RECORD MACHINE DETAILS

MODEL

SERIAL No.

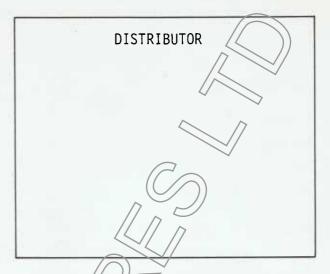
DATE of PURCHASE

VOLTAGE

PHASE

CYCLES

QUOTE THIS INFORMATION WHEN REQUESTING SERVICE OR SPARES.



This Machine is engineered to a high standard of construction and performance. Attention to maintenance and service will be repaid by many years' trouble-free operating.

# STARTRITE

Model TA255

TILT ABBOR SAWBENCHES

HANDBOOK

22E

.T. Saws & Spares Ltd

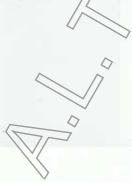
Startrite Machine Specialist

Unit 15, Pier Road Industrial Estate Gillingham Kent

ME7 1RZ

Tel/Fax: 01634 850833

www.altsawsandspares.co.uk





# QUALITY TCT CIRCULAR SAW BLADES

## TO SUIT THE TA255 MODEL

ORDER LINE- 01634 850833

A.L.T. SAWS & SPARES LTD

Unit 15, Pier Road Industrial Estate

Gillingham

Kent

ME7 1RZ

www.alts aws and spares.com

#### SPECIFICATION:

Model TA255 - 10" Standard Tilt Arbor Sawbench

Saw Blade Size 255 mm Dia. x 2.0 mm Thick (x %" Bore)

lo" Dia. x .079" Thick (x %" Bore)

Blade Speed - 1980 m/min., 6500 ft/min.

Max. Rise of Saw  $90^{\circ}/45^{\circ}$  - 89 mm,  $3\frac{1}{2}$ " / 63 mm,  $2\frac{1}{2}$ "

Max. Tilt of Saw - 45°

Motor (1 & 3 Phase) - 0.9 kW., 1.25 h.p., 2850 r.p.m.

220/240 Volt 3 Phase 50Hz.

Standard Voltages - 380/440 Volt 3 Phase 50Hz.

220/240 Volt 1 Phase 50Hz.

Gross Weight - 102 kg., 225 lbs.

FOR BEST RESULTS USE 'STARTRITE' SAW BLADES.

#### WHEN ORDERING PARTS, PLEASE STATE :-

1. Quantity required.

2. Part No. (where applicable) and description.

Specify power supply for electrical components.

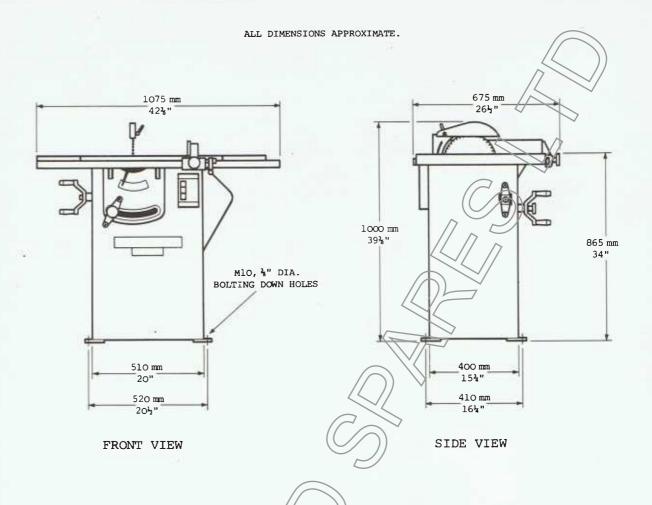
3. Machine Model and Serial No.

NOTE: ILLUSTRATIONS MAY VARY IN DETAIL, ACCORDING TO MODEL.

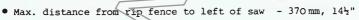
We reserve the right to change design and specification without notice.

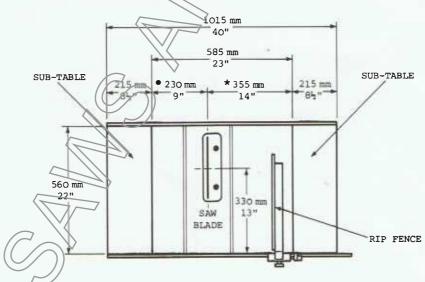
Startrite Machine Tool Co. Ltd., Waterside Works, Gads Hill,
Gillingham, Kent, ME7 2SF, England.

C STARTRITE 1981.



\* Max. distance from rip fence to right of saw - 500 mm, 19%"

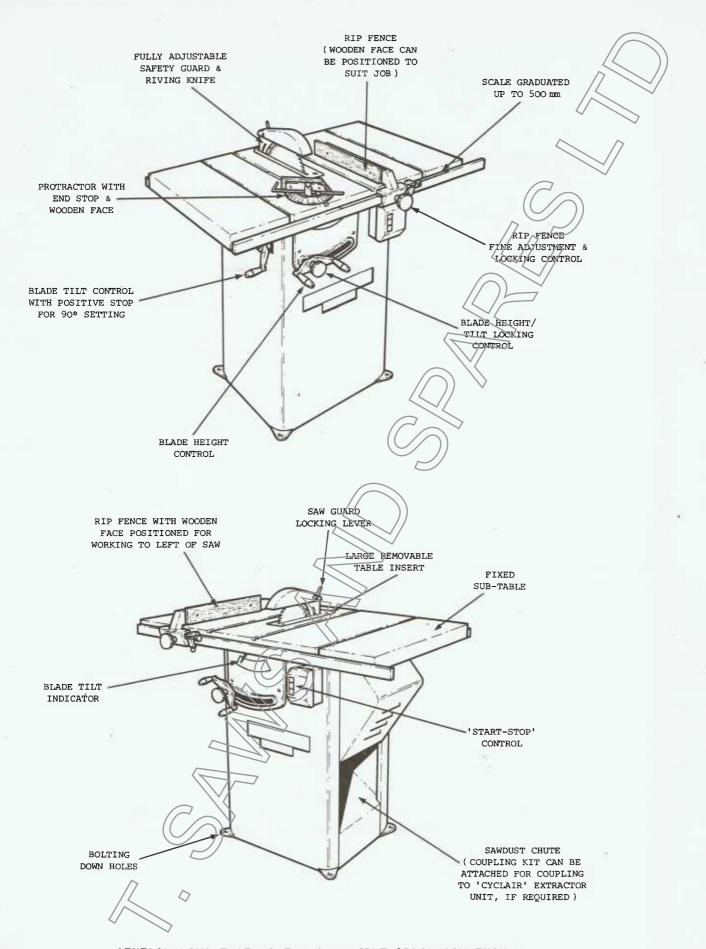




2E

PLAN

FOUNDATION PLAN OF MODEL TA255 TILT ARBOR SAWBENCH.



