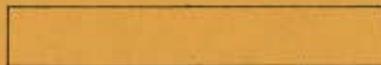




INSTRUCTION MANUAL

COMPACT

500mm Planer and Thicknesser



PLEASE INSERT SERIAL
NUMBER OF MACHINE

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

89

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.**

www.DaltonsWadkin.com

Planer & Thicknesser Type Compact 500

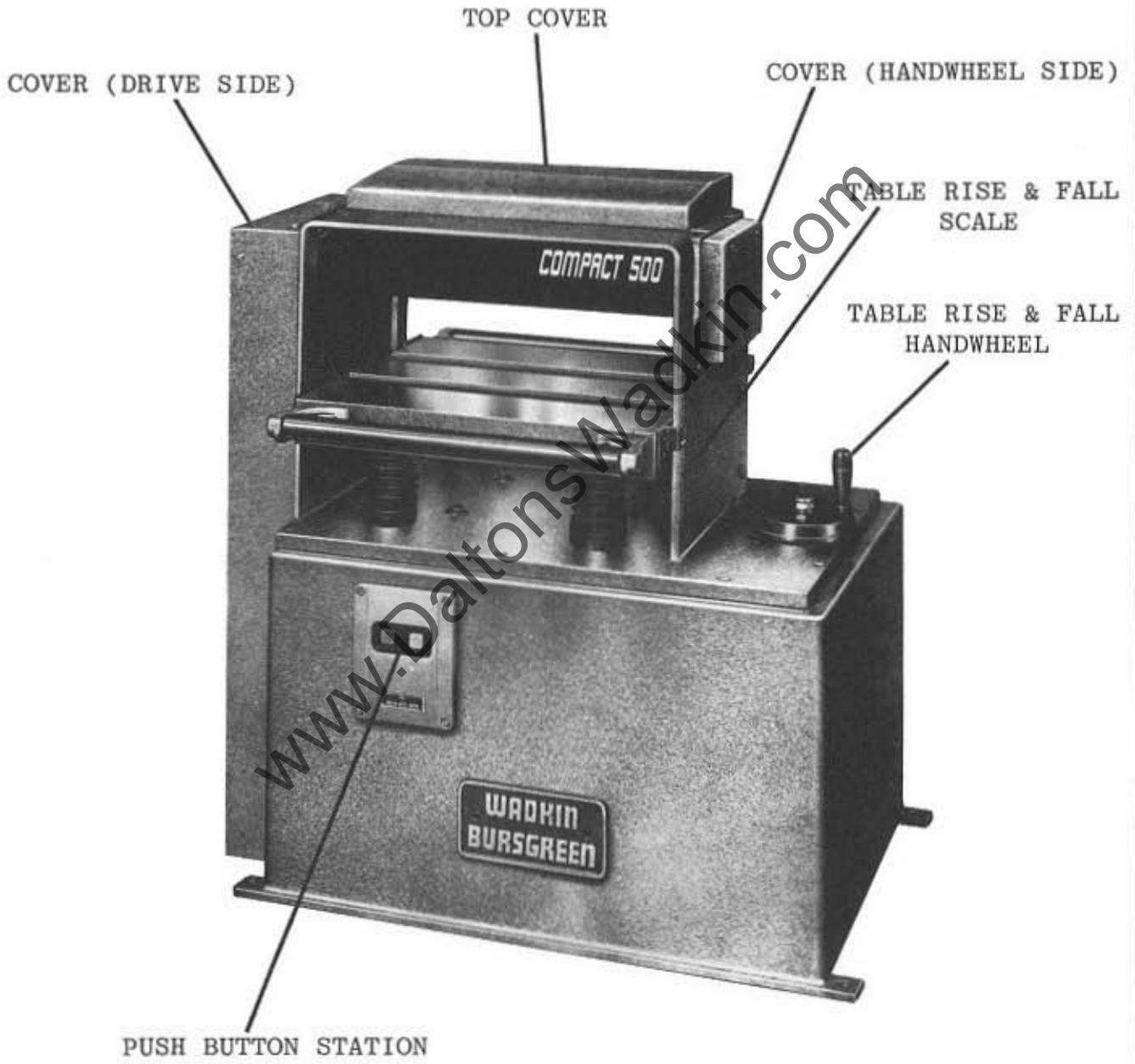


FIG. 1

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Principal Dimensions & Capacities

Capacity of machine	505 x 230mm
Maximum depth of cut	8mm
Minimum length of stock	155mm
Feed speeds (two)	6 and 12m/min
Speed of cutterblock	5000 rev/min
Speed of motor (50 Hz)	3000 rev/min
Diameter of cutting circle	75mm
Diameter of feed rollers	50mm
Power of motor	4 kW
Floor space	830 x 530mm
Net weight	254 kg

Bearings

1 - SKF 6207-2RS	Cutterblock
1 - SKF 6206-2RS	Cutterblock
2 - SKF 6004-2RS	Feed Drive Gear
1 - SKF 6200-2RS	Feed Jockey Pulley
1 - SKF 6005-2RS	Driving Gear
8 - INA AS2542	Rise and Fall Screws
4 - INA AXK2542	Rise and Fall Screws
2 - INA AXK1730	Handwheel
4 - INA AS1730	Handwheel

