

# FUTURA FLEXO

*Inspired Design – Precision Engineering*

## USER INSTRUCTIONS

Thank you for choosing the Keencut FUTURA FLEXO Every effort has been made to bring you a precision engineered product with the promise of many years of valuable service. In order to obtain maximum benefit from your machine please read these instructions carefully. For advice and assistance or replacement parts please contact your distributor or Keencut Ltd.



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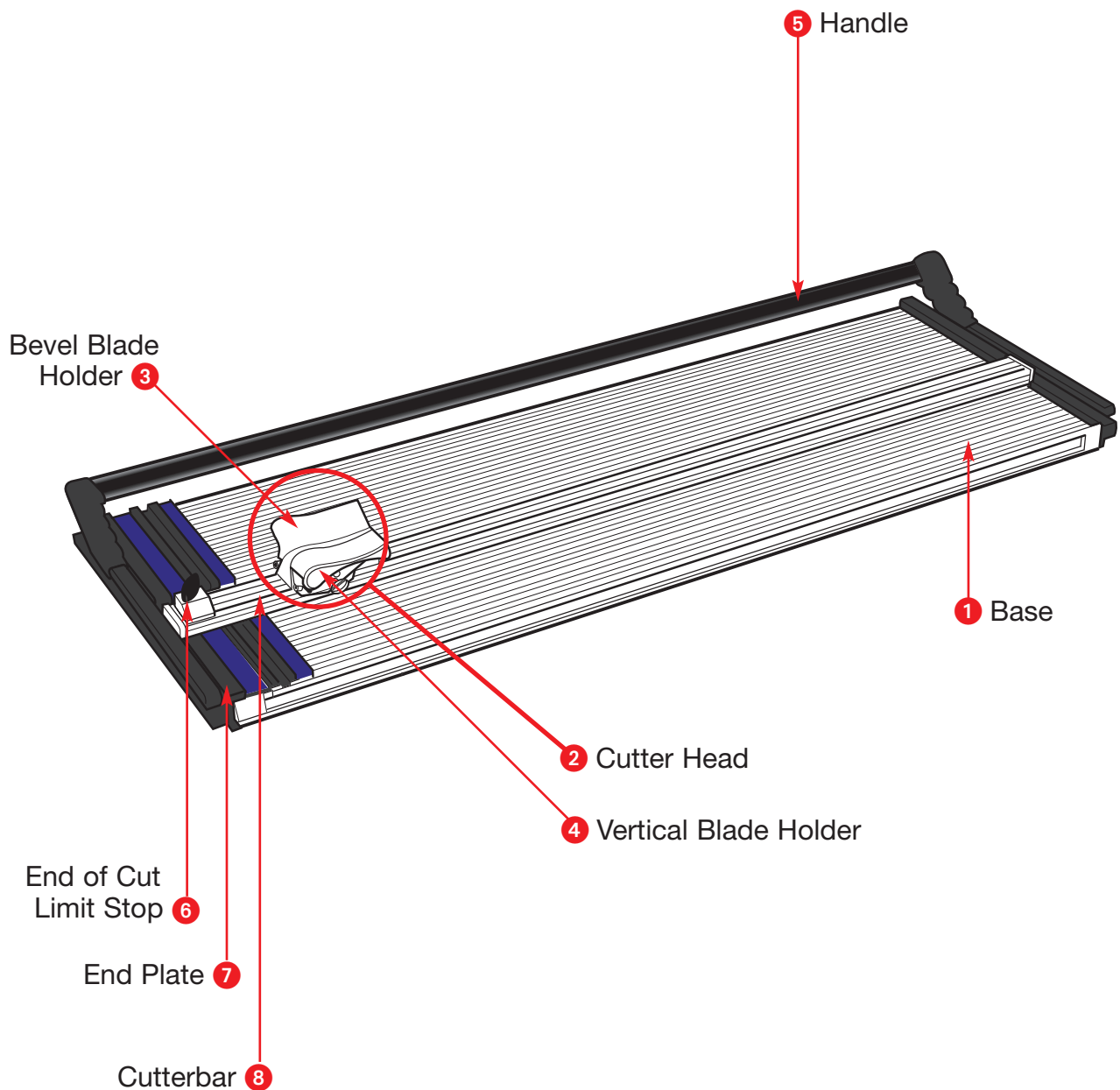
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## Know your FUTURA FLEXO

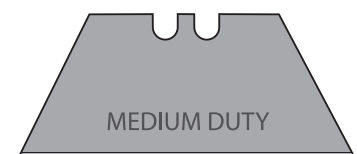
**Cutter - Available in four sizes:**

■	FLEX 100	100cm	40" cutting length	(with 6 rubber feet*)
■	FLEX 120	120cm	48" cutting length	(with 6 rubber feet*)
■	FLEX 150	150cm	62" cutting length	(with 8 rubber feet*)
■	FLEX 218	218cm	86" cutting length	(with 10 rubber feet*)

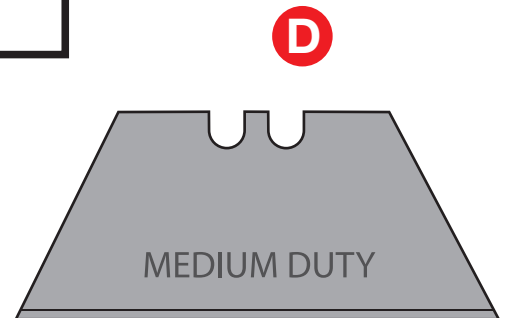
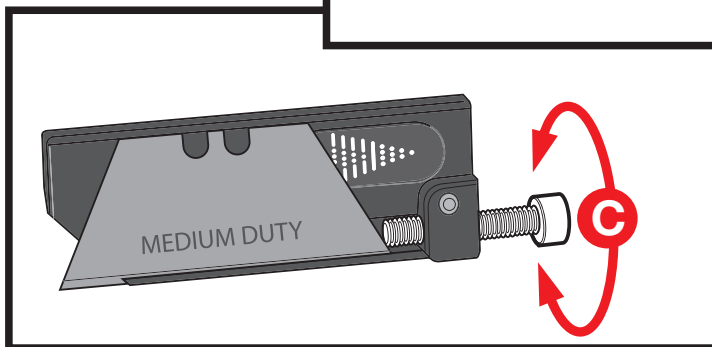
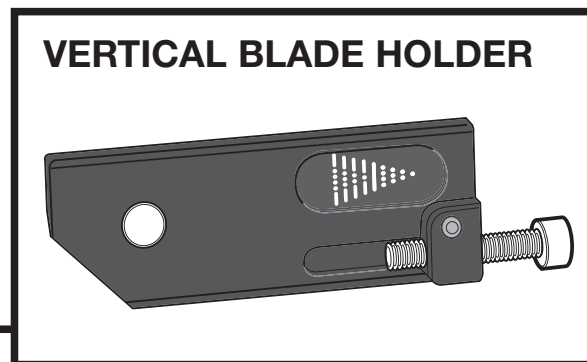
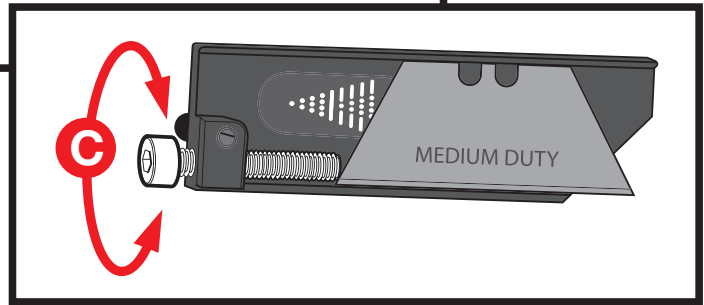
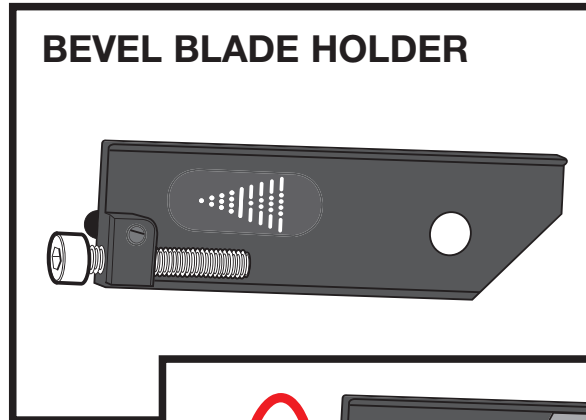
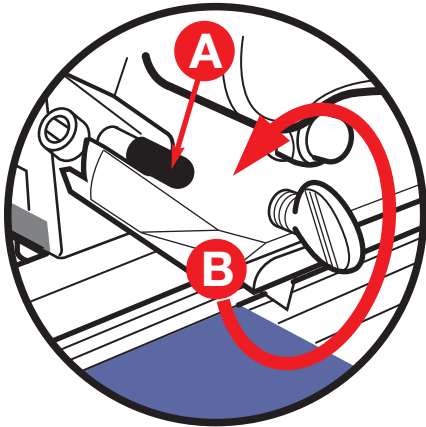
\* FEET TO BE EQUALLY SPACED ALONG THE LEFT AND RIGHT EDGES OF THE BASE.