GENERAL LAYOUT OF MODEL TA255 TILT ARBOR SAWBENCH.

7

4

#### INSTALLATION.

Site the machine with adequate working space around it so as to ensure proper operation without obstruction.

Where possible, choose a position that offers minimum risk of the operators attention being distracted while using the machine. Take advantage of any natural light available and provide adequate artificial lighting over the whole working area.

The floor around the machine must have a level non-slip surface free of any feature which may create a hazard. The cabinet base is provided with four bolting down holes to accept MlO ( $\frac{3}{6}$ ") diameter bolts (not supplied). Before bolting the machine down, place packing under the feet to ensure that it stands firmly and without wobble.

#### CONNECTION TO THE ELECTRICITY SUPPLY.

IMPORTANT: Check that the electricity supply is suitable for the machine. At all times, ensure that the machine is isolated from mains supply before making any electrical connections or adjustments.

Fuse and cable recommendations given (see Chart ) are intended as a general

guide only, as local regulations and/or operating conditions may require alternative specifications to be adopted. Motor full load current may vary according to construction. The actual full load current is marked on the motor. Connect the machine to a fused isolator of suitable capacity (see Chart) using cable encased in conduit. Temporary connection (ie. for demonstrations) may be made with flexible cables, provided that it is protected from accidental damage.

MAINS SUPPLY	FULL LOAD AMPS	MIN WIRE SIZE mm²	MAX FUSE AMPS
220/240 VOLT 1 PHASE	7.3	1.0	20
220/240 VOLT 3 PHASE	3.9	1.0	15
380/440 VOLT 3 PHASE	2.25	1.0	15

To connect machine to mains supply, proceed as follows :-Remove cover of starter (two screws). For single phase supply, connect two supply leads to top terminals Ll & L3 of contactor (see Fig. 1) For three phase supply, connect three supply leads to top terminals L1, L2 & L3 of contactor (see Fig.2). An adequate earth continuity lead (yellow/green) must be connected to earth terminal of starter.

IMPORTANT: IN ALL CASES THE MACHINE MUST BE EFFECTIVELY EARTHED.

(CONTINUED ON PAGE 6).

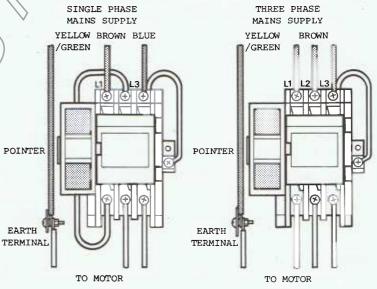


Fig.1.

Fig. 2.



#### CONNECTION TO THE ELECTRICITY SUPPLY (CONTINUED).

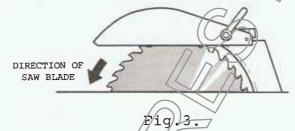
The contactor incorporates an overload release and it is essential that it is set correctly in order that the motor is protected against sustained overload. The pointer on the overload unit must be set to indicate the full load amps of the motor.

A three phase motor may run in either direction, therefore, check that leading edge of saw blade passes downward through the table (see Fig. 3). If necessary, interchange any two supply

leads to reverse motor rotation.

With all connections made, replace starter cover.

IMPORTANT: The service of a competent electrical engineer must be obtained if there is doubt on any point regarding electrical installation.



#### OPERATING SAFETY PRECAUTIONS.

BEFORE ATTEMPTING TO OPERATE THE MACHINE, BECOME FAMILIAR WITH THE CONTROLS AND OPERATING INSTRUCTIONS.

NO PERSON SHOULD OPERATE THIS MACHINE WITHOUT SUFFICIENT TRAINING AS TO ITS SAFE AND PROPER OPERATION, OR WITHOUT SUCH SUPERVISION AS MAY BE NECESSARY.

Before starting the machine, check that it is safe to do so. Make sure that all necessary adjustments have been completed and all guards are in position and secure. Never at any time make an adjustment to any part of the machine while the saw blade is in motion.

Never put hands near a moving saw blade. When ripping short lengths or making the last 300 mm (12") of a cut use a push stick to feed the work. A push stick should be made from strong straight grained hardwood of rectangular section with one end rounded to form a comfortable grip, and the other end notched to grip the workpiece.

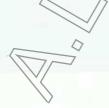
Do not operate the machine with loose cuffs, or with an exposed bandage on the hands. Should it be necessary to wear a tie, prevent the ends from hanging loose. For greater safety wear the type of tie that has a weak elastic neck band or a collar clip.

Always allow the saw blade to cut freely, this is particularly important when feeding warped or irregular timber which may not sit firmly on the table.

Use only a saw blade that is in good condition and suitable for the machine (see page 7) and for the work in hand. A saw blade that is distorted, cracked or has mis-shapen teeth is unsafe to use and should be discarded.

Wet or unseasoned wood may tend to close in and grip the saw blade. This may cause the wood to be flung towards the operator or cause the saw blade to distort due to the heat generated by friction. Caution is also necessary when cross-cutting to an end stop as the workpiece may cross-lock and jam the saw blade.

When feeding small or slender sections, particularly if knots are present, there is a risk of the saw blade snatching the workpiece and ejecting it with violent force. Jigs, push blocks and other devices which allow the operator to control the workpiece with safety should be used under these circumstances.



OPERATING SAFETY PRECAUTIONS (CONTINUED).

Take care not to strike the saw blade or guard by careless handling of the workpiece.

When a wobble saw, or moulding and grooving cutters are used, a Hold Down Unit with some form of tunnel guard should be used, and also a Special Table Insert (Optional Extras).

Any person, other than the operator, who is removing material from the machine should stand only at the delivery end of the machine. Under these circumstances the machine should be fitted with the Feed off Roller Assembly (Optional Extra).