Belts

1 - TURNER ALPHA 530	Cutterblock
1 - DAWSON Z 890 M34	Feed Drive

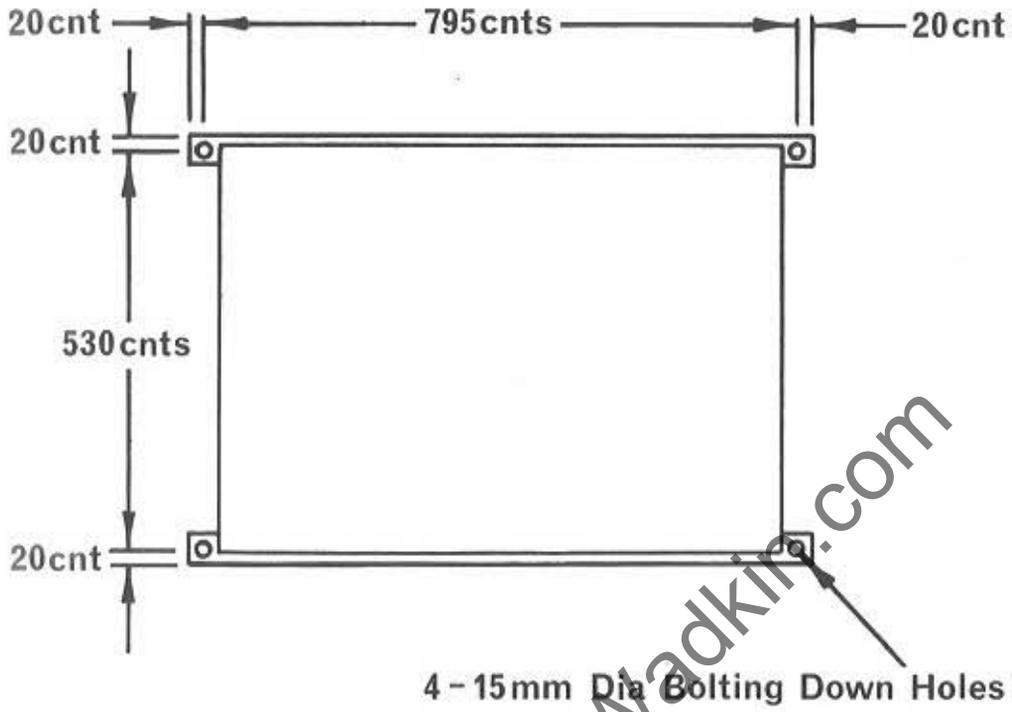


FIG. 2

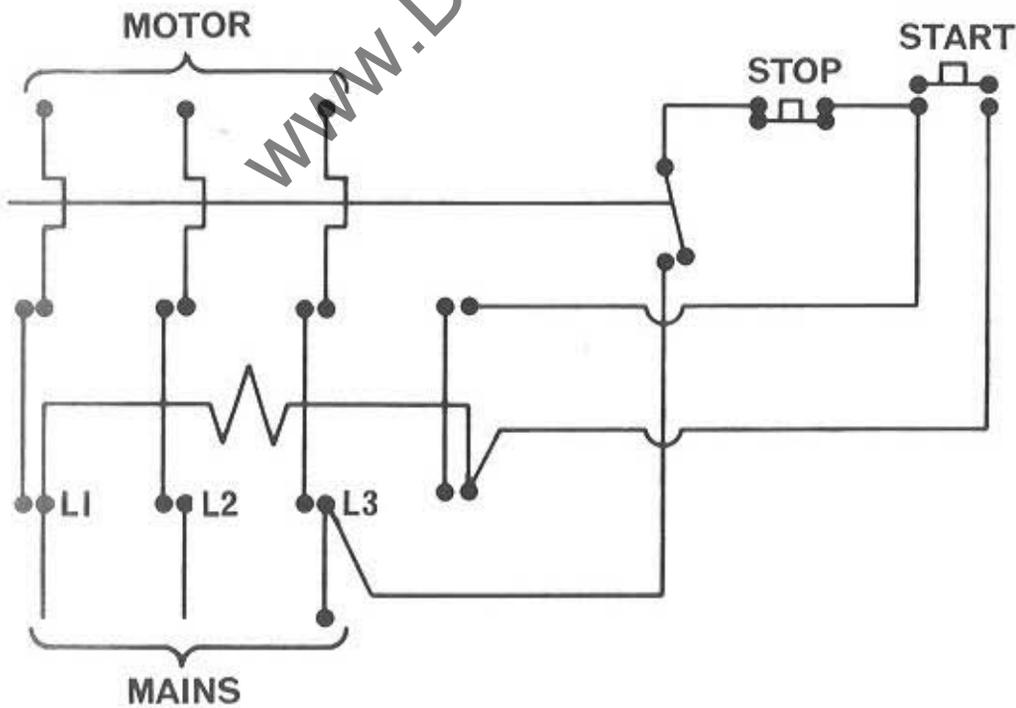


FIG. 3

INSTALLATION

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

FOUNDATION

See FIG. 2 for bolt positions and clearances required. Foundation bolts are not supplied with the machine except by special order.

WIRING DETAILS

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

Points to note when connecting to power supply:

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

<u>Voltage</u>	<u>Phase</u>	<u>S.W.G. Tinned Copper Wire</u>	<u>Amps</u>
550/400/440	3	23	20
380/420/340/380	3	22	24
220	3	21	29

Fuse capacity should not exceed three times full load current of machine.

LUBRICATION

The machine is fitted with sealed for life bearings which require no lubrication.

Lightly oil feed roller drive chain:- once per week.

Lightly oil table rise and fall chain:- once per month

TYPE OF OIL RECOMMENDED - POWER EM 125

It is advisable to keep all bright parts covered with a thin film of oil to prevent rusting.

