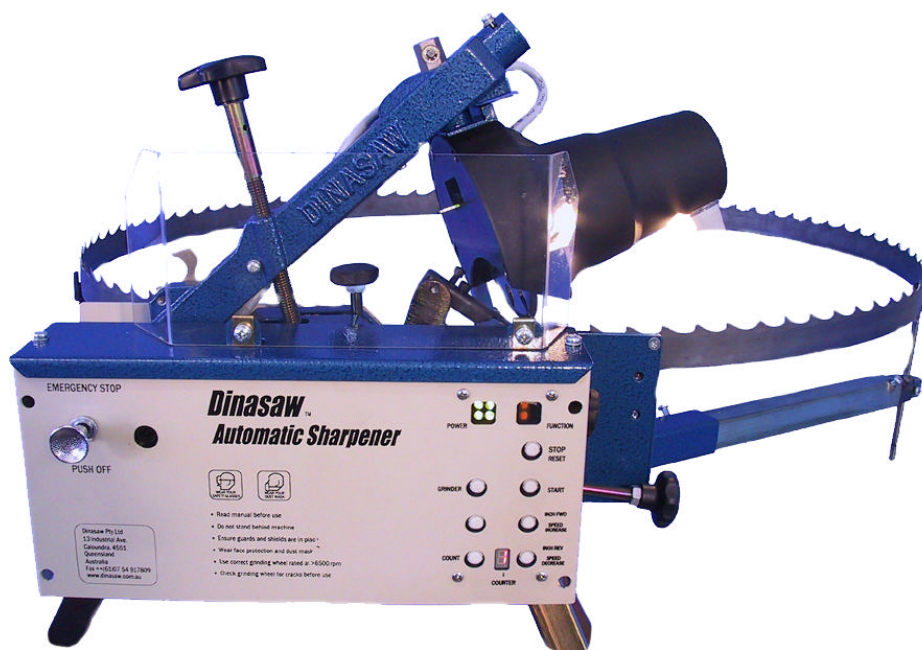


DINASAW

Bandsaw Sharpener

Instruction Manual

Automatic and Semi-Automatic Models
V9.1



DinaSaw®

Australia

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This manual should remain with the machine when resold or transferred to a new operator. The manual contains important safety procedures and instructions which should be carefully and thoroughly read and understood before operating the sharpener.

This machine is intended for use by professional operators who are familiar with the general requirements of bandsaw sharpening and the types of machinery used within the industry.



CAUTION

This machine uses a rotating grinding wheel to remove metal. As a consequence grinding dust and metal particles will be emitted and may be projected at high speed from the grinding contact area. Always wear protective clothing and remove all flammable substances from the vicinity of the machine.

**Read this manual before use.
Do not stand behind the machine.
Ensure that all guards and shields are fitted before operating.
Wear eye protection and dust mask.
Use correct grinding wheel rated at 6500 rpm or more.
Check grinding wheel for cracks before use.**



LIMITED WARRANTY:

Dinasaw® warrants that its products will be free of defects in workmanship or material. Should any failure to conform to this warranty appear within the period of 6 months or 100 hours of operation, whichever comes first, from date of purchase, Dinasaw® shall upon notification of and substantiation that the product has been stored, installed, operated and maintained in accordance with Dinasaw's specifications and instructions, repair or replace, at Dinasaw® sole option, any components or parts of the product determined by Dinasaw® to be defective.

This warranty is exclusive and is in lieu of any warranty of merchantability, fitness for a particular purpose or other warranty of quality, whether express or implied.

LIMITATION OF LIABILITY:

Dinasaw® shall not under any circumstances be liable for special or consequential damages, such as, but not limited to, damage or loss of other property or equipment, loss of profits of revenue, cost of capital, cost of purchased or replaced goods, or claims of Purchaser for service interruption.

The remedies of the purchaser set forth herein are exclusive and the liability of Dinasaw® with respect to any contract, or anything done in connection therewith such as the performance or breach thereof, or from the manufacture, sale delivery, resale, or use of any goods covered by or furnished by Dinasaw® whether arising out of contract, negligence, strict tort, or under any warranty, or otherwise, shall not, except as expressly provided herein, exceed the price of the goods upon which such liability is based.

The warranty period for Dinasaw® products is 100 hours or 6 months, whichever is sooner, from date of purchase. Grinding wheels are excluded from the warranty. Parts damaged through abuse or fair wear and tear are excluded from the warranty.

No transportation costs of any kind are covered under this warranty. Transportation charges to return products for repair shall be the responsibility of the customer. Returned goods shall be at the customers risk and expense.

Serial Number

The serial number is located on the back of the machine.

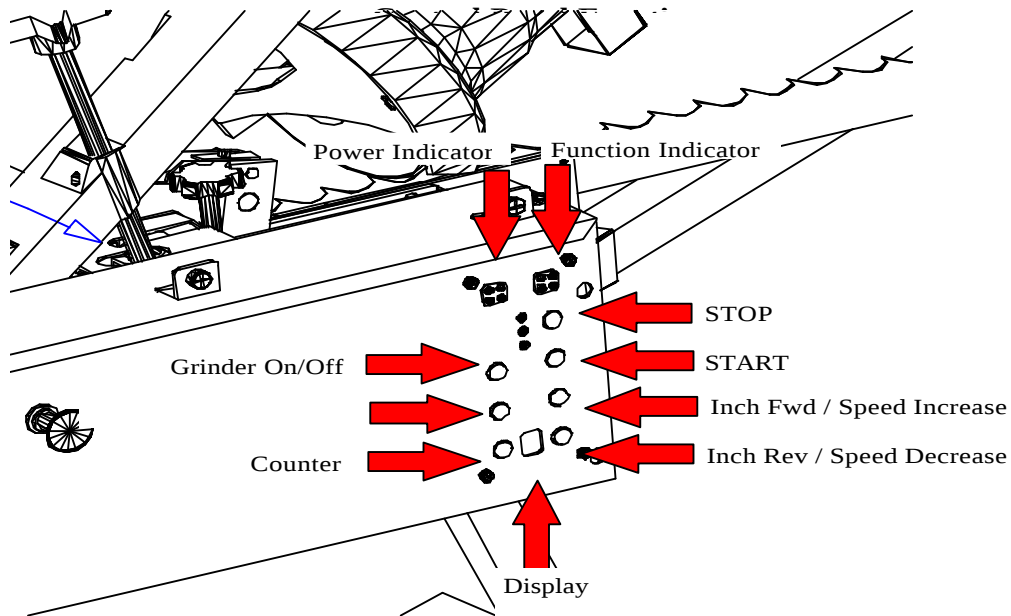
Serial Number _____

Purchase Date _____

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Control Panel Functions



STOP—Stops the machine

START—Starts the blade feeding

InchFwd — Momentarily runs the blade feeding motor in forward direction

Inch Rev — Momentarily runs the blade feeding motor in reverse direction

Grinder ON/Off—Turns the Grinder motor On or Off

Counter—Counter - Increases the count in the display by +1; which is decreased by 1 when the counting magnet (attached to the blade) passes the reed switch. The machine stops when the counter reaches 0

Description

The Dinasaw Bandsaw sharpener is a cam operated machine suitable for sharpening bandsaw blades from 12mm (1/2") to 75mm (3") wide with tooth pitches between 6mm (4 tpi) to 40mm (.6 tpi). It is capable of both standard, straight grinding with the additional feature of 'MSA Sharpening' to enhance cutting performance.

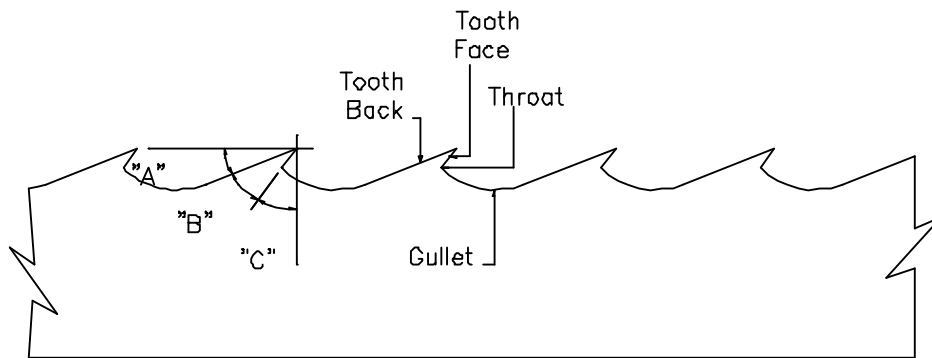
Overview

This machine uses cams to produce the desired tooth profile. One cam indexes the teeth while another simultaneously lifts the grinder motor.

A third cam, which can be disengaged, bevels the grinder motor 14° to the left and right to allow the set teeth to be ground at an angle.

The hook angle is adjusted by rotating the blade support assembly.

Blade Terminology



- "A" - Clearance Angle
- "B" - Tooth Included Angle
(angle of Keenness)
- "C" - Hook Angle

General Operation Hints

- ✍ Starting the “Grinder Motor” stops the feed for approx. 5 seconds to allow time for the grinding wheel to spin up to operating speed.
- ✍ Introducing the grinding wheel to the teeth requires a coordinated adjustment of both the Feed Position Knob and the Height Adjusting Knob – grinding more from the front face will take the grinding wheel away from the back of the tooth and vice versa.
- ✍ Grind only the minimum from the front face of the teeth. Altering the tooth’s front face shape or hook may require readjusting the feed pawl height to suit the new form.
- ✍ Bi-metal blades have a very small high speed steel tips that disappear after successive grinds. Their run time between sharpening is reduced once the high speed steel is removed.
- ✍ A clean, smooth blade surface is required for consistent grinding — remove any rust or gum from the blade. Applying a light coat of “water dispersant” to the blade aids uniform feed.
- ✍ Heat is the enemy when it comes to cutting accuracy as it expands the blade’s leading edge, causing loss of rigidity and wandering. Ideally the heat generated in cutting should be removed with the sawdust and not retained in the blade. Keeping the blade sharp and cutting enables the teeth to discharge heat in the sawdust.
- ✍ When cutting, the available power at the blade is consumed in many ways including (1) penetration (2) bending & shearing the chip (3) accelerating the chip and (4) friction between the blade & chip. The teeth’s geometry is important in maximising the blade’s performance. Teeth must be sharp but strong enough to maintain set and resist deformation in the cut. As a general rule, the angle of “keenness” (sharpness) must be between 40° and 50° to allow the teeth to penetrate easily. For example, 10° hook - 45° tooth included angle - 35° clearance. Increasing the hook should see a commensurate decrease in the clearance. 20° hook -45° tooth included angle - 25° clearance.
- ✍ Low hook angles are less efficient as they use more power to accelerate the chip down the tooth’s face and increase friction **but narrow blades are generally not sufficiently rigid to cope with hook angles much higher than 12°-15°** especially when there are knots — 10° hook is generally a good starting point.
- ✍ Become familiar with using the machine in the standard, straight sharpening mode before progressing to MSA sharpening.

- ✍ When sharpening in MSA mode, it is preferable that blades are joined so that the teeth set holds its sequence through the join (total teeth number is dividable by 3). Should this not be the case, sharpeneing must start and stop at the join in the blade. Place a magnet on the join; when this passes the reed switch, the machine will automatically stop, providing the counter is at its default value. (1).
- ✍ The tooth pitch at the join should be similar to the rest of the blade – variation in pitch will change the tooth's profile but not the tooth's height. Outsized pitch may not allow the feed pawl to engage the following tooth.

✍ **Blades with MSA sharpened teeth do not require as much set because:**

1. The chip is not directed immediately under the tooth but away into the gullet.
2. The tooth is pulled out to the side and not pressed in.

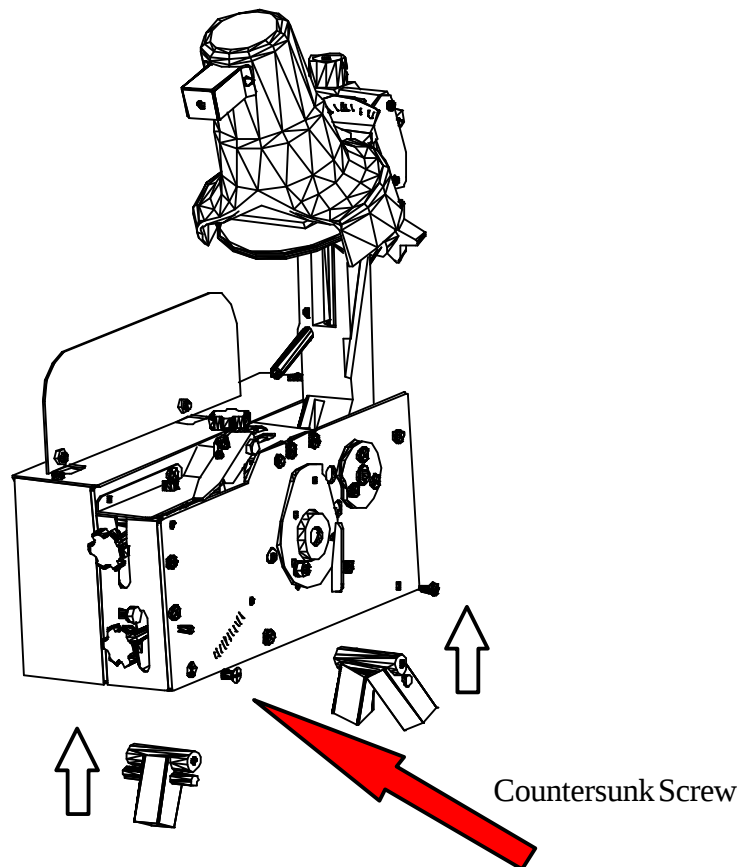
✍ Saws sharpened in the conventional, flat top manner dull faster due to their rubbing action. The set teeth, which do the majority of the work, have to attack using a compromised negative angle that forces the chip down under the set causing additional heat and stress. MSA sharpening optimises the cutting angles that produces a larger chip that is directed away from the side of the cut reducing sawdust packing and consequential heating.. MSA sharpened blades cut straighter and stay sharper longer.

Setup

The box contains the following components for assembly.

