



Since **MBM** 1978

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Quality Tooling

SHOK BLOK®



FITTING INSTRUCTIONS



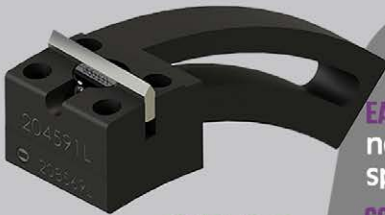
SHOK BLOK®

A unique patented spring action blade design that delivers the perfect flap cuts and instantly increases your productivity!

- ✓ Brilliantly simple spring action blade design
- ✓ Simple fitting and set-up
- ✓ Simple parts replacement and re-order identification
- ✓ Variable design options to accommodate different machine makes/models
- ✓ Precision made from quality materials
- ✓ Industry proven worldwide



SERIES 1



SERIES 2



SERIES 2 DESIGN BENEFITS

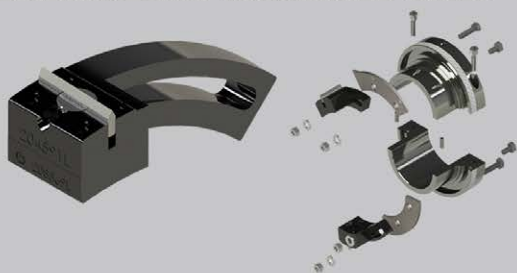
EASIER MAINTENANCE - Only the cassette needs to be removed to change the spring, leaving the block in place.

COST EFFECTIVE - The cassette can be replaced at a lower cost than a new S1 body and spares can be held in stock minimising downtime.

PARTS COMPATIBILITY - The S2 design will fit most machines and use the same spares (blades, holders & springs) minimising the need for different parts for each machine.



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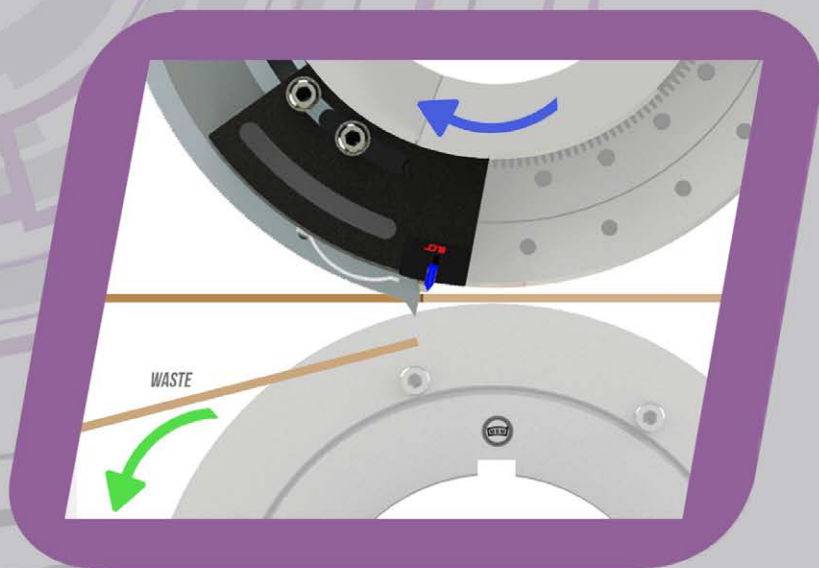




Remove existing stitch / glue flap blocks (and anvil if applicable) from the heads and open the shafts apart to maximum gap. (Except on Emba blocks).

Fit the new lead and trail Shok Bloks® in the same position as original, using same fixings or alternative screws if required. If applicable fit new steel anvil(s) too.





With the appropriate height blade fitted for the board type (see chart) manually rotate the slotting head so that the trailing (T) block is at the cutting position on the anvil. See centre line

Adjust the shafts closer so that the blade compresses approx 1mm or 0.040". (Except on Emba blocks).