Keep the machine table and work area free from tools and off-cuts.

There is considerable risk of accidents through tripping or stumbling due to off-cuts being allowed to accumulate on the floor. A convenient bin should be provided to enable off-cuts to be safely disposed of as fast as they are produced. Vertical stacks of timber should be kept away from the working area to avoid the possibility of long lengths of wood falling across the machine.

Always stop the machine before leaving it unattended. Where there is a risk of personal injury due to unauthorised use the machine should be made immobilised by means of a Lockable Switch or Tamper Proof Blade Guard Hood (Optional Extras) during the operators absence.

Dust Extraction Equipment (Optional Extra) should be used, particularly when some hardwoods are being sawn, to reduce pollution of the atmosphere. Some materials, such as asbestos, give off toxic fumes and dust when machined, and in such cases it is necessary to seek expert advice as to the method of dust extraction.

#### SETTING UP THE MACHINE.

Set the saw blade tilt upright (0° on tilt scale) and raise the saw blade to its maximum height. Remove saw guard, table insert and saw blade. Clean spindle nose and thread with a suitable brush and apply a few drops of very thin oil. Placing clamping washer (Item 87 - see Parts List) on spindle with dished side towards spindle nose giving maximum clamping area. Place suitable saw blade on spindle, ensuring that the central portion is free from dust and dirt. Place second clamping washer on spindle with dished side facing saw blade. Screw on spindle nut (Item 88) and clamp saw blade in position. To prevent spindle turning whilst this is being done, the tommy bar (supplied) should be inserted through the hole in the table so as to engage with the opposite end of the spindle. Undue force should not be used when tightening spindle nut.

The minimum size saw blade to be used on this machine is:-

152 mm (6") diameter.



SETTING UP THE MACHINE ( CONTINUED ).

The plate thickness of a parallel plate saw blade should be less than the thickness of the riving knife.

The riving knife should be set so that it is not more than  $12 \text{ mm} (\frac{1}{2}")$  from the blade teeth at table level (see Fig.4). The saw blade should not be more than 25 mm (1") higher than the riving knife.

Replace table insert and saw guard. At all times the guard should be set to cover the gullets of the teeth at some point (see Figs. 4 & 5).

Place workpiece on table and set saw blade to required height and tilt. The front of the guard should not be more than  $12 \text{ mm} (\frac{1}{2}")$  above the top of the workpiece (see Fig.4).

The rip fence has a wooden face which can be positioned to suit the job in hand. For rip sawing where there may be a tendency for the workpiece to splay out whilst being sawn, the wooden face should be set in the outboard position to give maximum clearance and thus avoid jamming (see Fig.6).

(see Fig.6).
For most other operations (especially moulding or grooving - see page 10) the wooden face should be set in the inboard position to give maximum support to the workpiece while sawing (see Fig.7). For working to the left of the saw blade the wooden face can be positioned on the right of the rip fence.

With wooden face correctly set, position rip fence as required and lock in place.

Fig.5 MAXIMUM CLEARANCE MAXIMUM SUPPORT ALLOWS WORKPIECE FOR WORKPIECE TO BE PARTED & DURING CUT AVOIDS JAMMING CENTRE CENTRE OF SAW OF SAW BLADE BLADE 0 WOODEN FACE WOODEN FACE IN OUTBOARD IN INBOARD POSITION POSITION Fig.6. Fig.7.

12 mm

Fig.4.

The protractor (standard equipment) is used to guide the workpiece whilst cross-cutting and permits the cutting of compound mitres. The scale, marked in degrees provides a useful guide for setting the required angle, but a test piece should be carefully checked for accuracy before proceeding further.

A Feed Off Roller Assembly is available (Optional Extra - see page 24), and this will considerably assist in the handling of large sheets.



#### MAINTENANCE.

The motor and saw spindle are mounted on sealed-for-life bearings and do not require further lubrication.

Periodically clean the spindle nose and thread with a suitable brush to remove any gummy deposits. Blow out the interior of the machine to clear all moving parts of dirt and dust deposits. Apply a few drops of very thin oil to spindle nose and all working surfaces.

Check the belt tension after the first five hours running and weekly thereafter. The belt tension is adjusted by slackening off 3 screws (Item 71) and rotating motor flange (Item 94) as required. A good guide as to the correct belt tension is that it should be possible to give the vee-belt a quarter twist midway between pulleys using thumb and forefinger only. The vee-belts are fitted as a matched pair and should only one belt fail, it is necessary to replace both belts (Part No. M22).

CAUTION: DO NCT OVER TENSION VEE-BELTS, as this may damage both the belts and the bearings.

### HOLD DOWN UNIT ( OPTIONAL EXTRA ).

The hold down unit is a device having leaf springs which hold the workpiece against the rip fence and down onto the table (see Fig.8). It is easily bolted directly to the top of the rip fence so that the bearing portion of springs are more or less over the saw centre.

The unit complies with the requirements of the Woodworking Machinery Regulations 1974 (U.K.) when fitted with pressure pads that form an effective tunnel type guard for rebating, tenoning, moulding and grooving. Suitable pressure pads can be easily made and fitted by the user to suit the nature of the work to be carried out.

The unit should be adjusted so that the leaf springs bear down on the top and side of the workpiece. Excessive spring pressure should be avoided as this makes it difficult to maintain a smooth and even feed.

IMPORTANT HOLD DOWN UNIT MUST ALWAYS BE USED WHEN GROOVING OR MOULDING.

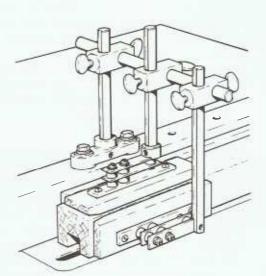
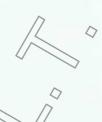


Fig.8.



### WOBBLE SAW ( OPTIONAL EXTRA ).

The wobble saw comprises of a robust saw blade, complete with a set of tapered washers (see page 26). By adjusting the relative position of the washers the saw blade may be made to 'wobble', and thus cut a groove (see Fig.9). Both blade clamping washers (Item 87) must be removed from the saw spindle before the wobble saw assembly can be screwed on. To adjust the amount of wobble (and thus the width of the groove), slacken off the slotted locking ring and whilst holding the saw hub stationary, rotate the saw blade together with the two immediate washers, and tighten locking ring.