**You should have:**

Cutting Mat  
 Pack of 100 Medium Duty Blades (Keencut Code CA50-019)  
 3mm Allen key  
 Instruction CD



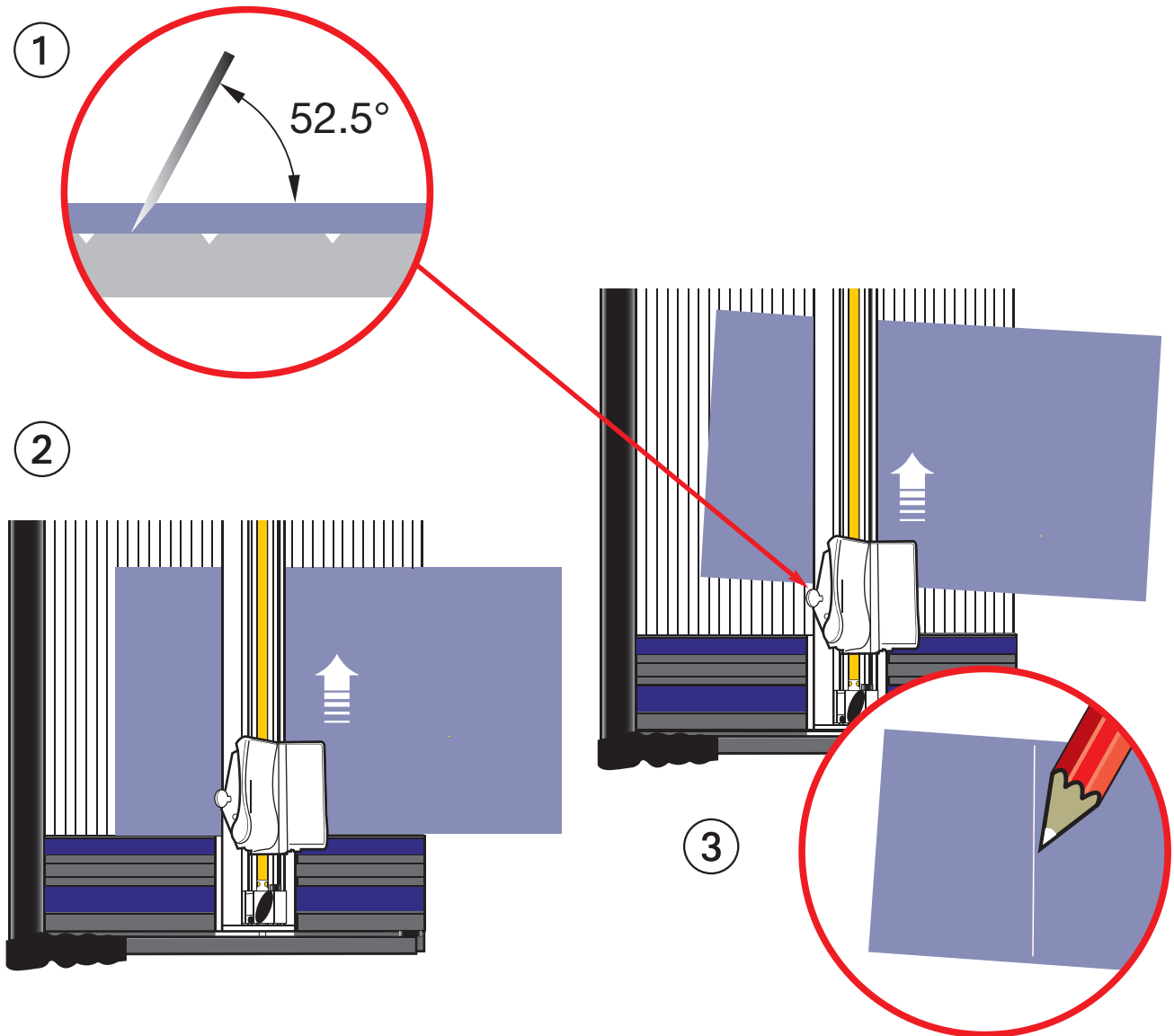
## The Blade Cartridges



- Both the bevel and vertical blade holders are fitted with Blade Cartridges, to release the cartridge from either of the blade holders slacken the blade clamping screw (B) and pull the cartridge out, gripping the black plastic pin (A). The blade is held onto the cartridge by a strong magnet, place the blade between the two raised edges and slide it so the back edge of the blade touches the depth adjustment screw. To adjust the blade depth turn the adjustment screw (C) clockwise to extend the blade length and counter-clockwise to reduce it. Always check that the blade is properly located in the cartridge before loading it into the blade holder.

Each cartridge has a different coloured label to help with identification and calibration if pre-set to suit different thicknesses of material. Additional blade cartridges are available from your Keencut distributor.
- The standard blade used with the Futura Flexo is the Medium Duty Utility blade (D).

## General Purpose Cutting 1



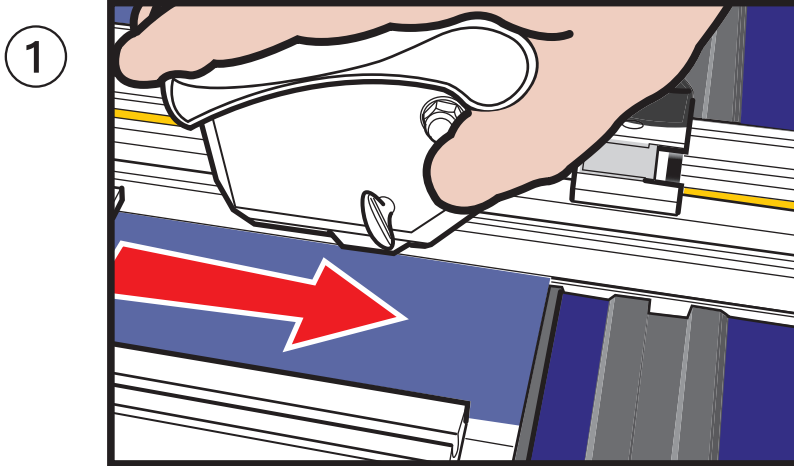
The Futura Flexo is a general purpose machine that will cut a large range of materials up to 6mm (1/4") thick with the standard medium duty blade.