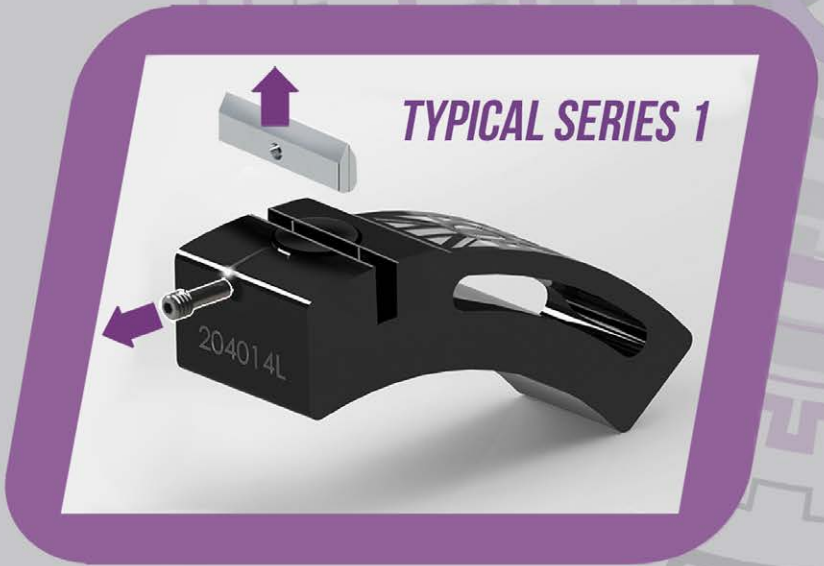
Slowly rotate the heads and test the cut of both Shok Bloks.[®]

Change blade height if necessary to suit nip pressure.

Do not exceed 4.5mm or 3/16" blade compression.

Run machine at normal speed.





Blades can be changed by using the T key to remove the the blade screw. When replacing the blade, do not overtighten the screw as it does not clamp the blade.

Replace blade when blunt and cutting fails.





SERIES 1 - To access the spring and blade holder, remove Shok Blok® from head and unscrew the spring cap underneath using the T key or pin spanner provided. The blade holder will only remove if the blade is out.

With the blade holder aligned to access blade screw, fit blade, re-fit spring and spring cap and tighten until it stops. *Do not overtighten.*

SERIES 2 - To access the spring and blade holder: while fixed to head (or removed from head) unscrew the cassette screws (4) and lift off to access spring. The blade holder will only remove if the blade is out.

To refit the cassette, with blade holder aligned to access blade screw, refit blade, refit spring and tighten 4 screws evenly, keeping cassette central.





SERIES 2 CASSETTES - When fitting the cassette to the body we recommend using the Torque Wrench to maintain the correct screw tightness of 6Nm, this helps prevent any damage from overtightening or component loss through insufficient screw tightness.

TORQUE WRENCH - The preset torque driver prevents the operator from over tightening the cassette screws.

ISHOK BLOK®



6.5MM / 1/4" MAX



**WORN S1 BODY
OR S2 CASSETTE
BLADE SLOT**



WORN BLADE



WORN BLADE HOLDER



INSPECTING

Regularly inspect and replace badly worn blades, springs and holders. If the performance is affected, periodically inspect the blade slot for wear.

When there is evidence of a widened slot in excess of approx. 6.5mm / 1/4" the Shok Blok® body / cassette needs replacing.

See trouble shoot / best practice guide.
Or contact your supplier for additional help.



1. LEAD BLOCK CUTS OK, TRAIL NOT OK

A. Try a red PU spring in the trail block for more pressure, or try a 1mm higher blade in the trail block.

2. TAB WASTE STAYS CONNECTED TO BOX IN THE CORNER

A. If changing the blade and spring does not remedy, check the condition of the blade slot. Change the cassette (S2) or body (S1) if the gap exceeds 6.5mm / 1/4". Check block is securely fixed to the head and there is no gap between the blade and the slot knife and check the condition of the male slot knife. Ask about our FCO slot knife modification. FCO Knife image below, see page 21 for more details.

B. Check blade is compressing against the anvil. Replace the blade if it's blunt. Check the spring and replace if undersized or split.

