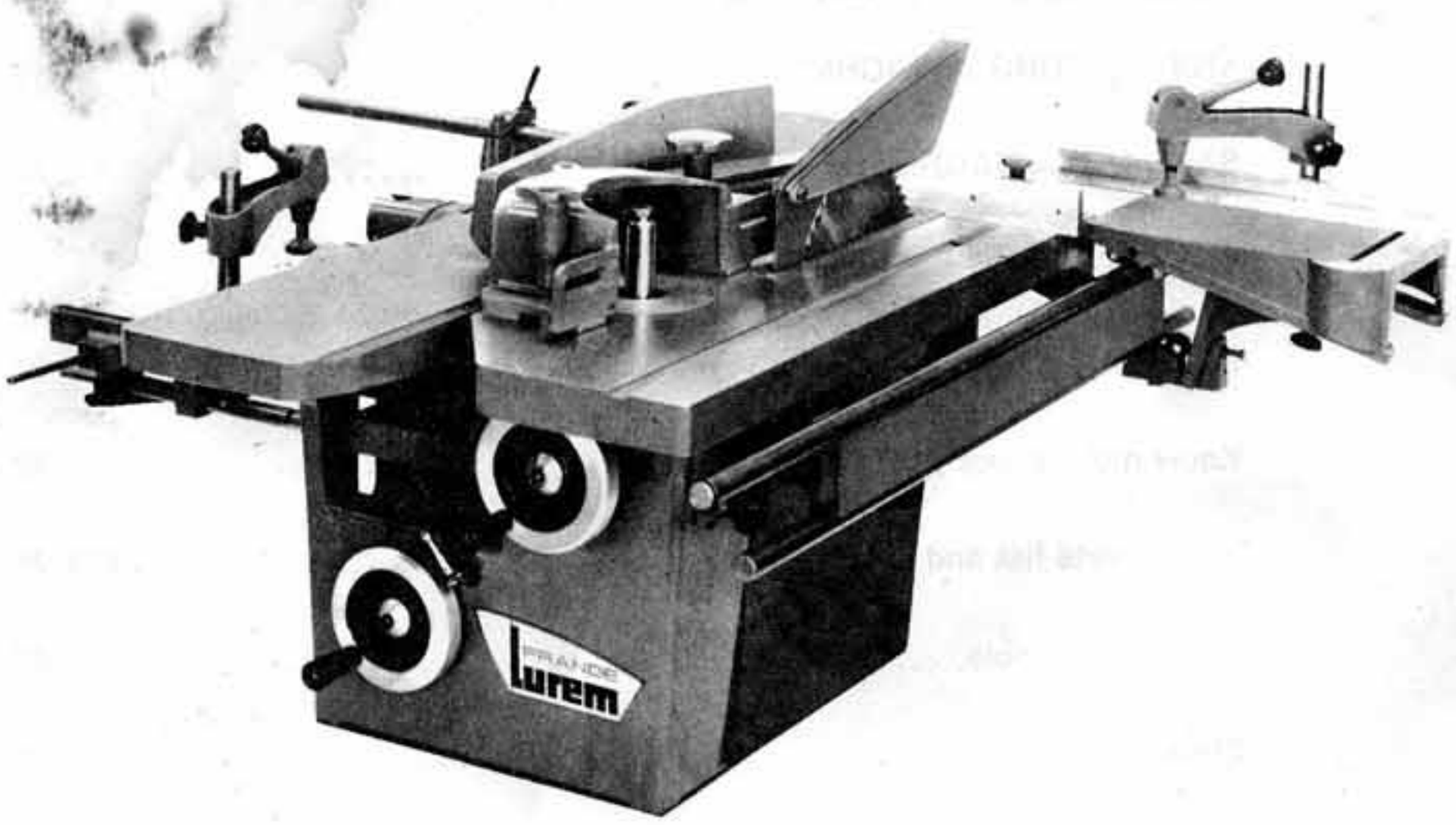
lurem C.210 B

8″ UNIVERSAL WOODWORKER

2 to 10 OPERATIONS



OPERATING INSTRUCTIONS

AND

SPARE PARTS LIST

CONTENTS

TECHNICAL DATA

SURFACE PLANER — JOINTER : 6 400 r.p.m.

Shaft ∅ 60 mm, 2 blades 210×20×2,5 mm, 2 lifting and adjustable tables. Maximum depth of cut 6 mm (1/4").

VERSION	Total table length	Asymetric	
		feed table	receiving table
Short	900mm (35")	500 (20")	400 (16")
Long	1200mm (47 1/8)	650 (25 1/2")	550 (21 5/8)

Planer fence : 580×110 mm (22 7/8"×4 3/8"). Tilts to 45°.

THICKNESS-PLANER : 6 400 r.p.m.

Table 17 1/8"×8 2/8" — mounted on guiding column. Rise and fall by rack pinion. Maximum thicknessing height : 155 mm (6"). Maximum depth of cut 6 mm (1/4"). Feed rollers can be disconnected during operation. Feed speed 7,2m per minute (22ft per minute). Wood-shavings ejector. Depth of cut safety bar.

ELECTRICAL EQUIPMENT :

2 HP three-phase or 1,5 HP single phase motor 3 000 r.p.m. — non reversing.

Drive-belts :

Planer-thicknesser belts	: 900 W 20 E
Feed-roller belt	: POLY V 610 J 4
Feed-roller chain	: Thread 9.52 — 68 links
Planer bearings	: 25×52×15 n° 1205
Spindle-belt	: 900 W 20 E
Saw-belt	: 800 W 20 E
Upper spindle bearings	: 30×55×13 — 6006 2 R S 1
Lower spindle bearings	: 25×47×12 — 6005 2 R S 1
Saw bearings	: 20×42×12 — 6004 Z

HORIZONTAL DRILL — MORTICER : 3 000/6 400 r.p.m. — 13 mm chuck (½")

TYPE B (standard) : table 450×180 mm right-turning bits with lever operation

Stroke : vertical : 100 mm (4")
horizontal : 135 mm (5 1/4")
in depth : 120 mm (4 3/4")
Maximum bit diameter : 16 mm (5/8").
Quick-action wood clamp — Rise and fall by thicknesser handwheel.

TYPE C : Same specifications as Type B but with independant rise and fall column.

CIRCULAR SAW : 4 300 r.p.m.

Blade ∅ 250 mm (10") — Bore 30 mm (1 1/4") — saw-blade can be lowered below table level. Flange ∅ 63 mm.

Cutting height 80 mm (3 1/8") — Vertical rise and fall by lever, with locking device.