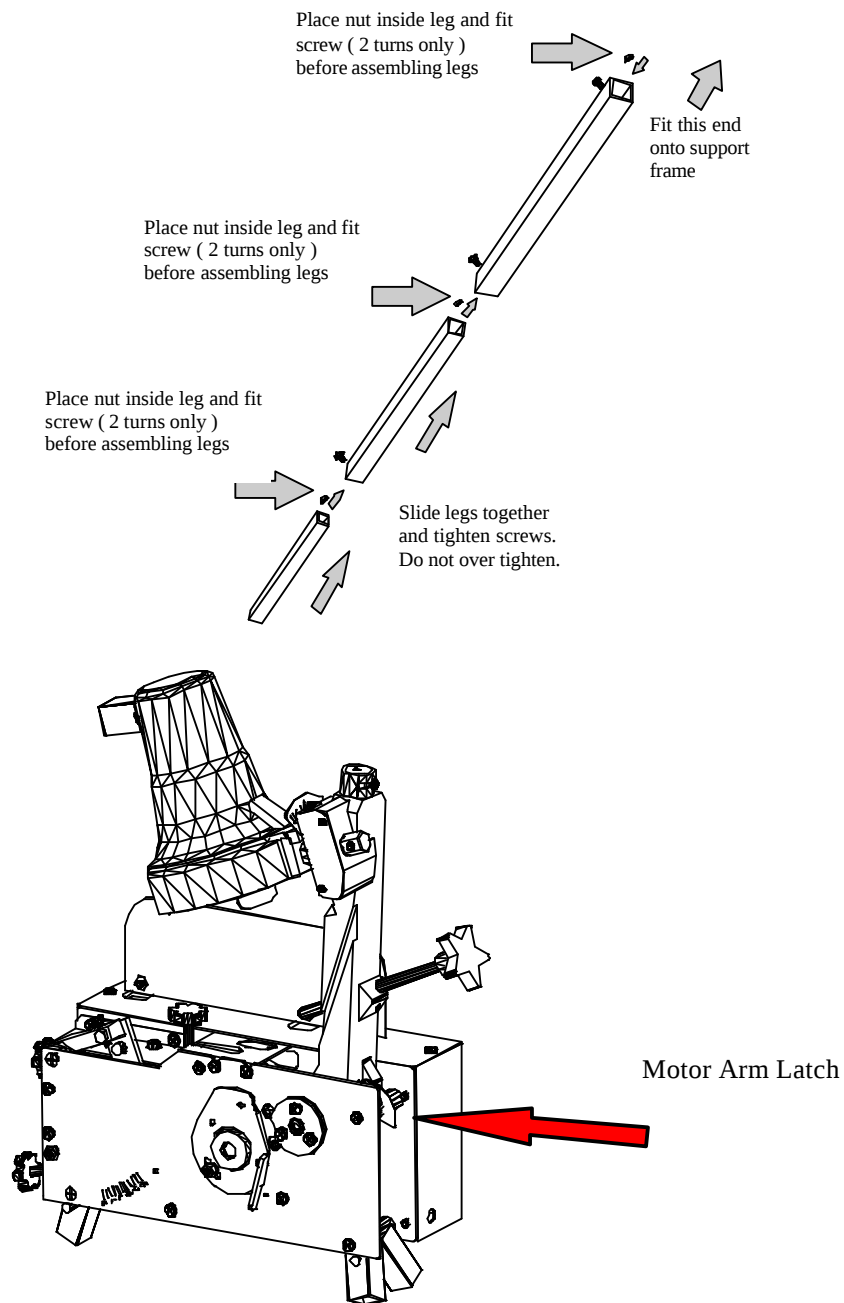
1. Sharpening Machine.
2. Blade Support Frame.
3. Blade Support Telescopic Arms.
4. Stand Attachment Lugs – 1 x single left hand – 1 x double (V) right hand.
5. Stand Legs – 3 sets of 3 telescopic.
6. Power Supply – (optional with manual machine)
7. Plastic Bag containing tools fasteners and Blade Support Posts
8. Grinding wheel.
9. Instruction CD
10. Handle (Manual machine only)

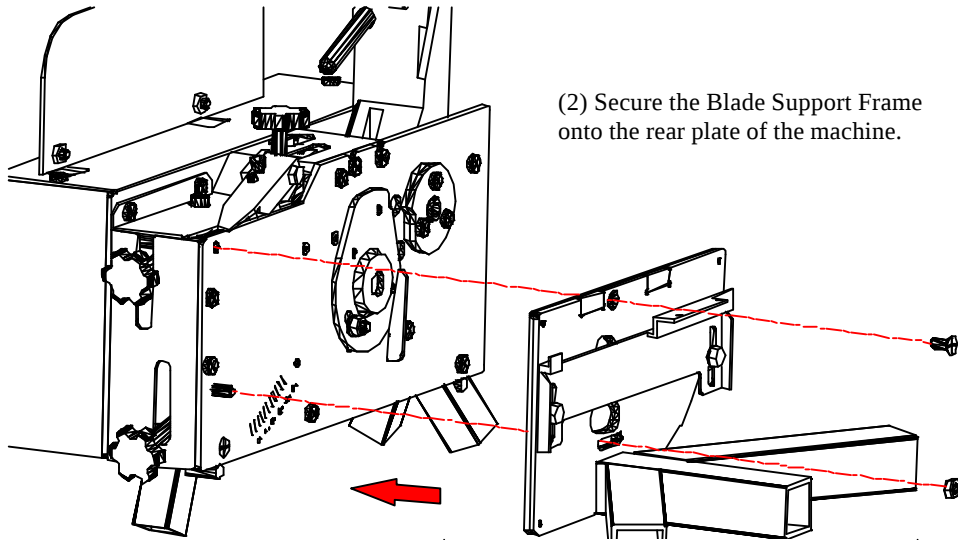
Assembling the Machine



(1) Secure the Stand Attachment Lugs between the machine's front and rear plates as per diagram.

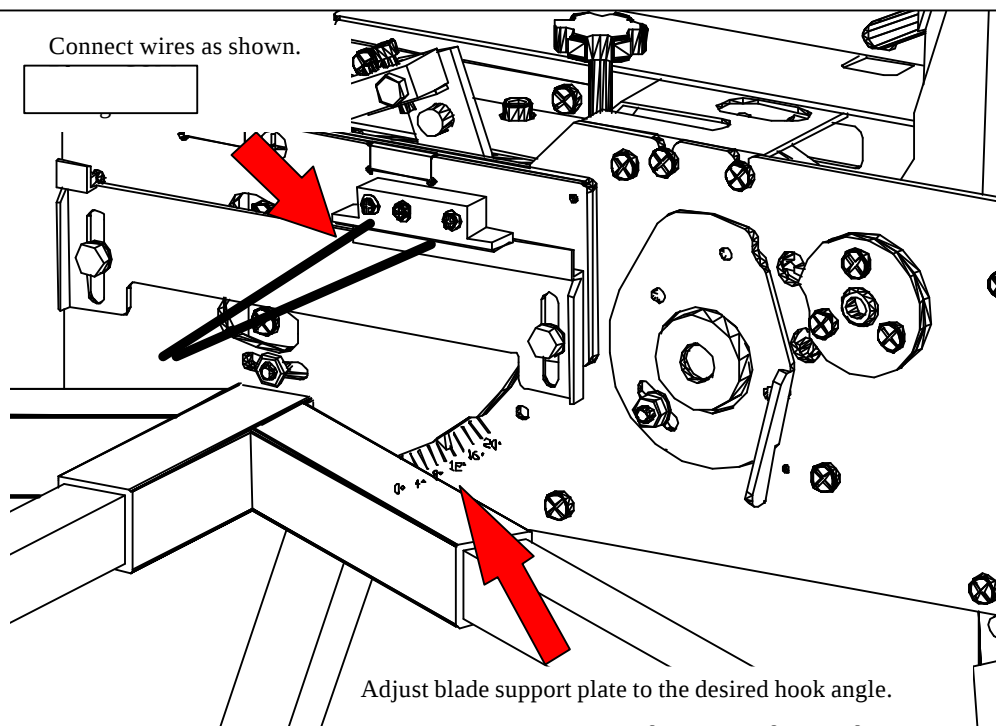
Extend and tighten the 3 telescopic legs before securing to the attachment lugs and lifting the Grinding Head Arm into its raised position (retained by a latch on the arm).

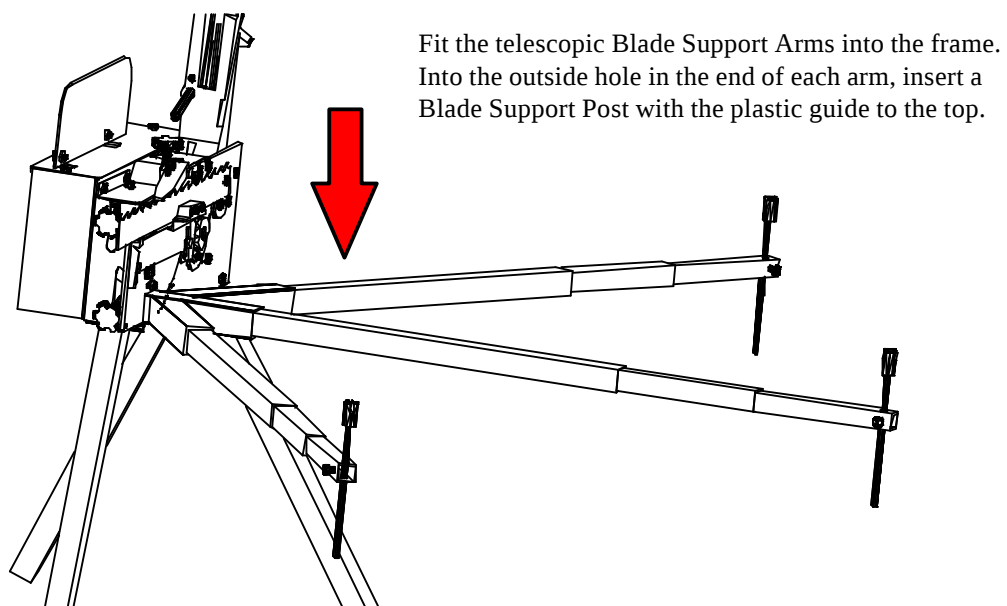




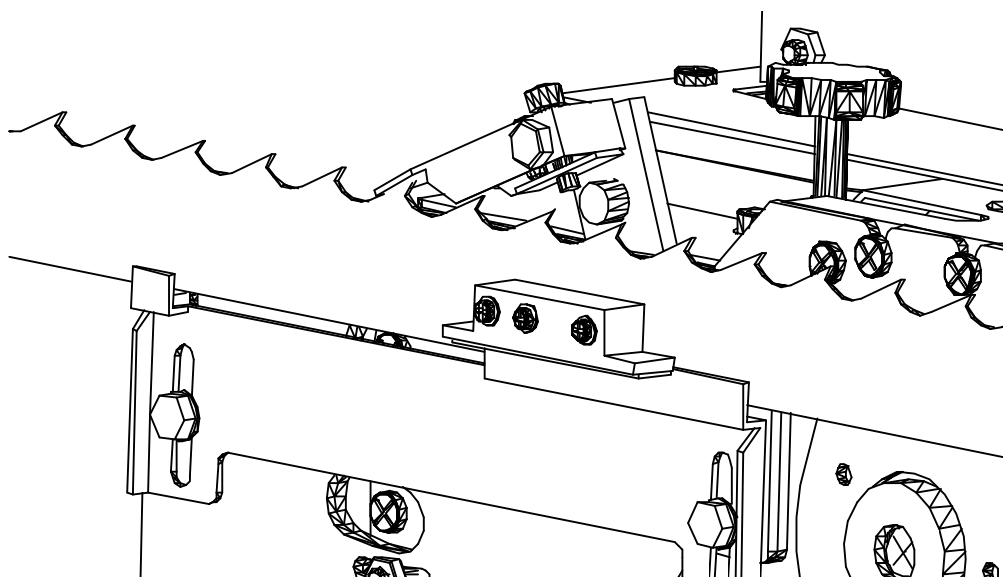
Important

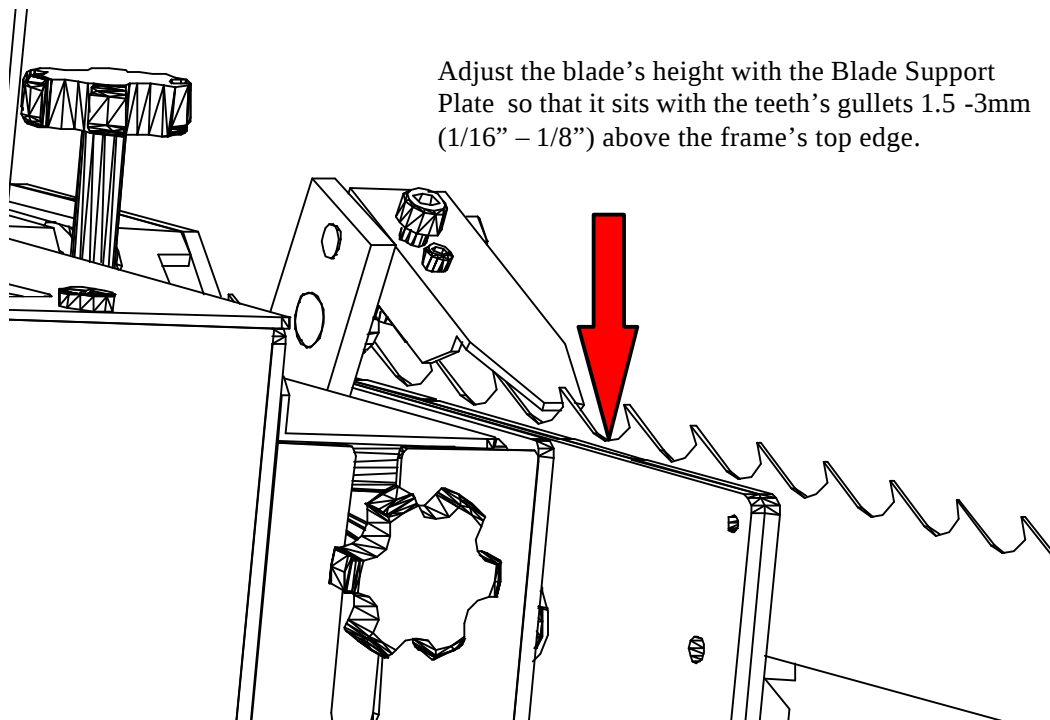
Connect the reed switch as shown below. (Automatic machine only)
 Colour coding is not critical. Any wire to each terminal. (NO and COM)



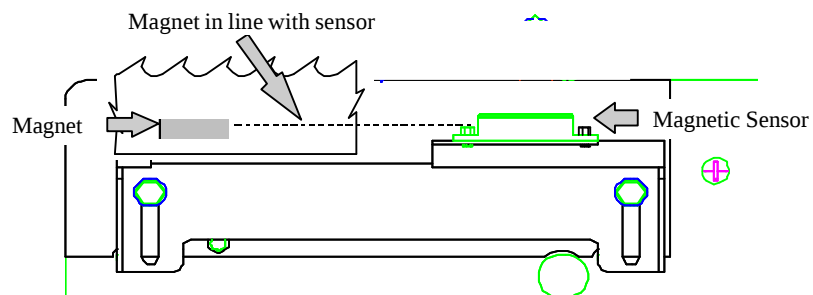
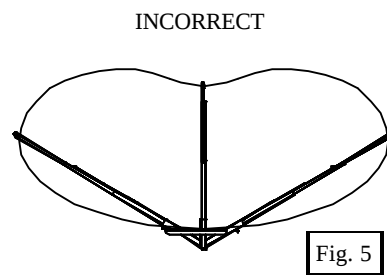
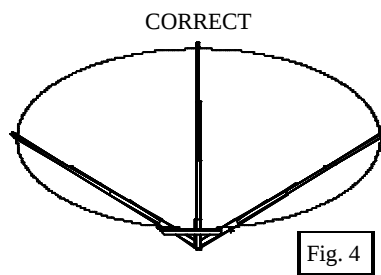


3) Fit the blade against the magnetic face of the Blade Support plate.