3. IF THE SHOK BLOK® (SERIES 1 ONLY) IS LIFTING ON THE BOSS

A. Check to see if the spring cap has been fully tightened.



FCO POCKET KNIVES

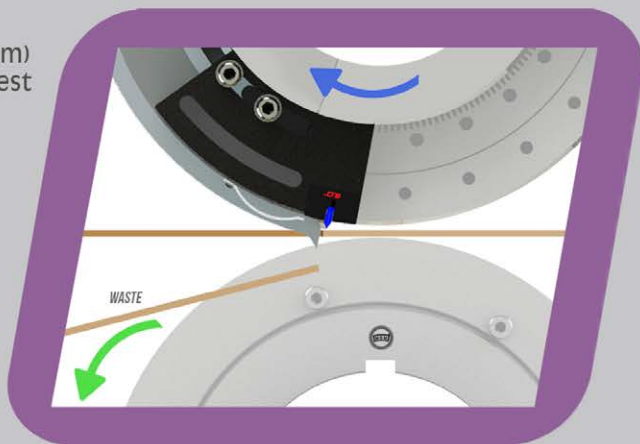


**IF IN DOUBT CONTACT
MBM OR
YOUR LOCAL SUPPLIER
TODAY!**



1. When cutting starts to fail, replace the blade and spring at the same time for optimum performance. This avoids the cycles of new blades / worn springs or new springs / worn blades.
2. Always keep the blade compression / deflection to a minimum for maximum life performance.
3. Use a PTFE lubricant in the blade slot to prolong life.
4. Change blade holder when visibly worn around the top diameter.
5. Make sure the correct blade height is being used. As the wrong blade may cause excessive wear on the components and reduce their working life, increasing costs.
6. Change S2 cassette when blade slot is noticeably worn. (see page 8)
7. To perform a paper cut test. Adjust nip tab until blade cuts with compression approx 0.40" / (1mm). Slowly rotate slotter heads and test cut of lead edge and trail edge blades. Adjust slot shaft nip setting if necessary to get correct tab cutting.

0.40" in (1mm)
paper cut test



**SERIES 1****SERIES 1 TYPICAL COMPONENTS**

- 1 Blade
- 2 Body
- 3 Blade holder
- 4 Blade screw
- 5 PU spring
- 6 Spring cap



SERIES 2

SERIES 2 TYPICAL COMPONENTS

- 1 Cassette screw
- 2 Blade
- 3 Cassette
- 4 Blade holder
- 5 Blade screw
- 6 PU spring
- 7 Body



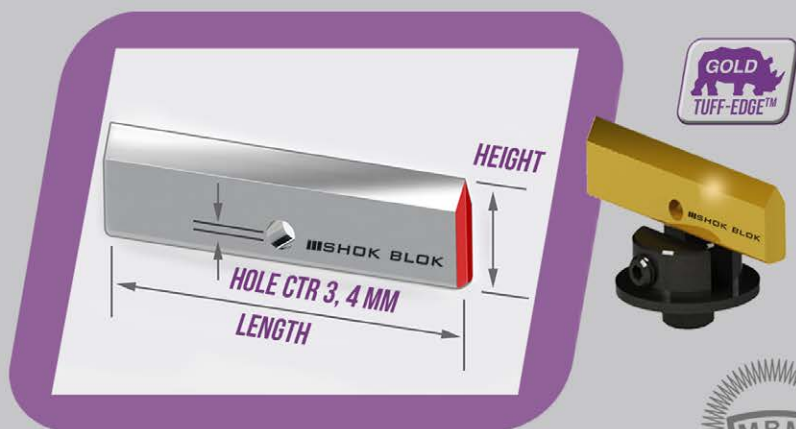
Blades are precision made from High Quality tool steel for trouble free performance and longevity.