2 versions : fixed or tilting sawblade (to 45°) — Table : 850×315 mm (33½×12 3/8").

Sawing fence (580×110), tilting to 45°.

Stroke 400 mm (15").

SHAPER-SPINDLE MOULDER : 3600/6400 r.p.m.

Same table as circular saw. Spindle shaft may be lowered below table level. Shaft ∅ 30 mm (1 1/4"), length 110 mm (4 1/4"), shaft slot 6×70 mm. A removable inset at base of shaft gives passage to cutters up to ∅ 140 mm (5½").

Enclosed spindle guard, allowing a cutter of 200 mm (8"). ∅.

SAWING AND TENONING CARRIAGE :

Table 335×235 with adjustable height. Aluminium fence bar with adjustment at 45°. Total displacement of carriage 930 mm (37"). Excentric wood-clamp.

OPTIONAL ATTACHMENTS :

Wood-turning lathe, sanding disc ∅ 230 (9"), knife-grinder, knife adjuster, fixed or roller stand, band-saw attachment.

GENERAL OPERATION INSTRUCTIONS

A — PREPARING MACHINE FOR OPERATION

Before setting up and operating the machine, please read the following instructions CAREFULLY.

You may recive your machine with certain parts not assembled (sawing carriage, morticer, lathe). To assemble these parts, proceed as follows :

— MORTICER (HORIZONTAL-DRILL)

Support bars fixed with four large bolts under the thicknesser table.

— Wood-turning lathe :

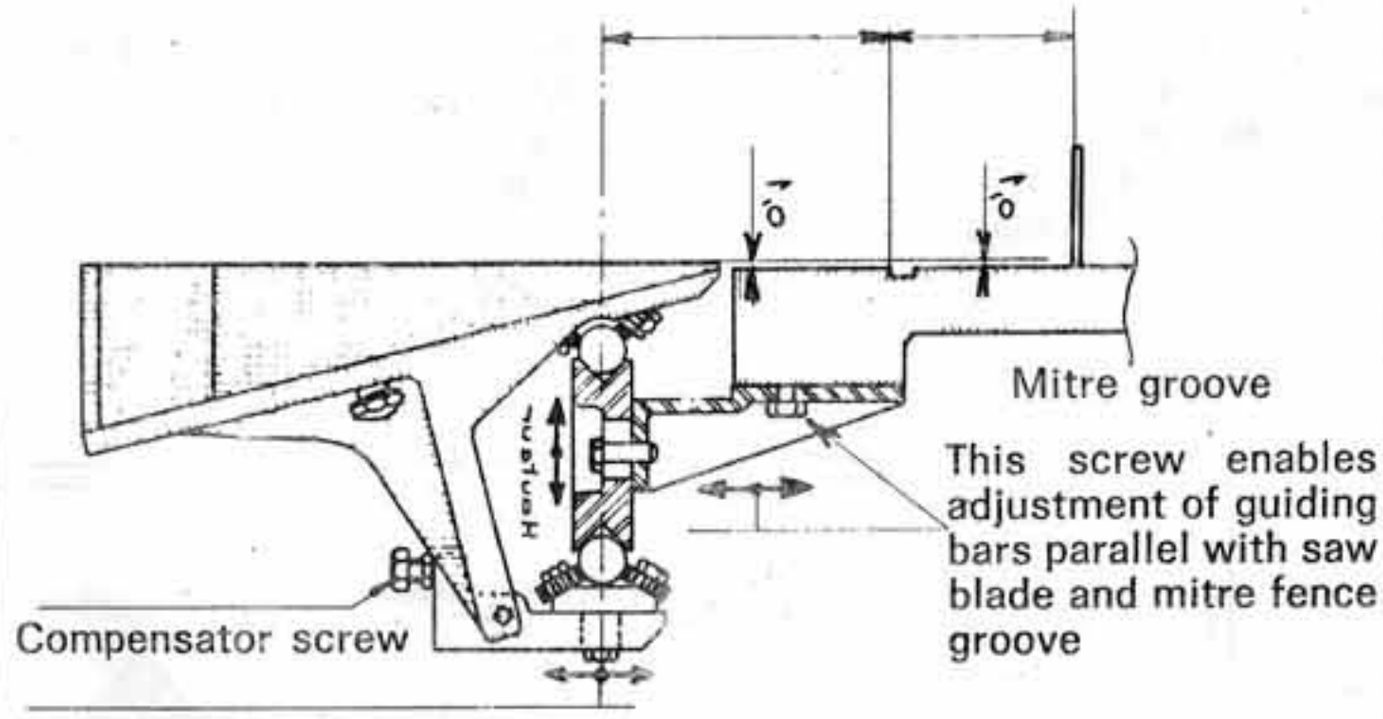
The supporting piece is fixed on to the machine frame with two bolts. Check correct alignment of head and tailstock. A six sided hollow screw on the side of the tailstock allows for perfect alignment.

— Sawing and tenoning carriage :

Carriage is pre-set in our factory. To mount carriage, remove safety clips on the end of guide bars, and slide carriage outo the bars. Replace safety clips.

For satisfactory operation, the carriage should slide parallel to the sawblade and slightly above level of sawing table.

If further adjustment is necessary, see drawing below.