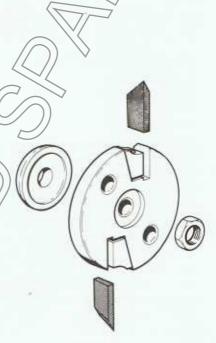
NOTE: The wobble saw MUST be used in conjunction with the Hold Down Unit (see page 9) and the Special Table Insert (Optional Extra - see page 26).

#### MOULDING & GROOVING BLOCK (OPTIONAL EXTRA).

The moulding and grooving block consists of a circular steel block with provision for holding a pair of specially shaped cutters (see Fig.10) Various patterns are available for moulding, trenching, rebating, tongueing and grooving (see page 26).

To set up the block place it on the saw spindle with one of the clamping washers (Item 87) behind it and the locking wedges leading. The second clamping washer is omitted and the block is secured to the spindle by a standard nut which seats directly in the centre recess Position one cutter in the block with its clearance angle behind the cutting edge. Raise saw spindle so that when the block is rotated, the edge of the cutter will just touch a straight-edge laid across the table insert opening. Without moving the saw arm, position the second cutter in a like manner, ensuring that the two cutters are in line (see Fig. 11). Check locking screws for tightness before using the block. All cutters are supplied in matched pairs for both form and weight. It is most important, therefore, that both cutters are re-sharpened in an identical manner as even a small difference in weight will set up considerable vibration when the block is in use. In view of this, it is recommended that the job of re-sharpening moulding cutters be entrusted to specialists.

NOTE: The moulding and grooving block MUST be used in conjunction with the Hold Down Unit (see page 9) and the Special Table Insert (Optional Extra - see page 26).



Fi/g.9

Fig. 10.

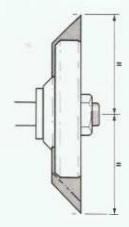


Fig.ll.



SAW BLADES.

NOTE: The most important part of the machine is the saw blade itself. It is unsafe to use a saw blade that is in bad condition or of the wrong type, and is bound to result in wasted time and material.

A saw blade should be re-sharpened as soon as the teeth lose their keen points, and persistent attempts to force timber through a blunt saw blade will cause the blade to distort through overheating, and may damage the motor and bearings. Such distortion may become permanent and in this event, the saw blade is unfit for further use and should be discarded.

If it is not possible to re-sharpen the saw blade on the premises where it is being used, alternative saw blades should be at hand to prevent the machine from standing idle.

#### RIP & CROSS-CUT SAW BLADES.

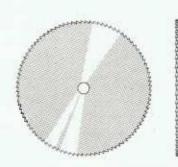
The rip tooth saw blade, as its name implies, is used for rip sawing timber lengthwise, ie. with the grain. It will of coarse, cut across the grain, but the finish tends to be ragged. The teeth have fairly coarse pitch and positive hook. The amount of hook, or front rake is approximately 250 for soft woods, decreasing to 15° or even 10° for hard woods. The hook of the blade is defined as the angle suntended by the front edge of the tooth to a radial line touching its tip. Whilst maximum amount of hook is desirable for fast cutting, there is a tendency for the teeth to 'hammer' in hard woods and in knots. The clearange angle is the back slope of the tooth, and is measured to a line drawn tangential from the tip. This angle is usually around 15° but sometimes, however, it may be increased to 25° for very soft woods. Although the maximum clearance angle and front rake make for easy penetration into soft woods, they tend at the same time to weaken the points of the teeth, and teeth weakened in this fashion will be found to blunt very easily. The rip saw blades as received from the manufacturer will have the teeth shaped to meet

average conditions, and this shape should not

drastically be modified without good reason.



RIP TOOTH SAW BLADE



CROSS-CUT SAW BLADE

Spring set saws have the clearance angle filed at an angle to the axis of the saw blade and this is called top bevel. Soft woods require a top bevel of 15°, this being reduced to around 5° for very hard woods. The top bevel has the effect of giving a shearing action to the tooth and tends to produce a cleaner cut. It must, of coarse, be noted that the top bevel slopes outwards to the tip of the tooth according to which way the hook is set, thus the top bevel will run the same way on alternate teeth only. Front bevel to the teeth should be kept to the minimum and should certainly not exceed 5° for hard woods.

Cross-cut saw blades differ mainly from rip saw blades by their negative hook of up to 30°. They are intended for sawing across the grain and also for cutting plywood, blockboard and other similar materials. They are usually spring set with a clearance angle of up to 60°. Top and front bevels are usually around 15°, but less will be required on very hard woods.



### RIP & CROSS-CUT SAW BLADES (CONTINUED).

Only the periphery of the saw blade should be in contact with the workpiece, and this condition is met on rip saw blades by spring setting, or swaging the tips of the teeth so that they protrude beyond the face of the saw blade. With spring setting the tips of the teeth are bent outwards, either by means of a saw set hammer blow upon a special anvil, adjacent teeth being set in the opposite direction. The set should be made tangential and from a position not more than one third of the way down from the tip of the tooth. It should be remembered that a saw blade with one or two overset teeth will produce ugly score marks on every piece of wood it cuts. The amount of set required for general purposes is approximately 0.25 mm (.010") each side of the saw blade, but the golden rule is to apply the least amount which prevents the saw blade from binding in the cut. Some woods by their nature tend to be woolly or exude resin, and extra care must be allowed in these cases, but it must be borne in mind that the wider the kerf, the more power required to drive the saw blade To avoid an accumulation of resin building up in the saw blade, the blade should be frequently wiped clean with a rag soaked in petrol or other switable solvents.

NOTE: It is incorrect to set the teeth after the sharpening operation.

#### SHARPENING SAW BLADES.

General purpose rip and cross-cut saw blades are usually made from carbon steel and these may be easily re-sharpened by hand.

Before sharpening, ensure that the saw blade runs true by stoning the teeth. This is done by first lowering the saw blade into the machine until it is below the table. Place a coarse emery stone over the table slot and

it is below the table. Place a coarse emery stone over the table slot and very gently raise the saw blade until the teeth just make contact with the emery stone. Remove emery stone, and start the machine. Slide the emery stone over the tips of the saw blade until a witness mark appears on every tooth.

Remove the saw blade from the machine and clamp in a suitable vice. File the top bevel of each tooth in the direction of the set until the witness mark is just removed.