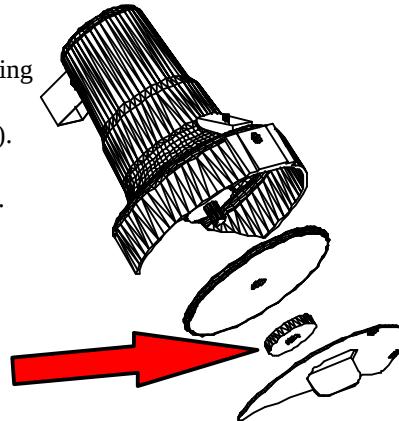
Adjust the telescopic arms and posts to suit the blade length. Adjust the 3 telescopic arms' Blade Support Posts to hold the rest of the blade at this same height.



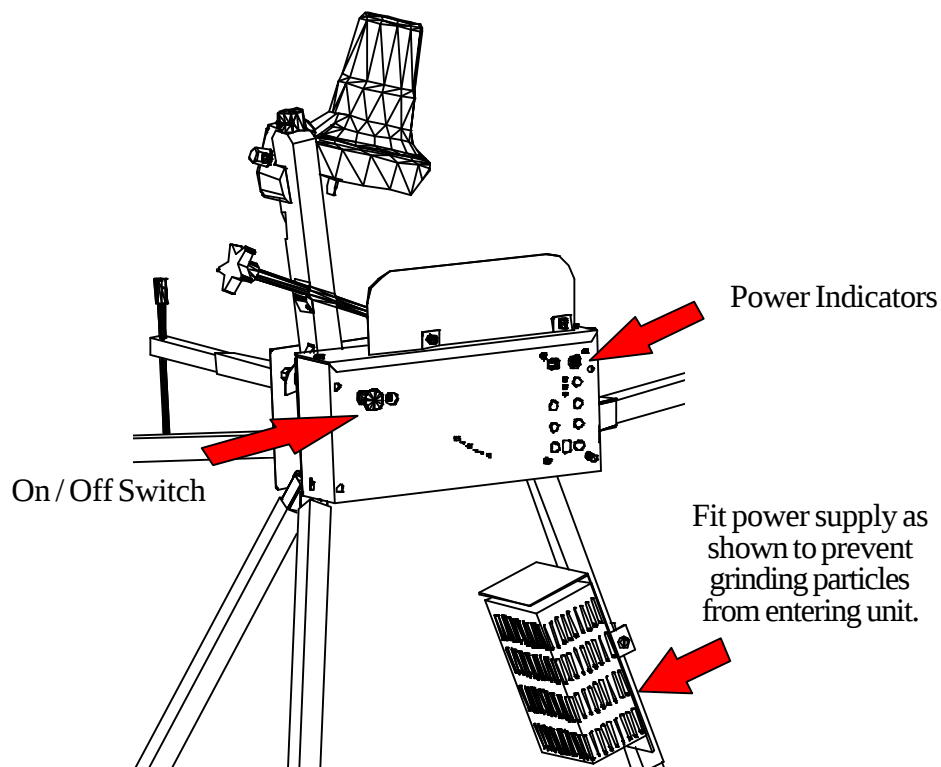
- (4) Remove the guard from the grinder shroud by turning it anticlockwise, and fit the Grinding Wheel to the motor spindle (note left hand thread on spindle nut).

Important safety check!! Check the integrity of vitreous or resin bonded grinding wheels before use.

Left hand thread



- (5) Fit the Power Supply to the support stand leg, connect the low voltage lead to the machine and plug AC to the mains supply. Turn on the On/Off switch on the front panel – the top LED's on the front panel will illuminate. If using a battery or other power source, ensure the polarity is correct and the input voltage is between 12-15vdc.



Dressing and Truing the Grinding wheel



CAUTION: Grinding wheels may shatter causing injury.

Grinding dust has been associated with respiratory disease.

Preferably use ABN / CBN wheels and wear a suitable dust mask

Resin bond Grinding Wheels

Fit and secure the appropriate grinding wheel (note left hand thread)

Before starting the grinding wheel check that it is rated at 6500 RPM or more and is not cracked or damaged.

Raise the grinding head fully so that the catch holds the head back.

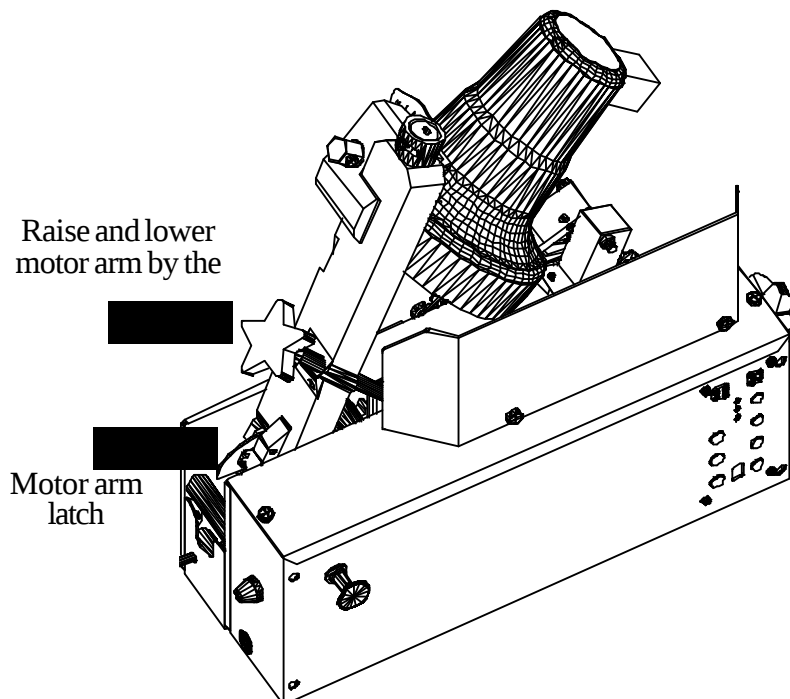
Do not lift the grinding head by the motor. Always lift the head by the handle on the depth adjusting screw.

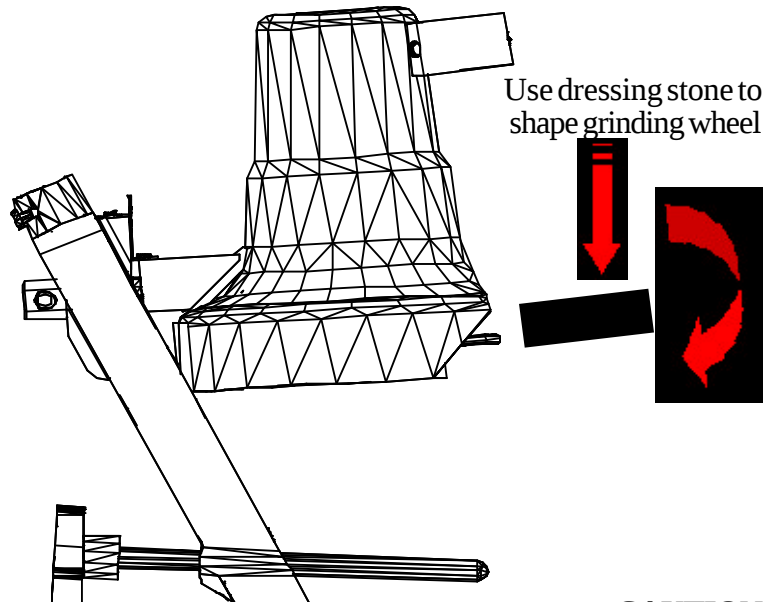
When satisfied the wheel is okay, make sure there are no bystanders near the machine and, **standing behind the grinding wheel shroud** press the grinder button or start the grinding motor.



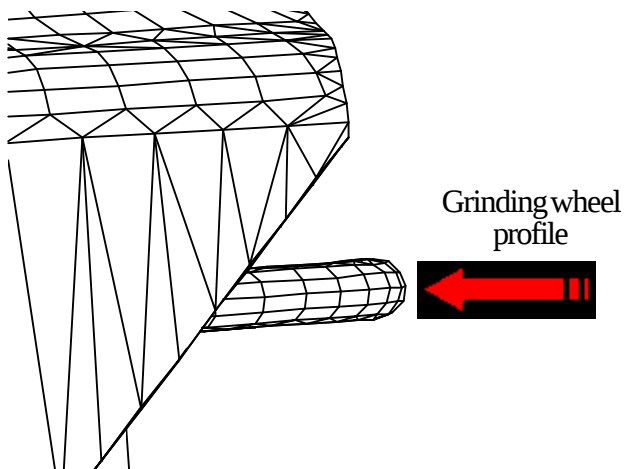
CAUTION

It is prudent not to trust the integrity of a newly fitted, bonded grinding wheel - run for at least one minute before dressing the wheel to the required shape.





CAUTION 
Wear face and breathing protection
when dressing the grinding wheel



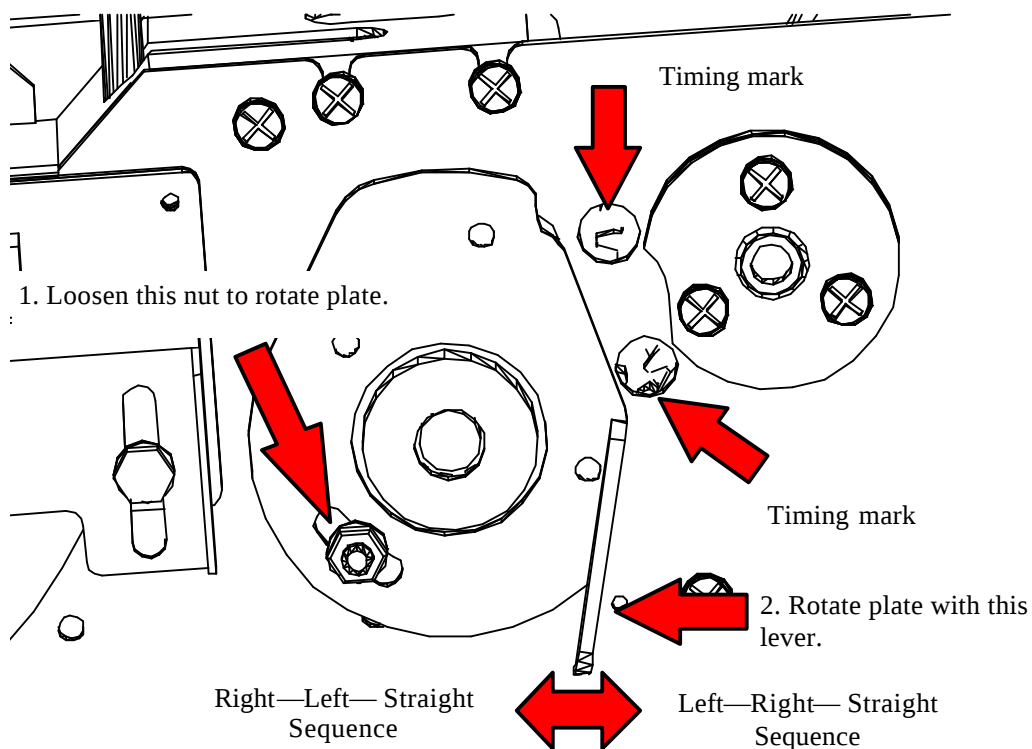
CAUTION 

Grinding is dangerous. Damaged or cracked grinding wheels can shatter causing injury to the operator. Do not operate the machine without guards in place and always wear face and breathing protection.
True and dress the grinding wheel using the dressing stone provided as shown above.

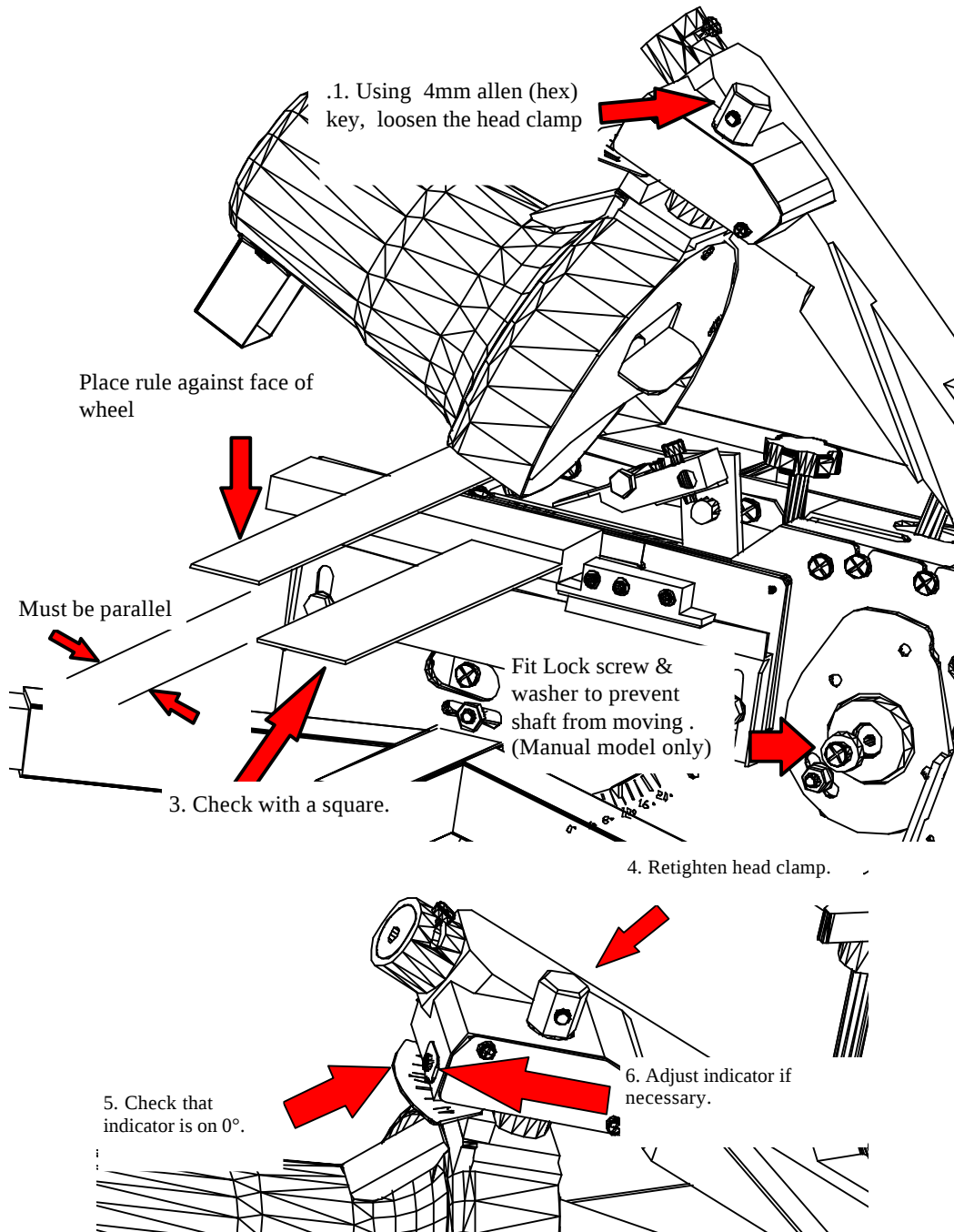
Adjustments and fine-tuning

Disengage the MSA mechanism.