■ **IMPORTANT:** It is important that the table surface the cutter is used on is relatively flat. If not the base and cutter bar may not clamp the material properly allowing it to move whilst being cut.

- ① The cutting head has two blade holders, a vertical cutter on the right hand side and a bevel cutter on the left.
- ② To load material into the machine raise the long black handle and place the material under the cutter bar. Should the cut need to be perpendicular (90 degrees) to the edge of the material position it against the End Plate to align it.
- ③ Alternatively place the material forward of the End Plate and align the blade with the desired cutting line. Lower the black handle to clamp the material in place.

The Futura Flexo is normally operated from the end of the machine such that the cutter head is pulled towards the operator when cutting,

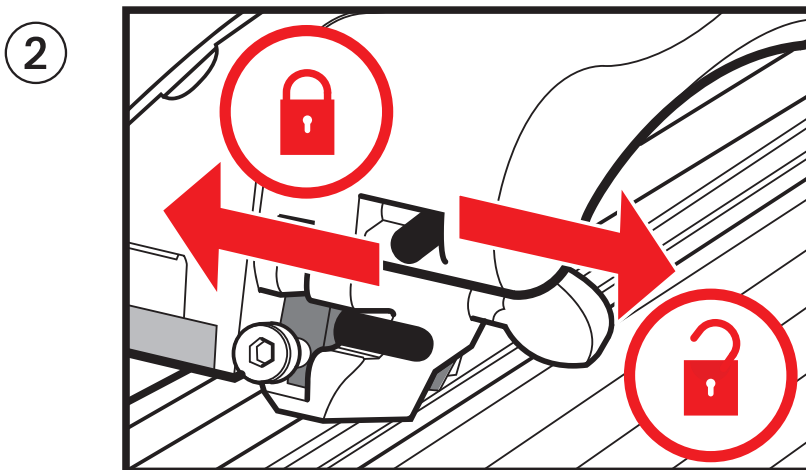
## General Purpose Cutting 2

**Bevel Cutting**

Always adjust the blade depth so that the smallest amount of blade is exposed to just cut through the material, it will produce a better quality cut and require less effort. There is a groove along the base plate which accommodates the tip of the blade when cutting. Thin materials may need the cutting mat to support them to avoid the material being pressed into the groove which will produce inconsistent and unsatisfactory results.

- ① A cutting mat must always be used when bevel cutting thick materials as the blade may run outside the groove and damage the base plate.

**DO NOT REST YOUR HAND ON THE LONG LIFTING HANDLE WHILST CUTTING  
BECAUSE THE BLADE PENETRATION WILL BE REDUCED.**

**Vertical Cutting**

The vertical cutter can also be used with or without a cutting mat, this will help to produce a better quality cut on most materials. The blade depth should be set just long enough for the tip to penetrate the material being cut.

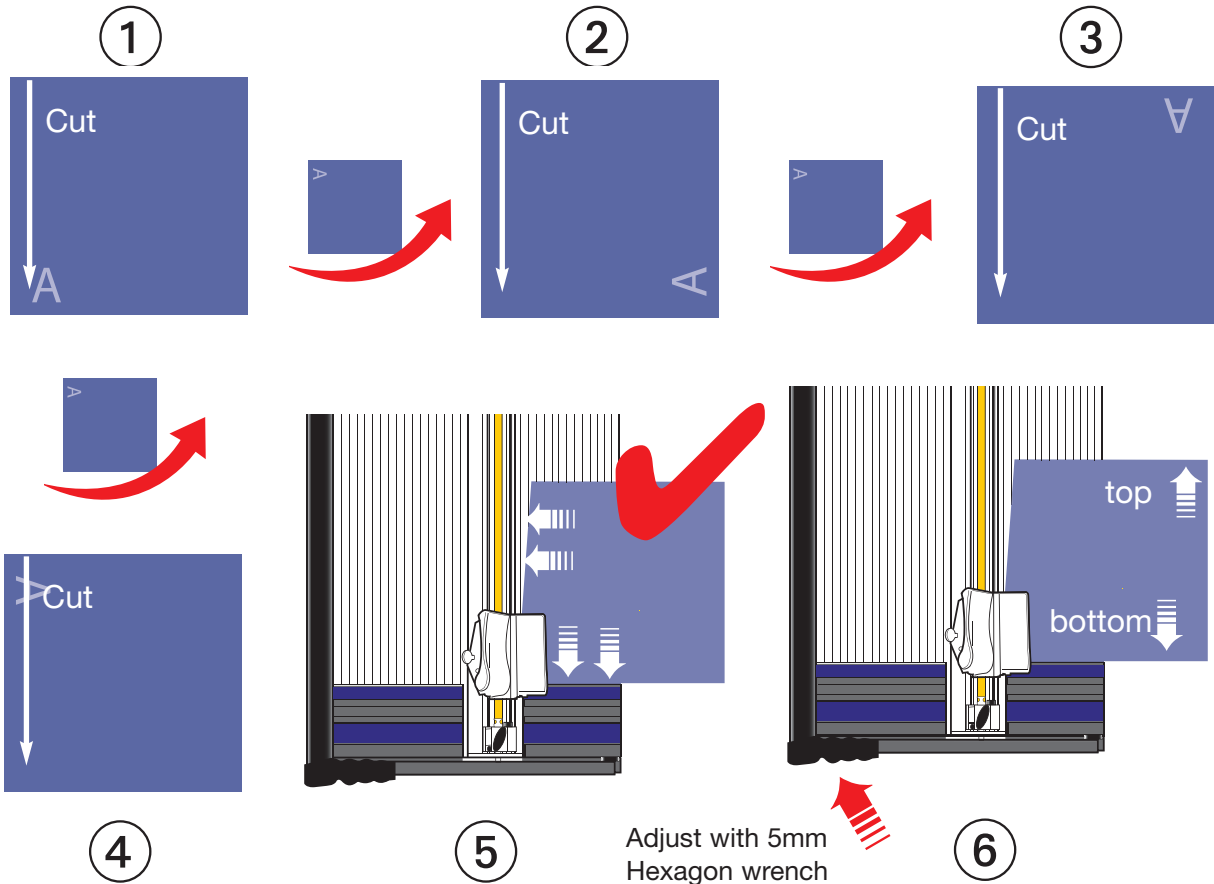
- ② The vertical cutter has a two way lock which can lock the blade in the down or up position. Slide the black pin to the left to lock and to the right to release.

**DO NOT REST YOUR HAND ON THE LONG LIFTING HANDLE WHILST CUTTING  
BECAUSE THE BLADE PENETRATION WILL BE REDUCED.**

You will need



## Squaring



Adjust with 5mm  
Hexagon wrench

### YOU SHOULD NOT NEED TO ADJUST THE SQUARING OF THE MACHINE!

- **SQUARING THE CUTTER BAR TO THE END PLATE** is carried out in our factory before despatch of all new machines. Therefore adjustment should never be necessary.

#### SQUARING TEST

Take a piece of thick card or board at least 65 x 65cm (25 x 25") in size.

- ① Clamp it under the Cutterbar and trim off approx 1cm (1/2") using the vertical blade, ensuring the bottom edge is in close contact with the End Plate.
- ② Turn the board a quarter of a turn counter-clockwise and trim the same amount from the second edge.
- ③ Repeat for the third edge.
- ④ And again for the fourth edge, always making sure the bottom edge of the Board is in close contact with the End Plate.
- ⑤ Rotate the Mat a quarter of a turn counter-clockwise but this time place the bottom edge on the End Plate and slide it to the left until it comes into contact with the Cutterbar. If the board comes into contact with the Cutterbar along its whole length the End Plate is square to the Cutterbar.