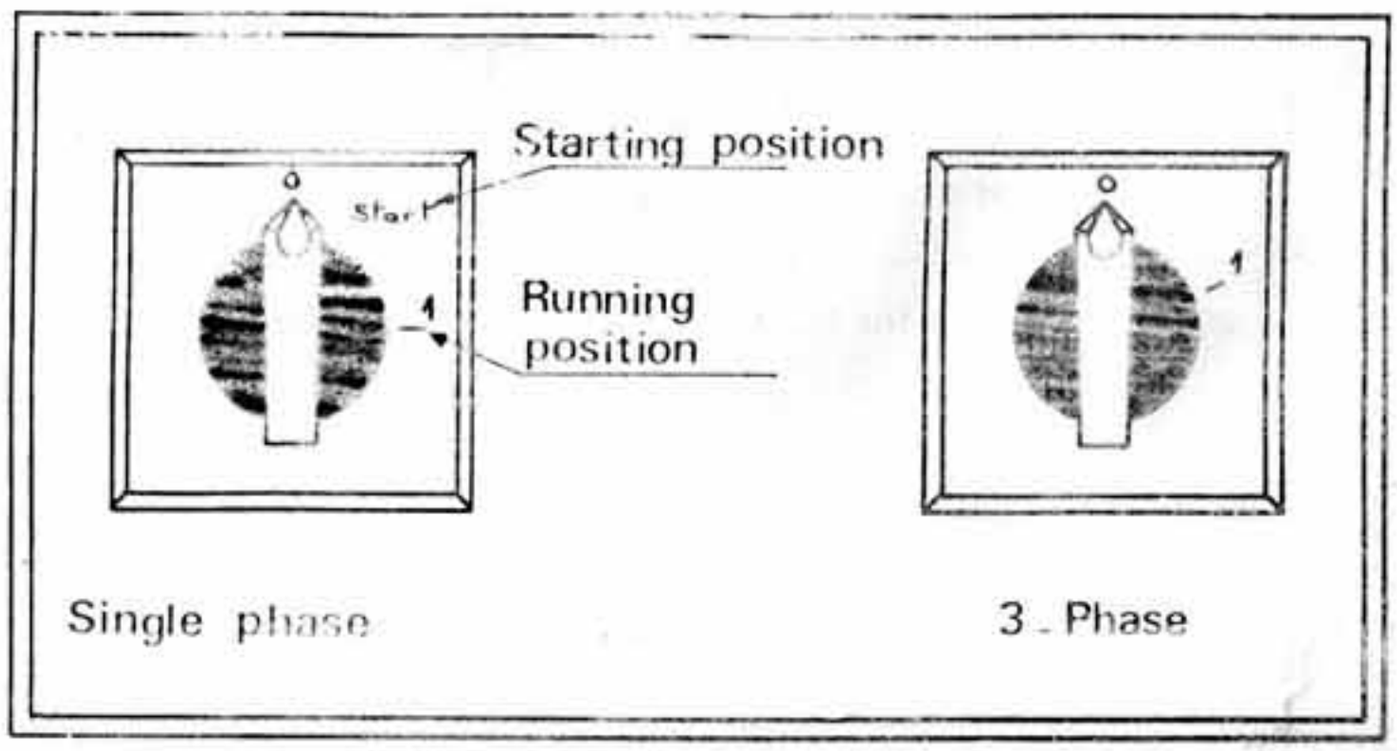
ADJUSTMENT OF SAWING CARRIAGE
(Not necessary in normal circumstances)

2) Your C. 210 B machine is now fully mounted. On the reverse side of the exploded view, you will find a spacing diagramm and also the measurements for a self-made floor stand. Material : hardboard, quantity required = 3,8 × 2,4".
3) Place your machine on its stand, and fix it with four bolts, one at each corner. Metallic washers should be placed on the bolts to avoid damaging the hardoard when tightening. If your stand is not perfectly horizontal, you may place small wedges under the machine. NOTE : ready-made steel stands (fixed or with wheels) are available on option.
4) When machine is in position clean tables and the moving parts (workhead, feed-rollers, spindle shaft, etc...) These parts are greased before leaving our works.
5) Check the electric supply : voltage power at mains (15 Amps is a minimum). Your machine is delivered with the voltage you ordered :
   2 HP 3-phase 220/380 V. 2 tensions : These motors are always delivered with contact bars set for 380 V. If your tension is 220 V. you must change the position of the contact bars inside the switch-box (see electrical chart).
   1,5 HP singe-phase 220 V. : (see electrical chart).
   2 HP 3-phase, 2 speed, 220 or 380 V. : If you have explicitly ordered this type of motor, it will be delivered correctly wired.

   CAUTION : If you have ordered a 2-speed /3-phasemotor, do not run it on tension other than indicated on the motor-plate. Otherwise, the motor would burn out immediately, and guarantee would fall. Use 16/10 wires to connect your motor with the mains. Check which way the workhead is rotating, if this is wrong, invert the connecting wires. We recommend to use an earth wire in single-phase.
   If you have the slightest doubt about electricals do not hesitate to consult a qualified electrician.

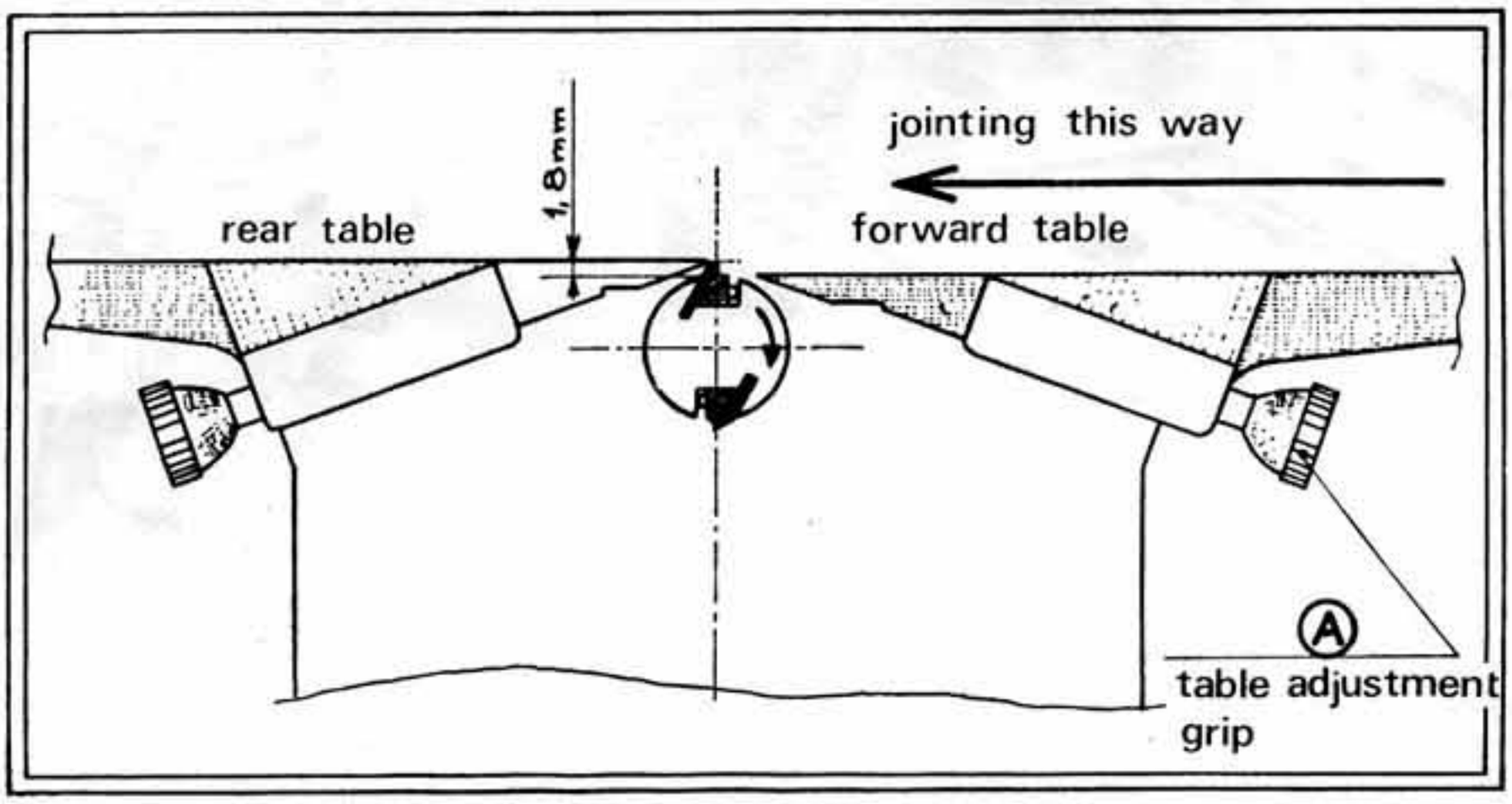
VERY IMPORTANT :