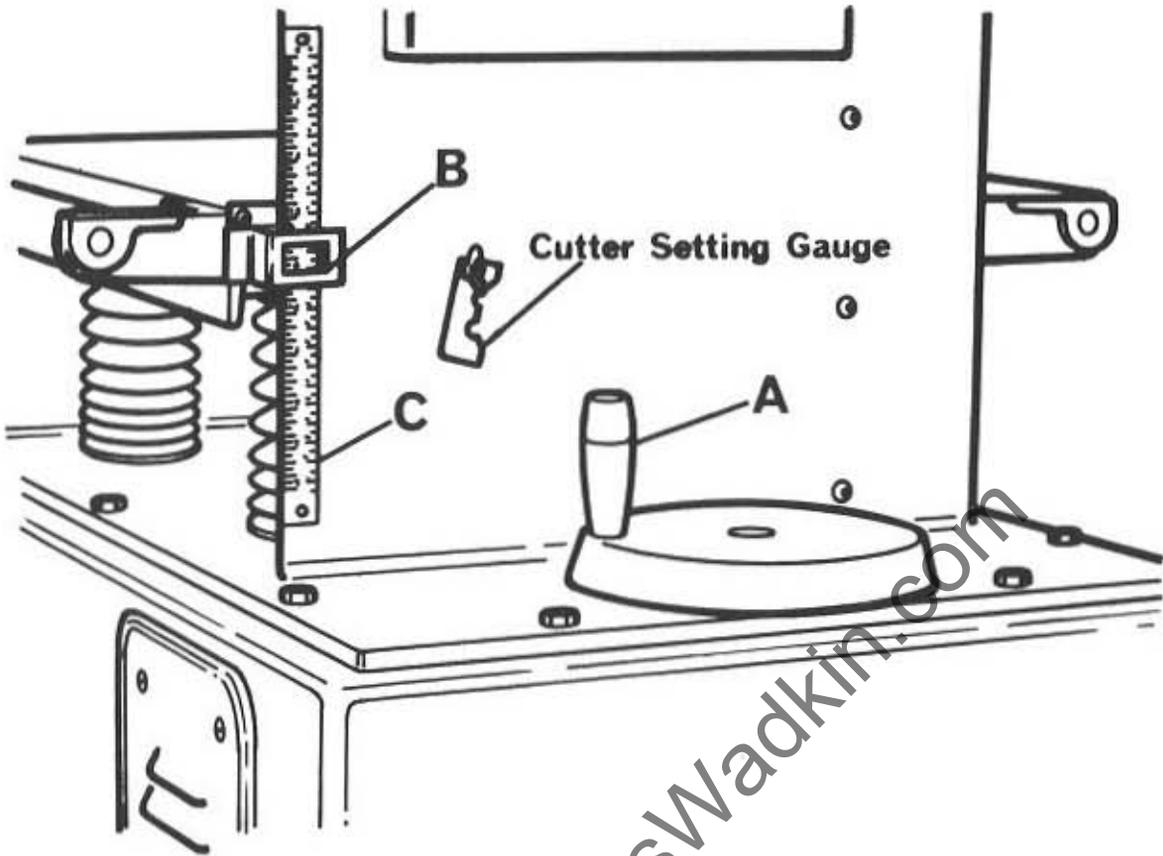


FIG. 4

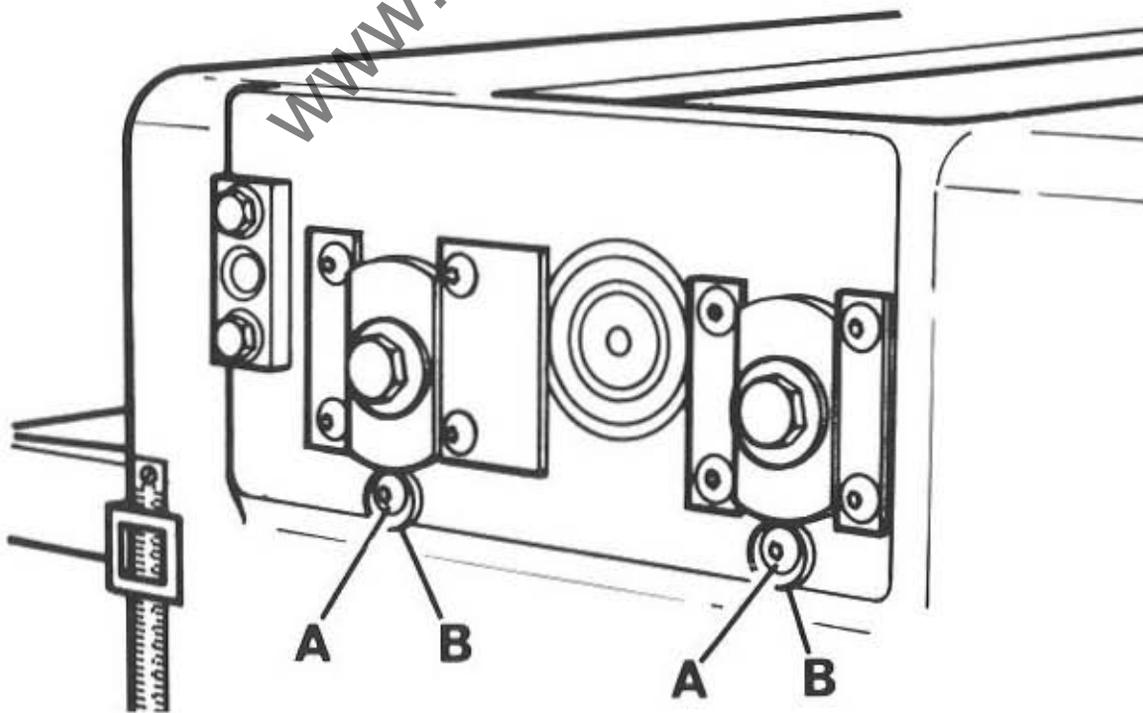


FIG. 5

CONTROLS

Table Rise & Fall Controls

Rise & Fall of machine table is by conveniently placed handwheel "A" in FIG. 4. The pointer "B" on scale "C", indicates the thickness of timber machined.

Electrical Controls for Cutterblock & Feed Rollers

The Cutterblock & Feed Rollers operate simultaneously by START - STOP push buttons situated at front of machine.

TABLE ROLLERS

The anti-friction table rollers or bed rollers, revolve on oilite bush bearings which require no lubrication.

Height of table rollers in relation to table, is pre-set before despatch from the works and requires no further adjustment.

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 an overhand jointer or surfacer to remove twist and other irregularities.

FEED ROLLER AND PRESSURE BAR SETTINGS

The feed rollers and pressure bar are pre-set at the works and should never require adjustment.

If replacement rollers are ever fitted the feed roller and pressure bar settings are as follows:-

1. Ensure cutters are set correctly (see cutter setting)
2. Position 1 piece of pre-planed wood on each side of infeed table
IMPORTANT: Ensure both pieces of wood are perfectly matched in thickness throughout their length.
3. Start machine, then feed both pieces into machine simultaneously.
4. When wood is under both infeed and outfeed rollers, stop the machine.
5. Isolate machine electrically then remove drive side cover and handwheel side cover
6. Loosen the 4 button head socket screws "A" in FIG.5 on feed roller adjusting cams "B" (NOTE: 1 cam under each feed roller mounting bracket, 2 on drive side & 2 on handwheel side).
7. Using feeler gauge set gaps between cams and feed roller brackets at 0.015".