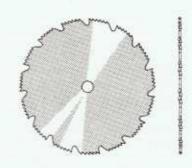
It may be necessary to dress the front bevel, but take care not to remove more of the tooth profile than is required and to dress all teeth equally.

WARNING: Take extra care when stoning saw blades. It is advisable to wear eye protection and use an emery stone large enough to be held down firmly on the table by both hands.

#### NOVELTY COMBINATION SAW BLADES.

Novelty combination tooth saw blades as the name implies, combine the rip tooth and cross-cut pattern of teeth. These saw blades are most suitable for cross-cutting and mitreing only, giving a slightly easier feed than the standard cross-cut saw blade, but do not produce as good a finish as the hollow ground novelty combination saw blades.

The flat ground novelty combination saw blade is made from carbon steel and can therefore be re-sharpened by hand.



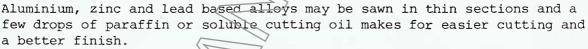
-NOVELTY COMBINATION SAW BLADE

Hollow ground saw blades have their faces relieved by grinding to produce the necessary working clearance, but the shape of the tooth may vary considerably according to the purpose for which it is intended.

One type has the teeth of the novelty combination pattern and is called a mitre or planer blade. This saw blade is used mainly for cross-cutting, or cutting thin sections and leaves a surface equal to a planed finish. It should be noted, however, that the planer blade is not intended as a substitute for the planing machine.

Hollow ground saw blades are also available for cutting a wide range of light alloys and plastics. Quite often the correct requirements for sawing these materials may only be determined by experiment, but the following notes should prove a useful guide.

For maximum cutting speed, saw blades of the greatest possible tooth pitch should be used, but it must be ensured that there are at least two teeth in engagement. On harder materials it will be necessary to have more teeth in engagement in order to avoid the blade chattering in the cut. A fine pitch saw blade is essential for cutting very thin sections, and the height of the saw blade should be reduced to avoid chipping the underside of the material. Heavier sections of some plastic materials will cut much more easily if the saw blade is lubricated with soap, or soapy water.



Due to the small working clearance of hollow ground saw blades there is a marked tendency for them to overheat once the teeth have lost their fine edge, and it is important, therefore, that these blades are frequently re-sharpened.

When saw blades of other than standard gauge thickness are used it may be necessary to fit a special riving knife of suitable thickness.

It must be borne in mind that the machine is designed primarily for cutting timber, and consequently its spindle speed is usually too great for sawing hard or abrasive materials.

A smaller diameter saw blade will give a lower peripheral speed. In addition, a smaller diameter saw blade is much stiffer due to its reduced diameter, and this is an important factor in preventing blade wander.



HOLLOW GROUND CROSS-CUT SAW BLADE



#### CARBIDE TIPPED SAW BLADES.

Due to industries heavier demands in recent years, the tungsten carbide stellite tipped tooth saw blade has become more popular than ever for normal woodworking operations, hardwoods and abrasive materials. For this reason every Model TA255 Tilt Arbor Sawbench is fitted with a carbide tipped saw blade.

The carbide tipped saw blade supplied with your machine is a 10" diameter x  $\S$ " bore x 24 teeth x .090"/.095" kerf x .067" body. This saw blade is mainly for good fast feed rip sawing, and also suitable for cross and panel cutting where finish is not important. A 10" x  $\S$ " x 40 teeth saw blade is suggested for general purpose cutting. This will

cut all natural and man-made material at reasonable feed, speed and finish, whilst a 10" x %" x 60 teeth saw blade should be used for plastic faced panels and thin sheet materials, where a good fine finish is required.

CARBIDE/TIPPED

SAW/BLADE

It is important when re-ordering carbide tipped saw blades that the blade body thickness is maintained to .067" (1.6 mm). The use of a thicker blade body would mean that a thicker riving knife would be necessary.

For specialised work, other carbide tipped saw blades are available.

To ensure that maximum production yield is maintained, care and maintenance of your carbide tipped saw blade is of paramount importance.

#### CARE:

Never place a carbide tipped saw blade on metal, concrete or other abrasive surfaces. When not in use, the saw blade should be returned to its original packing or a specially prepared storage box.

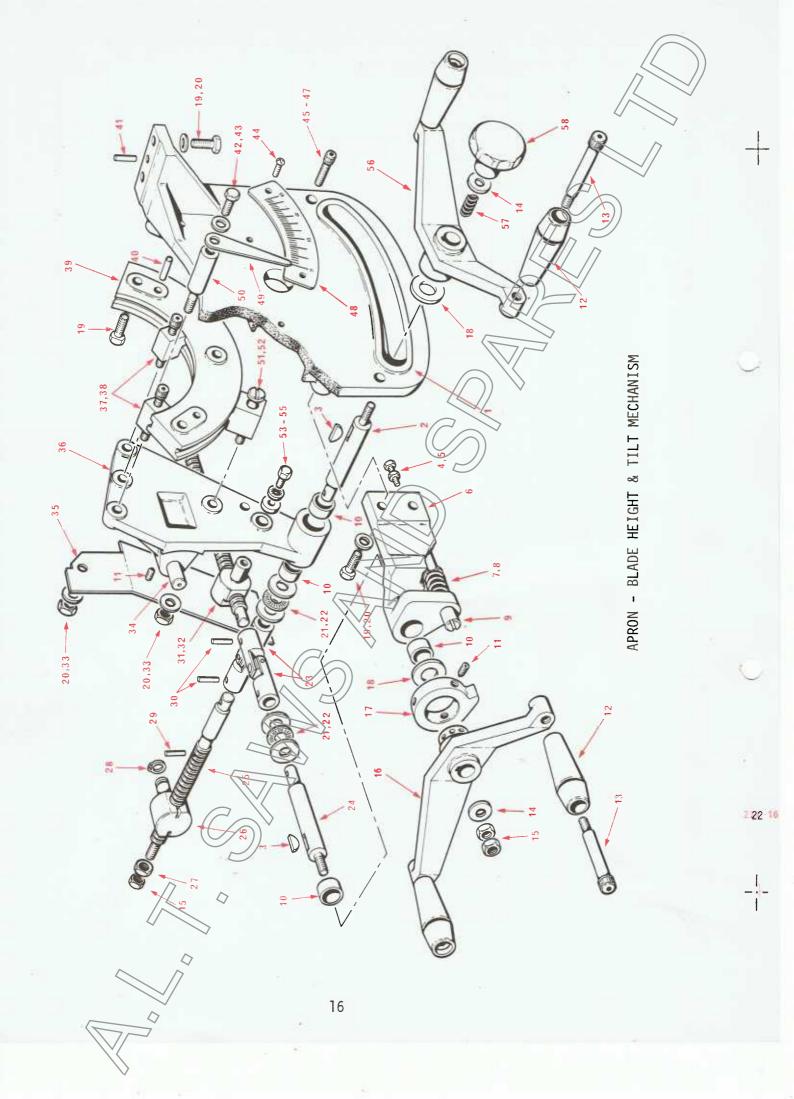
Always keep the saw blade clean and free from timber sap and other deposits.