| SHOK BLOK® CO.UK | | | NIP / BOARD (MM) | |
|---|--------|-------------------|------------------|--------|
| BLADE COLOUR | | BLADE HEIGHT (MM) | TYPE 3 | TYPE 4 |
|  | BROWN | 11 | 2.5 | — |
|  | ORANGE | 12 | 3.5 | 1.5 |
|  | PINK | 13 | 4.5 | 2.5 |
|  | GREY | 14 | 5.5 | 3.5 |
|  | BLUE | 15 | 6.5 | 4.5 |
|  | RED | 16 | 7.5 | 5.5 |
|  | YELLOW | 17 | — | 6.5 |
|  | WHITE | 18 | — | 7.5 |
|  | GREEN | 19 | — | 8.5 |
|  | GOLD | 20 | — | 9.5 |

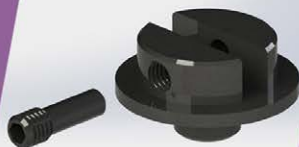
Blades are in a variety of different sizes ranging from 11 - 20mm height to accommodate all cutting needs. (Tuff-Edge™ GOLD treatment option available - enquire for details.)

Blade height calculation - Correct blade height is determined by:

- 1) Board thickness + 10.5mm = Blade height for 4mm hole ctr (type 4.)
- 2) Board thickness + 8.5mm = Blade height (for 3mm hole ctr (type 3.)



TYPE 3



3mm Hole Centre

TYPE 4



4mm Hole Centre

**TORX
SCREW**



Special





POLYURETHANE SPRINGS

RED - HEAVY DUTY

ORANGE - STANDARD



STEEL COIL SPRINGS

BROWN - HEAVY DUTY

SHOK BLOK®

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Spring caps are used in the Shok Blok® Series 1 to hold the spring and blade holder in place.



SPRING CAPS - GUIDE

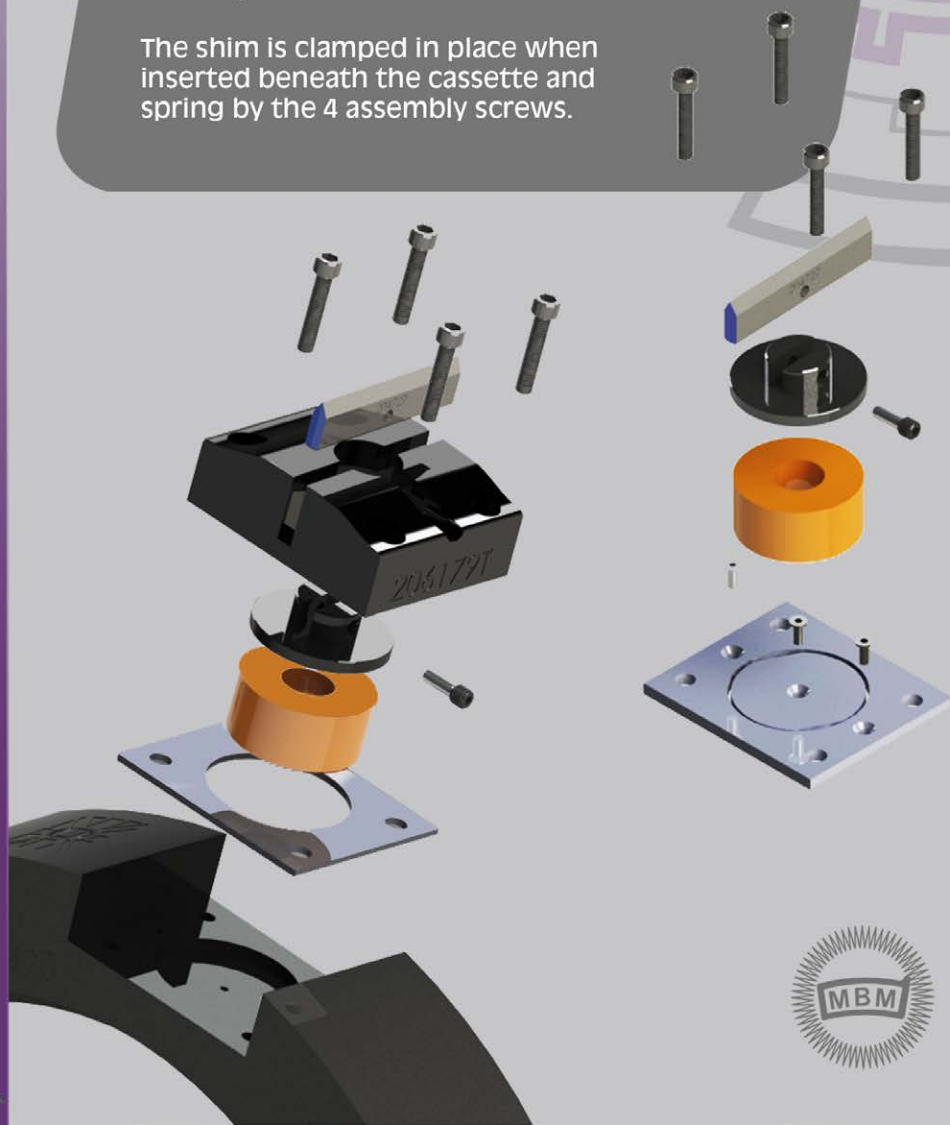
- 1) To remove the spring cap from the Shok Blok®, first remove the Shok Blok® from the machine if it is attached.
- 2) Insert the supplied hex key and unscrew the cap.
- 3) Unscrew the cap to allow access to the spring and the blade holder.
- 4) Please make sure the cap is fully tightened. **DO NOT OVER TIGHTEN!**



