



Quality for the world

FC 300 & BA / FC 350

MITRE SAWS



OPERATING & TECHNICAL MANUAL

04 / 2002

Cassese / Communication

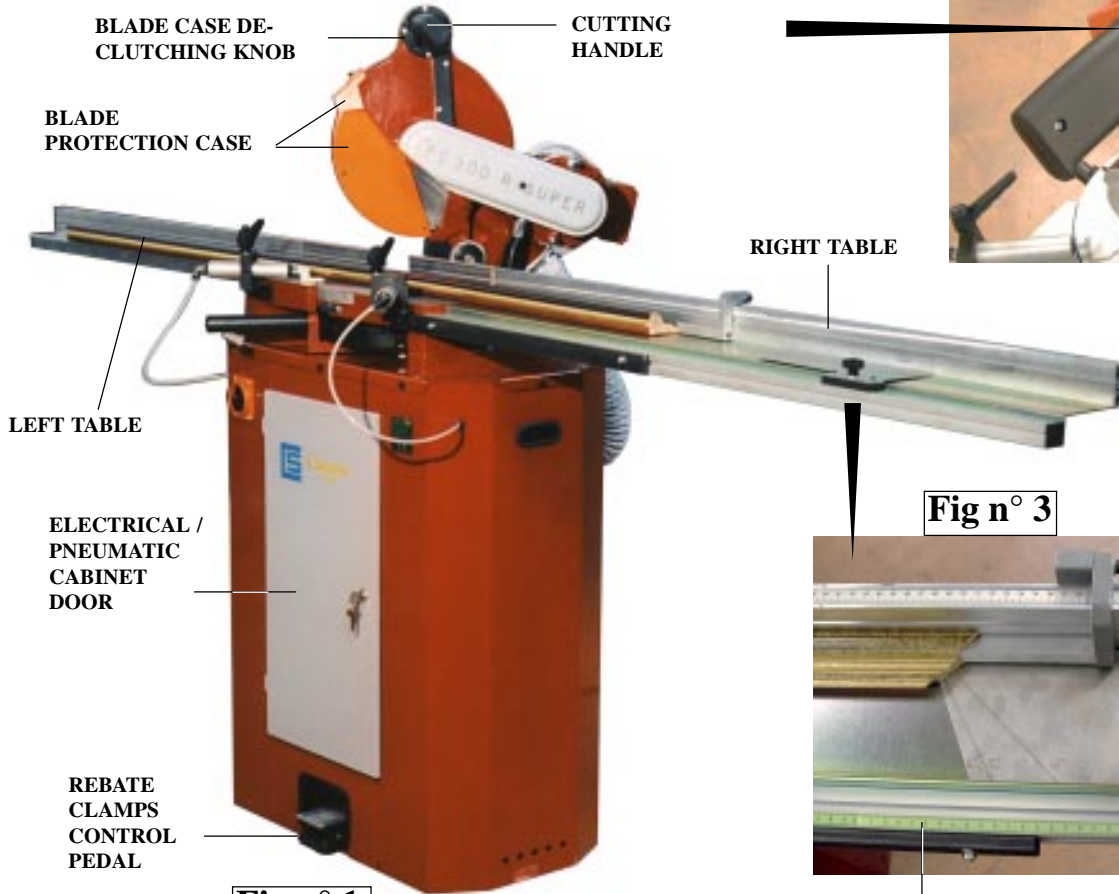


Fig n° 1

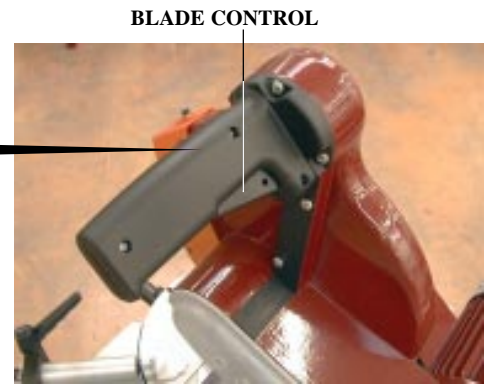


Fig n° 2

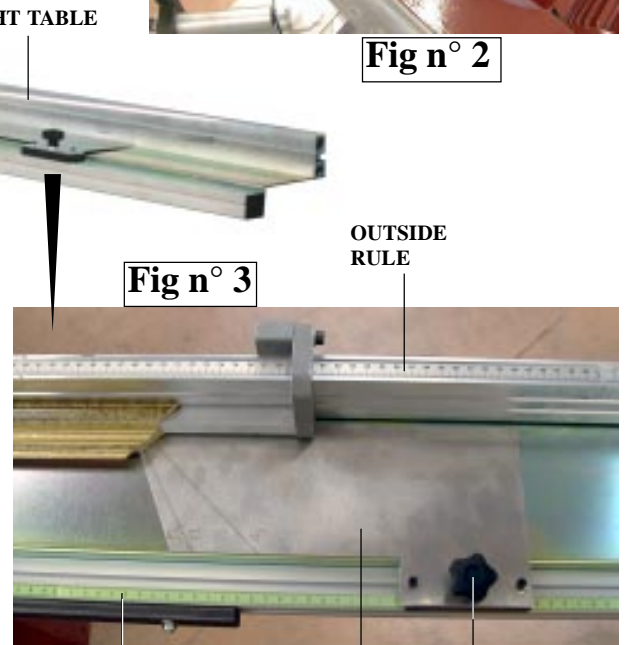


Fig n° 3

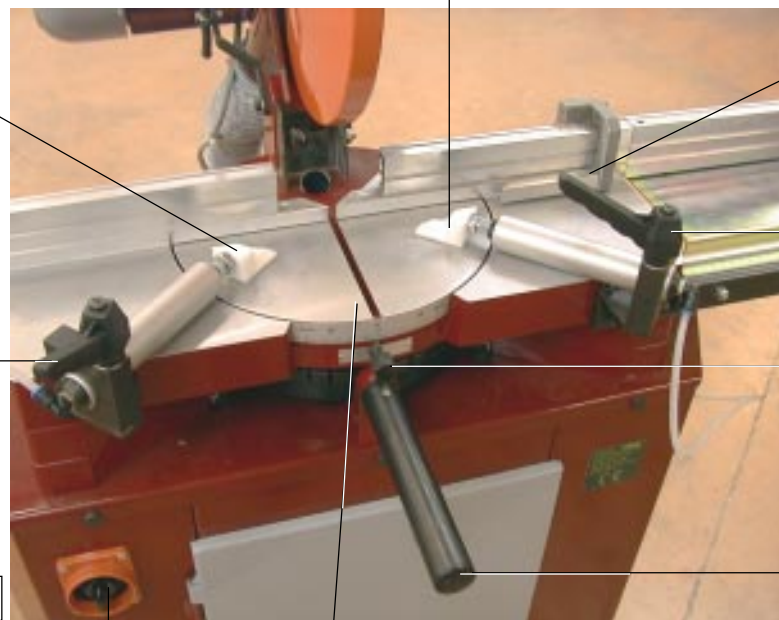


Fig n° 4

MAIN ON/OFF SWITCH

GRADUATED ROTATING BASE

FC 300

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INTRODUCTION

You have just purchased an FC 300. Congratulations on your choice and thank you for your confidence in our product.

The FC 300 saw is a machine for cutting mitres in mouldings made from solid or reconstituted wood, whether bare or coated (paint, varnish, plastic coating, paper or metal leaf [gold, bronze, aluminium, etc.]).

It is not suitable for:

- Mouldings which lack a 90° shoulder at least 5 mm high,
- Metal sections,
- Thin extruded plastic sections (joints, seals, etc.).

This machine is built to satisfy safety and hygiene requirements. No modifications may be made to pneumatic or electric components, factory fitted guards must not be removed and the safety devices must not be modified.

The FC 300 can only be used by one operator at a time.

ACCESSORIES SUPPLIED WITH THE MACHINE

This machine is packed in a crate containing:

- 1 right extension with measuring system and stop
- 1 left extension
- 1 box of accessories comprising:
 - 1 operating manual / 1 x 8 mm allen key (for removing the blade)
 - 1 each of 6 mm, 5 mm, 4 mm and 3 mm allen keys (for fitting the extensions)