#### MAINTENANCE:

The most important part of saw blade maintenance is the re-grinding or sharpening. A carbide tipped saw blade should never be allowed to become dull; this could cause friction heat and warp or buckle the saw blade. In which case the saw blade is rendered useless and should be discarded. Re-grinding or sharpening is best carried out by professionals. Your local saw doctor will be pleased to help and advise, or return the saw blade to STARTRITE Service Department who will offer a speedy and efficient service.



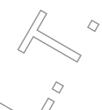
	APRON	- BLADE HEIGHT & TILT MECHANISM - ASSEMBLY	No.SP1770
ITEM	PART N	NUMBER AND DESCRIPTION	No. OFF
1	1736	Apron	1
2	1788	Shaft	1
3		Key	2
4		Hex. Hd. Screw	
5 6	2000	Hex. Nut	1
7	2069 2072	Tilt Shaft Bracket	1
8	2072	Compression Spring Circlip External	1 1
9	2070	Positive Stop Pin	
10	20,0	Compo Bush	4
11		Soc. Set Screw	/7 2
12		Handle	// 4
13		Shoulder Screw	4
14		Std. Washer	2
15		Hex. Locknut	3
16	5532	Handle	1
17	2071	Positive Stop Collar	1
18	1798	Special Washer	2
19 20		Hex. Hd. Screw Std. Washer	9
20	1795	Special Washer	10 4
22	1755	Needle Thrust Race	2
23	SP212	Universal Joint	2
24	1790	Shaft	1
25	2013	Feed Screw L.H.	1
26	1814	Trunnion Nut L.H.	1
27	5634	Special Nut	1
28		Circlip External	1
29		Mills Pin	1
30 31	1791	Mills Pin Feed Screw R.H.	4
32	5735	Trunnion Nut R.H.	1 1
33	3733	Hex. Nut	4
34	1812	Pivot Pin	i
35	5651	Deflector Plate	1
36	1738	Tilting Arm	1
37	1777	Internal Shoe	2
38		Soc. Hd. Cap Screw	2
39	1737	Segment	1
40 41		Std. Dowel Spring Dowel	2 2
42		Hex. Hd. Screw	1
43		Std. Washer	1
44	(=	Rd. Hd. Screw Recessed	2
45		Soc. Hd. Cap Screw	4
46	8	Self Locking Nut	4
47		Std. Washer	4
48	3336	Tilt Scale	1
49	3338	Pointer	1
50	1793	Pointer Support	1
51//	1776) 1794	External Shoe	1
5/2/	1/34	Eccentric Screw	1
	~		(CONTINUED)

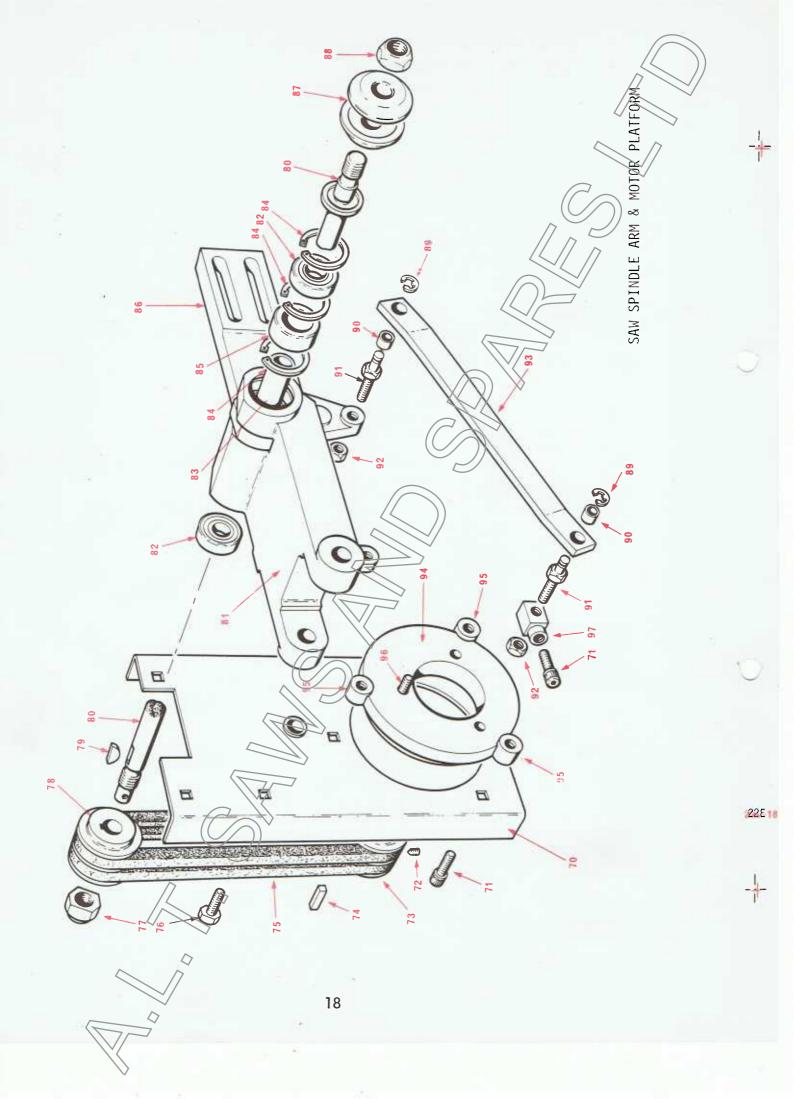


	APRON -	ASSEMBLY No.SP177C - CONTINUED	
ITEM	PART NU	MBER AND DESCRIPTION	No. OFF
53 54 55	5736	Hex. Hd. Screw M5 x 10 mm Shakeproof Washer M5 Washer	1 1 1
56 57 58	5532/1 1499 5130	Handle Compression Spring Handknob %" Whit	1 1