When setting is correct, re-lock 4 button head socket screws "A" in FIG. 5. (2 on drive side and 2 on handwheel side).

Check to ensure settings have not moved.

8. Replace drive side and handwheel side covers.
9. With the 2 pieces of pre-planed wood still in machine, ensure that top cover "A" in FIG. 6 is locked in position by knurled knob "B".
10. Check with feeler gauge to ensure a 0.015" gap at points "C" & "D" in FIG.6. This clearance allows the pressure bar correct lift.
11. If clearance is incorrect, adjust the 2 socket head grub screws "E" in FIG.6 until correct clearance is attained.
12. Start the machine to remove the two pieces of wood.

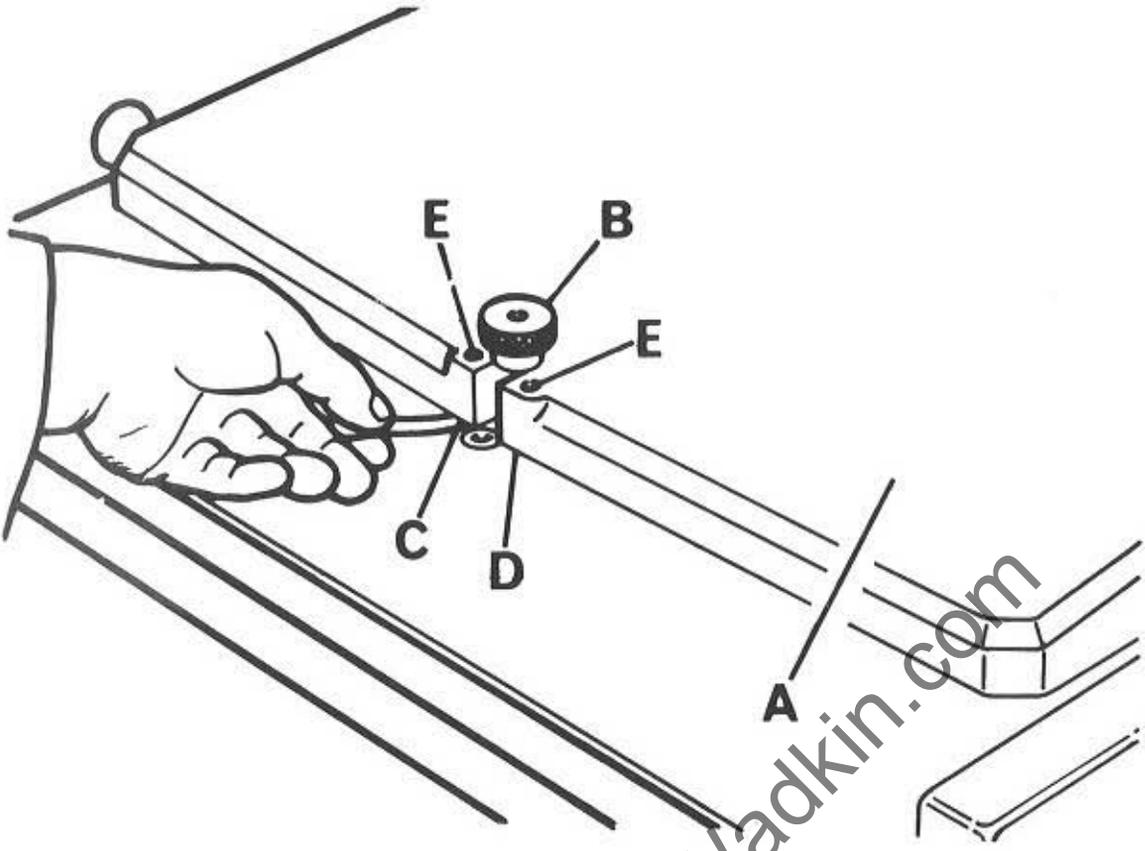


FIG. 6

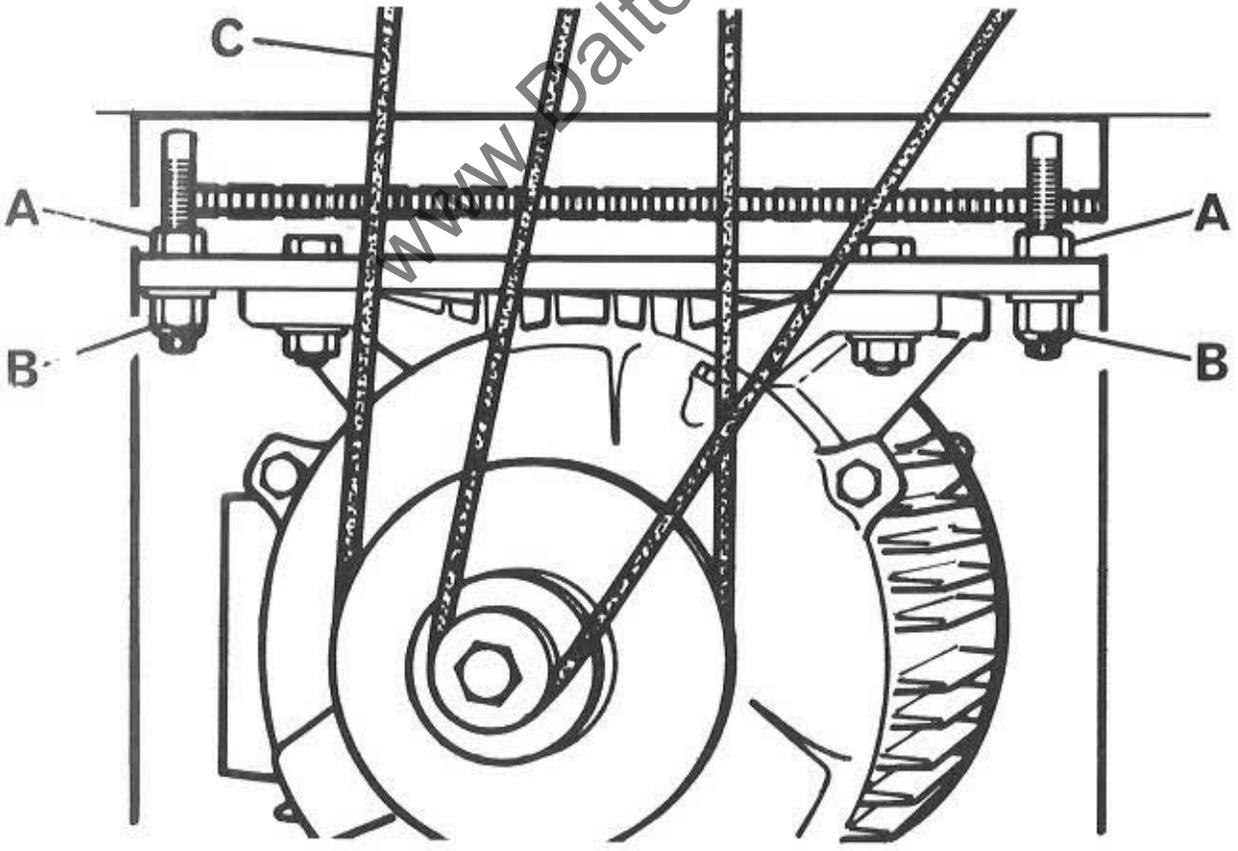


FIG. 7

BELT CHANGING ON CUTTERBLOCK DRIVE

To change cutterblock drive belt, follow undermentioned procedure:

1. Isolate machine electrically then remove drive side cover.
2. Loosen 2 hexagon head nuts "A" in FIG. 7, then turn 2 aerotight nuts "B", so releasing tension on cutterblock drive belt "C".
3. Loosen 2 button head socket screws "A" in FIG. 8 then release chain tension by moving tension roller "B".
4. Extract split link from chain then remove chain.
5. Loosen feed pulley locking handle "C" in FIG. 8 then remove feed belt "D" from machine.
6. Remove cutterblock drive belt "E" from cutterblock pulley and motor pulley,
7. Remove feed pulley locking handle "C" in FIG. 8 and feed pulley locking plate "A" in FIG. 9.
8. Support gear and feed drive pulley then remove button head socket screw "B" in FIG. 9. Remove gear and pulley assembly.