6) Starting with a single-phase motor : The switch is first **moved to the starting position marked « START ».** It is imperative to remain on this position for 3-4 seconds, before switching to the running position marked « 1 ». Failing this, motor and condensors will be damaged (see following drawing).



STARTER SWITCHES FOR C. 210 B

7) Checking and setting of jointer knives :
It is preferable to use our knife-setter (see catalogue). With the knife-setter, adjust planer knives on the workhead, then set the rear table level with knife edges.
If you are not using our knife-setter, set the rear table at 1,8 mm above level of workhead. Then adjust knife edges level with rear table.
A perfect cut is obtained by sharpening the knife edges with an oilstone. You may renew this after using the jointer, or when you feel that the cut is loosing smoothees.

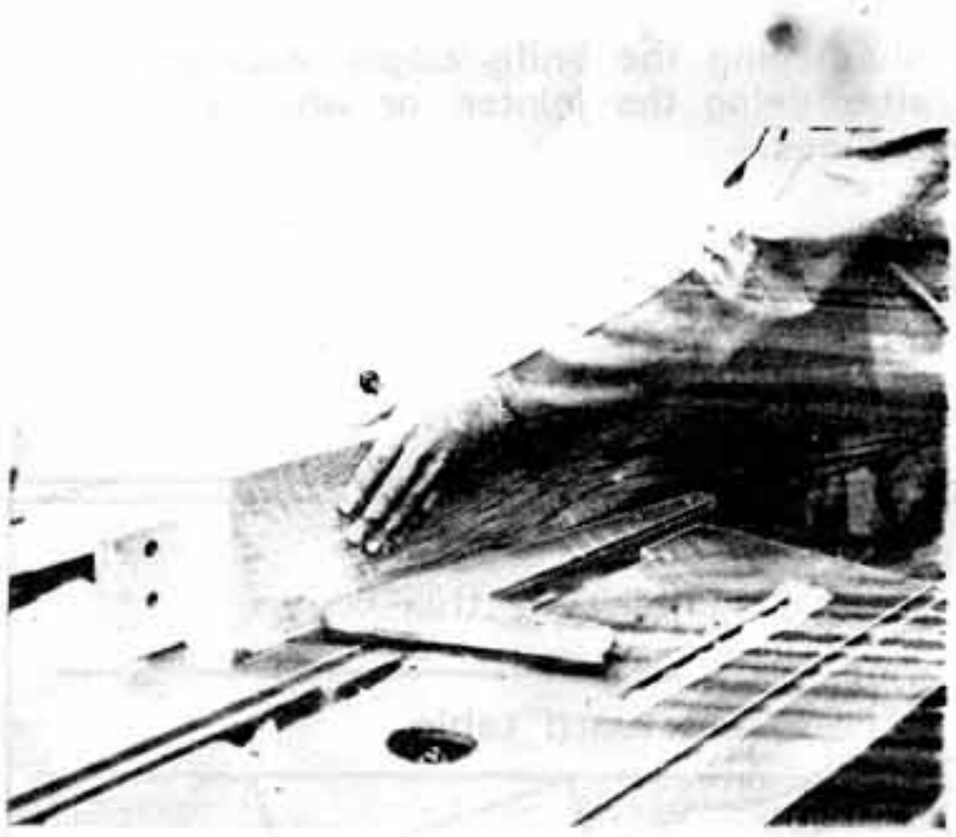


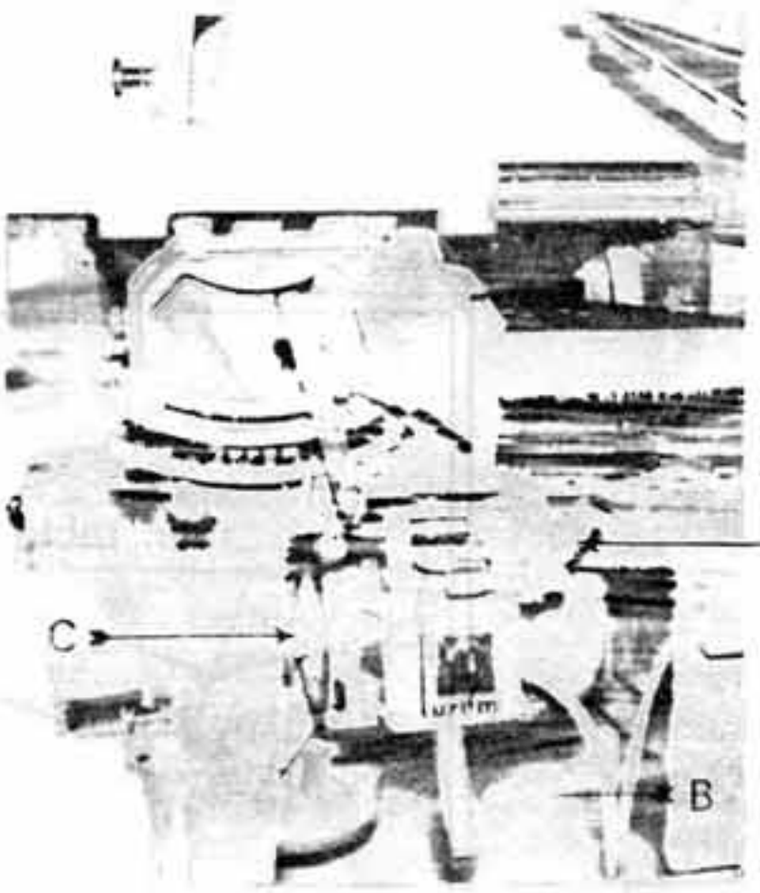
SETTING OF JOINTER KNIVES

B — GREASING AND SERVICING :

The machine is thoroughly greased before leaving our works. The motor is greased for 10 000 working hours.
Greasers are located as follows :
— workhead sockets
— feed roller sockets
— thicknesser rise-and-fall gearbox
— shaper rise-and-fall gearbox
— the shaper sockets are greased for 10 000 working hours.
The feed cogwheel is fitted with self-lubrificating rings, and requires no greasing. Clean the cogwheel every month, and grease the chain slightly.
The feed rollers may become gritty when working with poplar or resinous wood. Take care to clean them regularly.
The cast-iron rise and fall shafts must be cleaned with fuel-oil and lubricated with fluid oil. The joints of the saw tilting mecanism must be cleaned and greased every month.

