         | 1069/46      | 1          | Rise and fall handwheel shaft                          |
| 222         |              | 2          | 12mm washer                                            |
| 223         |              | 1          | 12mm nut                                               |
| 224         |              | 1          | 8mm x 44mm plastic handwheel                           |
| 225         | 1062/47      | 1          | Handwheel washer                                       |
| 226         | 1069/212     | 1          | Adjusting screw for jockey sprocket                    |
| 227         | 1069/230     | 1          | Stud for rise and fall handwheel                       |
| 228         | 1026/63      | 1          | Handwheel return spring                                |
| 229         | BS 99        | 4          | Oilite bush                                            |
| 230         | 1069/24      | 1          | Rise and fall handwheel                                |
| 231         | 1069/61      | 1          | Clutch pressure shaft                                  |
| 232         | 1069/59      | 1          | Rise and fall chain tension post                       |
| 233         |              | 1          | 16mm locknut                                           |
| 234         |              | 1          | 6mm x 32mm groverlok spring dowel                      |
| 235         | 1069/205     | 1          | Clutch pressure link                                   |
| 236         | 1069/221     | 1          | Adjusting screw for clutch pressure                    |
| 237         |              | 1          | 6mm x 12mm socket head grubscrew                       |
| 238         |              | 1          | 8mm x 50mm groverlok spring dowel                      |
| 239         | 1069/63      | 1          | Boss for clutch pressure shaft                         |
| 240         | 110038       | 1          | Roller chain (state no. of links including split link) |
| 241         | 1069/66      | 1          | Thrust bearing cover                                   |
| 242         | INA-AXK 2542 | 1          | Clutch thrust bearing                                  |
| 243         | 1069/20      | 1          | Inner clutch sprocket                                  |
| 244         | 1069/73      | 1          | Clutch for table rise and fall                         |
| 245         | 1069/138     | 1          | Outer clutch sprocket                                  |
| 246         | SKF 51105    | 2          | Rise and fall cross shaft bearing                      |
| 247         | 110038       | 1          | Roller chain (state no. of links including split link) |
| 248         |              | 2          | 6mm x 45mm groverlok spring dowel                      |
| 249         | 1069/14      | 1          | Driving gear for table rise and fall                   |
| 250         | 1069/31      | 1          | Rise and fall cross-shaft (with female end)            |
| 251         | SKF 51104    | 2          | Rise and fall screw bearing                            |
| 252         | 1069/13      | 2          | Driven gear for table rise and fall                    |
| 253         |              | 2          | 5mm x 5mm x 20mm key                                   |
| 254         |              | 2          | 16mm nut                                               |
| 255         |              | 3          | 10mm x 35mm hexagon head bolt                          |
| 256         | 1069/15      | 2          | Cross-shaft coupling                                   |
| 257         |              | 2          | 6mm x 40mm groverlok spring dowel                      |
| 258         | 1069/31      | 1          | Rise and fall cross-shaft (with male end)              |
| 259         | 1069/213     | 1          | Cover for cross-shaft thrust bearing                   |
| 260         |              | 2          | 12mm locknut                                           |
| 261         |              | 1          | 6mm x 60mm groverlok spring dowel                      |
| 262         | 1069/83      | 1          | Washer for jockey sprocket                             |

## VARIABLE DRIVE ASSEMBLY

| Ref.<br>No. | Part No.       | No.<br>Off | Description                                                                                                                   |
|-------------|----------------|------------|-------------------------------------------------------------------------------------------------------------------------------|
| 270         | 1069/203       | 1          | Anchor plate for feed roller spring                                                                                           |
| 271         | 1034/44        | 1          | Spring                                                                                                                        |
| 272         | 1069/288       | 2          | Gib strip                                                                                                                     |
| 273         |                | 6          | 8mm x 16mm button head capscrew                                                                                               |
| 274         |                | 9          | 8mm washer                                                                                                                    |
| 275         |                | 1          | 8mm x 16mm socket head capscrew                                                                                               |
| 276         |                | 8          | 8mm x 35mm stud                                                                                                               |
| 277         | 1069/60        | 1          | Motor platform traverse screw                                                                                                 |
| 278         | 1069/56        | 2          | Stop for rise and fall screw                                                                                                  |
| 279         |                | 2          | 6mm x 6mm socket head grubscrew                                                                                               |
| 280         |                | 1          | Holroyd type F.V. worm reduction box<br>20.5 to 1 reduction (50 cycle)                                                        |
|             |                | 1          | Holroyd type F.V. worm reduction box<br>25 to 1 reduction (60 cycle) special                                                  |
| 281         |                | 8          | 8mm nut                                                                                                                       |
| 282         | 6202/2RS       | 1          | Bearing for motor control shaft                                                                                               |
| 283         | Rencol No. 601 | 1          | Handwheel                                                                                                                     |
| 284         | 1069/99        | 1          | Handwheel spacer                                                                                                              |
| 285         |                | 2          | 6mm x 12mm socket head grubscrew                                                                                              |
| 286         | 110046         | 1          | Roller chain (FEED ROLLERS)                                                                                                   |
| 287         |                | 1          | 6mm x 6mm x 40mm feather key                                                                                                  |
| 288         |                | 2          | 6mm x 10mm socket head grubscrew                                                                                              |
| 289         | 1069/206       | 1          | Gearbox output sprocket                                                                                                       |
| 290         | 110038         | 1          | Roller chain (GEARBOX TO CROSS SHAFT)                                                                                         |
| 291         |                | 1          | 5mm x 5mm x 32mm feather key                                                                                                  |
| 292         |                | 1          | Variable pulley                                                                                                               |
| 293         | 1069/21        | 1          | Gearbox input sprocket                                                                                                        |
| 294         |                | 2          | 8mm x 8mm socket head grubscrew                                                                                               |
| 295         |                | 1          | CRVSV24HO81O3D Variable pulley belt                                                                                           |
| 296         |                | 1          | 6mm x 6mm x 35mm feather key                                                                                                  |
| 297         |                | 1          | Brook motor, 1HP, 1,500RPM, Frame 80A,<br>T.E.F.C. Foot mounted terminal box in<br>standard position 3PH, 50cycles.           |
|             |                | 1          | Brook motor, 1HP, 1,800RPM, Frame 80A,<br>T.E.F.C. Foot mounted terminal box in<br>standard position 3PH, 60cycles. (SPECIAL) |
| 298         | 1069/286       | 1          | Feed motor platform.                                                                                                          |

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

