# LIGHT STINDLE MUULDER TIPE BEK

www.DaltonsWadkin.com

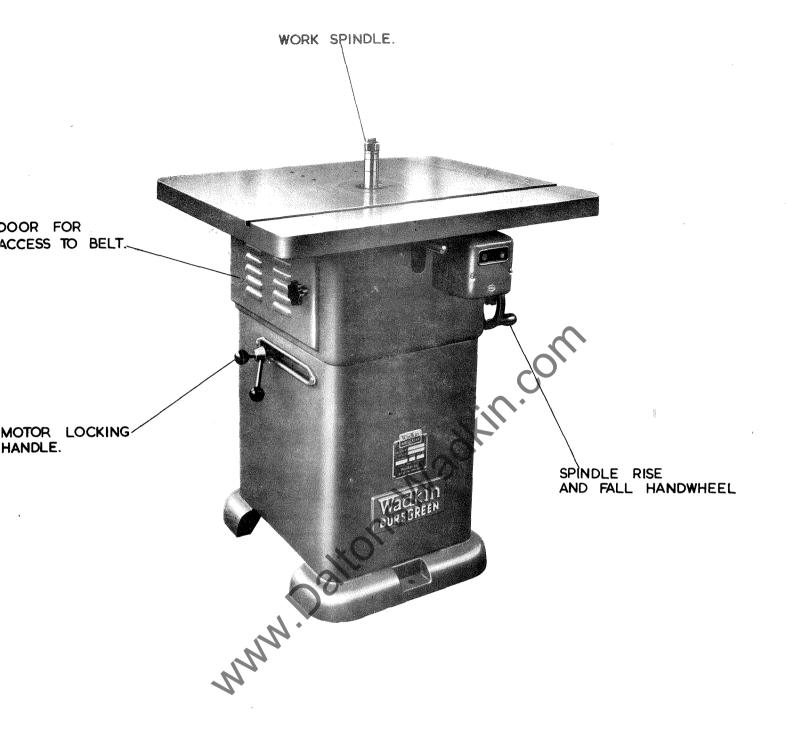
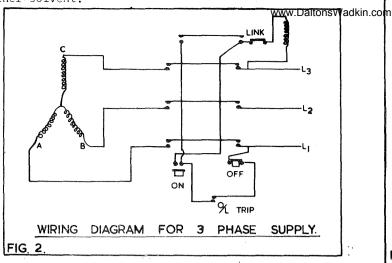


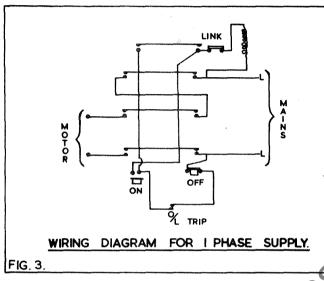
FIG. 1.

#### SPECIFICATION

Standard diameter of top piece	 20 mm
Size of table	 30" x 24" $760 \times 610 \text{ mm}$
Speed of spindle	 7,000 & 10,000 r.p.m.
Alternative speeds to order	 , 5,000 & 7,000 r.p.m.
	2" 50 mm
Height of table from floor	 33½" 850 mm
Horsepower of motor (3 phase)	 2 <b>2</b>
Speed of motor	 3000 r.p.m 50 cycles 36000 r.p.m 60 cycles
Floor space	
Net weight	 350 lb. 160 kg.
Gross weight	 500 lb. 225 kg.
	www.DaltonsWadkin.com ft. 0.60 cu.m.

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





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

direction. If this is incorrect on three phase supply reverse any two of the line lead connections.

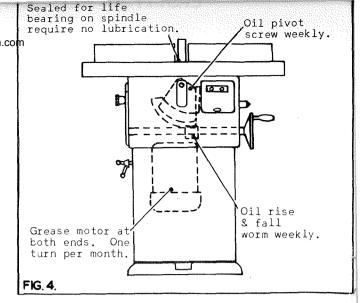
<u>VOLTS</u>	PHASE	S.W.G. TINNED	<u>AMPS</u>
220	3	24	17
340/420	3	25	15
550	3	29	10
200/250	1	19	38

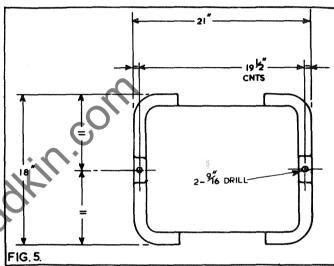
It is advisable to keep all bright parts covered with a thin film of oil to prevent rusting.

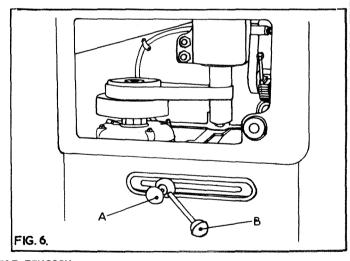
TYPE OF OIL RECOMMENDED POWER EM 125 TYPE OF GREASE RECOMMENDED SHELL ALVANIA 3.