SURFACE PLANER JOINTER





PREPARATION :

- Lock both tables in position for jointing.
- Loosen motor cradle by unlocking lever (A), and slip the drive-belt onto the larger section of motor pulley (C). This gives workhead a speed of 6 400 r.p.m.
- Tension the drive-belt by pulling handgrip (B) up towards you. Lock motor cradle in tensioned position by tightening lever (A).
- Adjust depth of cut by turning the table adjustment grip on side of forward table. (See drawing page N° 5).
- Adjust position of fence to width of workpiece. Lock fence in required position.

SWITCH ON

OPERATION :

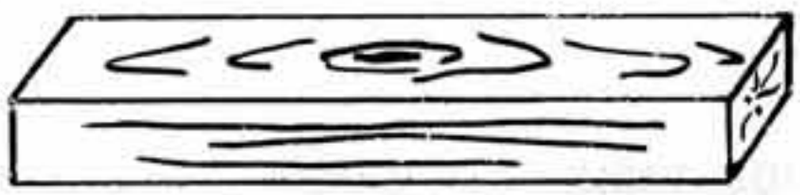
Once the workhead has gathered momentum, slide workpiece along the forward table, keeping it pressed against the fence. Do not touch the table with your fingers. Speed of operation should be adjusted so as not to strain the motor. Repeat operation as necessary. Proceed by thin cuts, along the grain of the workpiece.

PRACTICAL HINTS :

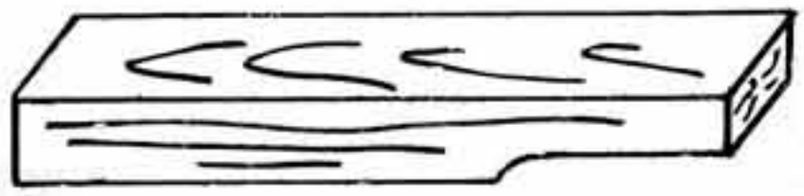
— To avoid roughing, cutter blades should be well sharpened and correctly set. This will ensure a smooth regular cut.
— Avoid excessive depth of cut. It strains the motor.
— Avoid excessive tensioning of drive-belt, as this will cause vibration and premature wear. Tension just slightly more than weight of motor.

FOR YOUR SAFETY :

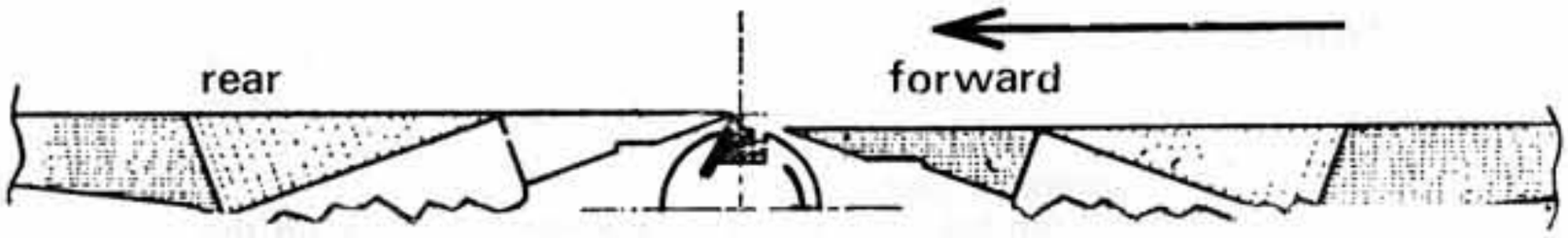
— Do not touch table with your fingers during operation.
— Use the spring - mounted guard. It gives complete protection.
NOTE : The rear table is pre-set in our works, and requires no further adjustment, except after sharpening jointer blades (see p. 18) or if the workpiece gets « nicked ». To avoid this, set the rear table in line with edge of blades.