 - 1 quick release female air connector for the male one that is on machine / 1 quick release US male connector / 1 hose connector

TECHNICAL SPECIFICATIONS

(valid since machine serial # 1547)

| | | |
|------------------------------------|---|---|
| CUTTING WIDTH | : | FC 300 & BA Minimum: 5 mm (3/16")- Maximum: 95 mm (33/4") FC 350 Minimum: 5 mm(3/16") - Maximum: 115 mm (41/2") |
| CUTTING ANGLES | : | Cutting angle index : 0° -15°- 22°30 -30°- 45° (other graduations by locking the plate) |
| BLADE DIMENSIONS | : | Outside diameter 300 mm(approx.12"); bore diameter 20 mm.(approx.3/4") |
| BLADE PART NUMBERS | : | Carbide blade: 96 tooth LR (FC 300/300BA) Item # Z 2978 108 tooth LR (FC 350/350BA) Item # Z 1570 |
| MEASUREMENTS | : | Direct measurement at the slot base, Outside measurement (in mm) |
| OVERALL DIMENSIONS | : | Length 2900 mm(116"); Depth 850 mm(34"); Height 1550 mm(102") |
| Net weight | : | 120 kgs |
| POWER SUPPLY | : | 220V single phase 16 amp |
| MOTOR | : | Saw drive motor: 1.5 hp -3000 rpm. Drive by ribbed belt, brake. |
| OTHER VERSIONS/ OPTIONS | : | FC 300 BA model: for cutting aluminium or wooden mouldings 110 V model. Measuring system in inches. Remote control (clamps tighten/ release) Item code Z 2898 |

WARRANTY

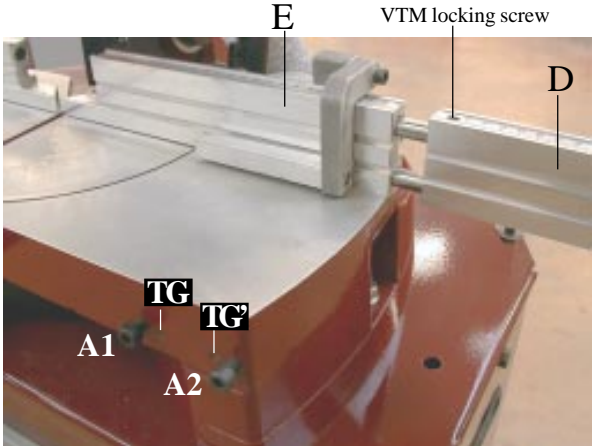
The FC 300 is covered by a 1 year parts and labour warranty, against manufacturing defects. Wearing parts and those damaged by failure to respect the operating instructions in this manual are excluded from this warranty.