9. To remove cutterblock drive belt, separate gear "A" from gear mounting bracket "B" as shown in FIG. 10.
A screwdriver or similar tool will help in separation.

TO RE-ASSEMBLE MACHINE PROCEED AS FOLLOWS:-

1. Replace cutterblock drive belt and re-fit gear "A" in FIG. 10 to gear mounting bracket "B".
2. Re-fit gear assembly to machine, ensuring spigot at rear of gear assembly locates in machine side frame.
Secure by button head socket screw "B" in FIG. 9.
3. Re-fit pulley locking plate "A" in FIG. 9 ensuring locking screw locates through centre of feed pulley.
Re-fit feed pulley locking handle "C" in FIG. 8.
4. Re-fit cutterblock drive belt, to cutterblock pulley and large motor pulley.
5. Loosen 2 aerotight nuts "B" in FIG. 7 then turn 2 hexagon head nuts "A" until correct cutterblock belt tension is attained, i.e. the belt should run neither too tight nor too slack. When correctly set, relock 2 aerotight nuts "B".
6. Replace feed chain over sprockets as shown in FIG. 8 then re-fit split link.
7. Loosen 2 button head socket screws "A" in FIG. 8 then move chain tension roller "B" until correct tension is attained, i.e. the chain must have 25.4mm (1") free play at point "F" to allow feed rollers to lift.
When set correctly, relock 2 button head socket head screws "A".
8. Replace feed belt "A" in FIG. 11 over motor pulley and feed pulley for required feed speed (see FIG. 12 for feed speed belt arrangement.).
9. Loosen feed pulley locking handle "B" in FIG. 11 and move pulley assembly by handle "C" until correct belt tension is attained, i.e. the feed belt should run neither too tight not too slack.
When set correctly, re-lock pulley locking handle "B".