CASSETTE SHIM - KIT MOD

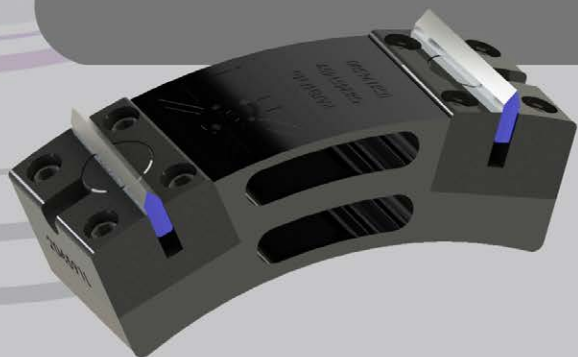
The shim kit is an optional item. Available in 2, 3 and 4mm heights, the shim spacer plates fit beneath the cassette and spring to raise the height and increase the overall diameter of cut.

The shim is clamped in place when inserted beneath the cassette and spring by the 4 assembly screws.



SPECIALS / CUSTOM SHOK BLOKS

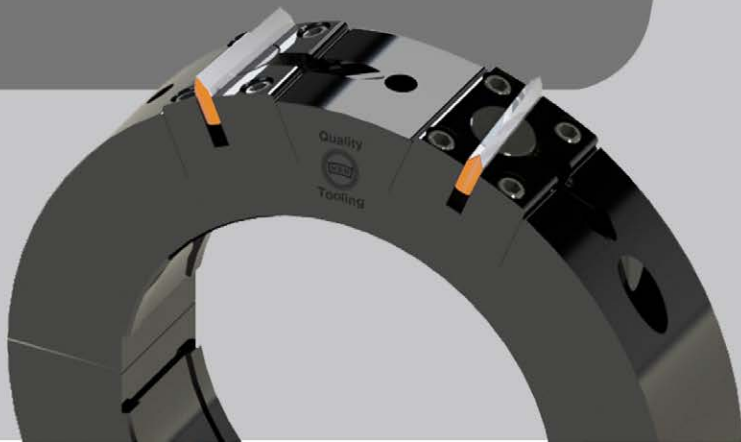
These are special / custom bloks to suit most machines, including double bladed bloks for chopping trim waste and special width blades.



TO SUIT EMBA SHOK BLOKS

2 or 4 circular double bladed bloks, with twin cassette assemblies, these use a single height blade for all board grades, as no adjustment to board nip.

The Emba 245 uses a 16.5mm height blade with 29mm height cassette.