INSTALLATION AND STARTING UP

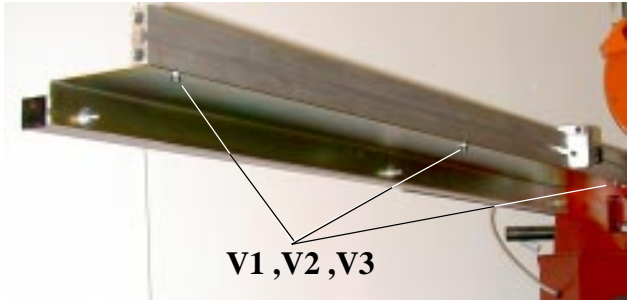
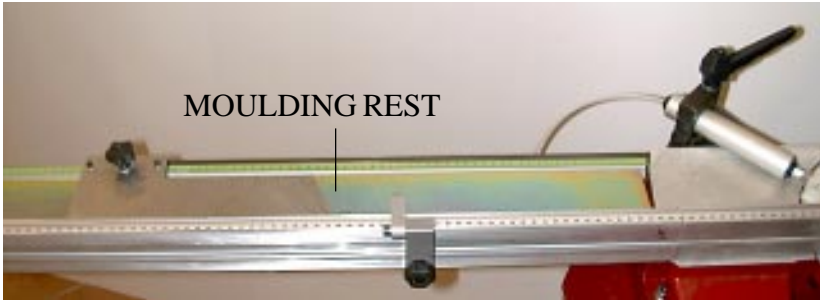
Sufficient space must be left around the machine for free movement and access for maintenance. It should be placed on a stable and practically flat floor.

As the work table height is 1030 mm (41 1/4") from the floor it may be necessary to provide duck boards for small operators.

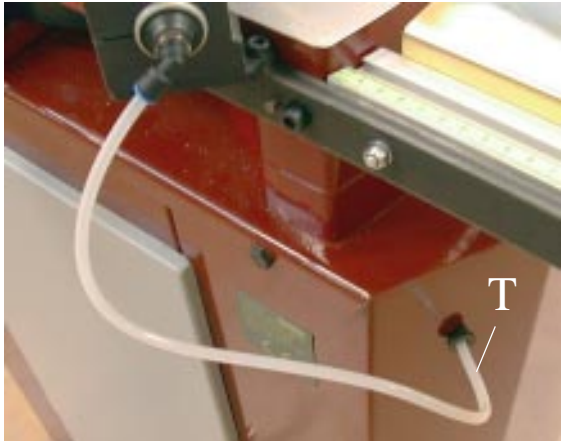
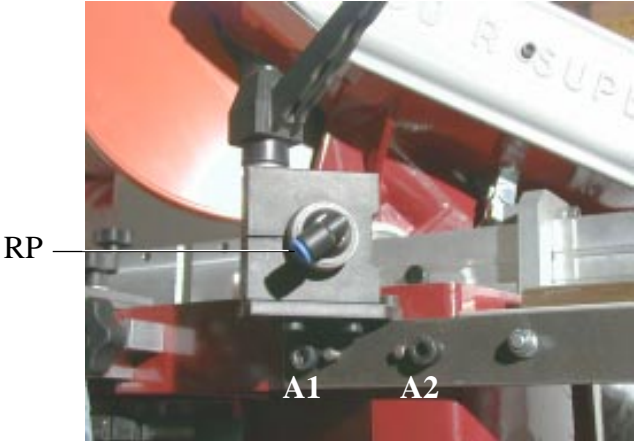
Fitting the measuring table (right arm)



Fit bar D inserting it fully into the two pins protruding from part E. Check that the outside measurement graduation is correct at the join between these two parts. If not, make sure that there is no foreign matter between the two contact faces. Tighten the VTM screw with the 3 mm allen key supplied. Remove screws A1 (nut in the base) and A2 with the 6 mm allen key supplied. Remove the 3 screws (V1, V2 and V3) + the moulding rest washers with the 5 mm allen key supplied.

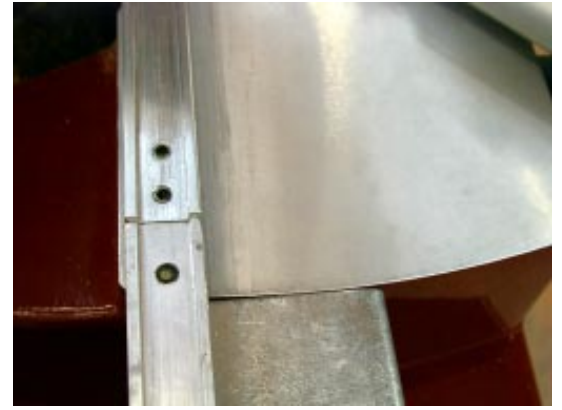
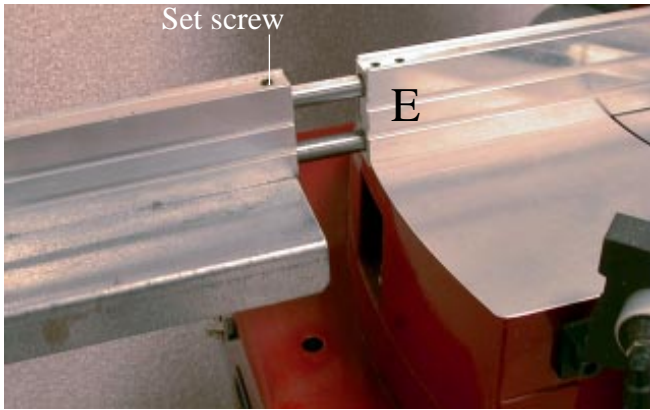


Place the moulding rest in front of the machine with the rebate clamp to your left. Insert pins G1 and G2 of the moulding rest in holes TG and TG' in the machine base. Tighten screws A1 (nut) and A2, and then V1, V2 and V3.