FOUNDATION
See Fig. 5 for bolt positions and clearance required. When installing the machine level the table by packing under the feet.
Foundation bolts are not supplied with the

machine except by special order.







BELT TENSION

The drive of this machine is by means of an endless flat belt from a 2 HP motor mounted on a hinged bracket inside the base of the machine. A hand lever removes the tension on the belt for changing the speed of the machine.

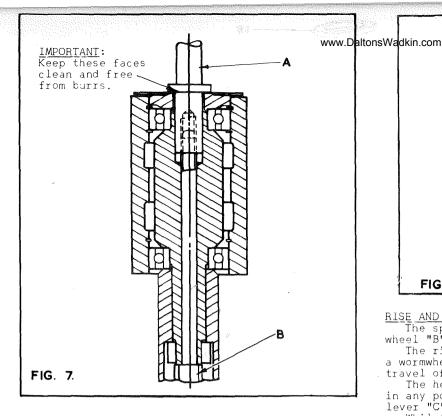
SPEED THE UNDERMENTIONED PROCEDURE

TO CHANGE THE SPEED THE UNDERMENTIONED PROCEDURE SHOULD BE FOLLOWED.

1. Open the door on the left hand side of the machine for access to the pulleys.

2. Remove the tension on the belt by unscrewing the ball handle "B" (right hand thread) as shown in Fig. 6 and move the handlever "A" along the slot towards the front of the machine.

Select the required speed and re-tension the belt by moving the handlever "A" along the slot away from the front of the machine.
 When the required tension is reached retighten the ball handle "B".



WORK SPINDLE INSTALLATION

Before inserting the work spindle, select which of the three table ring openings you require. The two removable rings give hole sizes of 4%"x 3½" and 2%"dia.

To insert the work spindle the undermentioned procedure should be followed:
1. Insert the work spindle the undermentioned

Insert the work spindle "A" in Fig. 7 into the main spindle through the hole in the table top. Great care should be taken to see that the work spindle seatings and the main spindle seatings are completely free from all burrs, dirt and rust. A thin film of oil should be put on the work spindle seating before inserting. Line the peg in the work spindle with the slot in the main spindle and press spindle onto

seating.

 Open access door on left hand side of the machine
 Lock main spindle as described in the following section.

4. Insert the spindle drawbolt "B" up the centre of the main spindle into the end of the work spindle tighten.

NOTE: Drawbolt thread is right hand. The spindle is now ready to receive the cutter equipment, etc. as required.

To remove the work spindle the undermentioned

procedure should be followed.

1. Lock main spindle as described in the following section.

Open access door at left hand side of the machine. Unscrew the drawbolt "B" and withdraw from the main spindle.

The work spindle "A" can now be removed by lifting clear through the hole in the table.

SPINDLE LOCK The spindle can be locked by means of the handle "A" in Fig. 8.

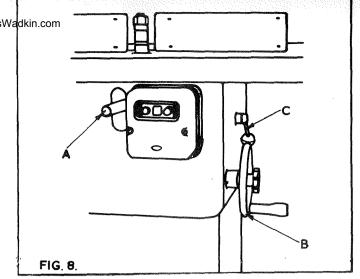
To lock the spindle the undermentioned procedure should be followed:
1. Apply pressure to the handle "A" until it touches

the main spindle.

2. Rotate the spindle by hand until the handle "A" drops into a hole in the main spindle. Turn handle "A" through 90° and release the pressure. The main spindle is now locked in position and the works spindle can be removed or cutter equipment mounted as required.

To unlock the spindle apply pressure to the handle "A" and rotate until the handle springs clear of the main spindle. Check the spindle is free to rotate by hand before starting the machine.

The spindle should be unlocked at all times before attempting to start the machine.



AND FALL OF SPINDLE.

The spindle rise and fall is by means of the hand-wheel "B" in Fig. 8.

The rise and fall of the spindle is obtained throug a wormwheel on a racked quadrant and has a maximum

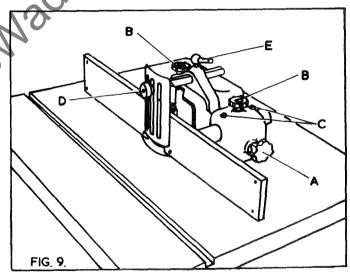
travel of 2".

travel of 2".

The height of the spindle can be efficiently locked in any position of its travel by means of the locking lever "C".

Whilst the rise and fall movement of the spindle provides an immediate adjustment to the cutter height, further adjustment outside the range of this can be effected by re-positioning the collars on the work spindle.

The spindle should be rotated by hand when the belt is fitted before raising or lowering the spindle, to prevent excessive stretch on the belt.



 $\frac{\text{FULLY ADJUSTABLE FENCE, TYPE 3}}{\text{Each fence plate can be independently adjusted by means of the plastic handwheels "A" in Fig. 9. The}$ fence plates can be set to the desired amount and locked in position by the plastic handwheels "B". The front fence plates can be made either of metal or wood and are adjustable endwise.