#### SQUARING ADJUSTMENT

- ⑥ If there is a gap between the board and the Cutterbar, then this gap represents four times the error of the machine.

Adjust the angle of the End Plate by turning the Squaring Adjustment Screw with the 5mm hexagon wrench.

Turn it clockwise to adjust if the gap is at the bottom of the board and turn it counter-clockwise to adjust if the gap is at the top of the board.

Close the gap between the Cutterbar and the End Plate by a quarter. Repeat the test and make further adjustments if necessary.

**■ MAINTENANCE**

Your cutter is a precision made machine and will give many years of accurate and reliable service if you follow these few simple steps.

Keep all liquids ( including tea and coffee) away from the machine - spillages spoil the machines performance and materials cut upon it.

Dust/vacuum daily, for stubborn stains use detergent/ water mix firstly applied to a cloth.

Cover the machine overnight with a plastic or fabric sheet.

If you need to move the machine away from the bench when it is not in use, store it either flat or if you have to stand it on end fasten the end of cut stop and use a strong elastic band to fix the cutter head to it. Then stand it on its top end leaning against a stable support.

Please note:- Standing the cutter on end should be avoided if possible but, providing it is done carefully no harm will come to it.

In the event of heavy soiling on any part of the machine solvents can be used for cleaning but:-

Apply the solvent to a cloth and not directly on the cutter.

Read and comply with the solvents safety instructions.

Do not allow solvent to come in contact with any printed or plastic parts of the machine.

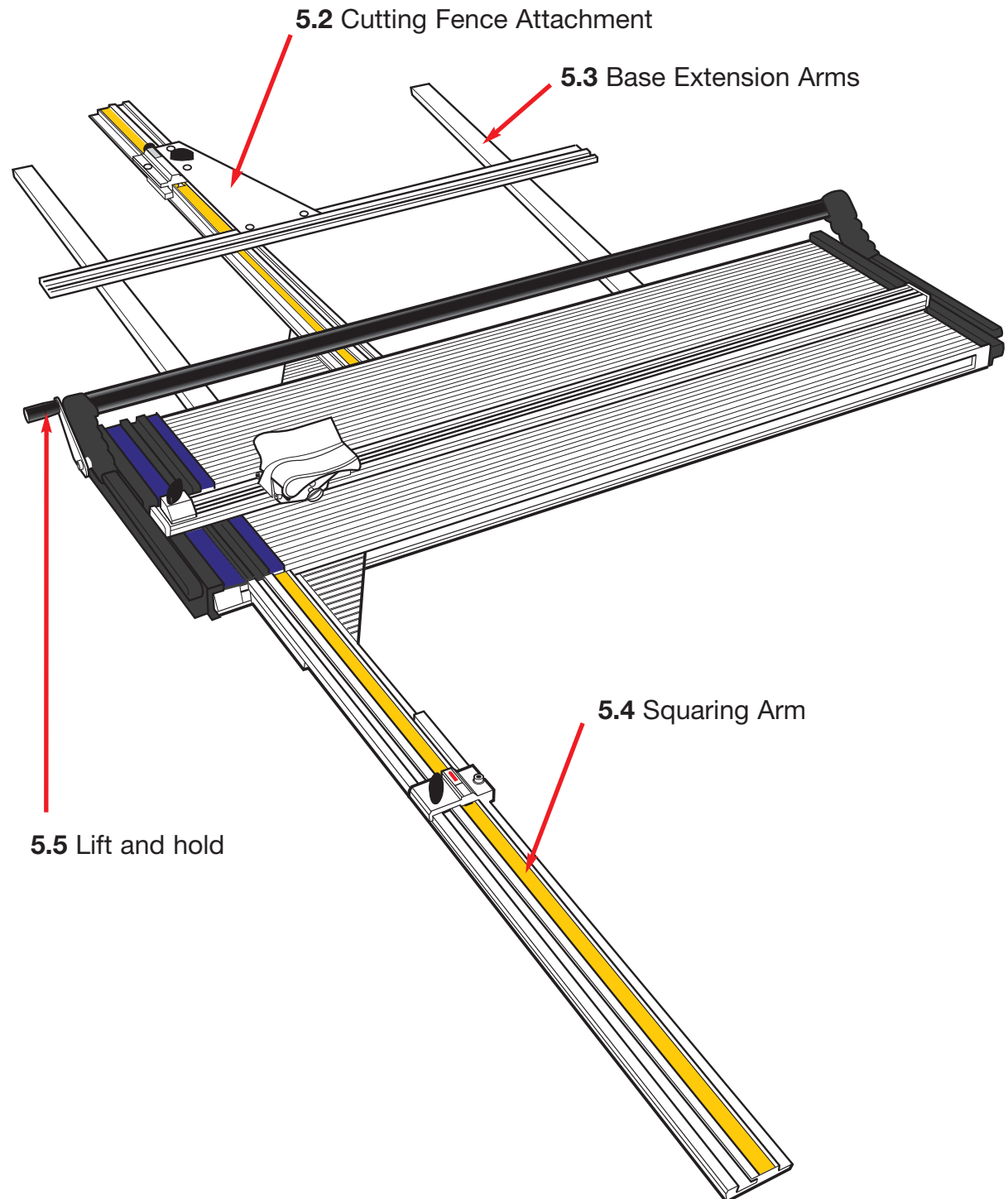
**■ CLEANING AND LUBRICATION OF THE CUTTER BAR**

As above, clean the two guide bars using solvent on a cloth being careful not to get solvent on the measuring scale. Lubricate using petroleum jelly or a firm grease, again apply it to a cloth then wipe it along the guide bars. Do not apply too much grease a thin smear is all that is required.

Oil can be used lightly on the lift and hold, pivot lift arm hinges and cutter bar pivots.



# 5.1 Optional Accessories 5.1



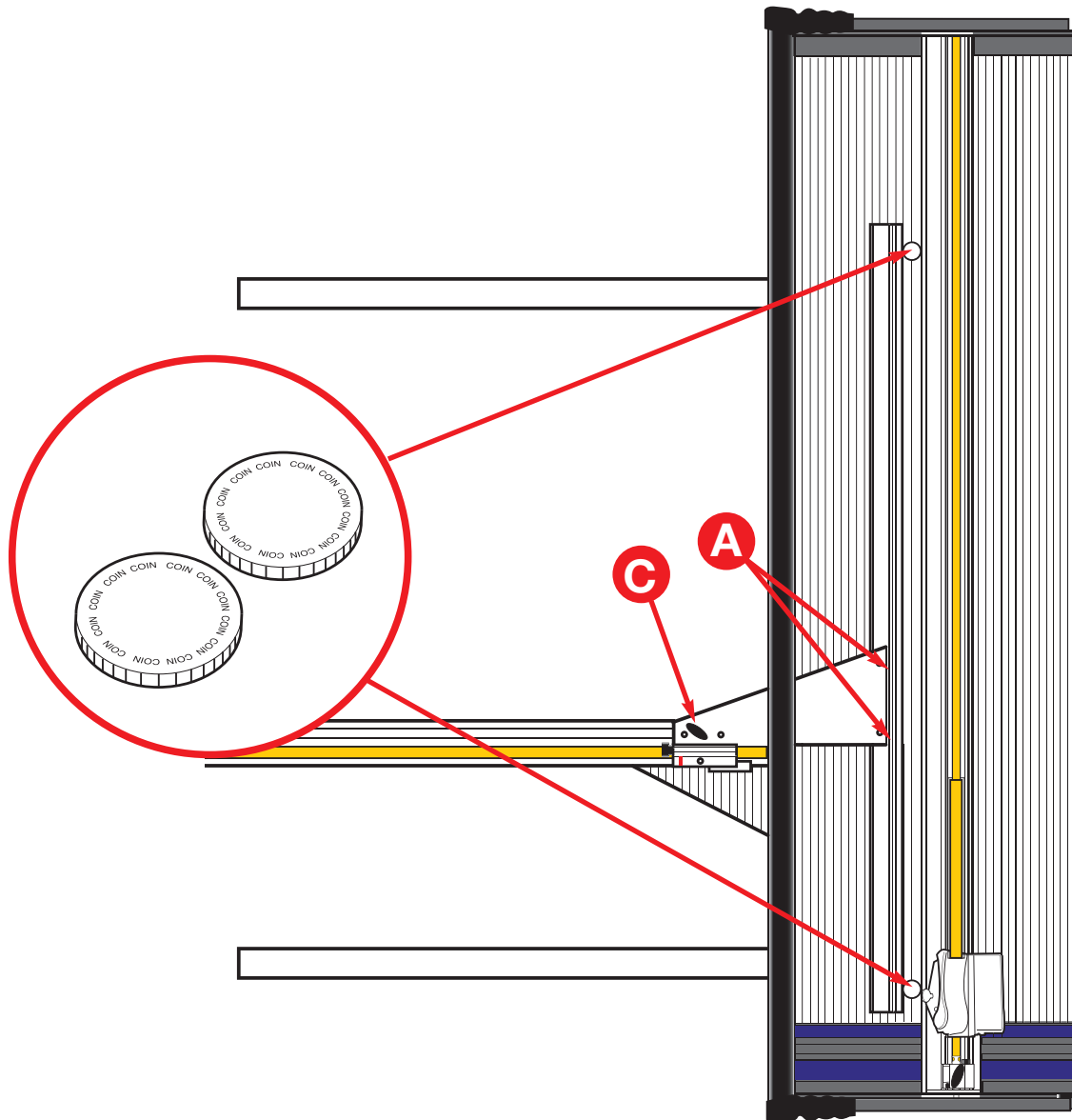
**There are a number of accessories available for the Futura Flexo:**