1. Advance the feed by either pressing the 'INCH FWD' button or turning the handle in a clockwise direction, until both timing marks are visible through the cut-outs in the rear plate.(see below)
2. Loosen the retaining nut as shown in step 1 below.
3. Rotate the plate until the gears are disengaged, as shown in step 2 below.
4. Retighten the retaining nut.



2. Ensure the grinding head is perpendicular to the teeth. This check should be done with the “bevel cam” follower located on the middle cam lobe with both timing marks visible. (see page 25). Make sure the lock screw is fitted while checking for square on the manual model.



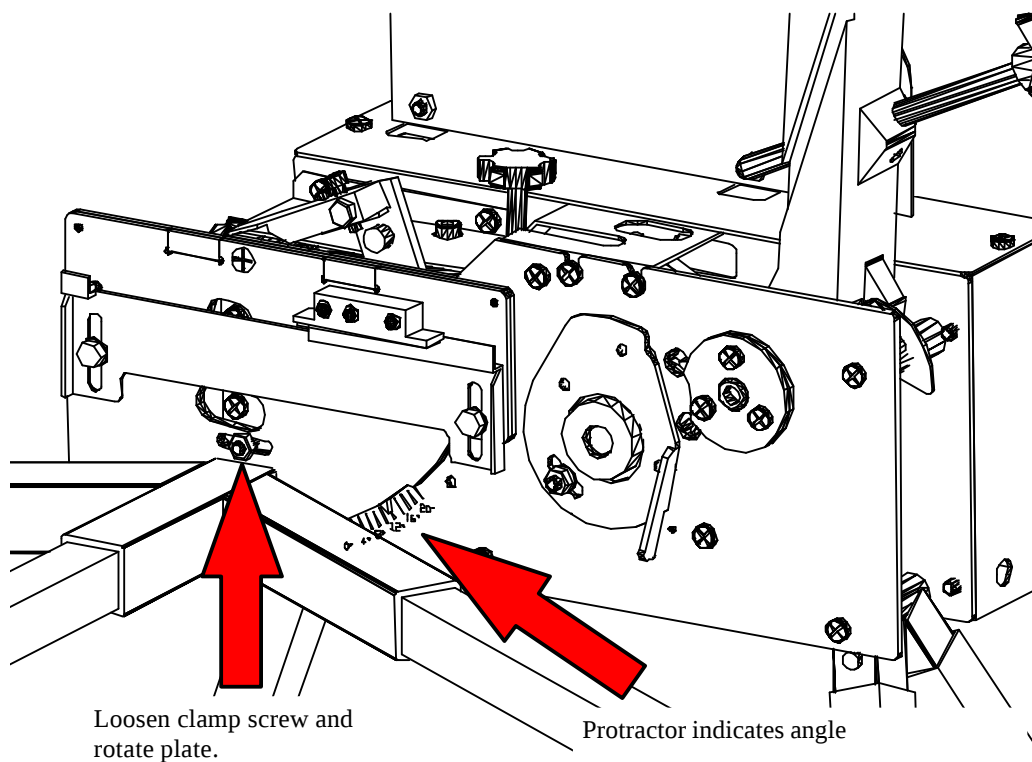
The next procedures set the tooth shape and grinder alignment and are best carried out in the following order.

1. Hook Angle
2. Tooth Stroke
3. Feed Pawl Position
4. Tooth Position
5. Tooth Shape
6. Bevel Tooth Sharpening
7. Centring the grinding head

With the grinding head in the raised position:

Hook Angle Adjustment

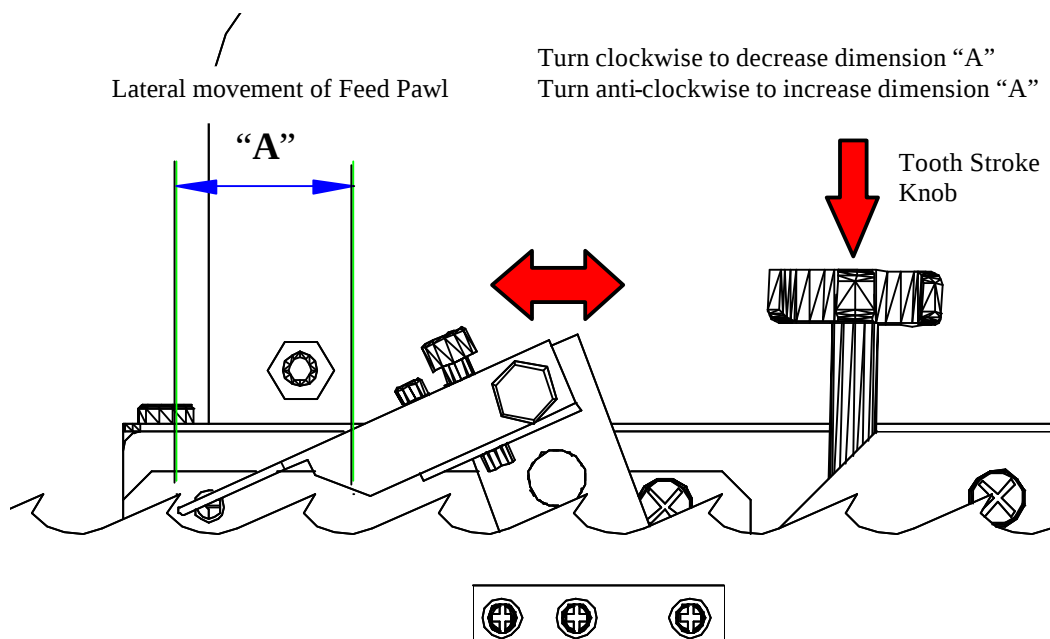
(1) Hook Angle Adjustment. Loosen the clamp screw and rotate the whole blade support assembly to the required angle on the protractor – retighten the clamp screw. (see below)



Tooth Stroke Adjustment

(2) Tooth Stroke. Press the “Inch Fwd” button, or wind the handle in a clockwise direction, to advance the feed through one cycle. The Feed Pawl should locate and push a tooth forward before retreating.

- ✍ Stop when the feed arm is in the fully returned position and:
- ✍ Turn the Tooth Stroke Knob so that the Feed Pawl over-strokes by approximately 25% more than the tooth pitch. For example, a 25mm {1"} pitch would return 6.25mm {1/4"} behind the next tooth.



Common Tooth Profiles

Simonds Red Streak 3/4" Pitch
Lennox Woodmaster 3/4" Pitch

Dimension "A" = 25mm (63/64")

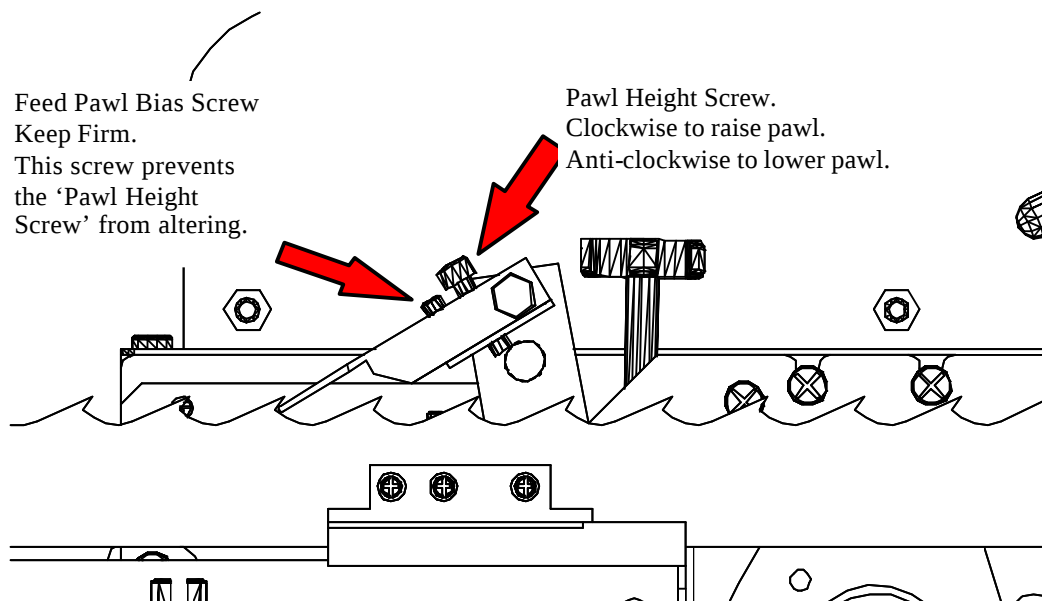
Simonds Red Streak 7/8" Pitch
Lennox Woodmaster 7/8" Pitch

Dimension "A" = 29mm (1 9/64")

Feed Pawl Presentation (Height)

(3) Feed Pawl Presentation. Using the “Inch Fwd” button, or by winding the handle in a clockwise direction, cycle the feed for one tooth and slowly bring the Feed Pawl up until it just touches against the face of the tooth.

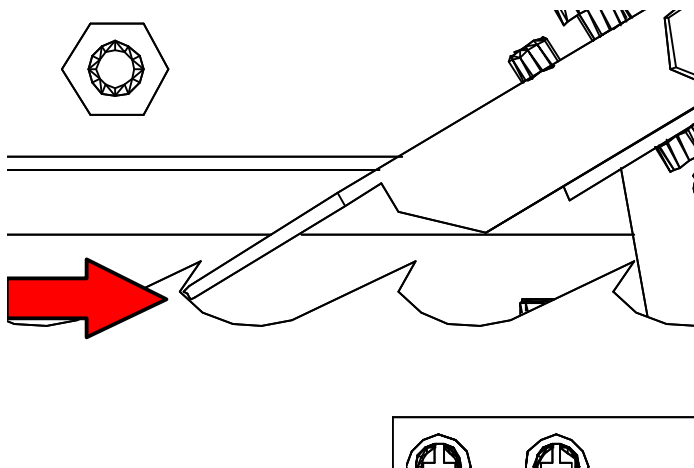
Using the rear Pawl Height Screw on the top of the Feed Pawl, bring the feed pawl to a height that presents it as far forward into the tooth’s throat as possible. This ensures that the teeth are pushed consistently from a point as far forward as possible and doesn’t allow the nose to “slip” any further forward as the tooth is pushed along (see below).



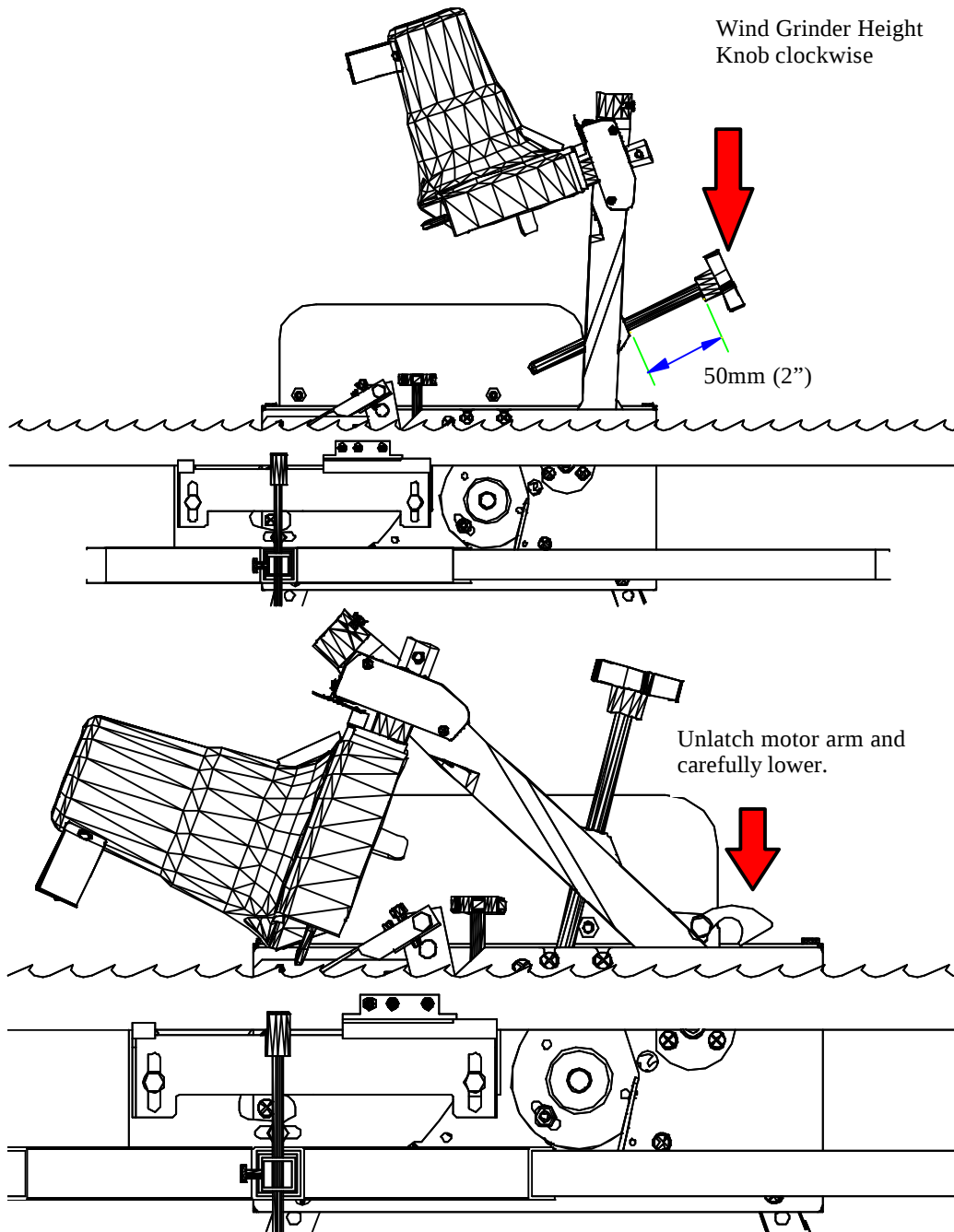
IMPORTANT

It is critical that the feed pawl contacts the blade at its most forward point.