The fence slide bars rest in accurately machined vee grooves and are held in position by the two brass grubscrews "C" on each bar. If the slide bars become slack adjust the grubscrews "C" by the required amount and relock in position with the % whit. locknuts. The fence plates should be locked both ways at all times when the machine is in use.

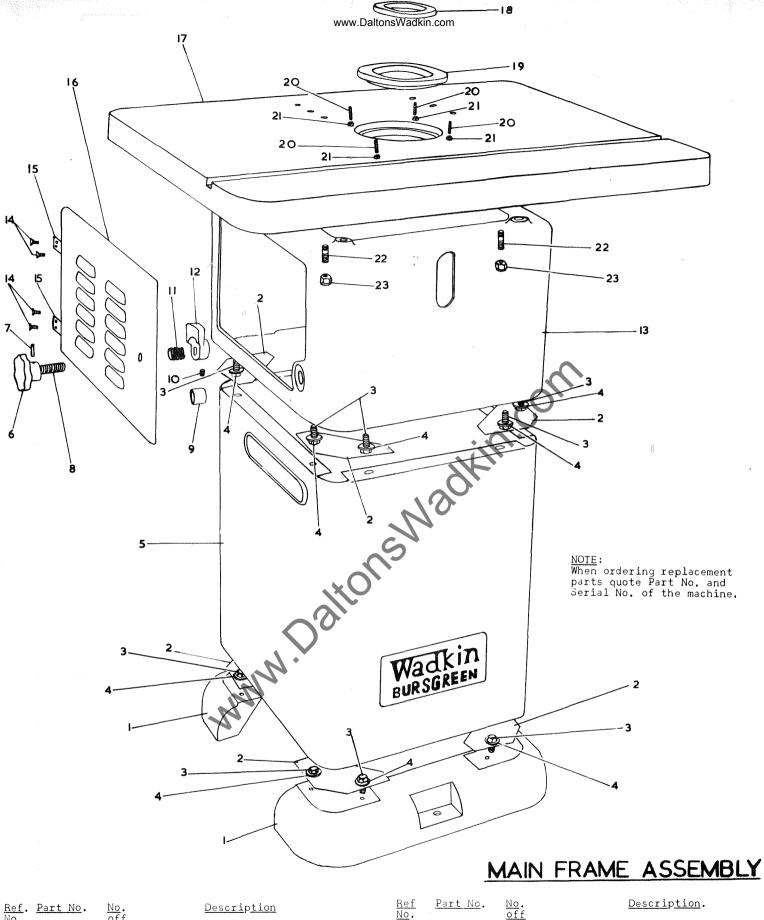
The fence is fitted with a safety guard and a

"Shaw" guard can also be fitted if required.

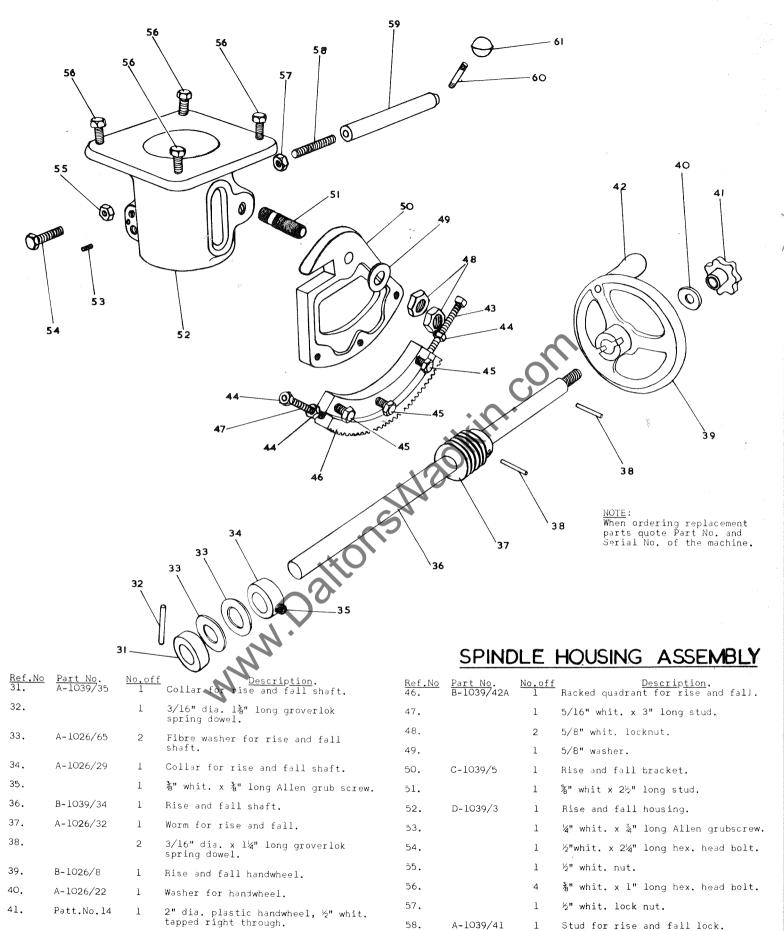
The safety guard is adjustable depending on the section of timber being worked. This guard is shown in position in Fig. 9. To adjust the guard for various sections of timber unscrew the knurled knob "D", set to required position and relock the knurled knob "D".