- 5.2 Cutting Fence Attachment - For accurate repeat cutting from 0 to 75cm (30") wide
- 5.3 Base Extension Arms - Provide support for material bigger than the machine base.
- 5.4 Squaring Arm - For precise square cutting and with integral stop for pre-set measurements
- 5.5 Lift & Hold - For quick lift and hold of the cutter bar to enable two handed material positioning.

# 5.2<sub>1</sub> Optional Accessories 5.2<sub>1</sub>

## 75mm Cutting Fence Kit - Alignment

①

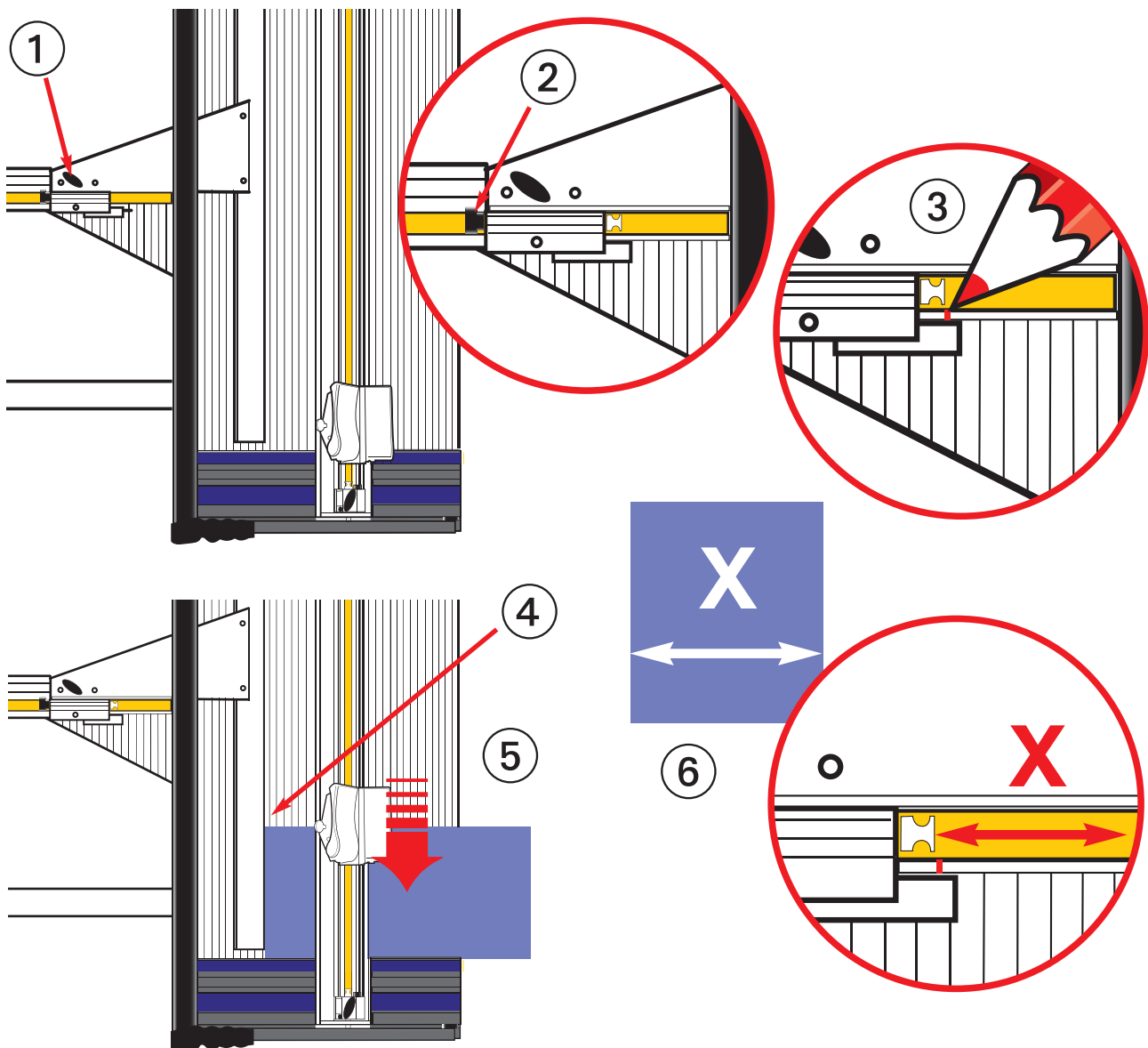


■ **THE ALIGNMENT OF THE CUTTING FENCE T-Bar** with the Cutterbar is checked using two identical coins.

- ① Place the coins as shown, one near the top of the Margin Guide T-Bar and the other near the bottom. Move the T-Bar across to touch both coins and clamp the wingbolt **(C)**. If both coins do not touch the T-Bar loosen the two Alignment Adjustment Screws **(A)**. Release the wingbolt **(C)** and move the T-Bar to the right touching the Margin Guide T-Bar on both spacers. Tighten the wingbolt **(C)**, gently tighten the two Alignment Screws **(A)**, check the coins now contact the T-Bar.