Irregular tooth placement will occur if the Feed Pawl is not adjusted correctly.



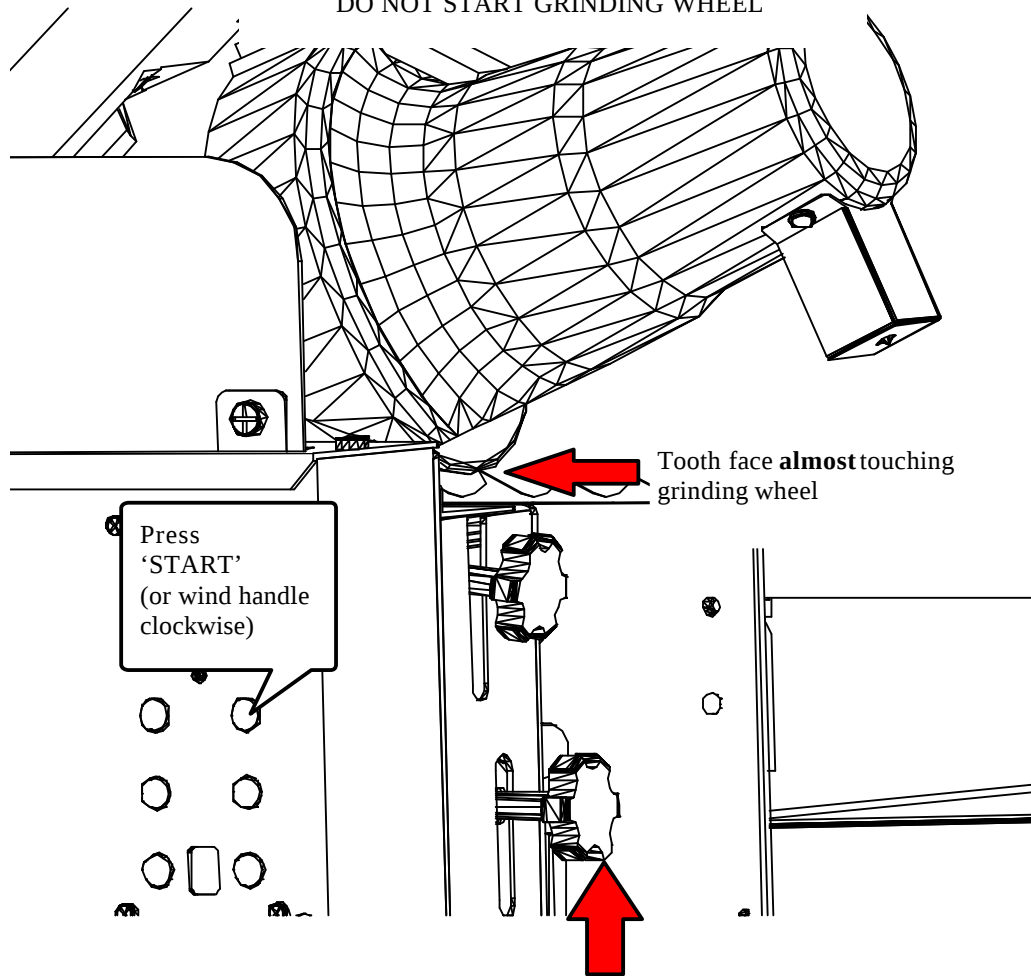
CAUTION: To ensure the wheel will clear the teeth when lowered, screw in the Grinder Height Knob, unlatch & carefully lower the grinding head into its working position:



Tooth Position

(4) Tooth Position. Push the “Start” button, or wind the handle in a clockwise direction, and adjust the feed to a slow speed using the “Speed Increase / Speed Decrease” buttons. Without starting the grinder, lower the grinder, with the ‘Grinder Height Knob’, towards the teeth while adjusting the Tooth Position knob so that the front face of the tooth is presented immediately in front of the grinding wheel on its descent. (see below)

CAUTION:
DO NOT START GRINDING WHEEL



Tooth Position Screw

Clockwise moves tooth away from grinding wheel
Anti-clockwise moves tooth towards grinding wheel

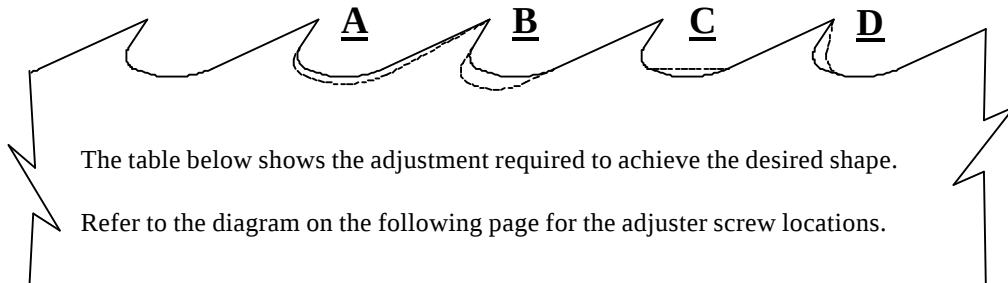
Tooth Shape

(5) Tooth Shape. Most common tooth profiles that have a curved gullet can be reproduced with adjustments to the tooth (a) “height” or (b) feed “stroke”.

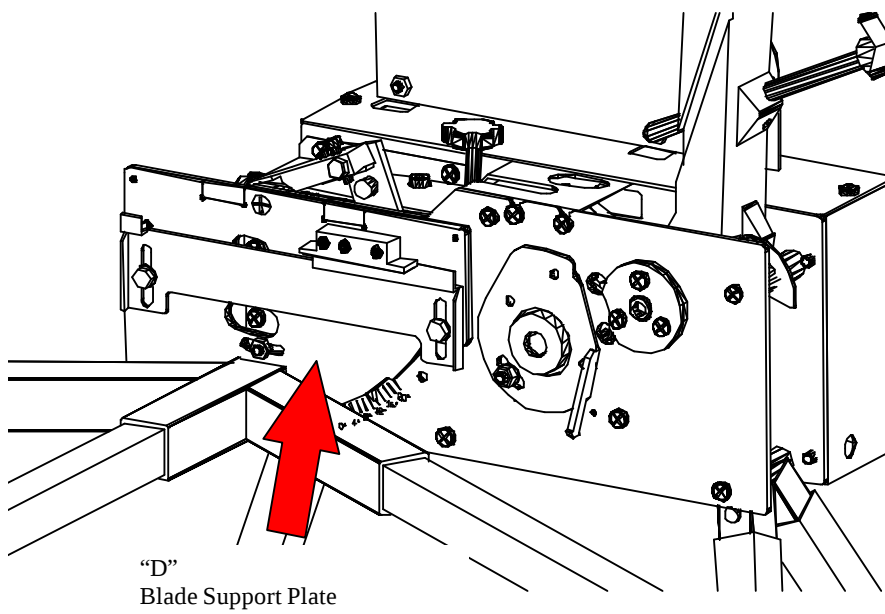
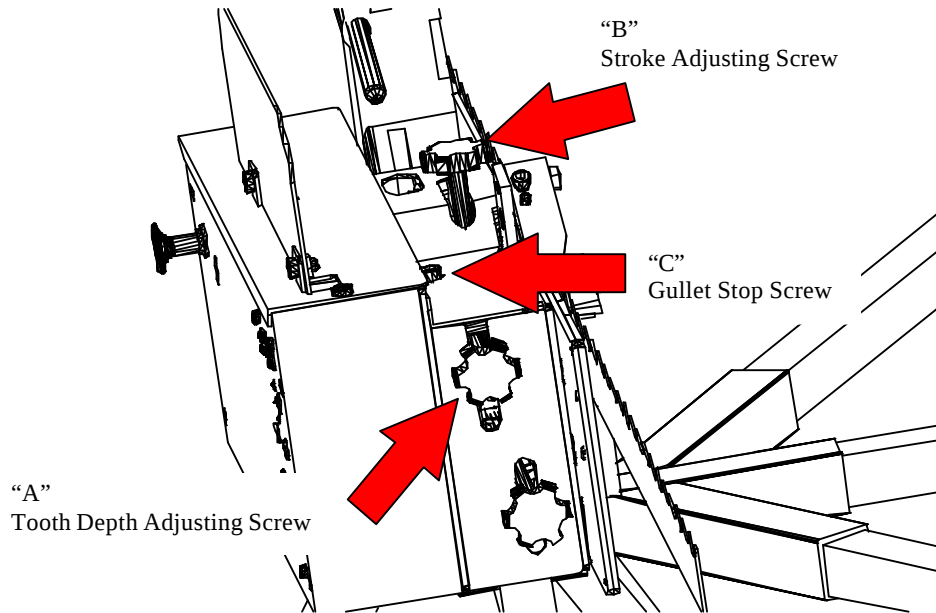
- (a) The tooth height can be changed by increasing/decreasing the grinding wheel’s total vertical movement by turning the ‘Tooth Depth Adjusting Screw (A)’— clockwise decreases tooth height, anticlockwise increases tooth height.
- (b) The front face and throat of the tooth can be altered with adjustments to the “stroke” by turning the ‘Stroke Adjusting Screw (B)’. Reducing the feed stroke, shortens the front face and increases the throat radius as it moves the tooth away from the grinding wheel earlier before it has fully descended.

Teeth that are flat along the base of the gullet can be sharpened by introducing the Gullet Stop Screw to limit the full up and down movement of the grinder arm. Limiting this movement causes the grinding head to stop its movement before rounding out the gullet. Make all adjustments as previously described and advance the feed until the grinding wheel is at the bottom of its movement. Carefully screw in the Gullet Stop Screw to slightly lift the grinder clear of the gullet bottom. The length of straight along the gullet is determined by how far the Gullet Stop is screwed in.

Radical alterations to tooth shapes can be made by changing the primary cam timing. Changes to the primary cam timing should only be undertaken if a suitable tooth shape cannot be obtained using the normal tooth height and feed stroke adjustments. Full cam timing instructions can be obtained by visiting the Dinasaw website at www.dinasaw.com.au



“A” - Tooth Depth Adjusting Screw—	Clockwise for solid line Anti-clockwise for dotted line
“B” - Stroke Adjusting Screw—	Clockwise for solid line Anti-clockwise for dotted line
“C” - Gullet Stop Screw—	Clockwise for dotted line Anti-clockwise for solid line
“D” - Blade Support Plate—	Rotate to the desired angle indicated on protractor.

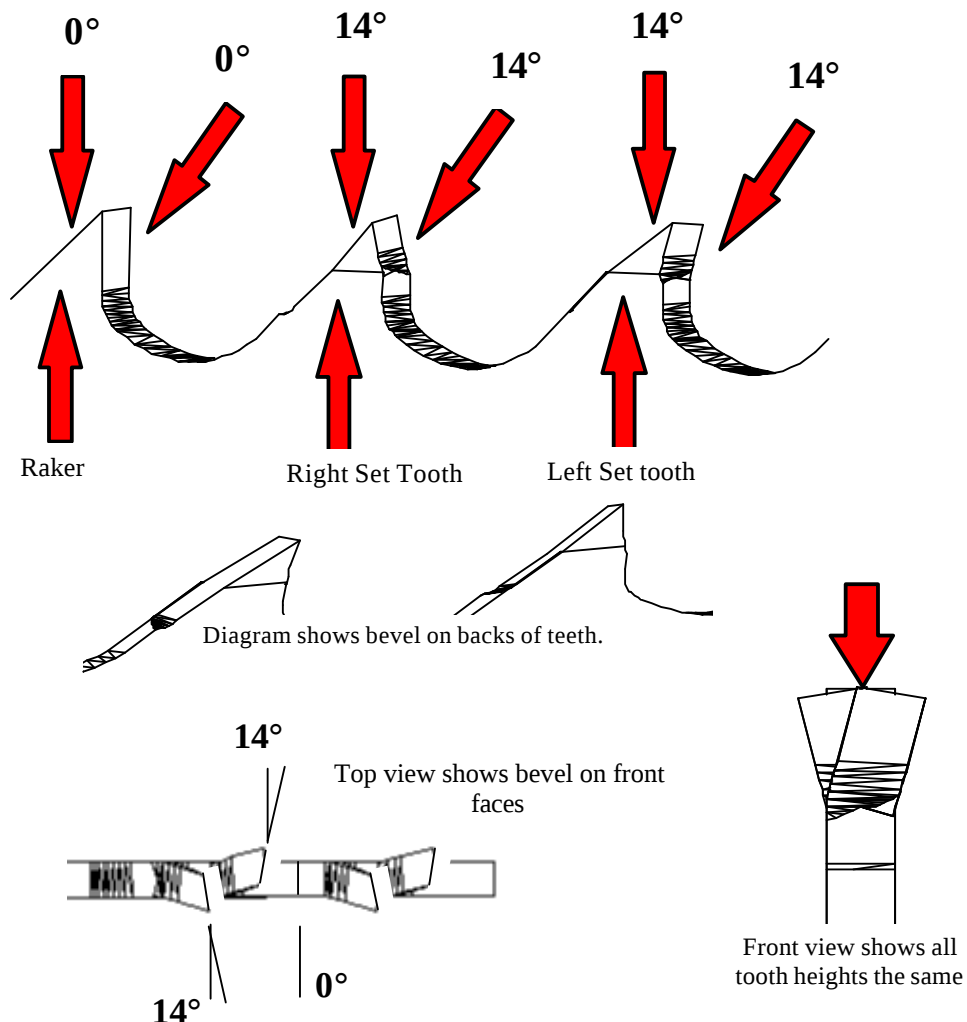


(6) Bevel Tooth Grinding—MSA.

As an alternative to standard sharpening, bandsaw teeth with “raker” set can be sharpened with Bevel points on their set teeth. This greatly enhances blade performance and requires:

- (a) Engaging the gear train to operate the MSA mechanism. Note: teeth can be set in two sequences – straight-left-right or straight-right-left.
- (b) Careful grinding head alignment (see *Centring the Grinding Head*) to ensure that both the left and right hand set teeth are ground to an even height.
- (c) The Count/Stop magnet to be placed on the blade join to stop the grinder if the tooth sequence is not carried through the join.

The diagram below shows the angles ground onto the back and front faces of the teeth when the MSA mechanism is engaged.



(a) Engaging the gear train to operate the bevel mechanism.