normal workpiece

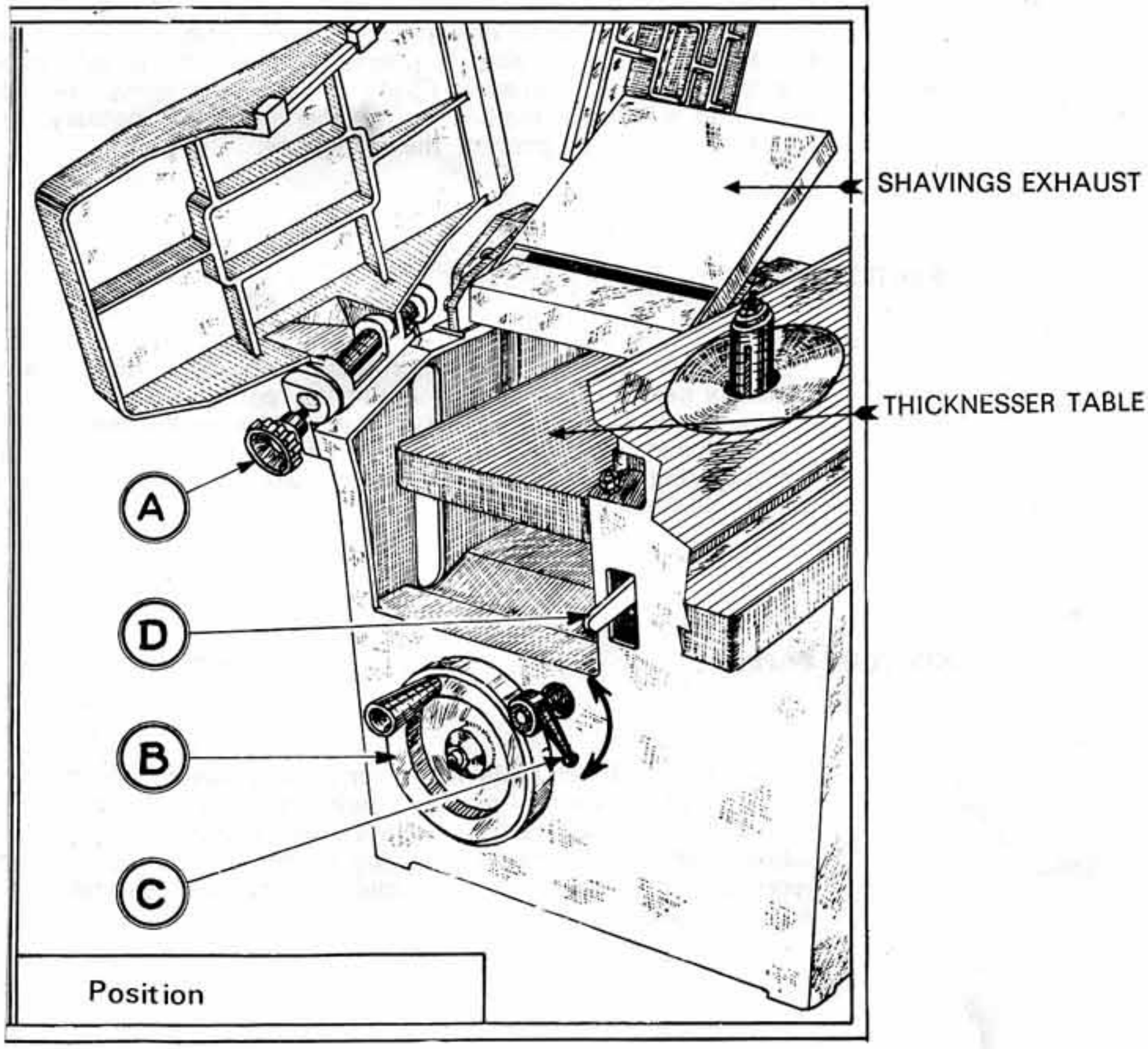


"nicked" workpiece



CORRECT SETTING FOR REAR TABLE

THICKNESS PLANER



THICKNESSING POSITION, TABLES LIFTED

Motor cradle and belt remain in the same position as for jointing.

PREPARATION :

— Remove jointer fence.
— Lift both tables until they are resting back on their hinges.
— Elevate thicknesser table to the required height, by turning hand-wheel B. Table height is shown on scale. Lock table at required height by tightening lever. **(C)**
— Swing shavings exhaust into operating position.

SWITCH ON

OPERATION :

— Slide workpiece along the table, until it is caught by the feed rollers, then let go. Movement of workpiece through the machine is automatic. Recover workpiece as it comes out.

— If motor strains because the cut is too thick, the feed mechanism may be instantly disconnected by lifting lever **(D)**.

PRACTICAL HINTS :

— Avoid excessive depth of cut.

— When inserting, keep workpiece in contact with thicknesser table. This way feed rollers get a better grip.

Check that table is clear of shavings before operating. A little parafin wax smeared on the table will give workpiece a better slide.

FOR YOUR SAFETY :

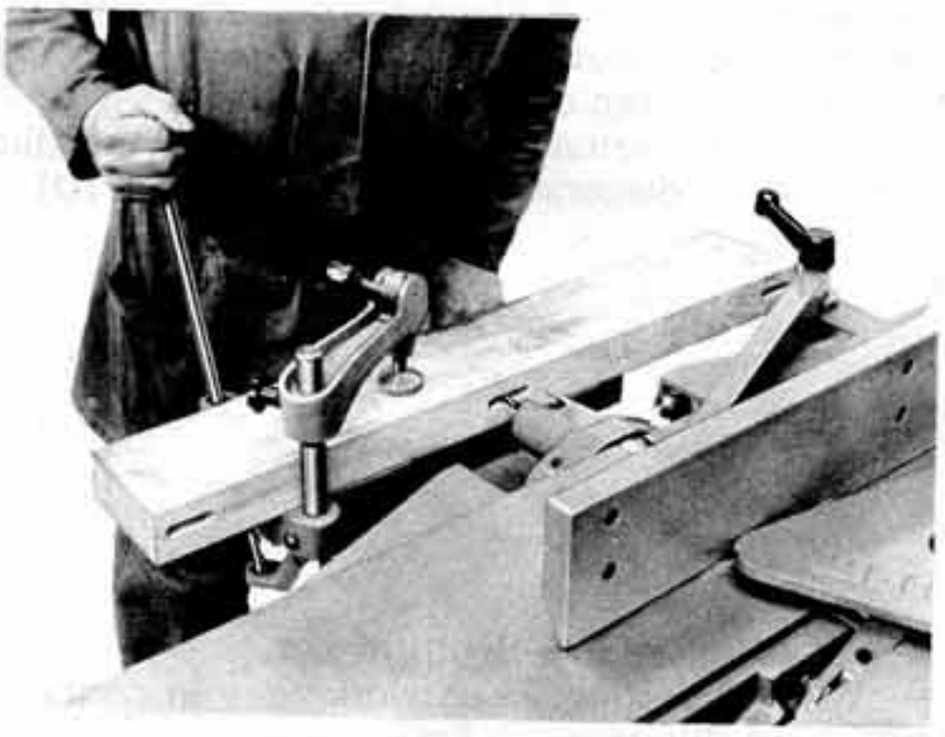
— Keep hands clear of feed rollers and workhead.

— If motor stalls or workpiece stops midway, do not pull workpiece out backwards. Switch off, lower the table, then recover workpiece.

NOTE :

The driving belt of feed mechanism does not normally require tensioning. However, if it gets loose, tension it by rotating tension pin R 29 (ses exploded wiew).

HORIZONTAL DRILL — MORTICER



PREPARATION :

— Place drill in the chuck, and tighten all three jaws with chuck key (supplied). Use RIGHT-TURNING-bits.
— Elevate drill table by turning handwheel **(B)** (see page 8).

NOTE :

On type C morticers the table is elevated by indpendant handwheel.
— Lock table by tightening lever **(C)** (see page 8).

NOTE :

Workhead drive-belt should be fitted :
— on the large section of motor pulley when using bits up to 8 mm (3/8").
— on the small section when using bits above 8 mm (3/8").
— Press workpiece against the lips on inner edge of table and tighten woodclamp.

SWITCH ON

OPERATION :

— By moving the control lever, drill the mortice with a few left-to-right movements of the lever.

— On soft woods : drill a short distance at one end of mortice, then move drill along lenght of mortice. Repeat operation until required depth is reached.

PRACTICAL HINTS :

— To avoid drill vibration, tighten all three chuck jaws.