# 5.2<sub>2</sub> Optional Accessories 5.2<sub>2</sub>

## 75mm Cutting Fence Kit - Calibration



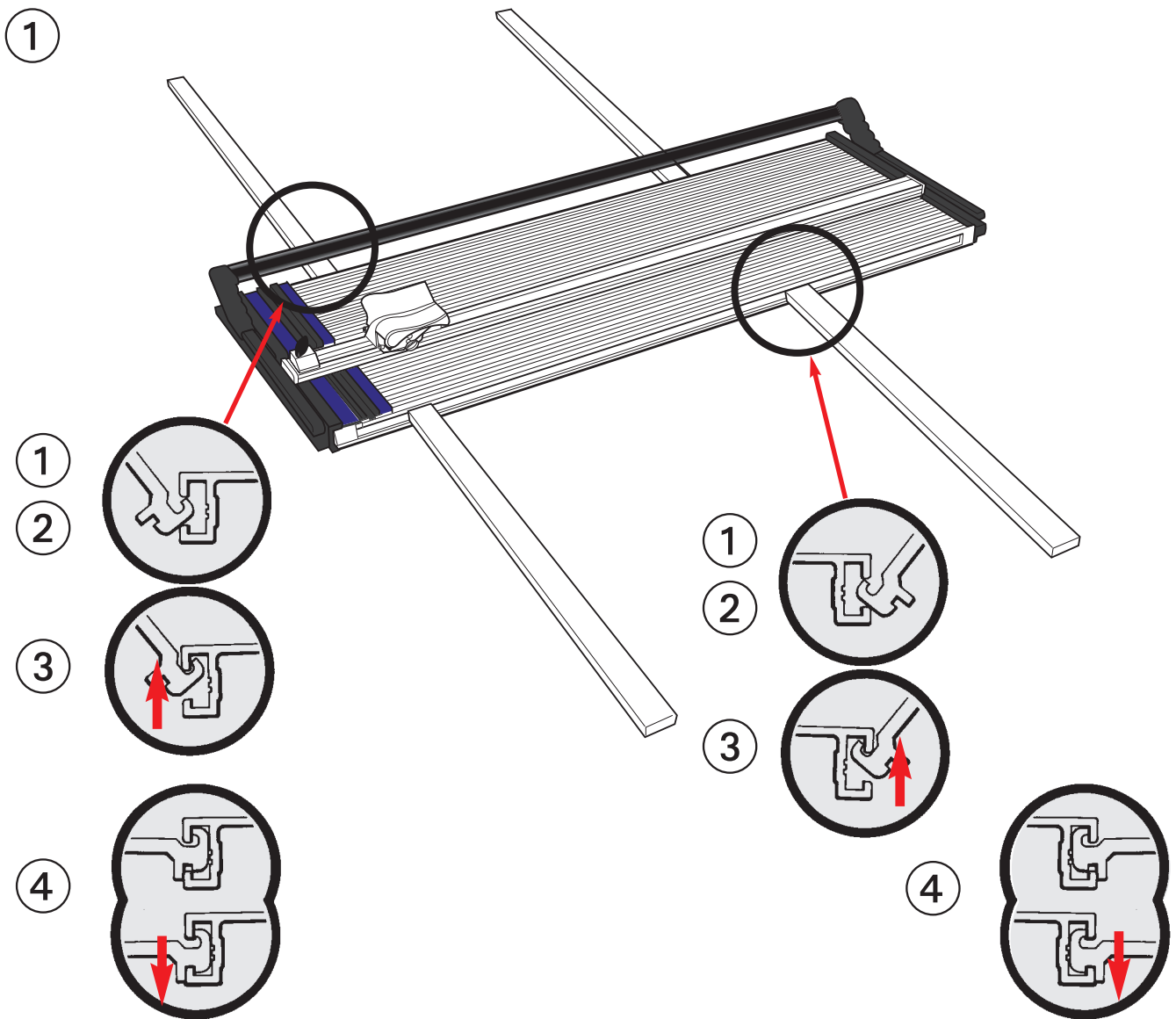
### ■ Calibrate the measuring scale to the vertical cutter:

- ① Position the T-Bar approximately half way across the Base, tighten the wingbolt.
- ② Ensure the blue metal scale adjacent to the wingbolt is set approximately to the mid-way point by turning the adjacent small black plastic knob.
- ③ Make a small pencil mark on the aluminium adjacent to the position of the cursor.
- ④ Place a piece of stiff card on the machine so its left hand edge is in contact with the T-Bar.
- ⑤ Cut the card with the vertical cutter.
- ⑥ Measure the width of the cut, remove the T-Bar from the Slideway and stick the scale to it so the pencil mark is aligned to the measured dimension on the scale.  
Fine adjustment can then be made using the micro-stop adjuster.

Should a parallel cut need to be made to the bevel cutter just add approximately 6.5cm (2 9/16") to the desired dimension. A more accurate adjustment measurement can be obtained by experimentation.

# 5.3 Optional Accessories 5.3

## Base Extension Arms



The Base Extension Arms are packed in pairs and can be fitted to either side of the Base. When large boards are cut on the machine they give the support necessary to keep the material flat for accurate cutting.

### FITTING

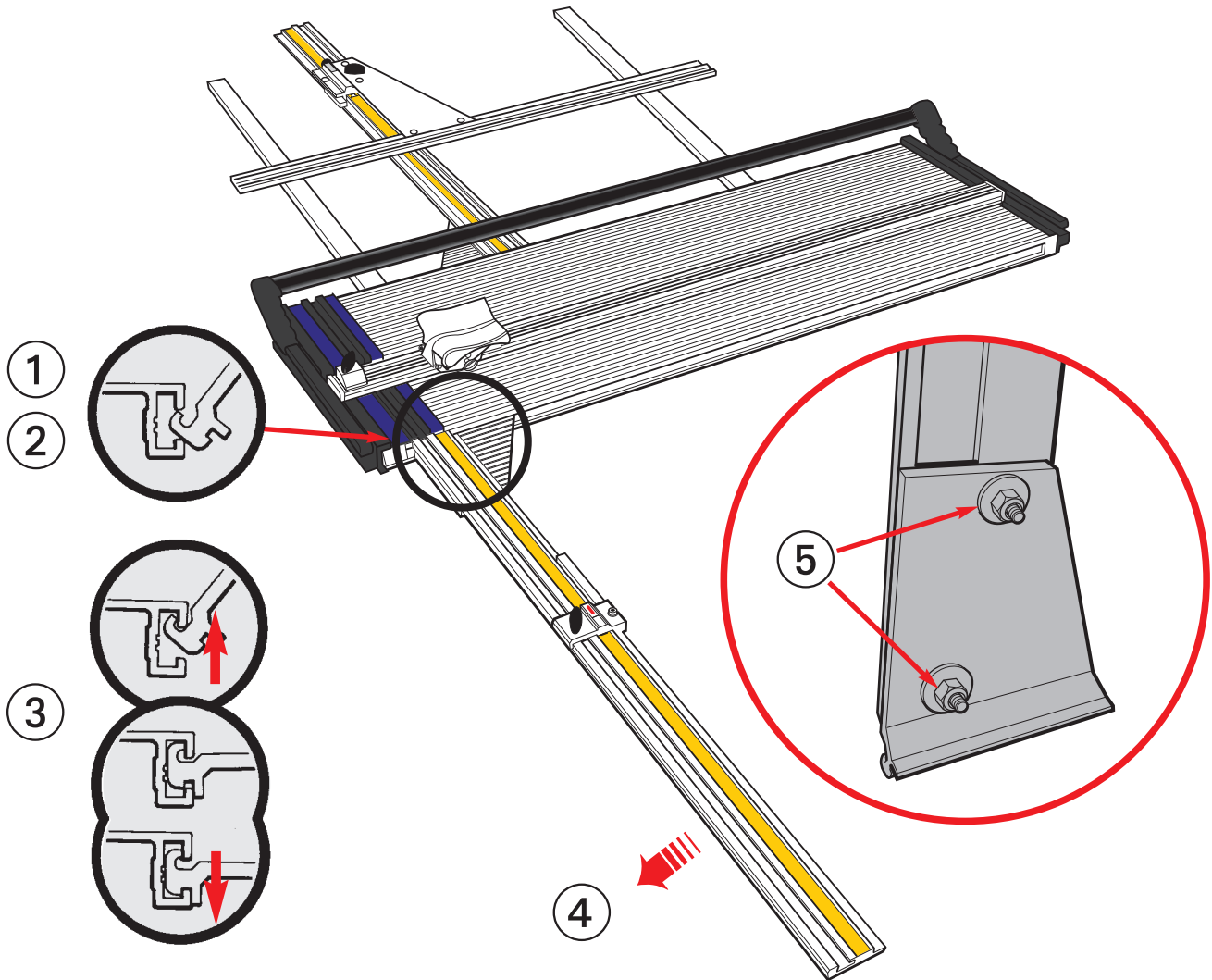
To clip the Base Extension Arms to the machine:

- ① Hold the Arm at 45 degrees to the Base.
- ② Present the Arm into the slot in the edge of the Base.
- ③ Engage the Arm upwards into the Base slot and ④ lower the Arm to horizontal.