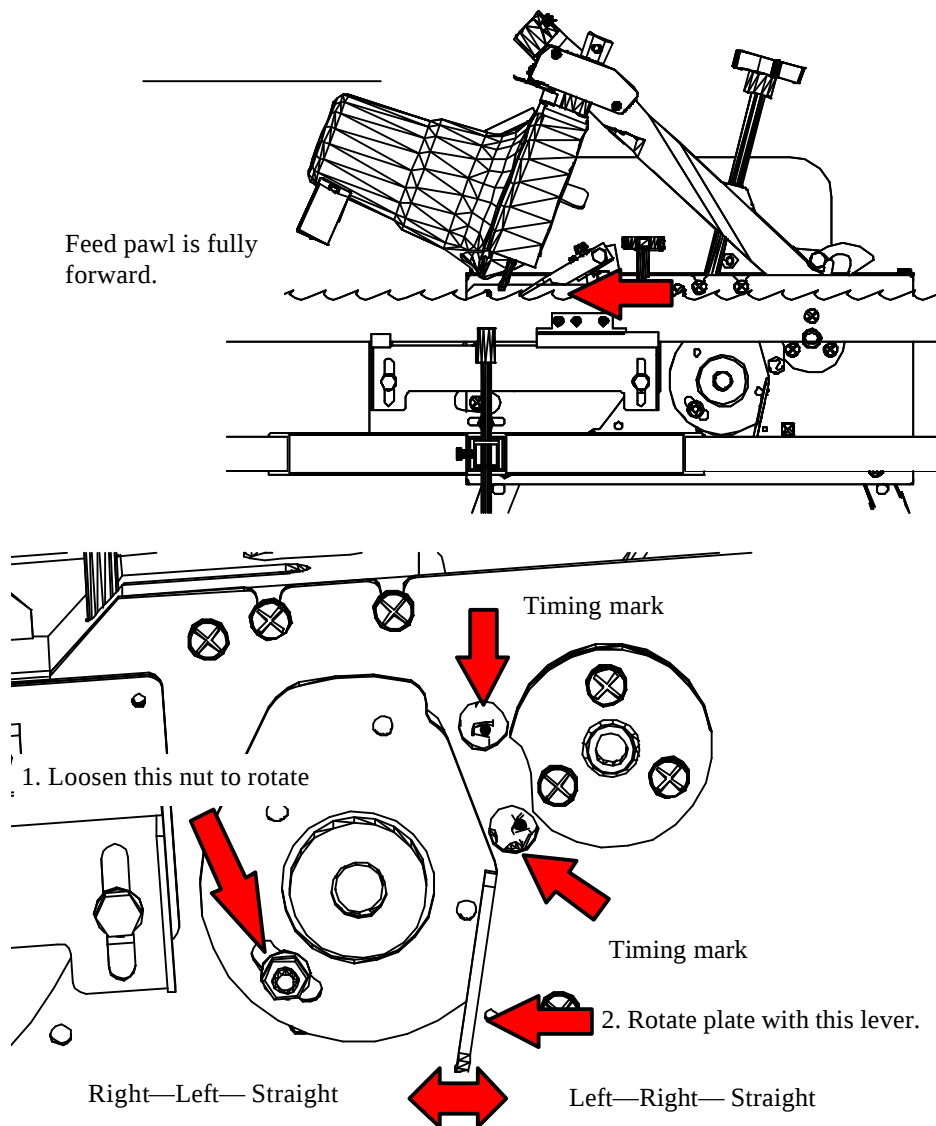
Press the 'INCH FWD' button or wind the handle in a clockwise direction until the feed pawl is fully forward (see below)

2. Engage the MSA mechanism as shown below.

Note: teeth can be set in two sequences – straight-left-right or straight-right-left.

Determine your blade's set configuration before engaging the bevel mechanism.

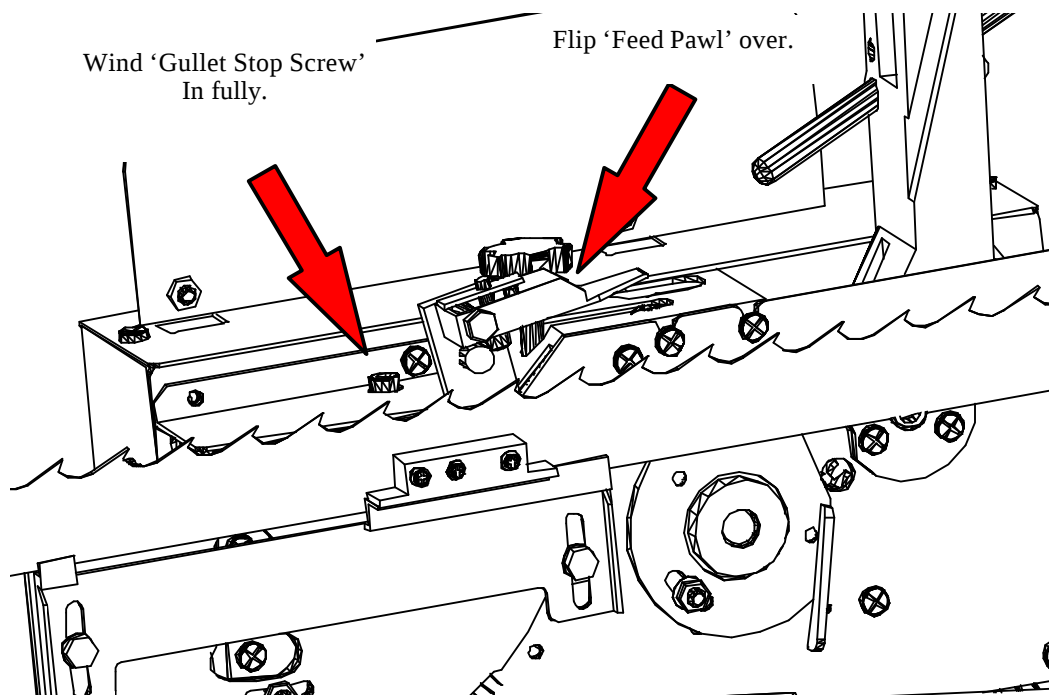
Straight-left-right requires the upper gears in mesh — straight-right-left requires the lower gears in mesh. (see diagram below)



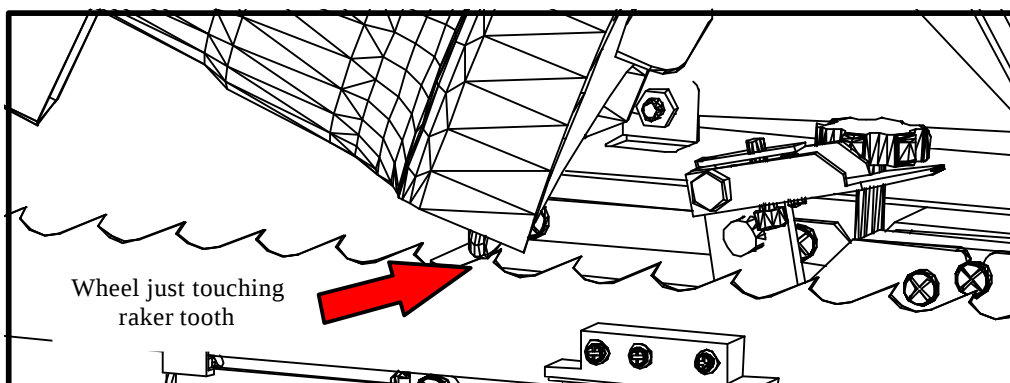
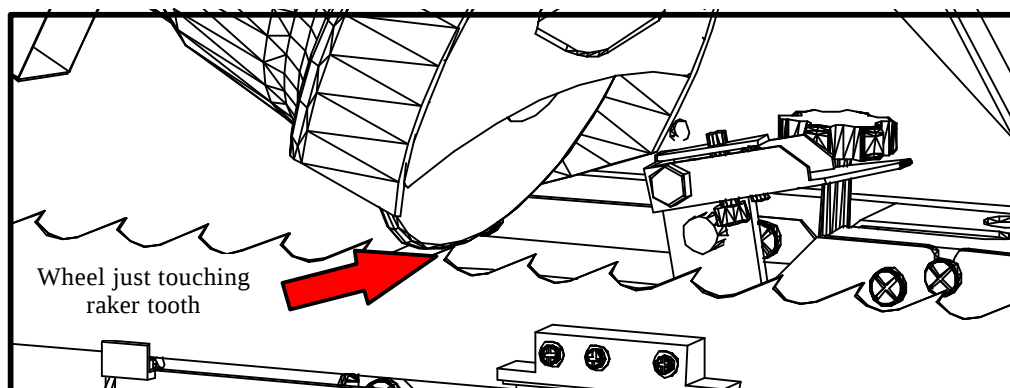
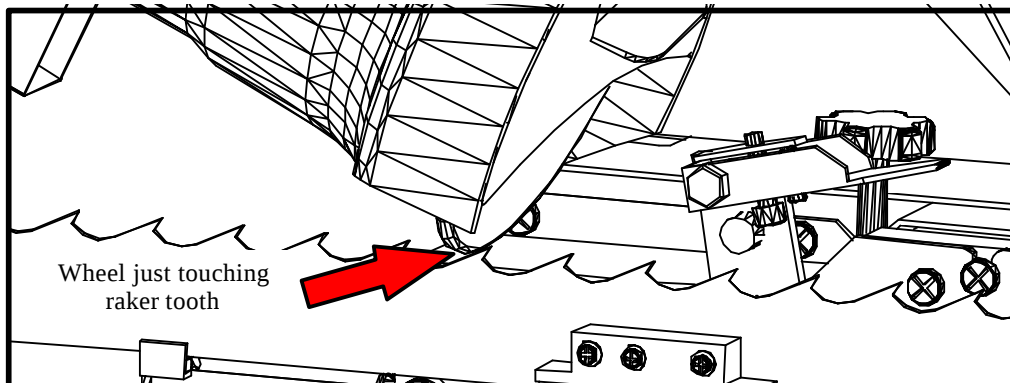
(7) Centring the Grinding Head.

With the grinder motor “Off” and the bevel head mechanism engaged:

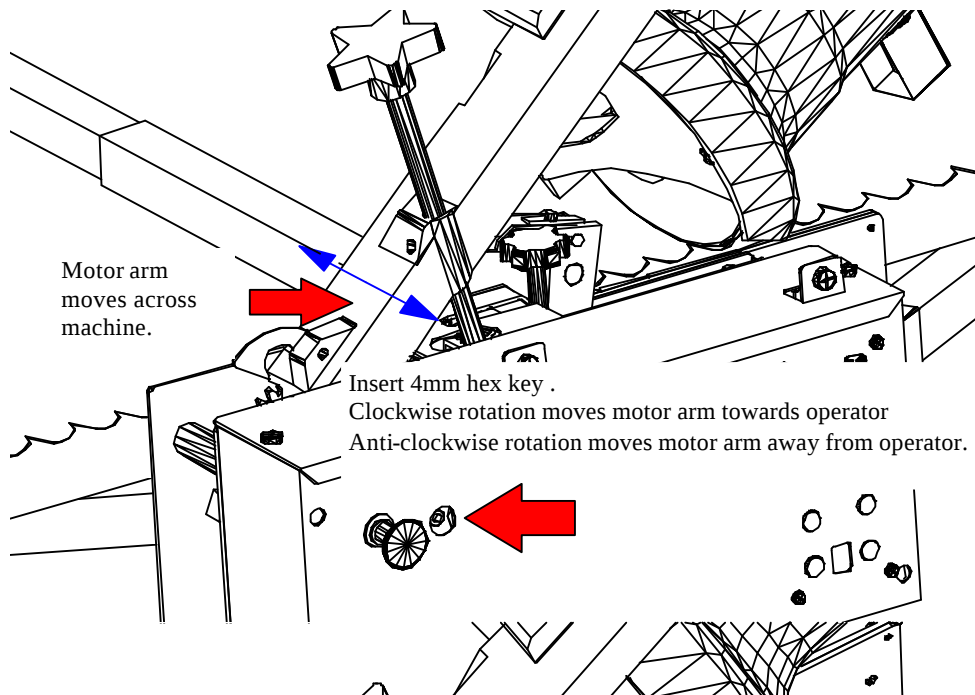
- (a) Screw down the Gullet Stop Screw fully.
- (b) Flip the feed pawl up and over so that it cannot index the teeth.



- (c) Move the back of an unset raker tooth into a position immediately beneath the grinding wheel.
- (d) Place the Grinder in the lowered position and carefully adjust the grinding wheel to just touch the back of the unset tooth.
- (e) Inch the feed, or wind the handle, through 3 cycles and note the clearance between the grinding wheel and the tooth back when the head is fully rotated left and right.

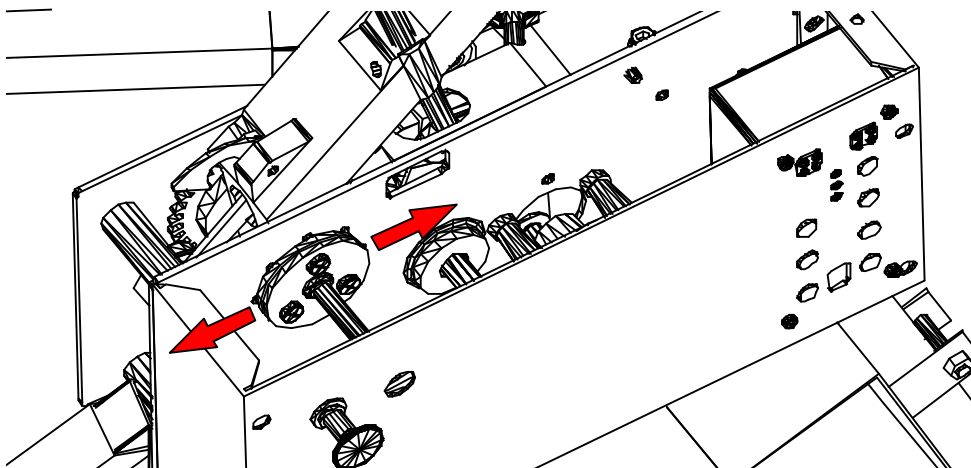


- (f) Adjust the Head Alignment Screw so that the gap between the grinding wheel and the back of the unset tooth is *exactly equal* when the head is rotated on the left and right hand sides. Final adjustment should be made after lightly grinding a section and noting the grind witness mark on the tips.



If more adjustment is required to centre grinding head over blade,, loosen the screws on the front pivot plates and move the required direction. See below.

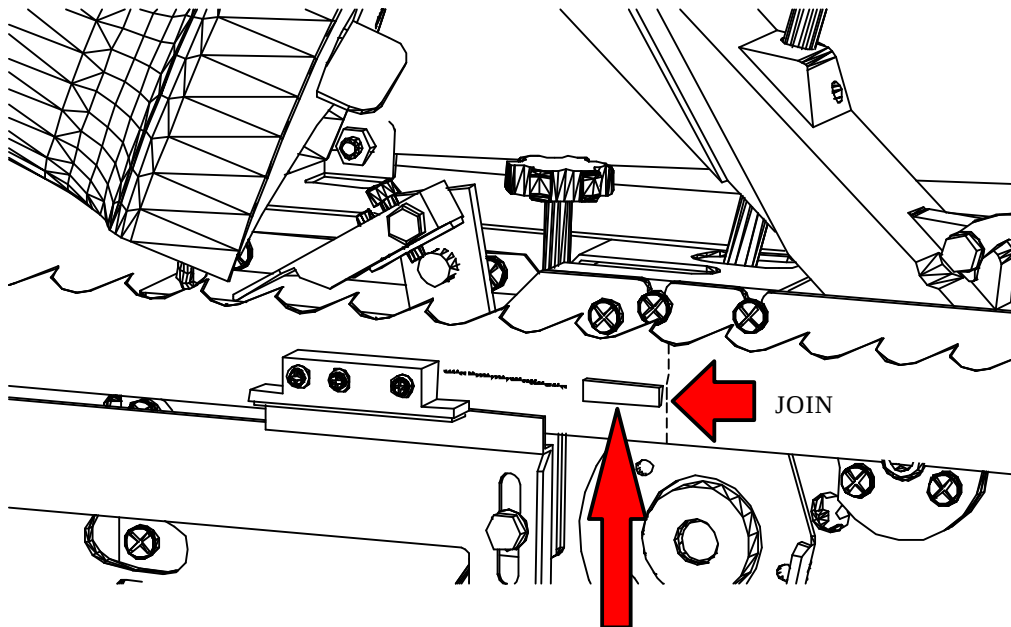
This adjustment should only be required after the machine has been disassembled.