Fix pipe T in the pneumatic union RP on the right rebate clamp .

Fitting the left arm



Insert the left table fully into the two pins protruding from part E, then tighten the set screw with the 3 mm allen key supplied.

Electrical connections

The operator must connect the supply cable to a source complying with current regulations, and protect the machine with a fuse:

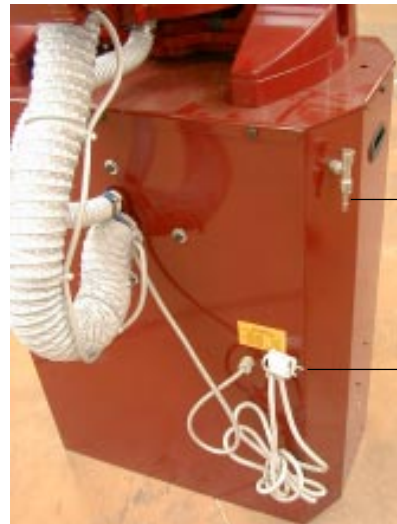
12 amps A.M. for 220 volts single phased.

Pneumatic connections

Install a supply pipe with an inside diameter of 8 mm and able to withstand the maximum air pressure of the source.

Source specifications:
non lubricated dry air

Machine connection:
SEE PAGE N° 10.



Pneumatic union

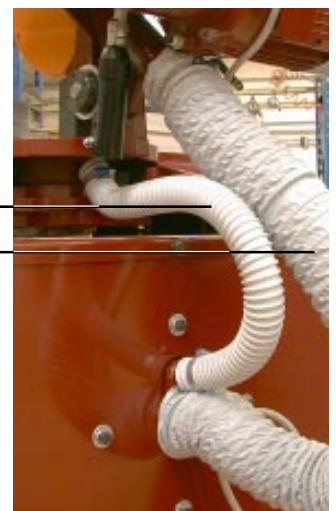
Electrical socket

Dust Extractor connection

Connect the bottom suction pipe (stored in the machine) and the top extractor pipe (fixed to the machine by the top hose clip).

IMPORTANT

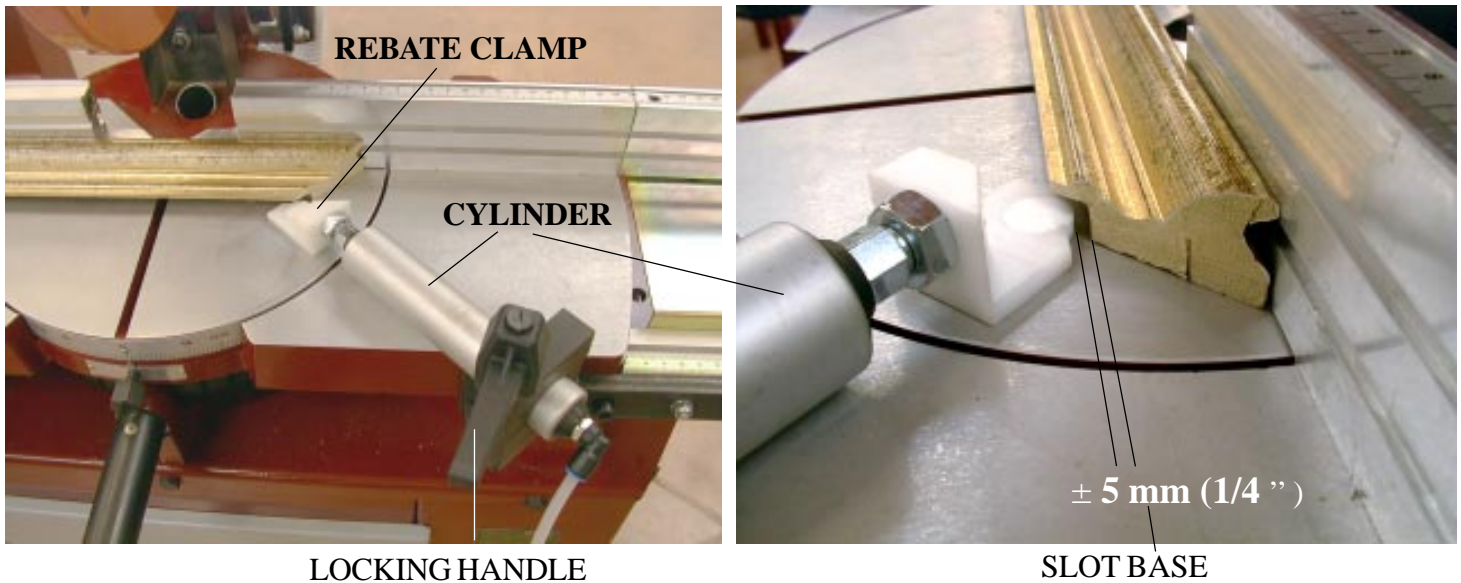
The sawdust is collected in a cloth bag fitted to the extractor outlet inside the machine. Remember to empty it regularly.



USE

ADJUSTING THE REBATE CLAMPS

Connect your FC300 to the compressed air supply (see page 3).