Check they are level with the base, the plastic screw and lock nut on the underside of the Arm can be adjusted if necessary.

# 5.4<sub>1</sub> Optional Accessories 5.4<sub>1</sub>

## Squaring Arm - Alignment



The Squaring Arm is used to cut materials precisely square and to a pre-determined size. Before fitting, check that the End Plate is square by carrying out the test on the 'Maintenance – Squaring' page 4.1, adjust if necessary

### To fit the Squaring Arm

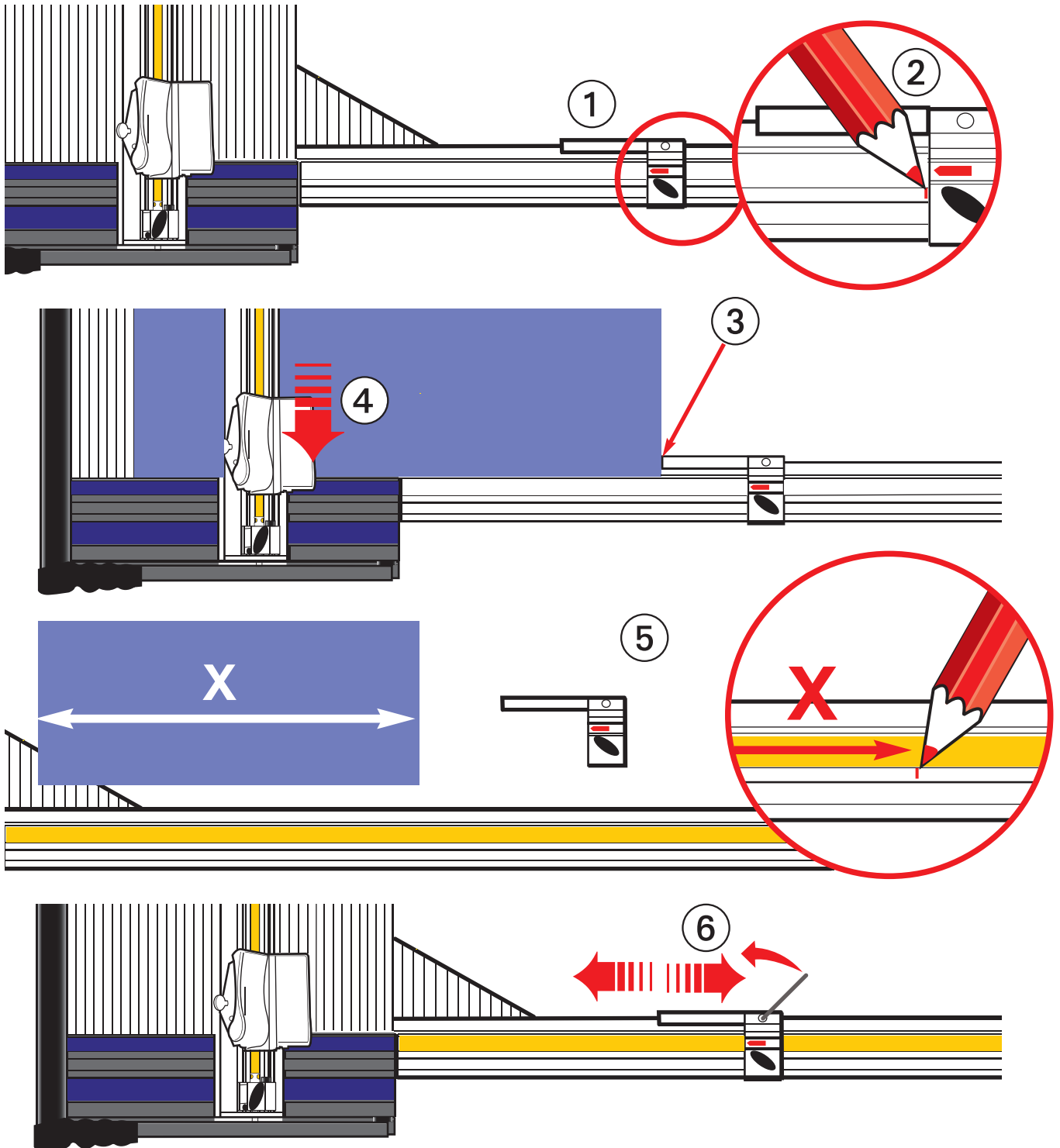
- ① Hold the Squaring Arm at 45 degrees to the Base and forward of the End Plate.
- ② Present the Squaring Arm into the slot in the edge of the Base.
- ③ Engage the Squaring Arm upwards into the Base slot and lower the Squaring Arm to horizontal.
- ④ Lift the right hand end of the Squaring Arm and slide it towards you.  
Reverse the instructions to remove the Squaring Arm.

### Align Squaring Arm with the End Plate

- ⑤ Loosen the two nuts on the underside of the Squaring Arm.  
Raise the Cutter Bar and place a long accurate straight edge along the two edges of the End Plate and onto the Squaring Arm.  
Hold the Squaring Arm in position whilst gently tightening the two nuts.