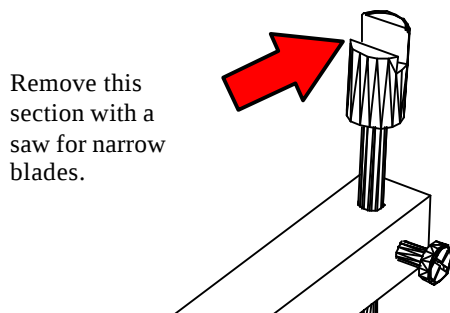
Counting Blade Revolutions

The machine can be setup to sharpen the blade a set number of times. The count number is set by pressing the count button. The count will decrease by 1 when the magnet (attached to the blade) passes the magnetic reed switch. The machine will stop when the count reaches zero.

1. Place the magnet on the blade at the join
2. Make sure the magnet is in line with the reed switch—see below
3. Press the count button until the desired number is displayed.
4. Press the START button.



Place magnet in line with reed switch at join of blade.



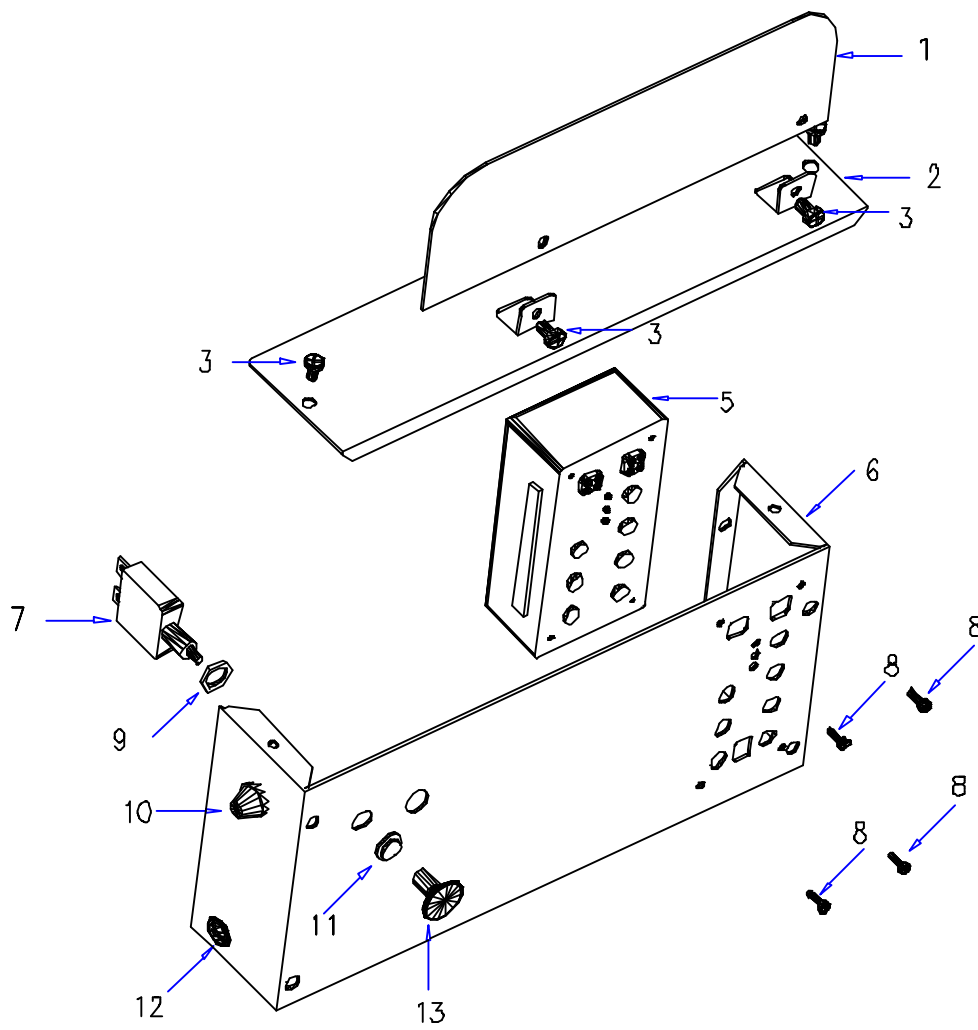
Remove this section with a saw for narrow blades.

Narrow blades may require the inside edge of the plastic blade guides to be removed as shown to allow the magnet to pass through.

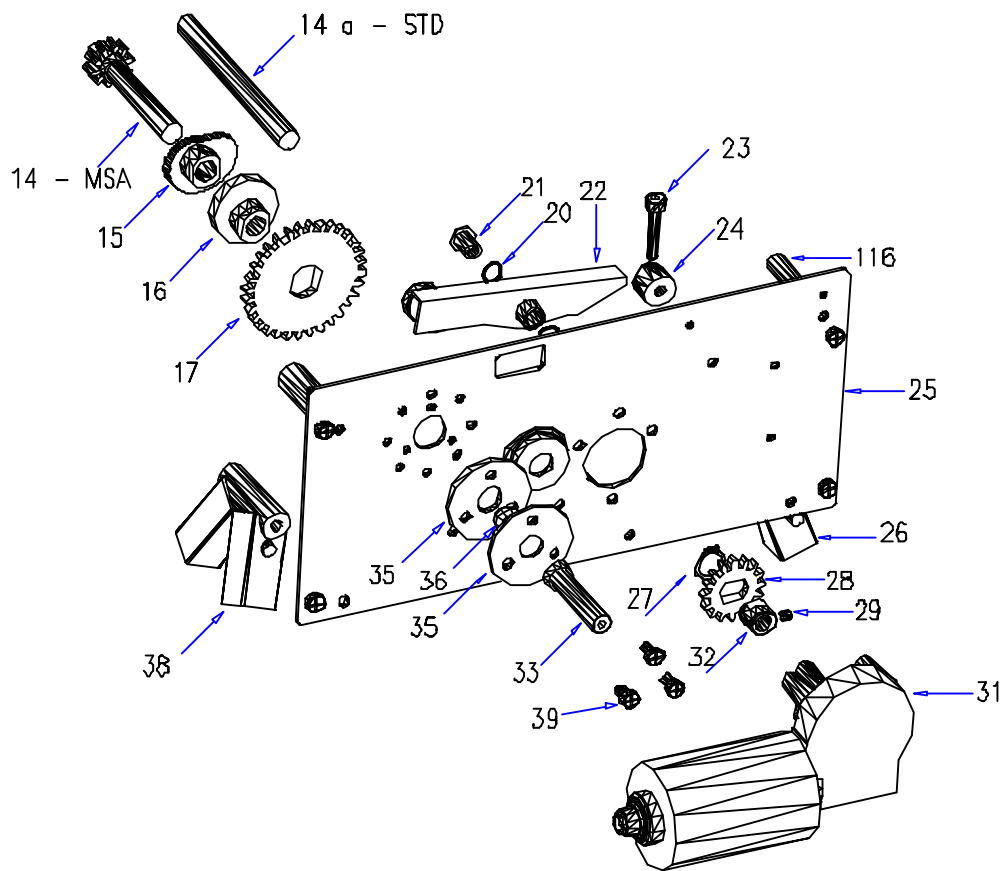
Troubleshooting

Problem	Cause	Remedy
Irregular Feed / Grind	1. Blade Rusted/Gummed/Dirty 2. Feed Pawl Nose Worn. 3. Feed pawl not presenting correctly 4. Blade catching in guides 5. Blade Sticking in height adjuster plate 6. Irregular tooth pitch – Alters tooth throat shape causing feed pawl to catch 7. Loose/worn feed arm pivot 8. Broken/worn cam follower 9. Worn feed cam 10. Worn feed pawl pivot	Clean blade Apply lubricant Re dress pushing face Adjust presentation height Adjust guides Ensure magnets are in place Adjust presentation height Tighten/replace shaft/bush Replace Replace Replace
Inconsistent Tooth Shape	1. Tooth pitch irregular 2. Feed Pawl not presenting correctly	Irreparable – Use new blade Adjust feed pawl height
Cannot centre grind	Grinding head not square Grinder arm pivots misaligned	Inch machine until grinding wheel is at highest point and MSA cam follower is on middle lobe. Head protractor should align with 0°. If not, unclamp grind head and realign before reclamping. 1. Ensure head is square (page16) 2. Slightly loosen front pivot plate and move plate in the desired direction.
Teeth burning	Too much heat	Dress grinding wheel Grind less material ABN – Invert or replace
Tooth burr	Grinding wheel dull Grind too heavy	Dress wheel Reduce grind
Fuse blows	Supply polarity wrong Motor overload Worn motor brushes	Correct polarity Check for jam Replace brushes