To adjust the safety guard in relation to the fence plates unscrew the two ball lever screw "E", position

the safety guard and relock.



	Fait NO.	140 •	Description	No		off	
$\frac{No}{1}$	C-1038/6	$\frac{\text{off}}{2}$ .	Foot for base.	$\frac{\text{No}}{12}$ .	A-1037/15	1	Door cam.
	0-1030/0			13.	D-1039/1	1	Main frame.
2.		.8	Fillet for base.	14.	,	4	3/16" whit. x 2" long countersunk
3.		17	¾" whit. x ¾" long hex. head	±		7	
			cadmium bolt.				screw.
4.		17	者" cadmium washer.	15.		2	l" back flaps.
5.	D-1039/17	1	Base.	16.	C-1029/18	1	Door for main frame.
		1		17.	D-1039/2	1	Table.
6.	Patt.No.14	Ŧ	2" dia. plastic handwheel, ½"plain	18.	B-1039/9	ī	Small table ring.
			bore.			1	
7.		1	3/16" dia. xl¼" long groverlok	19.	B-1039/8	1	Large table ring.
			spring dowel.	20.		4	3/16" whit. x ¾" long nicked and
0	A-1039/31	1	Door cam pin.				pointed grubscrews.
8.	H-1039/31	7	3.4.) 7.4. /1 3.4.1	21.		4	3/16" whit, nut.
9.		2	¾" bore x %" o/d x ¾" long oilite	22.		4	者" whit. x 14" long stud.
			bush.	~~. 			8 Will. X 12 long stud.
10.		1	busn. 如" whit x 者" long Allen grubs\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	onswaaki	n.com	4	者" whit. aerotight nut.
11	A-1024/57	1	Spring for door lock.				
***	11 1024/01	-	opining for door rock.				



59.

60.

61.

A-1039/63

A-1038/33

Rise and fall locking shaft.

l¼" dia. plastic ball, 着" whit.

Quill locking handle.

42.

43

44.

45:

Patt.No. 4

3

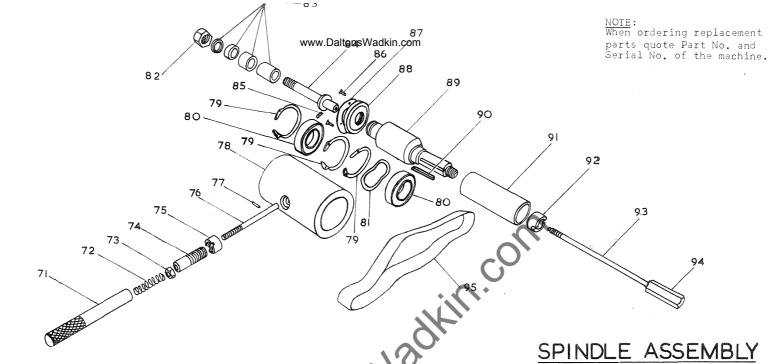
3

3" long plastic handle.

5/16" whit. nut.

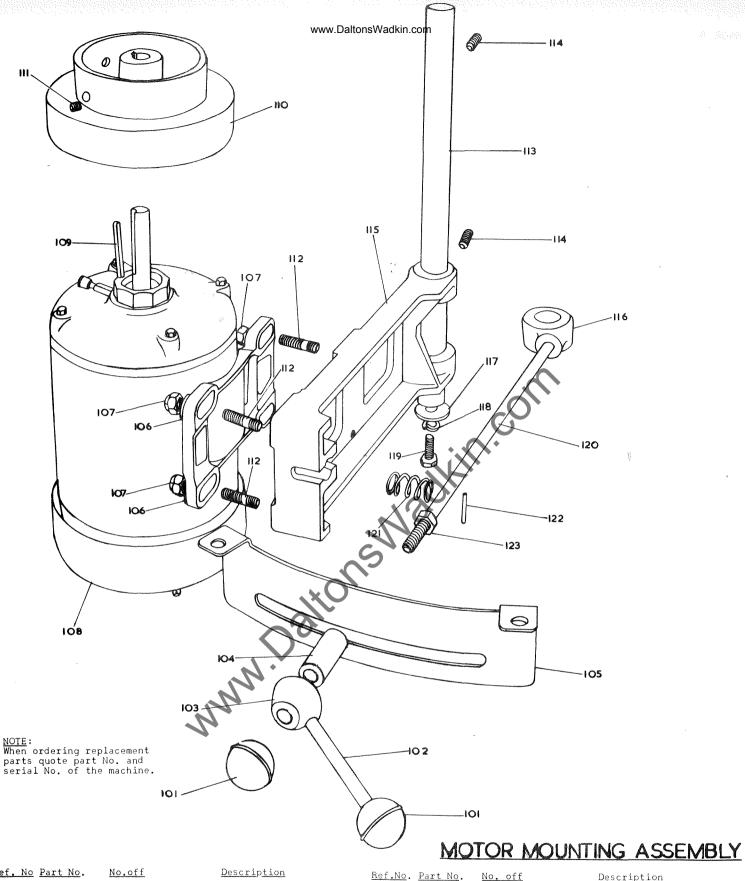
5/16" whit. x  $1\frac{1}{2}$ " long Hex. head bolt.