# 5.4<sub>2</sub> Optional Accessories 5.4<sub>2</sub>

## Squaring Arm - Calibration



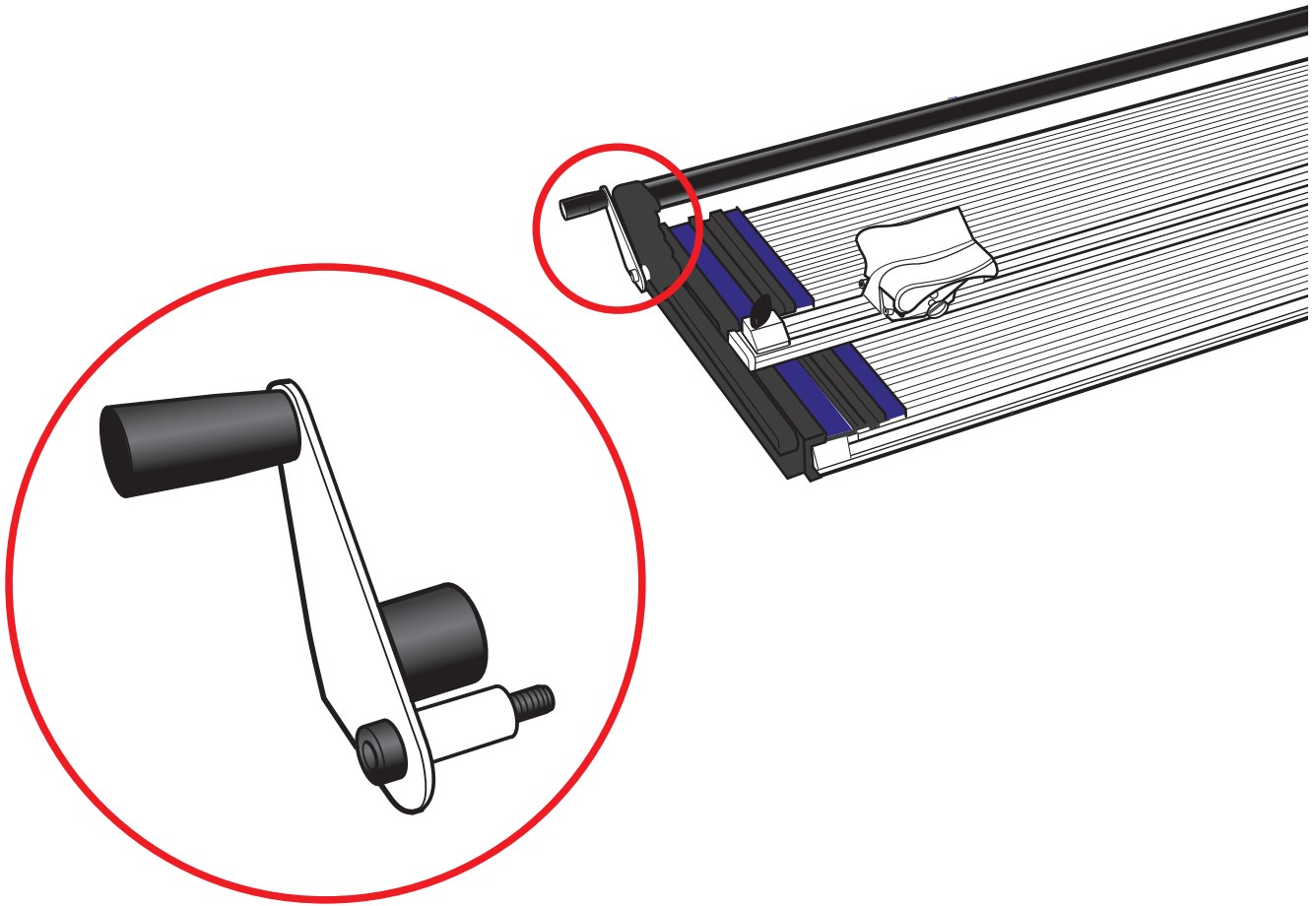
### Calibrate the measuring scale to the vertical cutter

- ① Position the Squaring Arm Stop a short way along the arm, tighten the wingbolt.
- ② Make a small pencil mark on the aluminium adjacent to the position of the cursor.
- ③ Place a piece of stiff card on the machine so its right hand edge is in contact with the Stop Finger.
- ④ Cut the card with the vertical cutter.
- ⑤ Measure the width of the cut, remove the Measuring Stop from the Squaring Arm and stick the scale to it so the pencil mark is aligned to the measured dimension on the scale.
- ⑥ Fine adjustment can then be made by adjusting the Stop Finger.

Should a measured cut need to be made to the bevel cutter just subtract approximately 6.5cm (2 9/16") from the desired dimension. A more accurate adjustment measurement can be obtained by experimentation.

# 5.5 Optional Accessories 5.5

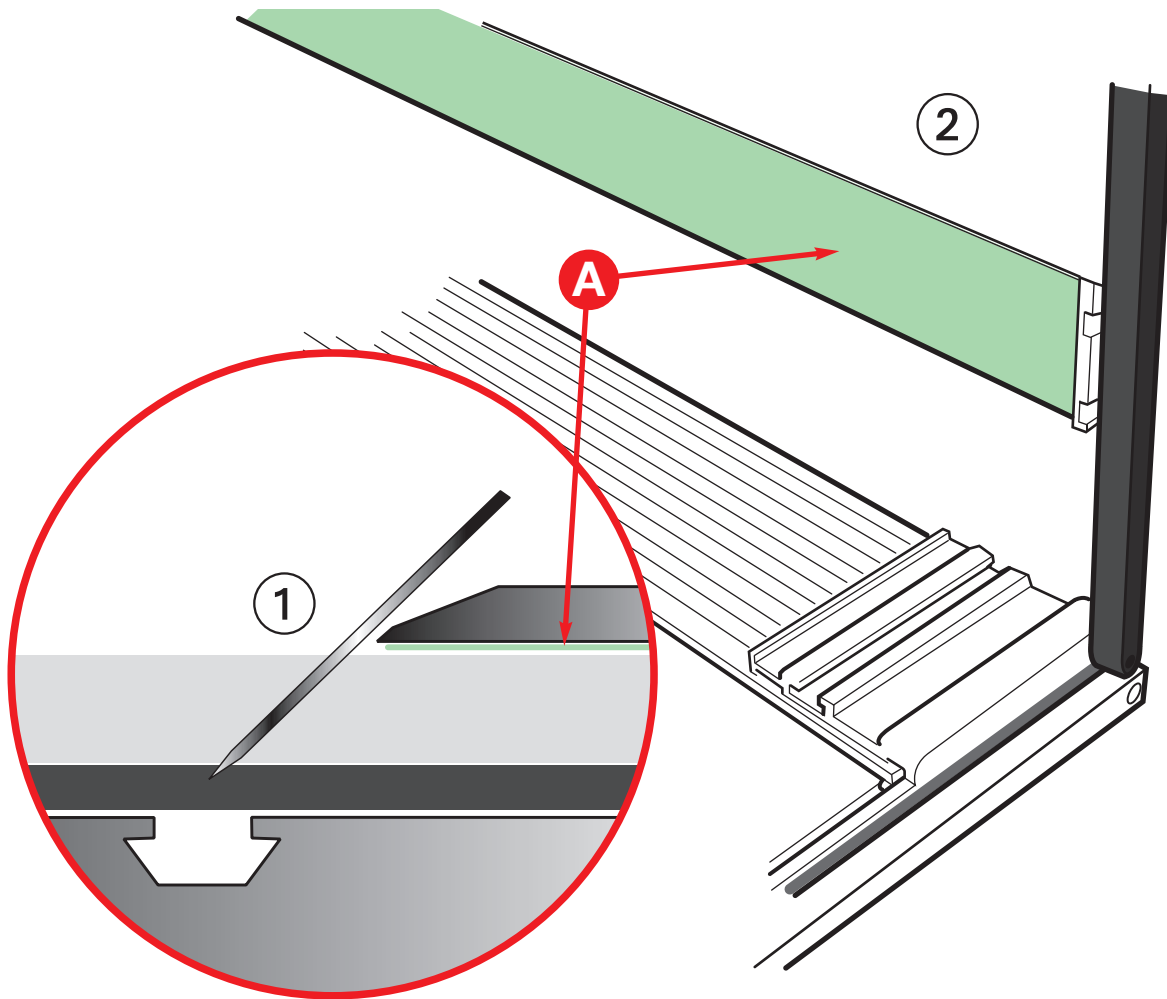
## Lift and Hold



The Lift and Hold is used to raise and hold the Cutterbar above the base so you can have both hands free when positioning the material ready for cutting.

Position the Lift and Hold and fit the screw into the threaded hole, tighten using the 4mm hexagon wrench.

## Cutting Flexo Plates



- ① When cutting Flexo Plate always use the cutting mat supplied to cut onto and ensure the blade depth is set to a minimum to cut through the material thickness.
- ② It is important that the silicon grip tape (A) on the underside of the cutter bar is kept clean to hold the flexo in place. If it becomes dirty through use clean it with a cloth moistened with diluted detergent.

**Helpful hints:**

- To eliminate entry and exit burrs, push the blade into the flexo, through the base, to start your cut.
- If you cut with the base side up place the foam protector sheet (used for shipping between each flexo plate), on the base board, to protect the emulsion side from scratching.
- To stabilize the plate for ultra-fine trimming, try starting your cut 2cm (1") in from the edge. Come back and complete the cut from the edge.
- To obtain smooth clean edges and avoid fracturing (especially on thicker flexo plates) make multiple passes and frequent blade changes.