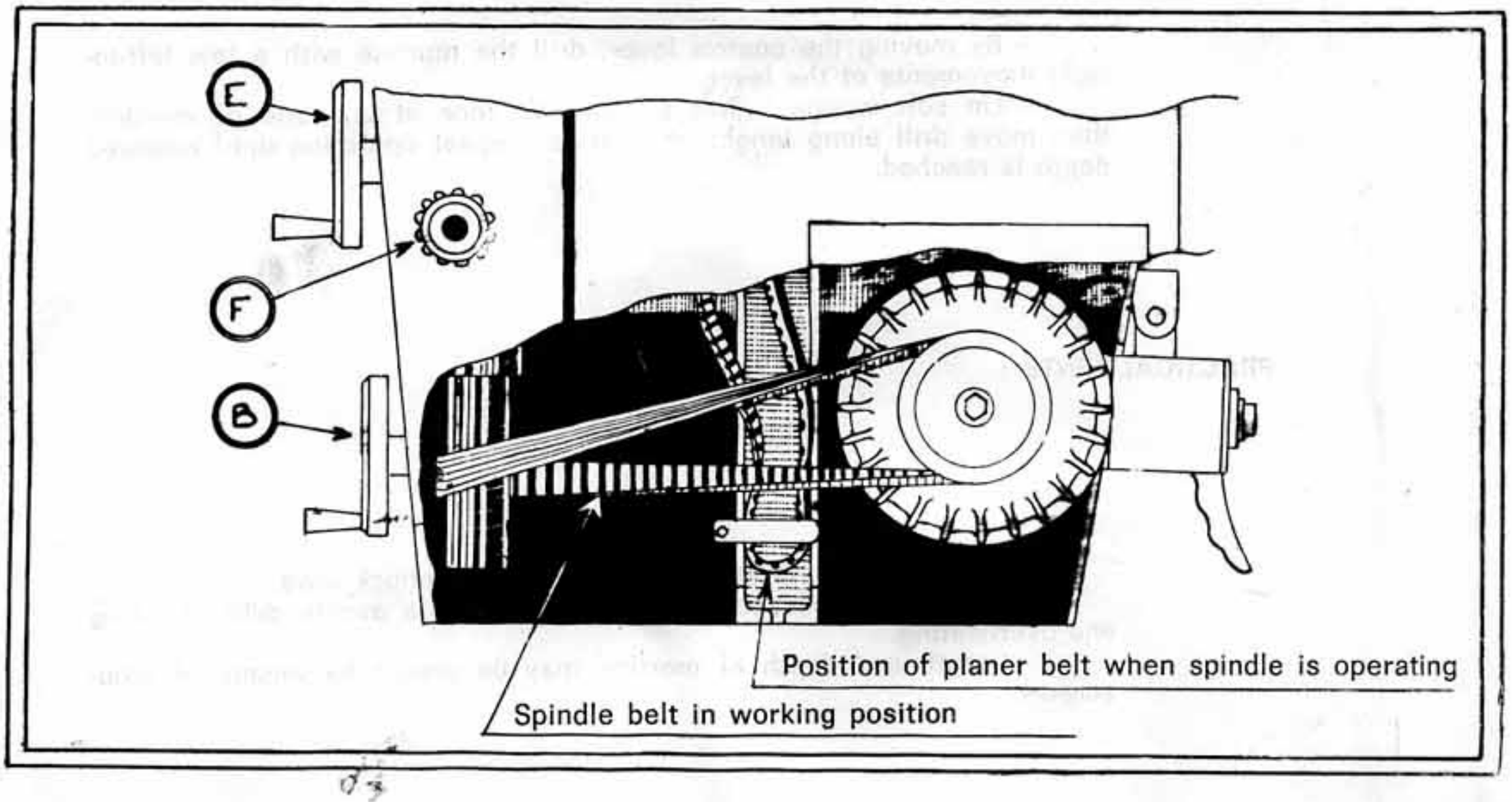
— Mark slight pauses during operation. This avoids drill straining and overheating.

— Length and depth of mortice may be preset by means of stop-screws.

FOR YOUR SAFETY :

— Lower jointer guard onto the table, to cover rotating workhead.
— Keep hands away from the drill.

SHAPER — SPINDLE MOULDER



PREPARATION :

— Remove saw guard, and lower sawblade below table level.
— Fit the spindle drive-belt :
• On the large section of motor pulley when using cutters up to 150 mm (6") diameter.
• On the small section of motor pulley when using cutters above 150 mm (6") diameter.

— The spindle drive-belt must be crossed before being slipped onto the motor pulley (see drawing). When using small section of motor pulley, motor cradle should be moved to the left.
— Elevate spindle shaft by turning tandwheel E. When required height is reached, lock by tightening knob F.
— Mount cutter tool on spindle head, adjusting height of tool with the supplied rings.
— Tighten tool with spindle head nut (supplied).
— Adjust fence to required depth of cut.
— Check for correct rotation and clearance of tool.

SWITCH ON

OPERATION :

Slide workpiece firmly along the fence at constant speed.

PRACTICAL HINTS :

— Spindle drive-belt should always be crossed in the same way. When machine is new a slight vibration, due to the new belt, may occur. This will disappear gradually. Do not over-tension the drive belt.

— Smoothness of operation and a perfect cut depend on the quality of your cutter tools.

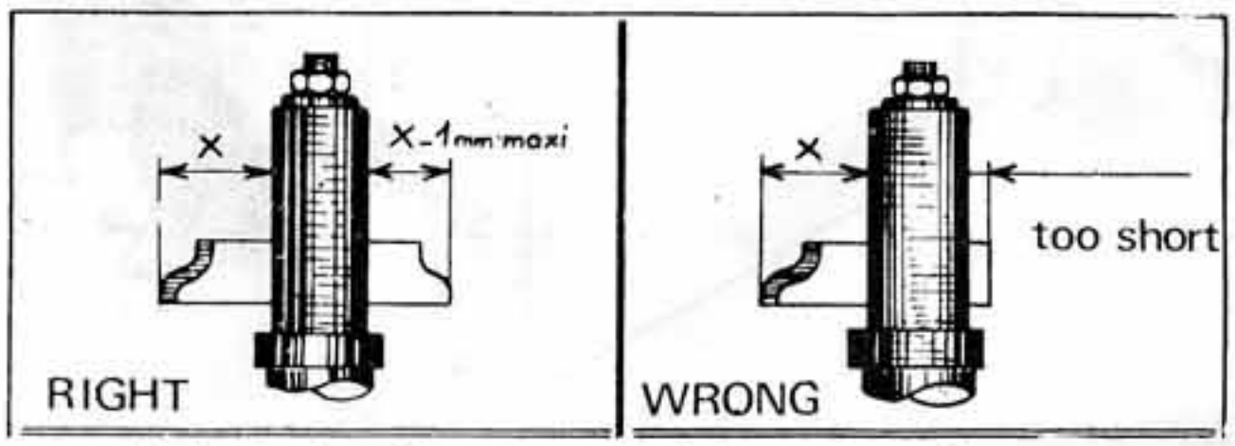
Keep these well sharpened and clean before use.