者" whit. x l" long Hex. head

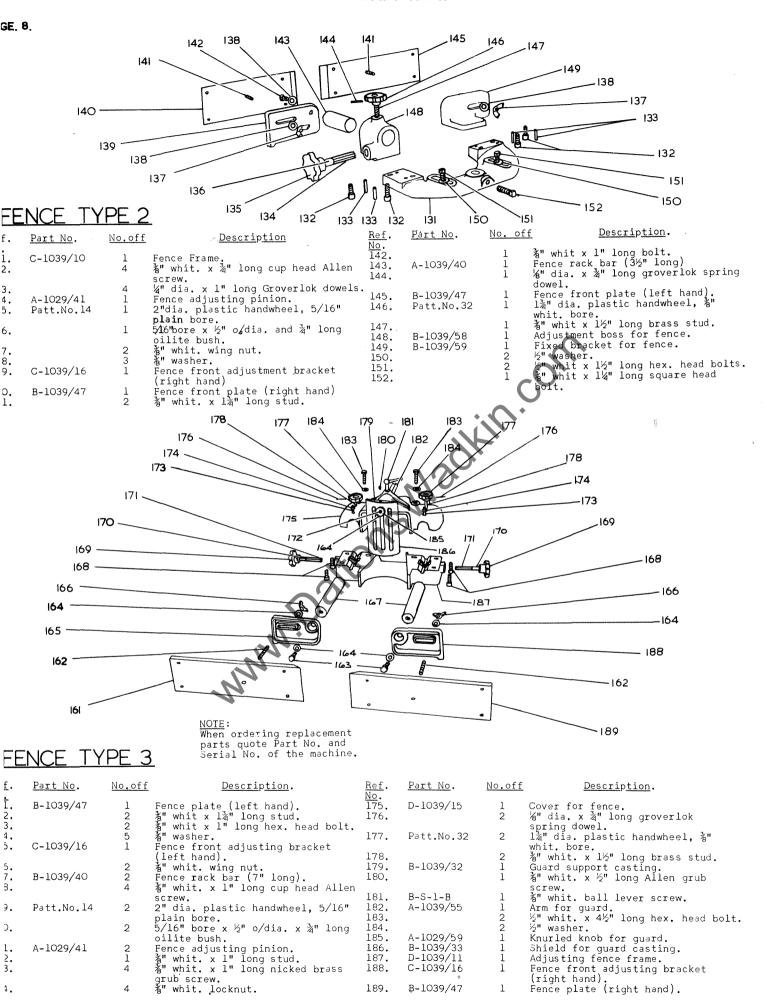


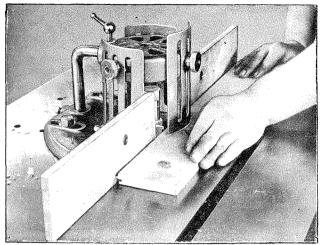
Ref.No.	Part No.	No.off			Part No.
71.	A-1039/25	1	Handle for locking plunger.	90.	
72.	A-1033/196	1	Spring for locking plunger.	91.	B-1039/21
73.		1	着" whit. nut.		.,
74.	A-1039/23	1	Rise and fall peg for spindle		B-1039/51
			quill.		
75.	A-1039/22	1	Rise and fall peg looknut.		B-1039/52
76.	A-1039/24	1	Locking plunger for spindle.		2 2007, 01
77.	,,	1	後" dia. x %" long groverlok spring		B-1039/53
•			dowel.		B 1007/00
78.	C-1039/4	Ŧ.	Spindle guill.	92.	A-1039/28
	5008-243	2			
79.		3	62m/m Truarc internal circlips.	93.	A-1039/43
80.	6206-2R5	2	SKF Sealed for life bearings.	94.	A-1039/44
81.	A-1023/80	1	"Bump" Thrust washer.	95.	
82.	1020, 00	1	%" RH.BSR nut (Standard).	,,,,	
oz.		1	%, uurbow wer (oralloato).		