SAW SPINDLE ARM & MOTOR PLATFORM - ASSEMBLY No.SM1195

ITEM	PART NU	UMBER AND DESCRIPTION	No.OFF
70 71 72	SM229	Motor Platform Soc. Hd. Cap Screw Soc. Set Screw	1 4 1
73 74	1938 1150	Motor Pulley Key	1 1 2
75 76 77		Vee-Belt Hex. Hd. Screw Self Locking Nut	3 1
78 79	6186	Pulley Key	1
80	1935	Saw Spindle	1
81 82	2200	Saw Arm Ball Bearing	1 2
83 84	1937	Spacer Tube	1 3
85	5109	Circlip Internal Bush	1
86	6160	Riving Knife Arm	1
87 88	1936 1190	Clamping Washer Spindle Nut	2 1
89	1130	Circlip External	2
90		Compo Bush	2
91	2151	Pivot Pin	2
92	2202	Hex. Nut	2 1
93 94	2202 1775 —	Tie Bar Motor Flange	1
95	1799	Motor Flange Clamp	3
96	1,33	Hex. Hd. Screw	3
97	2/47	Rivot Block	1

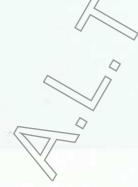


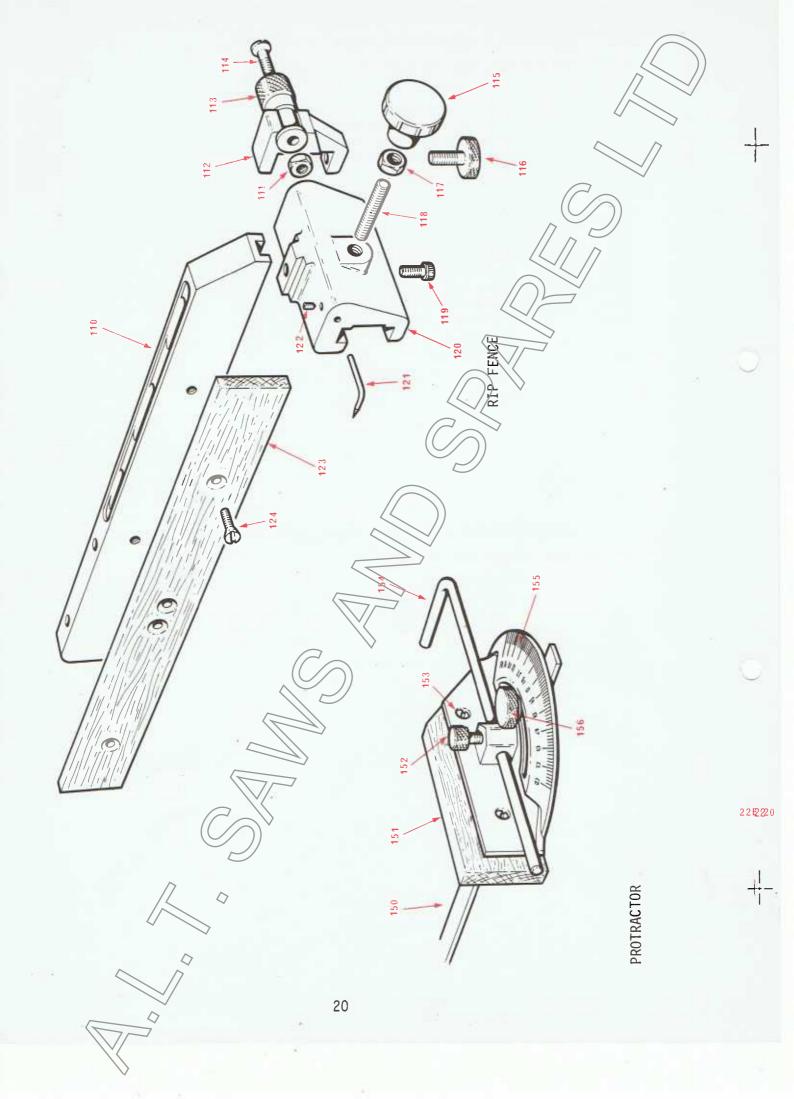


#### RIP FENCE - ASSEMBLY No.SM1201 PART NUMBER AND DESCRIPTION ITEM No.OFF Fence Body Hex. Nut Fine Adjustment Bracket Fine Adjustment Thumb Nut C'sk. Hd. Screw Slotted ${\tt Handknob}$ Thumb Screw Hex. Nut Stud Soc. Hd. Cap Screw Fence Bracket Pointer Soc. Set Screw Wooden Face Place C'sk. Hd. Screw Slotted