Press the pedal. The rebate clamps move to the release position.

Fit the moulding to be cut onto the left table. Loosen the left cylinder locking handle and adjust it to obtain a space of about 5 mm (1/4") between the slot base and the end of the clamp. Adjust the cylinder(s) holding it (them) against the machine table so that it (they) do(es) not lift the moulding when it (they) is (are) tightened. Tighten the locking handle. Repeat the operation for the right cylinder.

IMPORTANT: When cutting the rebate clamp must always be in contact with the rebate and it must never touch the cut part of the moulding. If this does happen, loosen the right cylinder and move it to the rear. The pressure will be provided by the left pressure clamp only.

1st CUT (preparation of the moulding)

The moulding must have a clean mitre cut before the start of measurement operations.

The air and electricity supplies are connected to your FC 300.

Switch on the main switch. The extractor starts operating.

Press the rotating base trigger (see page 5) and position the base to the left at the desired angle (see angle equivalence table on page 6).

The 45°, 30°, 22°30', 15° and 0° angles are indexed. For other cutting angles fix the plate with the locking screw - see fig no 4.

We do not recommend using this screw for the indexed angles.

Hold the trigger down and do not release it until you reach the position.

Grasp the cutting knob while pressing the switch fully home.

The blade will start turning. At the same time press the blade guard declutching knob with your thumb (BDC fig no 5).

Pull the handle and make the cut.

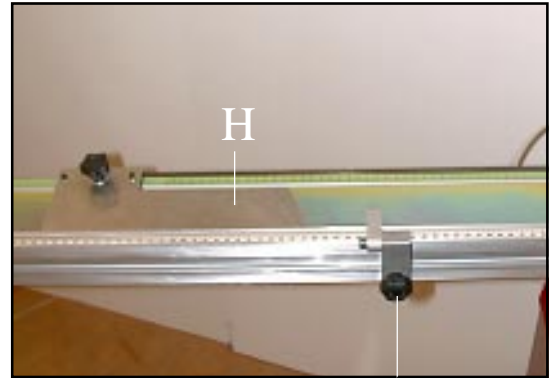
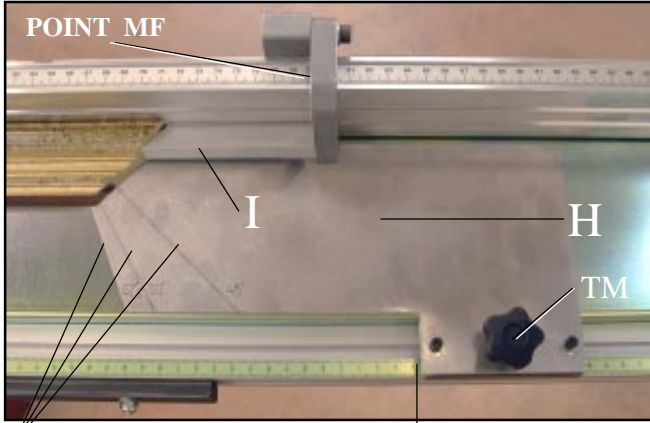
As a safety measure the FC 300 motor stops when the switch is released. Consequently it must be held down throughout the cutting operation.

Raise the cutting head after the operation.

INSIDE REBATE MEASUREMENT

If the measurements to be set are not too big, keep the clamps released by pressing the pedal with your left foot. If the settings are too far away, either loosen the clamp locking knob and pull the clamps towards you, or use the remote control (option, see page 1). Then move cursor H forward and lock it at the desired dimension (LEF) by tightening the screw TM.

Move the moulding up against the cursor so that the edge of the rebate coincides with the line of the required angles (ACI) 67.50°, 60° or 45°.



ACI

LEF (INSIDE REBATE MEASUREMENT)

VBBE STOP LOCKING SCREW

Keep the moulding in position and bring stop I into contact with it and lock it. Move the cursor away from the moulding underside. The inside measurement is completed.