			_ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Ref.No.	Part No.	No.off	Description.	Ref.No.	, <u>Part No</u> .	No.off	Description.
71.	A-1039/25	1	Handle for locking plunger.	90.	7	- 1	4" wide x 2" long feather key.
72.	A-1033/196	1	Spring for locking plunger.	91.	B-1039/21	1	Spindle pulley for 10,000 and
73.		1	省" whit. nut.				7,000 rpm (3PH and 1PH, 50 cycles).
74.	A-1039/23	1	Rise and fall peg for spindle		B-1039/51	1	Spindle pulley for 7,000 and
			quill.				5,000 rpm (3PH and 1PH, 50 cycles).
75.	A-1039/22	1	Rise and fall peg locknut.		B-1039/52	1	Spindle pulley for 10,000 and
76.	A-1039/24	1	Locking plunger for spinale.				7,000 rpm (3PH and 1PH, 60 cycles).
77.		1	海" dia. x %" long groverlok spring		B-1039/53	1	Spindle pulley for 7,000 and
	0.1000/.	2	dowel.				5,000 rpm (3PH and 1PH, 60 cycles).
78.	C-1039/4	Ţ	Spindle quill.	92.	A-1039/28	1	Spindle pulley locknut.
79.	5008-243	3	62m/m Truarc internal circlips.	93.	A-1039/43	Ţ	Stud for work spindle drawbolt.
80.	6206-2Rs	2	SKF sealed for life bearings.	94.	A-1039/44	1	Hexagon for workspindle drawbolt.
81.	A-1023/80	1	"Bump" Thrust washer.	95.		1	Meteor flat belt 23½" long x 1"
82.	1 1000 // 1	1	A" RH.BSR nut (Standard),				wide for 10,000 and 7,000 rpm
	A-1039/61	Ť	20m/m workspindle nut (special).			2	(3PH, 50 cycles).
0.0	D 1700 (00	1	ッ" RH. B. F nut (Special).			1	Meteor flat belt 24½" long x 1"
83.	D-1792/22	lset	Spindle collars, &" bore (Standard).				wide for 7,000 and 5,000 rpm
	D-1792/22	l set	Spin(le collars, 20m/m bore (Special).			2	(3PH, 50 cycles).
	A-1039/78	l set	Spindle collars, %" bore (Special).			4	Meteor flat belts 24½" long x 1"
84.	A-1039/78 A-1039/29	1 560	%" dia. work spindle (Standard).				wide and 20½" long x 1" wide for 10,000 and 7,000 rpm (1PH, 50
04.	A-1039/29 A-1039/62	1	20m/m dia. work spindle (standard).				cycles).
	A-1039/77	1	½" dia. work spindle (Special).			2	Meteor flat belts 25%" long x 1"
85.	A-1007/11	ī	3/16" dia. x ½" long groverlok			~	wide and 22" long x 1" wide for
00.			spring dowel.				7,000 and 5,000 rpm (1PH 50 cycles).
86.		3	3/16" x 者" long countersunk head			1	Meteor flat belt 24½" long x 1"
		Ü	screw.			-	wide for 10,000 and 7,000 rpm
87.	A-1039/73	1	Flinger for spindle locknut.				(3PH 60 cycles).
88.	A-1039/26	ī	Top locknut for main spindle.			1	Meteor flat belt 25½" long x 1"
89.	B-1039/20	ī	Main spindle.			_	wide for 7,000 and 5,000 rpm
~ / *		-	the mark of the ma				(3PH, 60 cycles).

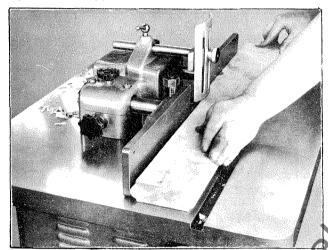


Ret. No	Part No.	No.oft	<u>Description</u>		Part No.	No. off	Description
101. 102. 103. 104. 105. 106. 107. 108.	A-1002/90A A-1039/79 A-1039/80 C-1039/19	2 1 1 1 1 4 4 1 1 1 1 1 1 1	l¼" dia. plastic ball, å" whit. Stud for motor pivot locking nut. Motor pivot locking nut. Distance piece for motor lock. Adjusting bracket for motor. 5/16" washer. 5/16" whit. aerotight nut. Brook motor, T.14 TEFC 2HP 2840rpm 3PH, 50 cycle. Brook motor, M.66 TEFC 2HP 2840rpm 1PH, 50 cycle. Brook motor, T.14 TEFC 2HP 3480rpm 3PH, 60 cycle. Brook motor, M.66 TEFC 2HP 3480rpm 1PH, 60 cycle. Brook motor, M.66 TEFC 2HP 3480rpm 1PH, 60 cycle. 3/16" wide x 2" long feather key.	110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122.	B-1039/7 A-1039/30 C-1039/6 A-1039/45 A-1024/58 A-1039/46 A-1024/21	1 2 4 1 2 1 1 1 1 1 1 1	Motor pulley.  %" gas x %" long Allen grub screw. 5/16" whit. x l%" long stud. Motor pivot bar. %" whit. x l" long Allen grub screw. Motor platform. Pivot boss for motor locking bar. Washer for motor pivot bar. %" spring washer. %" whit. x l" long hex. head bolt. Motor locking bar. Motor pivot locking handle spring. %" dia. x l" long groverlok spring dowel. %" whit. nut.
TO9.		1	2/ TO. MIDE X Z. TOUD LESTINGL KEY.				