CABINET SYSTEM

- Minimises your down-time - no waiting for spares
- Maximises your production and quality
- Robust cabinet with heavy duty custom foam inlays
- Suitable for all your essential components
- Industry proven 5S system of storage and management



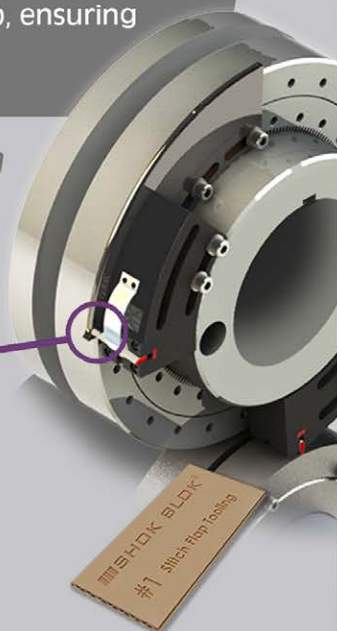


FCO SLOT KNIFE POCKET FEATURE FOR **SHOK BLOK®**

FCO POCKET KNIVES

The Flap Cut Overlap pocket feature is designed to work with the Shok Blok® system for a positive overlapped cut of both slot and flap, ensuring removal of any tab waste.

(ASSEMBLY)



*LONGER SHOK BLOK® BLADE REQUIRED

Sharp Solutions
for Corrugated...

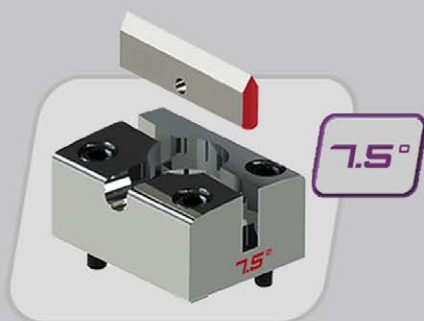


High Performance Knives

For Improved Cut Performance

SHOK BLOK[®].CO.UK

2.5 / 5.0 / 7.5 degree blade angle

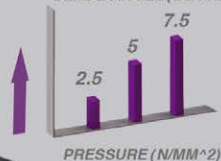


(ASSEMBLY)

Retrofit Upgrade with replaceable cassettes (S2) 5.0 / 7.5 degree

- Improved cutting yield.
- Extended component life.
- Compatible with existing Series 2 blocks. Uses same blades, springs and holders.
- Swappable cassette sub-assembly for optimal performance management.

BLADE ANGLE (DEGREES)



PRESSURE (N/MM²)



Sharp Solutions for Corrugated...



BOSSSES

Upper and lower slotting heads to carry knives and creasers



SLITTING KNIFE

Upper and lower bevelled knives for trimming board edge



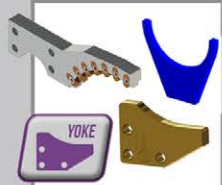
LOWER SLOT KNIFE

Female / lower knife ring, with flat or radius diameter



STITCH FLAP ANVIL

Steel (or polyurethane) ring for glue / stitch flap cutting



YOKE

HEAD YOKE GUIDES
in Bronze or polymer
for head positioning



STRIPPERS

SLOT WASTE STRIPPERS
Uni-Strip™
Replaceable tip version



HANDHOLE TOOLING

Used to create die-cut carry handles on the slot section



PIRANHA TOOTH™

Fine pitch serrated U/slot knives for clean cut slots in lower grade board



SUPACLEAN™

SUPACLEAN™
Serrated edge U/slot knives
for clean cut slots



UNI-TIP™

UNI-TIP™
U/slot knife with replaceable tip
for super extended life



SHOK BLOK®



SERIES 1
SERIES 2



5 degree blade angle
5.0°

SHOK BLOK® SYSTEM
Patented spring loaded stitch flap
blocks for trouble free setting and cutting



SHOK BLOK®



A GLOBAL SOLUTION FOR GLUE FLAP CUTTING



GB Patent No. GB2451459
US Patent No. US8196500