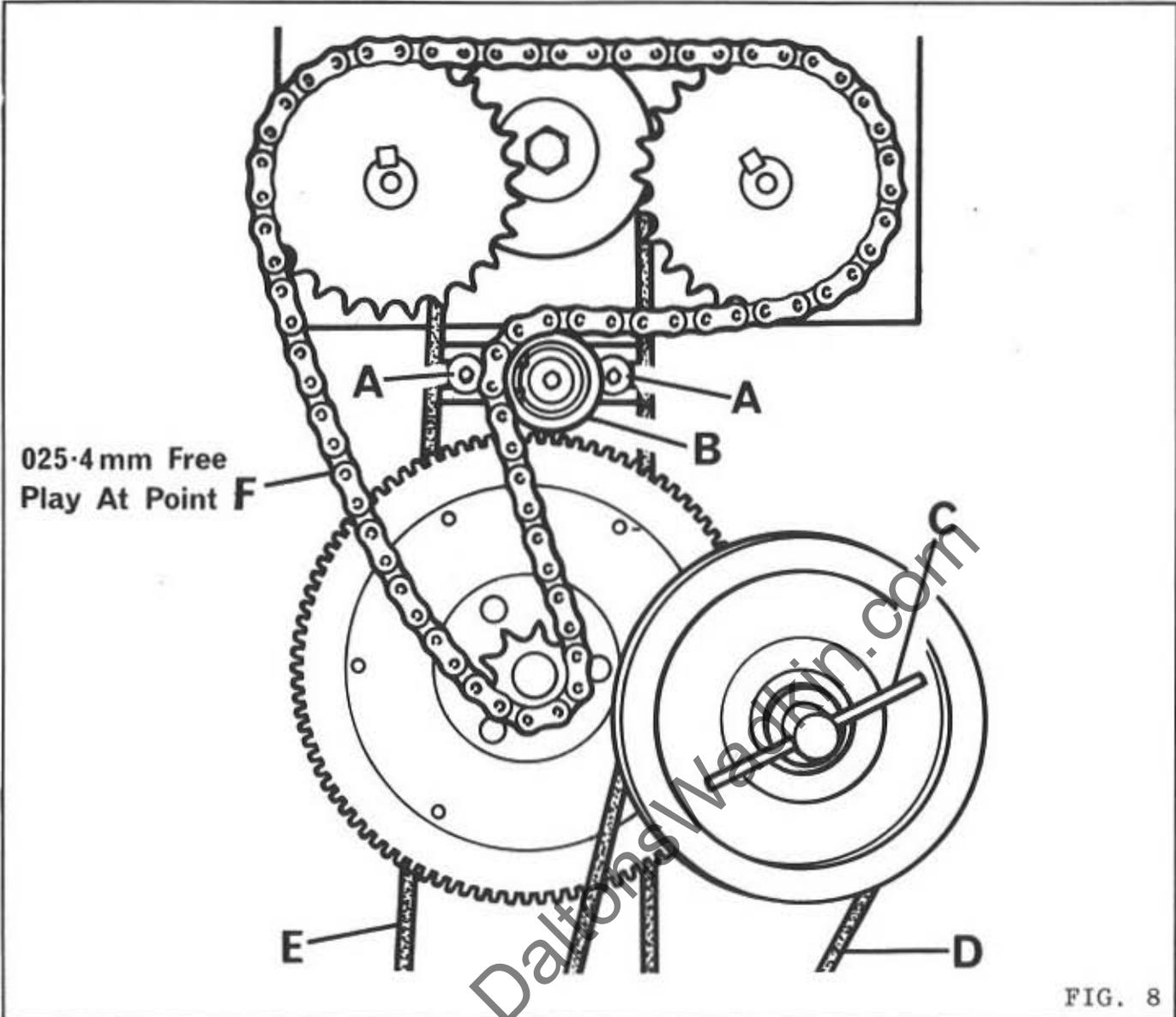


FIG. 8

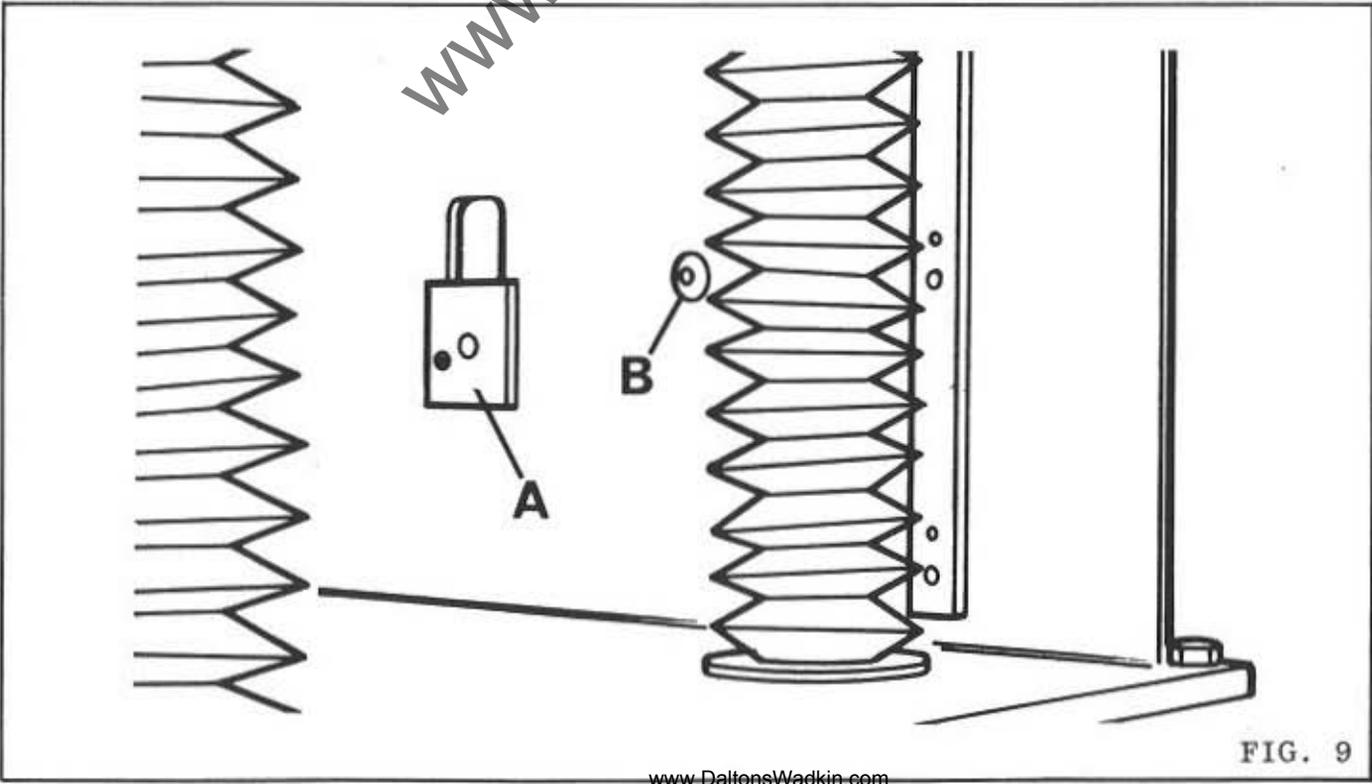


FIG. 9

CUTTER SETTING

The cutters are held in the cutterblock by a steel clamping bar, secured by 7 heat treated socket head locking screws. When the locking screws are released the amount of cutter projection can be increased or decreased by means of two jacking screws. This is to facilitate easy setting with the special gauge supplied. 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 cutters and re-set with the cutter setting gauge supplied, proceed as follows:-

1. Isolate machine electrically.
2. Rotate the cutterblock to position shown in FIG. 13.
3. Loosen the 7 socket head locking screws until cutter is just free in block.

NOTE: Knife locking screws are as follows,

2 knife cutterblock:- 10mm socket head capscrews

3 knife cutterblock:- 12mm socket head grub screws

4. Decrease the cutter projection to minimum by turning 2 - socket head jacking screws "A" and "B" in FIG. 13.
5. Position cutter setting gauge "C" (when not used, is secured to machine as shown in FIG. 4) in cutterblock setting gauge groove "D" and with central part of gauge over cutter edge as shown.
6. Increase cutter projection by turning socket head jacking screw "A" until the cutter just touches the setting gauge at point "E".
7. Move setting gauge to opposite end of cutterblock and use jacking screw "B" to adjust cutter to setting gauge.
8. When both settings are correct, re-lock the 7 socket head locking screws, securing cutter in block. See FIG. 14.