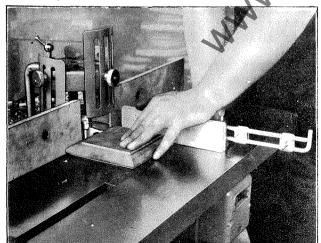




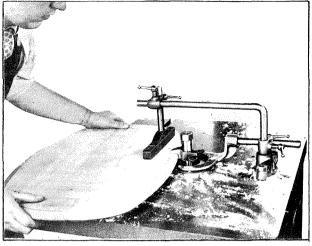
Machining a reversible glue joint using plain wood fence plates and universal guard. Cutter is a solid profile type No. 12.



This adjustable precision metal fence, combining dust hood and guar ensures maximum efficiency and safety on all straight work.



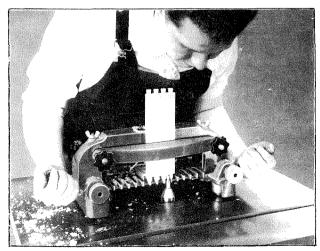
Small components such as this newel cap can be moulded with speed, accuracy and complete safety with the aid of the sliding fence shown.



Moulding table edge with solid profile Cutter No. 50, using template and ring fence with top pressure Shaw guard.



Shaping with slotted collars. (Universal guard removed to show detail).



Dovetailing can be easily and efficiently performed on this machine.

#### A FULL RANGE OF SOLID PROFILE CUTTERS CAN BE PROFITABLY USED www.DaltonsWadkin.com

These solid profile cutters cut a true shape indefinitely, resharpening does not alter the original profile.

No setting is required, they slip straight onto the spindle. May be used singly or stacked. Safest of all cutters in use.



No. 1 1" Square edge Cutter.



No. 20 %" Rad. Ovolo Cutter.



No. 25 1" dia. Nosing

No. 10 % Tonguing Cutter.



No. 26 1" dia. Nosing Cutter.





No. 30 1" Rad. Cutter.



No. 35 TRad. Ogee



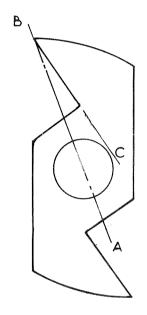
No. 40 45° Angle Cutter.



No. 41 30° Angle Cutter.



No. 50 Table edge



INSTRUCTION **FOR PROFILE** REGRINDING CUTTERS





FIG. I.

There are two methods of grinding these cutters.

1. With Precision tool gringe

This method involves grinding the cutter on an arbor between centres.

The machine should be set to grind the face of the cutter so that angle ABC, in Fig. 1 is the same after grinding as it was originally.

2. With hand or bench grinder.

Before regrinding the cutters by this method ensure that the check chart supplied with the cutters is to hand. To check the angle of the cutters, place the new ground face, i.e. line BC, in Fig. 1, against that of the check chart and when the angle is correct the bore of the cutter should correspond to that of the check chart. This ensures that the correct angle is maintained at all time.

1. A slight variation in the angle ABC, in Fig. 1 on opposite wings of the cutter is not too important, but for the best results avoid having the point "B" in Fig. 1 or its opposite on a different radius. This would cause one cutting edge to do all the cutting and would make the cutter out of balance and causewww.DaltonsWadkinsogsten Carbide Tipped variety. Write vibration.

2. When making single cuts with more than one cutter in the set up always STAGGER the cutting edges rather than line them up. Doing this improves the quality of the work and reduces vibration and chatter. Staggered cutters require less power than "in line" cutters.

3. Cutters must always be ground in the root of the tooth, as shown in Fig. 2. never as in Fig. 3. Otherwise the cutters will drag or fail to cut the complete shape. Failure in observing this point results in weakening the tooth form and shortening the usable life of the cutter.

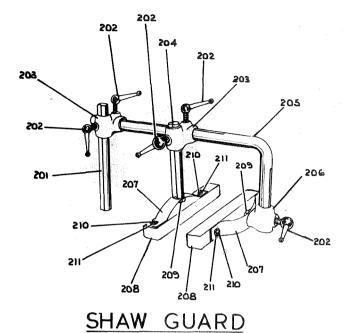
4. REGRINDING SERVICE

We offer precision regrinding service and the charges are moderate and the service prompt.

RETURN THE CUTTERS TO: BURSGREEN (DURHAM) LIMITED, FENCE HOUSES, HOUGHTON-LE-SPRING, CO. DURHAM, ENGLAND.