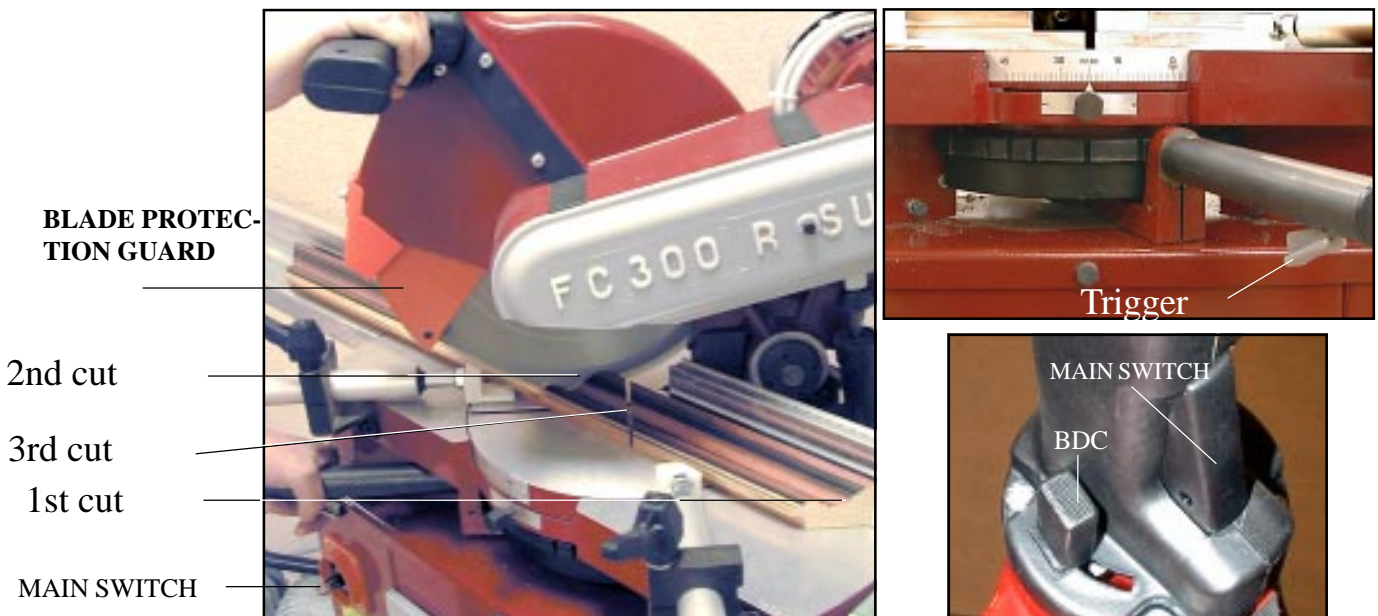
OUTSIDE MEASUREMENT

Loosen the outside stop screw (VBBE). Slide the MF point along the rule to the desired measurement. Lock the stop.

CUTTING MITRES (2nd & 3rd cuts)

Make sure that your FC 300 is connected to the compressed air and electricity supplies, and You have done the rebate clamp adjustments, the preparatory cut and the measurement operations.

Press the pedal to move the clamps back. (Adjust the right clamp if it was neutralised during the first cut). Move the moulding (**1st cut**) up against the stop I. Keep the moulding pressed flat onto the table and release the pedal to bring the left and right clamps into the pressure mode. Position the cutting head on the left.

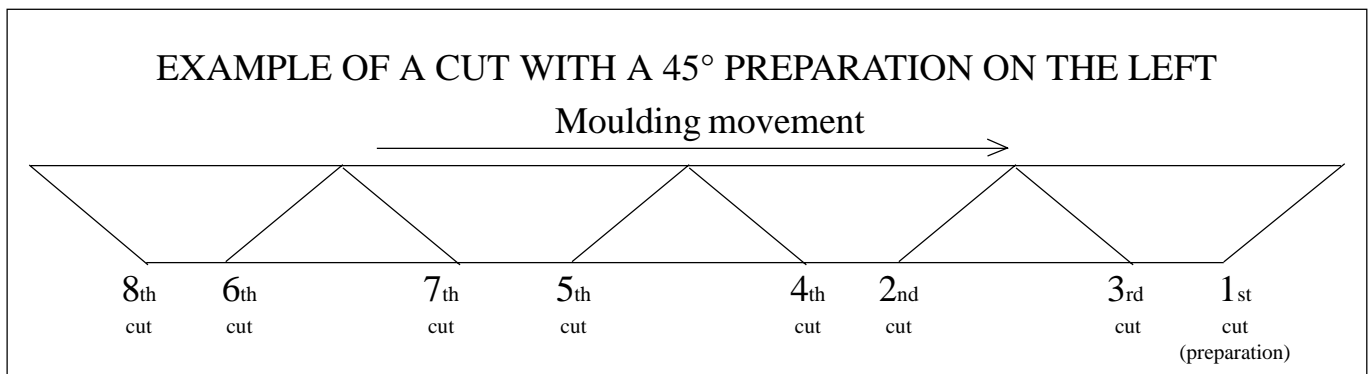


2nd cut: Make another cut without changing the position of the rotating base (1st cut).

For a 3rd cut: Do not press the pedal. Rotate the rotating base by a corresponding angle in the opposite direction. Make the 3rd cut which will give you the first piece. Check the measurement if necessary.

For a 4th cut: Press the pedal and remove the cut piece. Bring the moulding into contact with the stop I. Maintain the position of the rotating base, release the pedal and make the cut, etc.

IMPORTANT: For safety reasons do not press the pedal when sawing.



Depending on the type of frames to be made, follow the table below for the correspondence between the cursor indexed angles and the rotating base angles:

| | 8-sided | 6-sided | 4-sided (rectangle) |
|-------------------------------|--------------|------------|----------------------|
| CURSOR GRADUATION | 67°5 | 60° | 45° |
| ANGLE OBTAINED (TABLE) | 22°30 | 30° | 45° |

E.g.: If the cursor angle used is 67°5, the rotating base should be set to 22°30.