— cutter tools should be mounted as low as possible on the spindle head, to avoid straining the bearings.

NOTE 1 :

If you are working with profiles, you may use the top speed, but profile must be well sharpened and perfectly balanced (see drawing).

We can supply a well-balanced cutter head with two knives.



balanced profile — Unbalanced profile : vibration

NOTE 2 :

You may use 140 mm (5 1/2) cutter tools at and below table level by removing the circular inset fitted into the table.

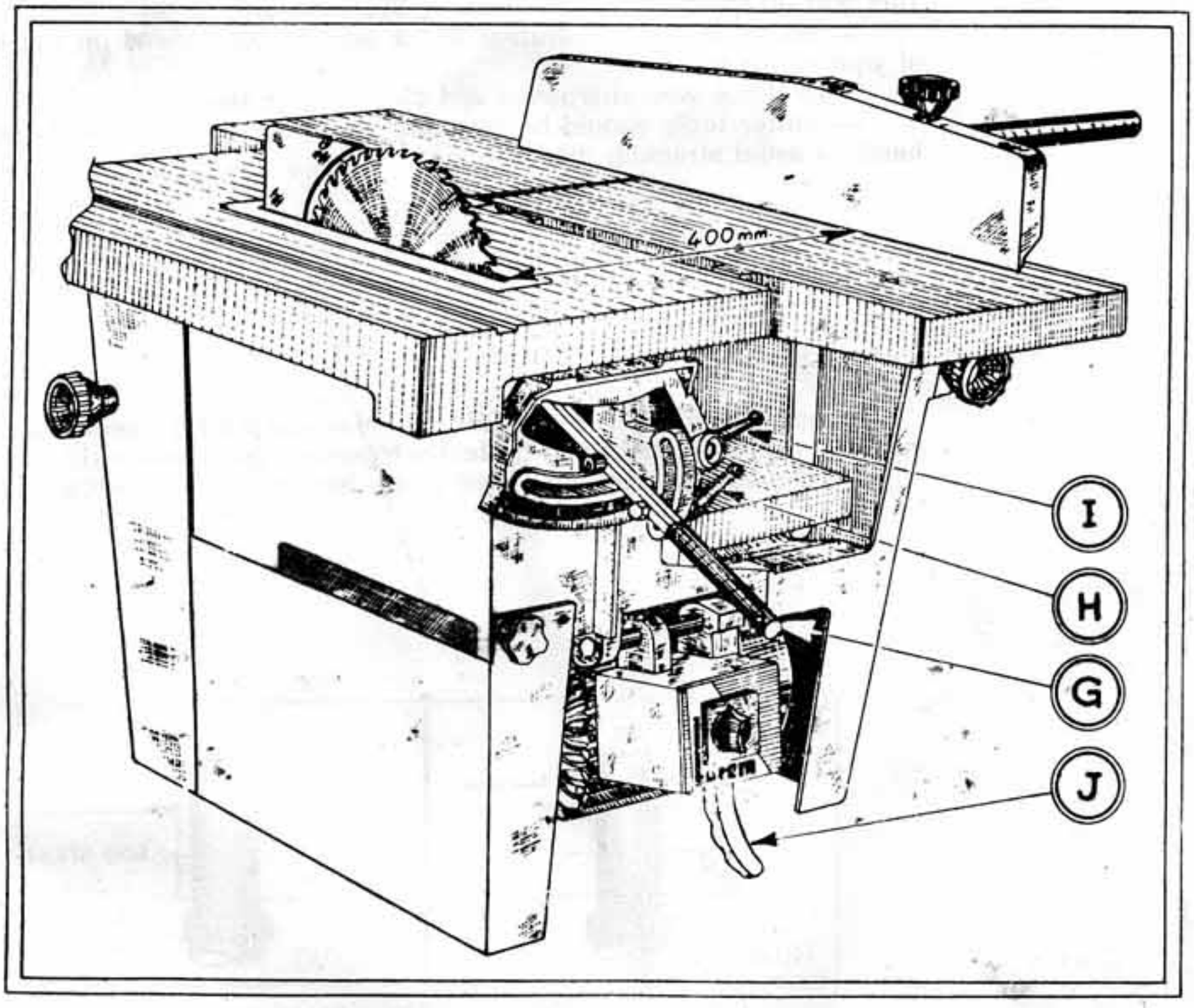
FOR YOUR SAFETY :

— Always use the spindle guard, which is mounted on the fence.
— Never place hands opposite cutter tool during operation, but always in front and beyond.
— Never pull workpiece backwards during operation.

OPTIONAL SEPARATE MOTOR FOR SPINDLE MOULDER

Two-section motor pulley for speed change — Motor swivels, to allow mounting and removal of drive-belt. Locking lever. G Holds motor in position.

CIRCULAR SAW



PREPARATION :

— Swing jointer guard right back and down.
— Lower the shaper-spindle below table level.
— Fit saw drive-belt onto larger section of motor pulley.
— Elevate sawblade by moving lever **(G)** downwards.
— Lock in required position by tightening lock **(H)**.
— For bevel ripping and cross-cutting, sawblade may be tilted. To do this, elevate sawblade about 50 mm (2") above table level, and lock. Then loosen cradle lock I, and tilt the entire saw assembly by swinging lever J. Once the blade is locked in tilted position (by tightening I) it may be elevated to required height.
— Set sawing fence to required sawing width, and lock in position.

SWICH ON

OPERATION :

Slide workpiece along fence, and push it against rotating sawblade. The splitter at rear of blade ensures a straight cut and prevents back-cutting. Speed of operation depends on quality of wood and sharpness of blade.

PRACTICAL HINTS :

— To obtain a large flat working surface, swing jointer guard below table level, and remove shaper fence and jointer fence mounting.
— An extension table (optional) gives a sawing width between blade and fence of 24", which enables you to saw a 4 × 8 board in half.

FOR YOUR SAFETY :

— Always fit the saw-guard over the blade.
— Do not elevate sawblade above required height.
— Do not pull workpiece backwards during operation.

NOTE :

The circular saw shaft may be used as a horizontal or tilted shaper with cutters up to 10 mm (3/8") thick. You may also mount a DADO up to 13/16" thick.

To remove sawblade, loosen the flange using spanner and locking bar (supplied).