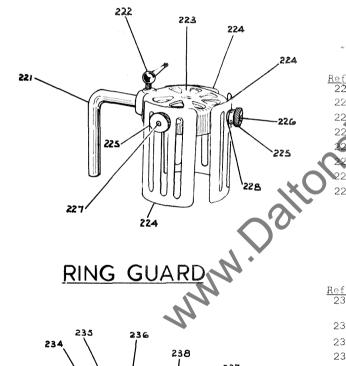
CAUTION

We do not recommend these cutters to be used on anything but short runs of plywood or resin bonded wood subtitutes, because resinous glues used in making plywood etc. are extremely hard and This causes the cutters to abrasive. overheat and soften if not of the for prices of special tipped cutters for such materials.



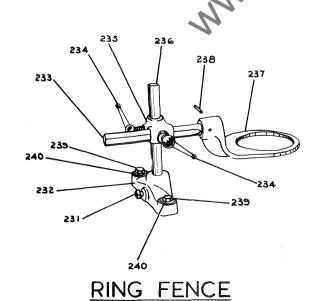
#### SHAW GUARD

	Part No. A-1039/38	No. off	Shaw guard column (only required
202.	B-S-1-B	3	for fences type 1 and 2). (For fence type 3) 着" whit. ball lever screw.
		5	(For fence type 1 and 2) ≹" whit. ball lever screw.
203.	D-1792/65	1	(For fence type 3) ¾" x ¾" Filboe.
		2	(For fence type 1 and 2) $\frac{3}{4}$ " x $\frac{3}{4}$ " Filboe.
204.	A-1039/36	1	Shaw guard top pressure bar.
205.	A-1039/37	1	Shaw guard cantilever arm.
206.	A-1039/14	1	Front pressure bracket for Shaw guard.
207.	D-1792/45	2	Shaw guard pressure springs.
208.	D-1792/44	2	Wood shoes for Shaw guard.
209.		2	$5/16$ " whit. x $\frac{3}{4}$ " long hex. head bolt and spring washer.
210:		4	No. 8 x ¾" long black japaned wood screw.
211.		4	3/16" washers.



# RING GUARD

Ref.No. Part No.	No. off	Description
221. A-1039/39	1	Ring guard arm.
222. B-3-1-B	1	å" whit. ball lever screw.
223. 0-1039/12	1	Ring guard top piece.
224. B-1039/33	3	Shield for ring guard.
225, A-1029/59	3	Knurled knob for ring guard.
226.	1	者" whit. x l" long stud.
227.	2.	$\frac{1}{2}$ " whit. x 1" long coach bolt.
228.	3	%" washer.

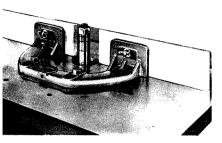


### RING FENCE

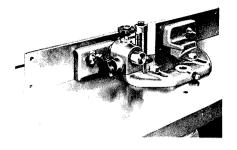
Ref.No. 231	Part No.	No.off 1	$\frac{\mathrm{Description}}{}^*$ whit. x $1\frac{1}{4}$ long square head bolt.
232.	B-1039/13	1	Bracket for ring fence column.
233.	A-1039/54	1	Ring fence arm.
234.	B-S-1-B	2	%" whit. ball lever screw.
235.	D-1792/65	1	¾" x ¾" Filboe.
236.	A-1039/38	1	Ring fence column.
237.	D-1792/56	1	Ring fence.
238.		1	No. 3 taper pin.
239.		2	$\frac{1}{2}$ " whit. x $\frac{1}{2}$ " long hexagon head bolt.
240.		2	½" washer.

 $\underline{\rm NOTE}\colon$  When ordering replacement parts quote Part No. and Serial No. of the machine.

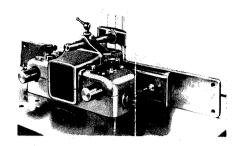
# EXTRA EQUIPMENT



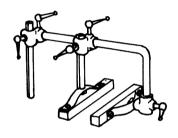
Type 1:- Plain horse shoe fence to take wood or metal front plates.



Type 2:- Horse shoe fence to take wood or metal front plates with the infeed side adjustable.



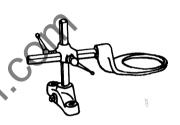
Type 3:- Combined fence, dust hood and guard with independent adjustment to both sides.



SHAW GUARD



RING GUARD



RING FENCE







ed collars dia. for 1" thick cutters.





Collar type slotted French Spindle for 3/16" thick cutters.



Collett type router cutter adaptor.



3½" dia. cutterblock



3½" dia. Serrated back cutterblock type EZ272 14" · thick.



Ball bearing slotted collar.



Ball bearing guide for QR type cutterblock



Router Cutters



4" dia. Dado set for grooves  $\frac{1}{8}$ " to  $\frac{5}{8}$ " wide.



4" dia. wobble saw to cut grooves 1" to ½" wide.



4" dia. Saw.