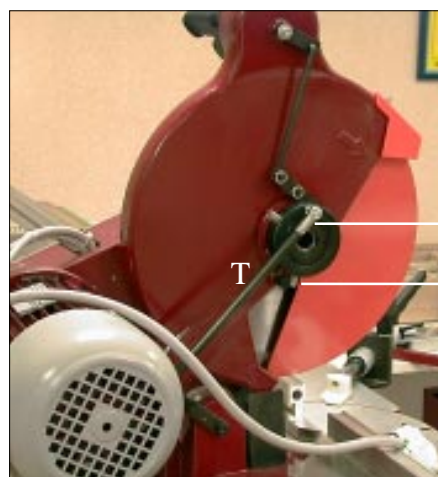
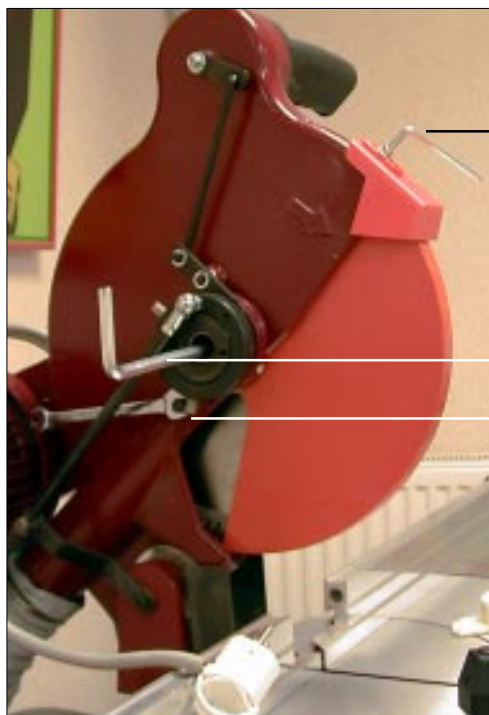
HOW TO CHANGE THE BLADE (ON FC300 - 350 - 300BA)

MAINTENANCE

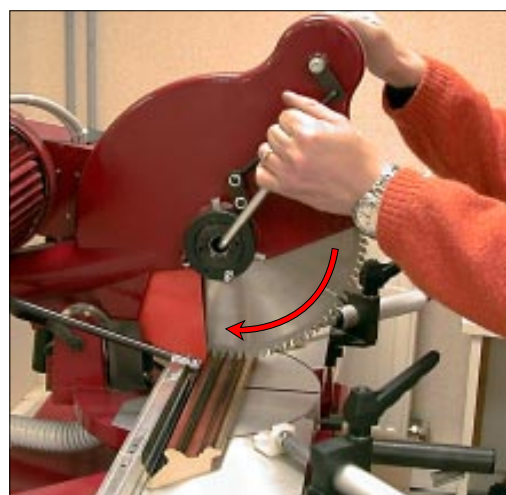
IMPORTANT
DISCONNECT THE MACHINE
FROM POWER AND AIR SOURCE.

Accessories needed:

8mm Allen key (supplied with machine)
4mm Allen key (supplied with machine)
10mm wrench (not supplied)
A piece of wood (not supplied)



1) Remove manually the clips that holds in place the bar **T**. Disconnect the bar **T** and remove the Stop Screw. The blade's protection cover can now turn and let access to the blade.



2) Bring down the cutting head on a piece of wood or moulding to block the blade so that it cannot rotate. Then turning the allen key in the sense of the arrow (i.e. towards yourself, while standing in front of the machine) loosen the screw that fixes the blade.



3) Remove the blade fixing screw. Remove then the anti-vibrations disc, **G**. Use **protection gloves to handle the blade**.



4) Remove the blade. Make the whole process in the other way round to fix the new blade. (Pay attention to the direction of blade's teeth. See picture).

FC 300 BA

FOR WOOD & ALUMINIUM

ACCESSORIES

The FC 300 BA is packed in a crate containing:

- 1 right extension with measuring system and stop
- 1 left extension
- 1 box of accessories (inside the machine) containing:
 - 1 x 8 mm allen key (blade removal)
 - 1 each of 6 mm, 5 mm, 4 mm and 3 mm allen keys (table fitting)
 - 1 quick-fit union
 - 1 operating manual
 - 1 deburring attachment
- 2 screws for fixing the clamp block (right and left) fitted on the machine.
- 2 spacers (right and left) inside the machine.

STARTING UP (Fig 5 - 6 page 9)

Position the right and left spacers and tighten them.

Loosen the locking screws from the rotating base.

Fit the clamping block in front of the base with the right and left screws.

Connect up the air and electricity supplies (see page 3).

Fit a metal moulding in position and adjust the right and left rebate clamps (see page 4).

Switch on the air pressure to the clamp (switch on the right side to ON).

Adjust the position of the clamp head on the profile, by sliding it, and lock it.

For measurement operations (see page 5), lower the retracting part of the cutting length stop.

CUTTING

The clamp must always be supported on the profile.

The cut can be made from left to right or vice versa.