NOTE: Check to ensure that settings have not altered during tightening of the 7 locking screws.

9. Rotate the cutterblock and use same cutter setting procedure on remaining cutter or cutters.
10. To avoid future misplacement, replace setting gauge to position shown in FIG. 4.

IMPORTANT: When cutter setting is completed, check to ensure that all cutter locking screws are securely tightened.

When changing cutter it is advisable to check that all locking screws are adequately lubricated and quite free.

Periodically examine for damage or cracks, particularly in the hexagon socket. Any doubtful screws should be replaced and all screws lubricated with "Molyslip" or similar oil, before replacing.

If the knives are removed for grinding or replacing, they must be re-set as described in Cutter Setting.

When grinding, it is important that the knives are ground dead straight and balanced in pairs.

An efficient regrinding service is available, charges are moderate and service prompt.

To avail yourself with this service, return cutters to:-
BURSGREEN (DURHAM) LIMITED, FENCE HOUSES, HOUGHTON-LE-SPRING,
TYNE & WEAR.

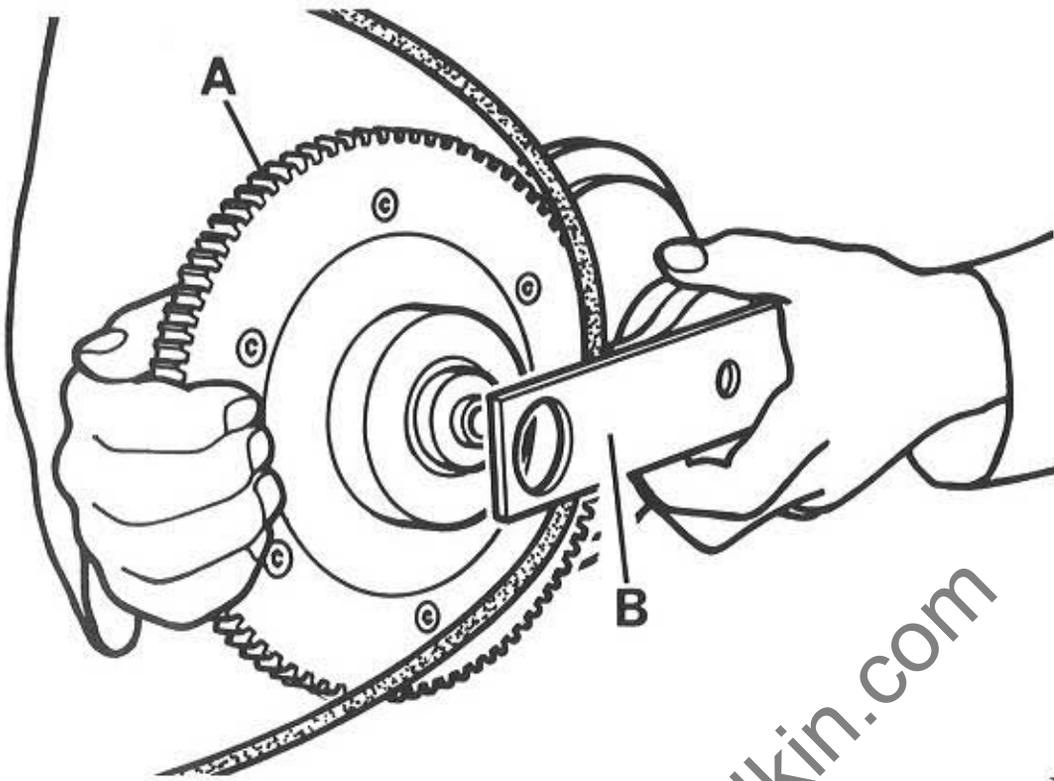


FIG. 10

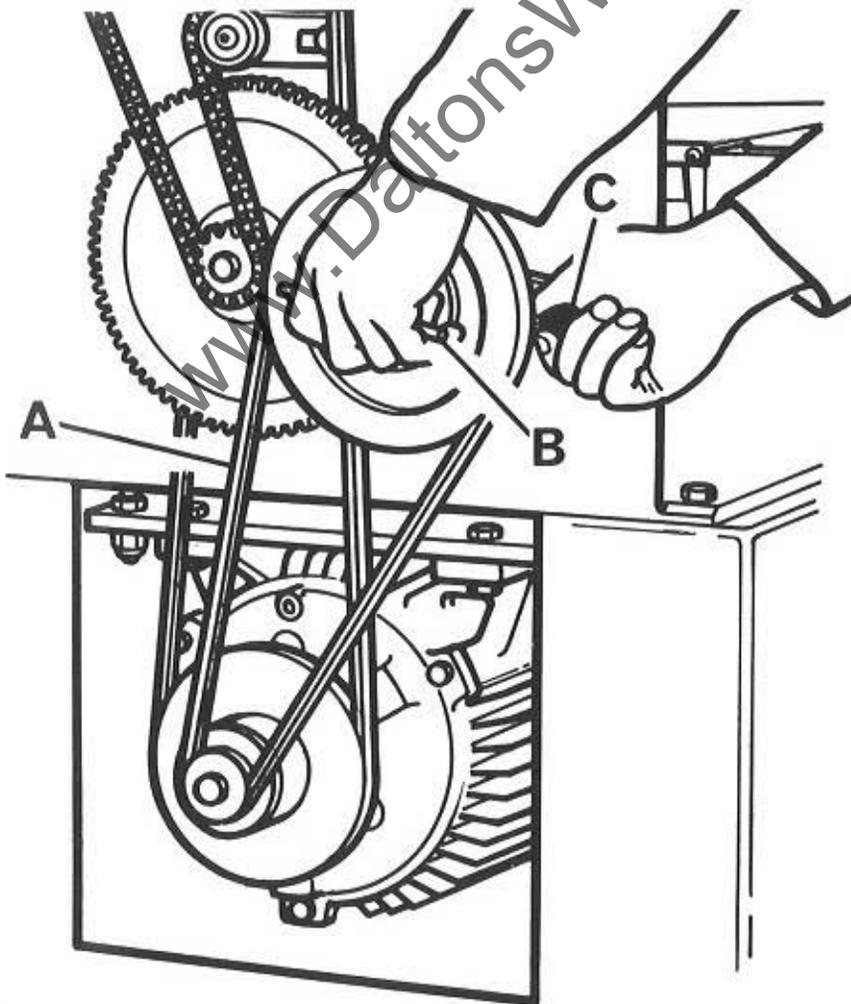


FIG. 11

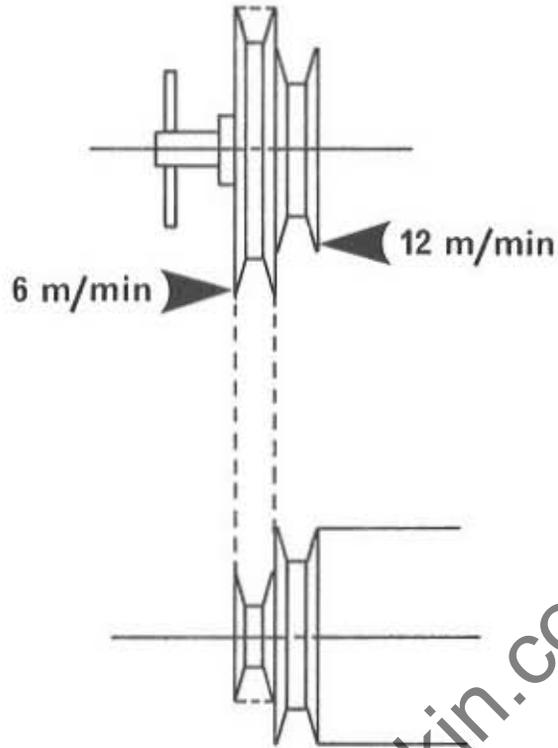


FIG. 12

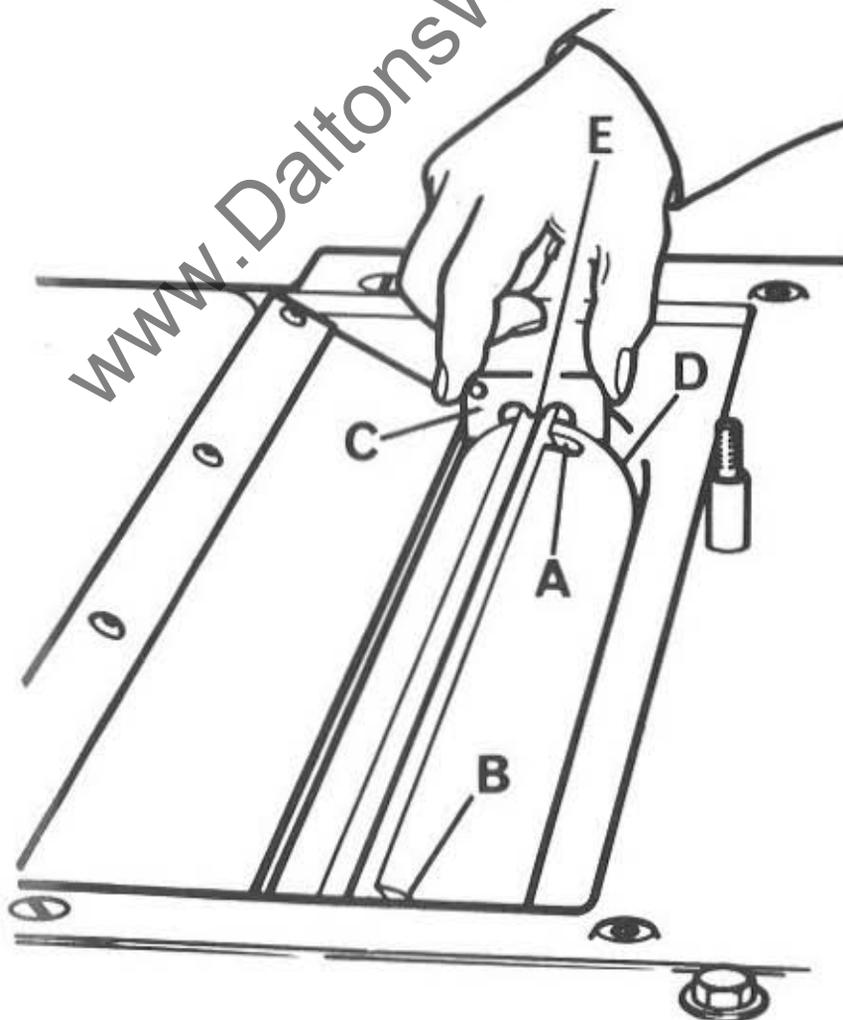


FIG. 13

ENSURE THAT SCREW HEADS AND
C/BORE ARE FREE FROM DIRT
BEFORE RETIGHTENING KNIVES
INTO POSITION

CUTTER SETTING GAUGE

CUTTERBLOCK SCREW

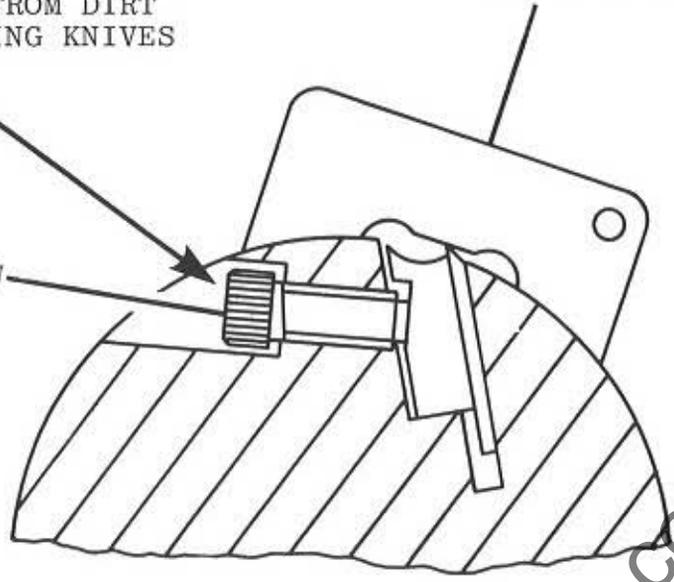


FIG. 14

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