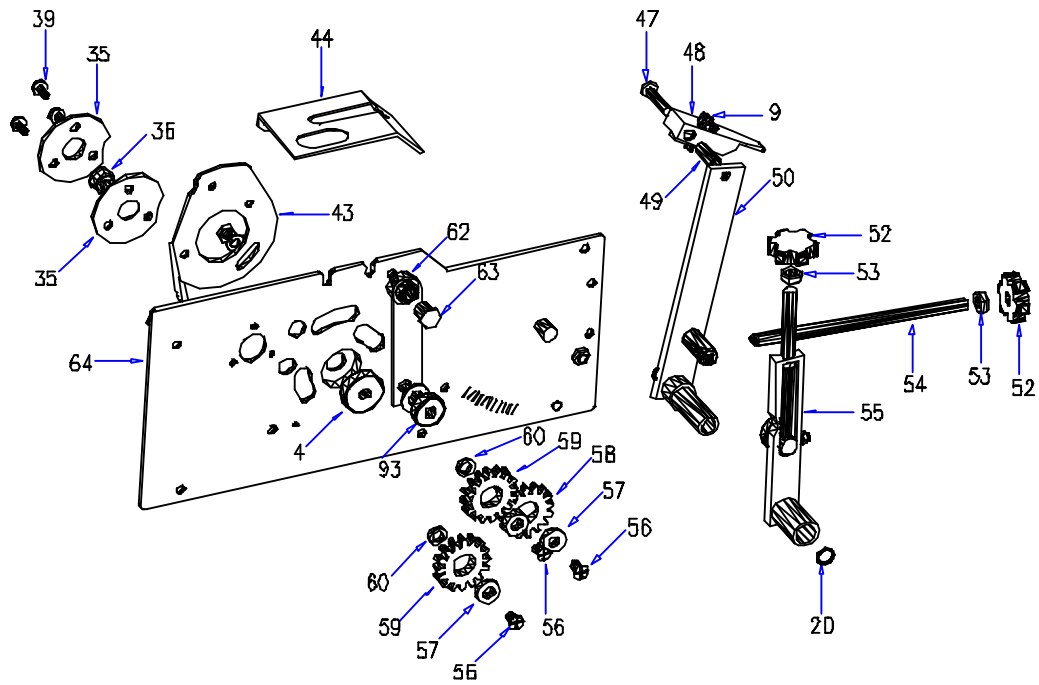
Cover Assembly



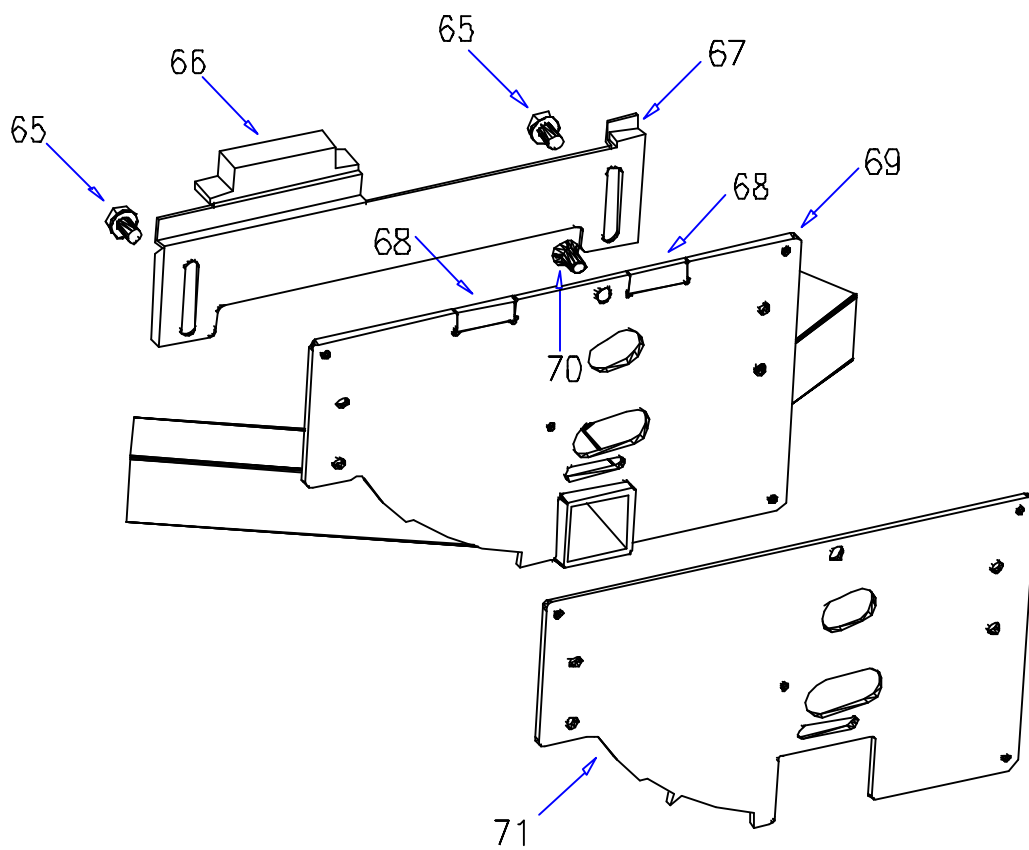
Front Plate Assembly



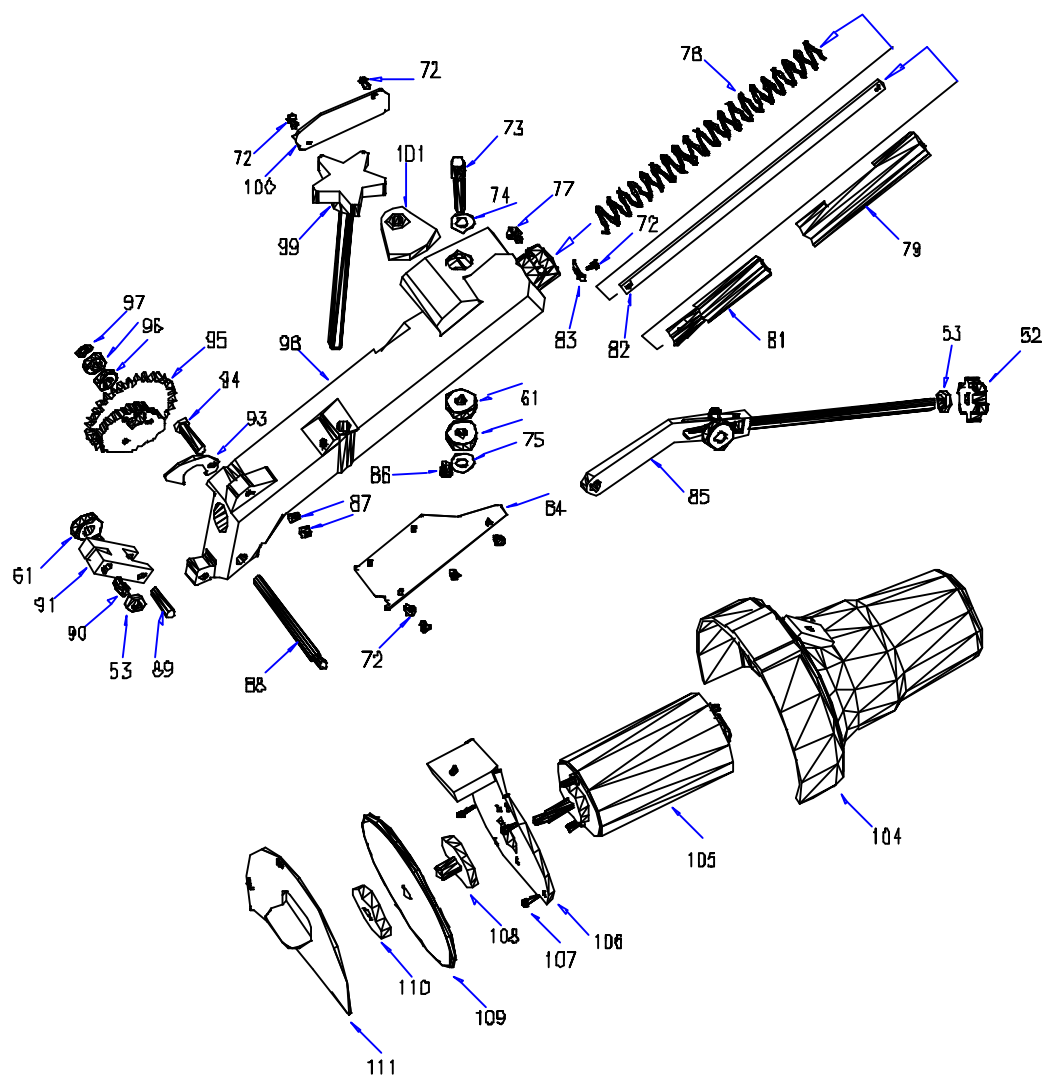
Rear Plate Assembly

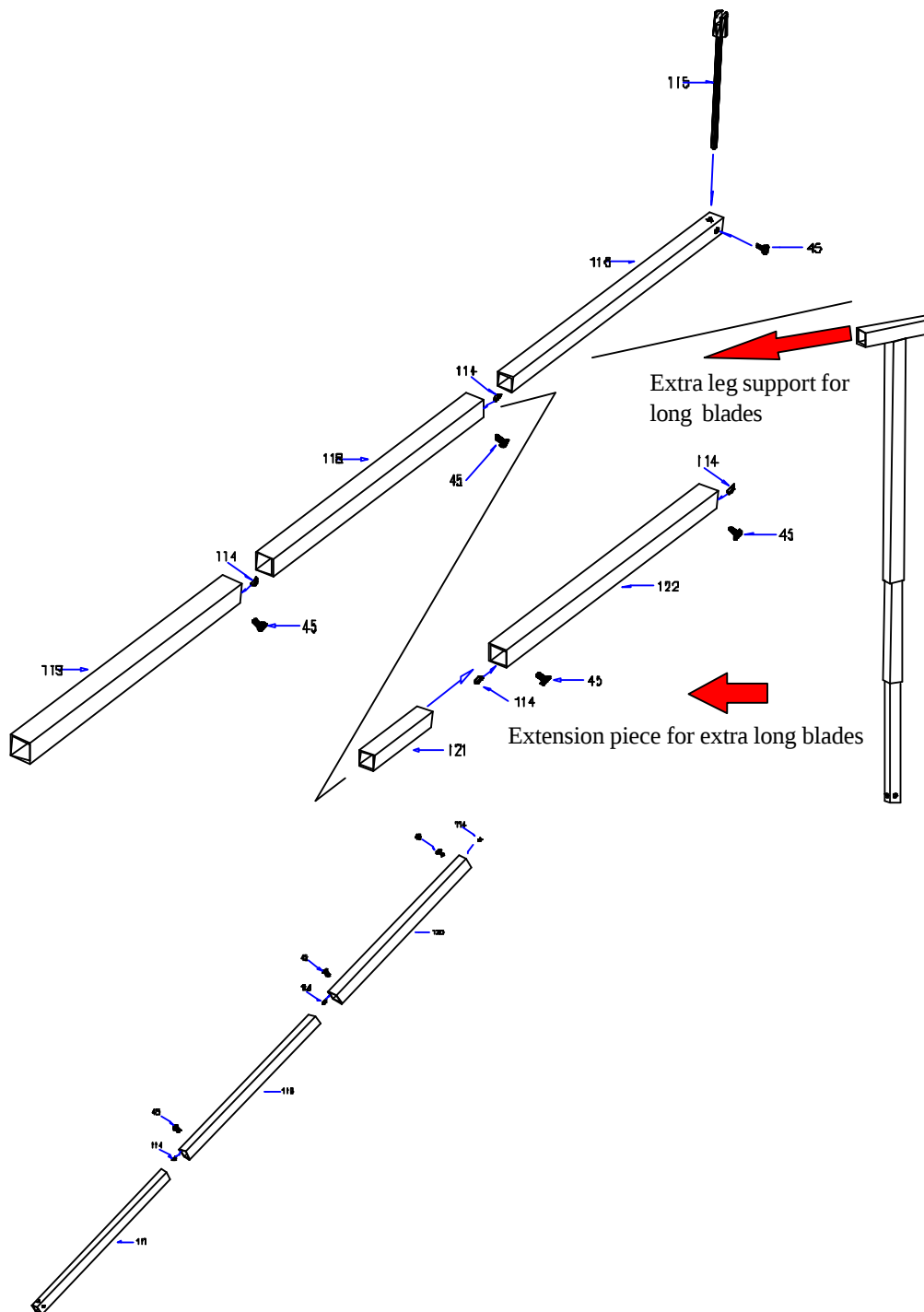


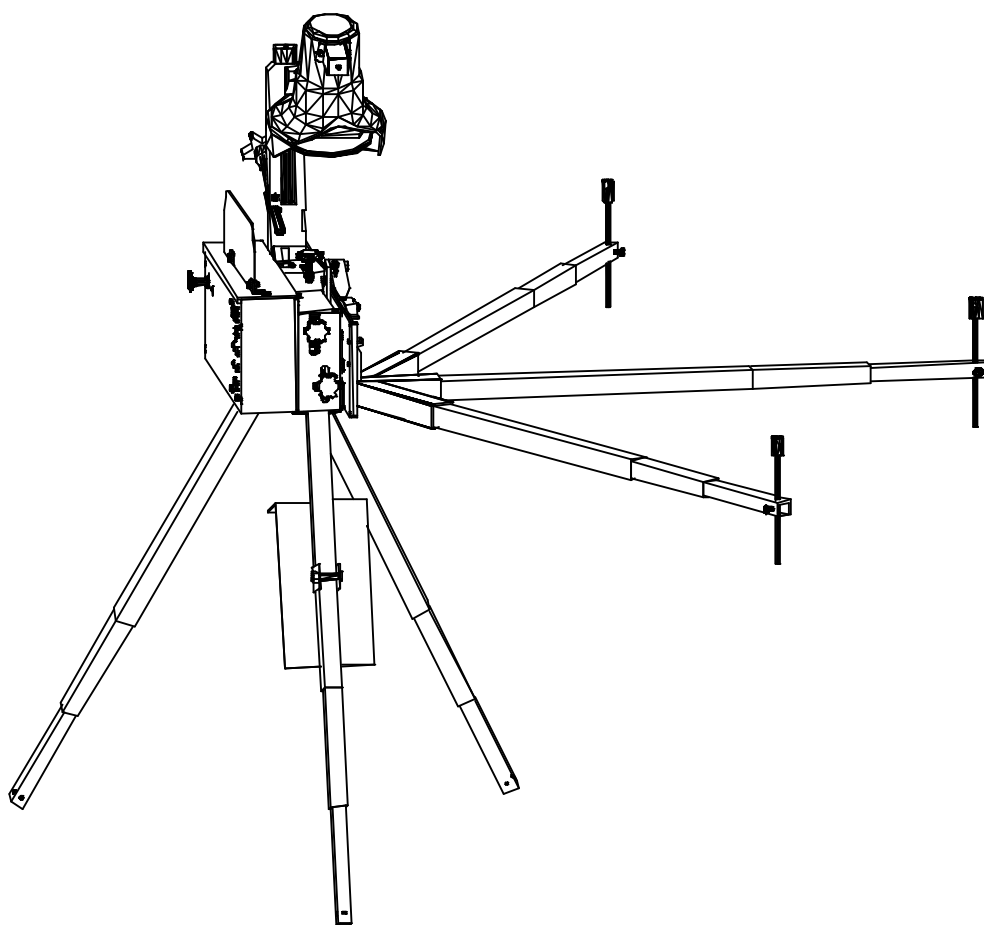
Blade Guide Assembly



Grind Arm Assembly







No.	Description	Part No.	No.	Description	Part No.
1	Shield	PZAPS	45	M5 x 10 Pan	FM510PAN
2	Cover, Top	RPTCP	46	Cover, Top 2	RPTC2
3	M5 x 10 Pan	FM510PAN	47	M6 x 30 Hex	FM630HEX
4			48	Picker, Feed	RPF
5	Controller	ECONTROLLER	49	Bush, Picker	RPPFBU
6	Cover, Front	RPPFC	50	Arm, Feed	RPFA
7	Switch Body	ESWITCHPP75	51	Cover, End	RPENDC
8	Self Tapper	F4G12PH	52	Knob	RPKNOB8B
9	Switch Nut		53	M8 Locknut	FM8LOCKNUT
10	Fuse Holder	EFUSEHLDRPM	54	Screw, Tooth Pos.	RPTPSC
11	Switch Nut - F		55	Trans, Feed	RPFTA
12	Gromet	EGROMET2	56	1/4"BSW x 1/2"	F1412CS
13	Switch Knob		57	688 Bearing	B-688zz
14	Camshaft - Auto	RPCS2003	58	Idler Gear - 5mm	RPIG5
14a	Camshaft - Manual	RPCM2003	59	Idler Gear - 7mm	RPIG7
15	Feed Cam	RPFCS	60	Spacer, Idler Gear	RPFIGS
16	Lift Cam	RPNAC	61	Bearing	B-608zz
17	32t Gear	RP32TG	62	Arm, Feed Cam Fol.	RPFCA
18	Circlip	FM10CCLIP	63	Bush, Feed Cam Fol	RPFCAFAB
19	Washer	FM10WZP	64	Plate, Rear	RPRP
20	Oring	B-ORING101	65	M6 x 10 Hex	FM610HEX
21	Pin, Pivot	RPACPF	66	Switch, Reed	ESWITCHREED
22	Arm, Amp Cam	RPACFA	67	Plate, Blade Supp.	PBCSP
23	Screw, Gullet Stop	RPFSGSC	68	Magnet	ENEOMAG2593
24	Block, Gullet Depth	RPDSB	69	Plate, Blade/Frame	RPFBPPA
25	Plate, Front	RPFPP	70	M6 x 16 C/S	FM616CS
26	Spacer, Single Leg	RPSSLS	71	Plate, Blade	RPBSP2
27	Circlip	FM16CCLIP	72	Self Tapper	F4G38PH
28	16t Gear	P16TG	73	5mm Fix	FM5FIX
29	Grub Screw	FM66GRUB	74	Cap, Head Clamp	CHCC
30	Spacer, Feed Motor	RPFMIS	75	Bolt, Head Clamp	CHCB
31	Feed Motor	ESWF55	76	Pin, Head Clamp	CHCOP
32	Sleeve, Drive Motor	CDMSF	77	M4 x 16 Pan	FM416PAN
33	Centring Adjuster-A	RPFMACA	78	Spring, Bevel	OBEVSPRING
33a	Centring Adjuster-M	RPFMACM	79	Sleeve, Offset	CWOS2
34	Washer	FM5WZP	80	Screw, Bevel Limit	C3BLMB
35	Plate, Pivot Front-O	RPFPP	81	Worm	CWCC
36	Bush, Ball	B-168SA	82	Conrod, Bevel	C3CRODC
37	Plate, Pivot Front-I	RPFPP	83	Indicator, Angle	CAIPA2
38	Spacer, Double Leg	RPSSLD	84	Cover, Arm Bottom	CMABT
39	M5 x 10 Pan	FM510PAN	85	8mm Washer	FM8WZP
40	Plate, Pivot Rear-O	RPFPP	86	Self Tapper	F4G38PH
41	Bush, Ball	B-168SA	87	M6 x 6 Grub	FM66GRUB
42	Plate, Pivot Rear-I	RPFPP	88	Pin, Motor Arm Pivot	RCMAPP
43	Plate, Idler Gear	RPIGAP	89	Pin, Bev. Cam Fol.	CBCFPP

NOTES

Warranty Registration

Please fill out and return to:

**Dinasaw®
Unit 6, 18 Claude Boyd Pde.
Caloundra
Queensland 4551
Australia
Ph. (61 7) 54 914999
Fax. (61 7) 54 917809**

First Name:

Last Name:

Address:

Phone Number:

Fax Number:

E-Mail Address:

Place of purchase:

Date of purchase:

Machine Type : Automatic ☐ Semi-Automatic ☐

Serial Number:



Dinasaw ®
Unit 6, 18 Claude Boyd Pde.
Caloundra
QLD 4551
Australia

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