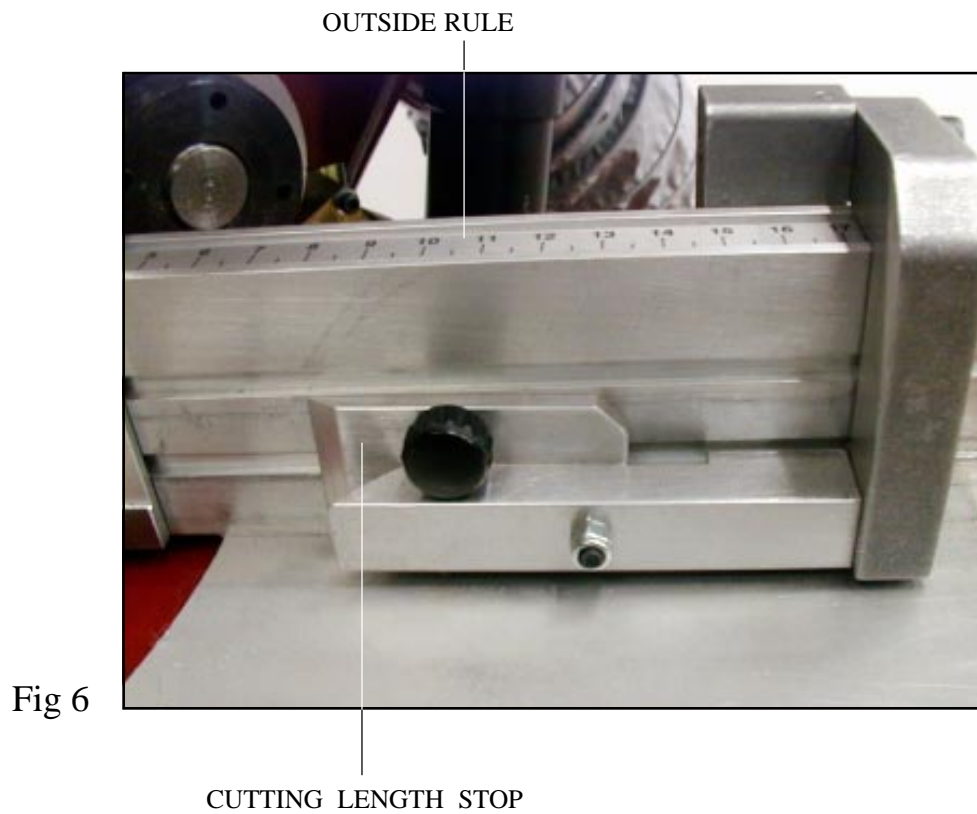
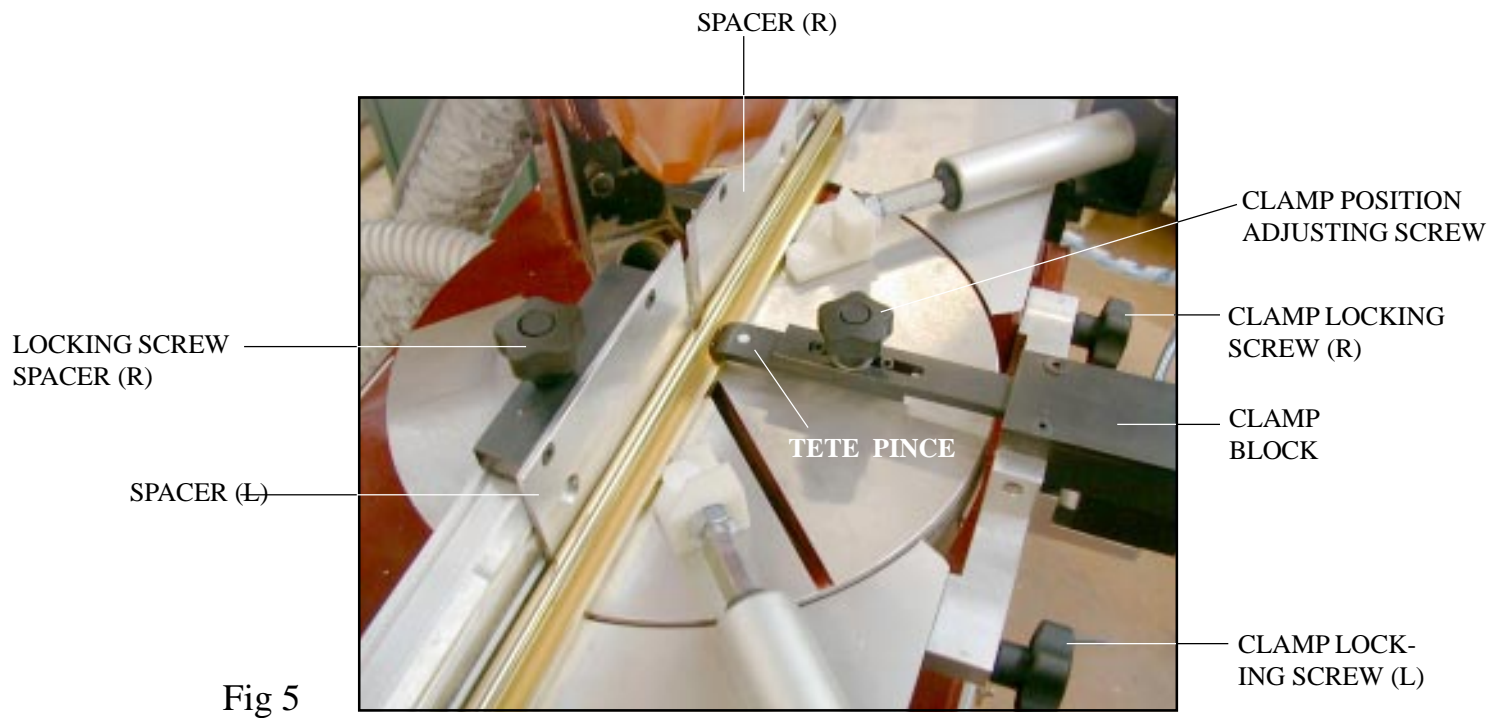
Do not touch the pedal between two opposing cuts, except at the end or start of the profile.

Make the cut at a normal descent speed and always go right down to the stop.

After the 2nd cut, before withdrawing the blade, wait for the clamp to move back with the waste.

**CASSESE DECLINES ALL RESPONSIBILITY IF THE INSTRUCTIONS
IN THIS MANUAL ARE NOT FOLLOWED.**

FC 300 BA - Aluminium and wood



FC 300 / FC 350 : AIR LINE FITTINGS

Advised way of fitting :



Z 675

USA

STANDARD

**Male Connector
on Machine**



Z 675



**quick release (Q/R)
female air connector**

Z 749



**Q/R US male
connector**

Z 701

**Standard hose
connector**

Z 556



AIR SOURCE (compressor)