### PROTRACTOR - ASSEMBLY NO. SM1538

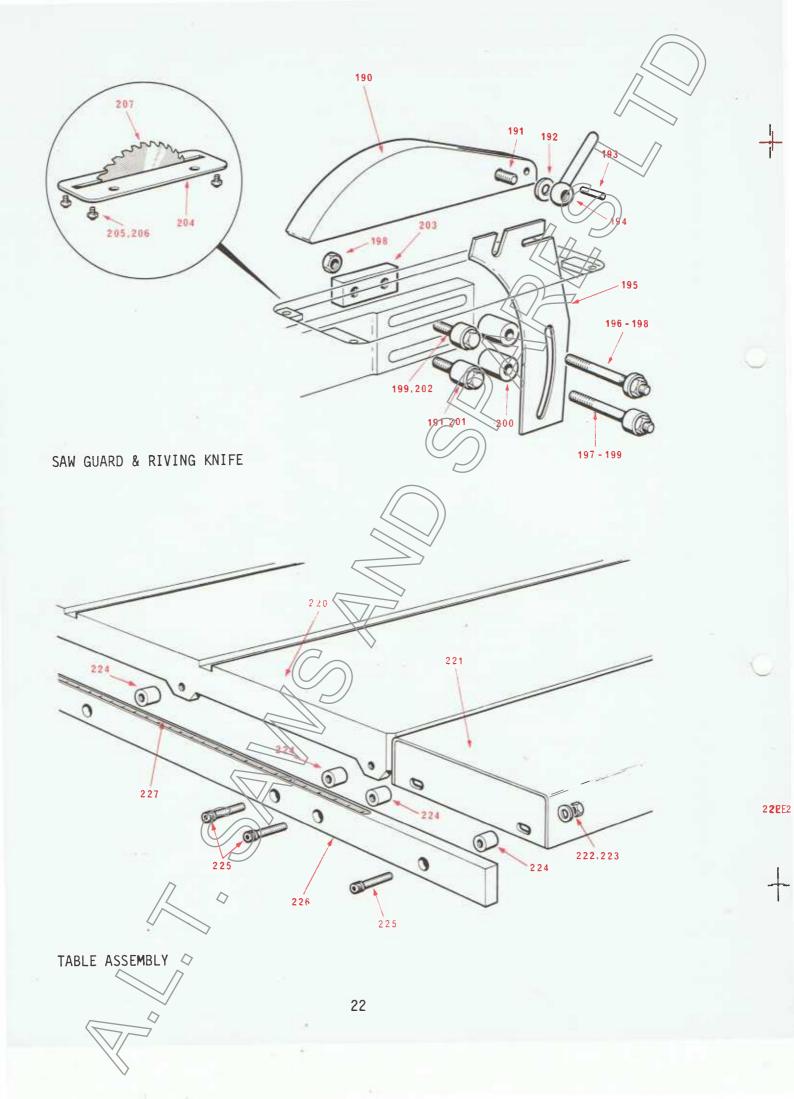
ITEM	PART N	NUMBER AND DESCRIPTION	No.OFF
150	2145	Tenon Strip	1
151	6204	Wooden Face Plate	1
152	126	Thumb Screw	1
153		C'sk. Hd. Screw	2
154	212	End Stop	1
155		Protractor	1
156	6234	Thumb Screw	1





	SAW GUARD & RIVING KNIFE - ASSEMBLY No.SM1203	
ITEM	PART NUMBER AND DESCRIPTION No.C	FF
190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205	5104 Guard	L L L L L L L L L L L L L L L L L L L
206 207	Hex. Nut Saw Blade  TABLE ASSEMBLY	1
ITEM	PART NUMBER AND DESCRIPTION No.0	OFF
220	6152 Table	L

Table Sub-Table Hex. Nut Std. Washer Fence Bar Spacer Soc. Hd. Cap Screw Fence Bar Scale - Metric NOT ILLUSTRATED Back Rail Soc. Hd. Cap Screw Hex. Nut Std. Washer



#### OPTIONAL EXTRAS & ACCESSORIES

ITEM PART NUMBER AND DESCRIPTION

'Cyclair' Extractor Unit - 1 Phase 'Cyclair' Extractor Unit - 3 Phase

251 SM1054 Lower Extractor Coupling Kit, enables Extractor Unit to be coupled directly to sawbench (rubber connecting sleeve and elbow not shown).

SM926/1 Feed Off Roller Assembly. Complies with the requirements of the Woodworking Machinery Regulations 1974 (U.K.), and gives an additional working area of 1040 mm (41") wide x 1145 mm (45") long.

253 SM928/1 Tamper Proof Blade Guard Hood, complete with mounting bracket, lock and keys.

#### NOT ILLUSTRATED:

SM881/1 Key Operated Switch

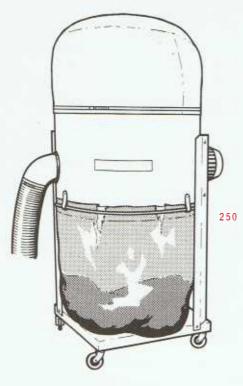
SM1066 Fused Isolator

SM1067 Trailing Foot Switch

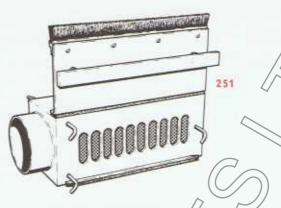
SM1068 Electrical Interlock for cabinet base cover.

SM1069 Non-Fused Isolator





'CYCLAIR' EXTRACTOR UNIT

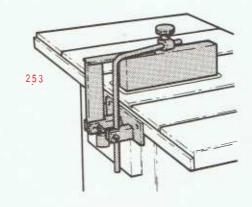


LOWER EXTRACTOR COUPLING KIT





FEED OFF ROLLER ASSEMBLY



TAMPER PROOF BLADE GUARD HOOD

22E·24 22E

#### OPTIONAL EXTRAS & ACCESSORIES

ITEM	מא שמאמ	MBER AND DESCRIPTION
TIEH	PART NO	MADER AND DESCRIPTION
260	SM833	Hold Down Unit. Complies with the requirements of the Woodworking Machinery Regulations 1974 (U.K.)
261		Safety Pattern Moulding & Grooving Block 100 mm (4") dia
262		Moulding Cutters for above. Supplied in pairs, quote Pattern No. when ordering.
263	SP254	Wobble Saw 4" - 5" capacity, complete with screwed and graduated collar, 'C' spanner and tommy bar.
264	6168	Special Table Insert (MUST ALWAYS be used with Wobble Saw and Moulding Block).

#### SAW BLADES

8", 9" & 10" Dia Rip, Cross-Cut or Novelty Combination saw blades for cutting wood.

8", 9" & 10" Dia Hollow Ground Cross-Cut and Mitre saw blades for accurate clean end grain cutting.

8" Dia Hollow Ground Altoy Steel saw blades for cutting plastic - 5, 8 or 10 T.P.1.

8" Dia Hollow Ground Carbon Steel saw blades for cutting thin plastic sheets - 16 T.P.I.

8" Dia Hollow Ground High Speed Steel saw blades for cutting plastics and light alloys - \frac{1}{8}", \frac{1}{4}6" or \frac{3}{8}" pitch.

8", 9" & 10" Dia Carbide Tipped saw blades for cutting industrial plastics, abrasive hardwoods, hardboard, chipboard, non-ferrous metals, graphite etc.
8" Dia - Available in 16, 20, 32, 36, 48 & 60 teeth
9" Dia - Available in 24, 36, 40, 48 & 60 teeth
10" Dia - Available in 20, 32, 40 & 60 teeth

