

## APPLICATION DETAILS

## TONGUE GROOVE & V SET

Please note there is a video on our YouTube channel to help with these instructions.

This set of blocks will make four kinds of tongue and groove and a further option by adding the optional over-chamfer block. The blocks are numbered to make it easy to follow the instructions. Please see the reference chart to quickly determine which blocks you will need for the operation you are undertaking. The reference number for each block is in brackets on the face of the block after the part number and other information.

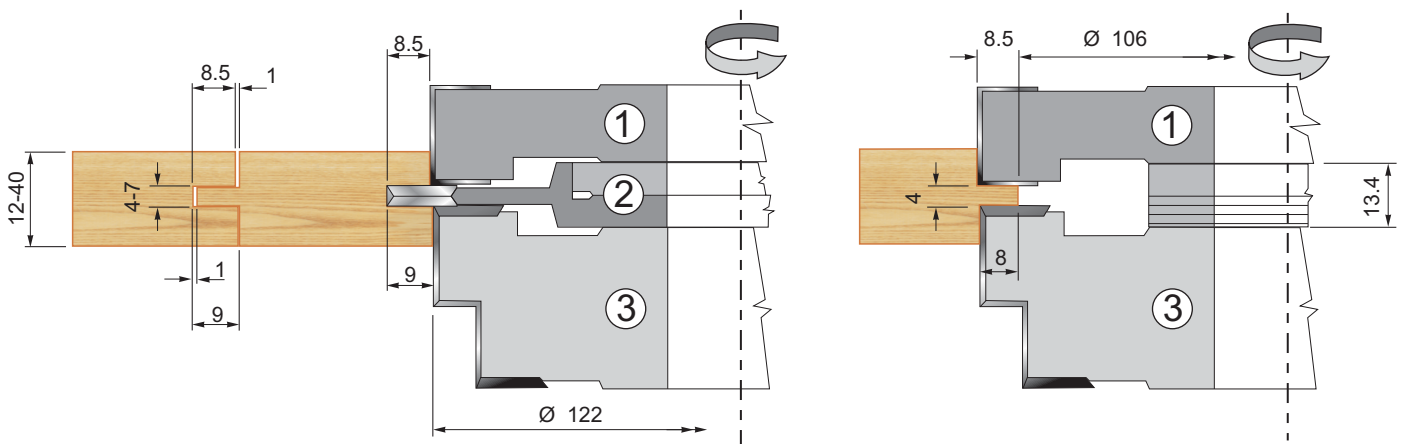
### Type 1- Ordinary Tongue and Groove:

Our preferred method is to cut the groove first, measure the groove and then create the tongue to suit.

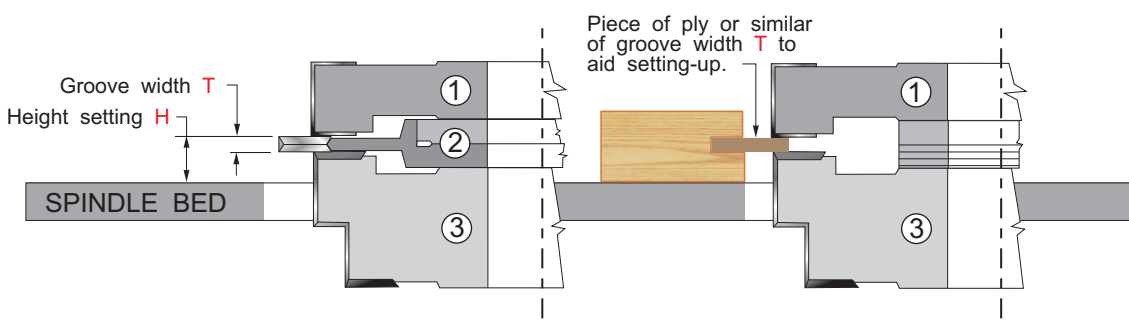
The groove can be 4-7mm wide and should be machined in the centre of the board thickness. Shims are provided to shim the adjustable groover (2) to the desired groove width. With no shims between the cutters the groove width will be 4mm; with a 1mm shim it will be 5mm etc. Do a test run of the groove and check for required dimensions - the groove should be 9mm deep.

With the groove machined, it is time to move on to the tongue. For this operation blocks (1) and (3) should be used in the orientation as shown below. The minimum thickness of the tongue is 4mm, which is achieved by adding a shim stack of 13.4mm (it is useful to have a vernier caliper for this), therefore if you add a further 2mm of shims, this will give you a 6mm tongue and so on.

Fit the blocks with the correct shims and set the height dimension H as shown below. A false tongue can be fitted in the previously machined groove, to visually aid the height setting of the spindle. Set the fence to take a cut just shy of 9mm deep and do a test pass to ensure you have the required fit, then adjust shims and height setting as necessary.



HEIGHT SETTING  $H = \frac{1}{2} \times \text{stock thickness} + \frac{1}{2} \times \text{groove width } T$



### Shims supplied:

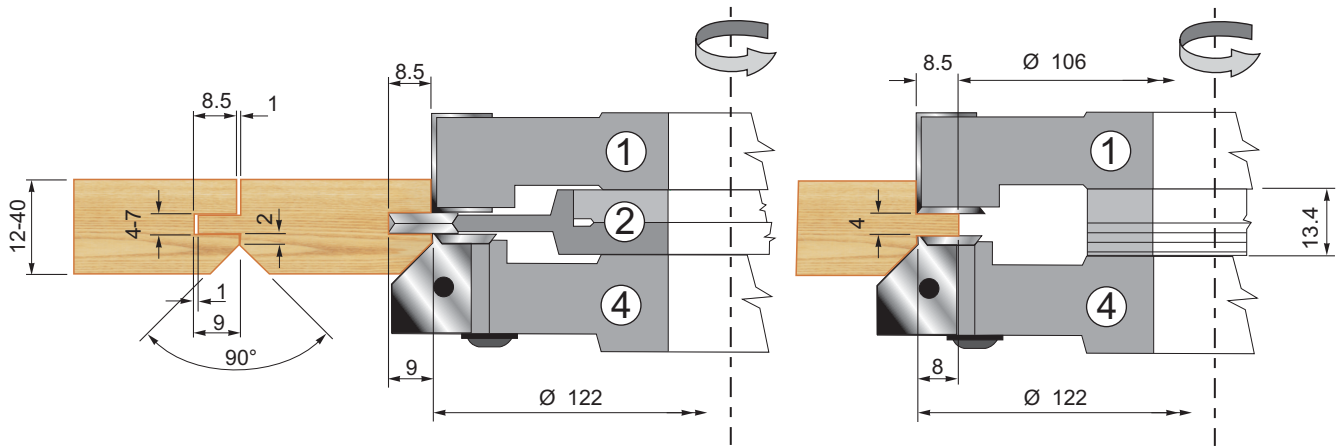
- 0.1mm x 1
- 0.2mm x 2
- 0.5mm x 2
- 1.0mm x 3
- 2.0mm x 3
- 6.0mm x 1

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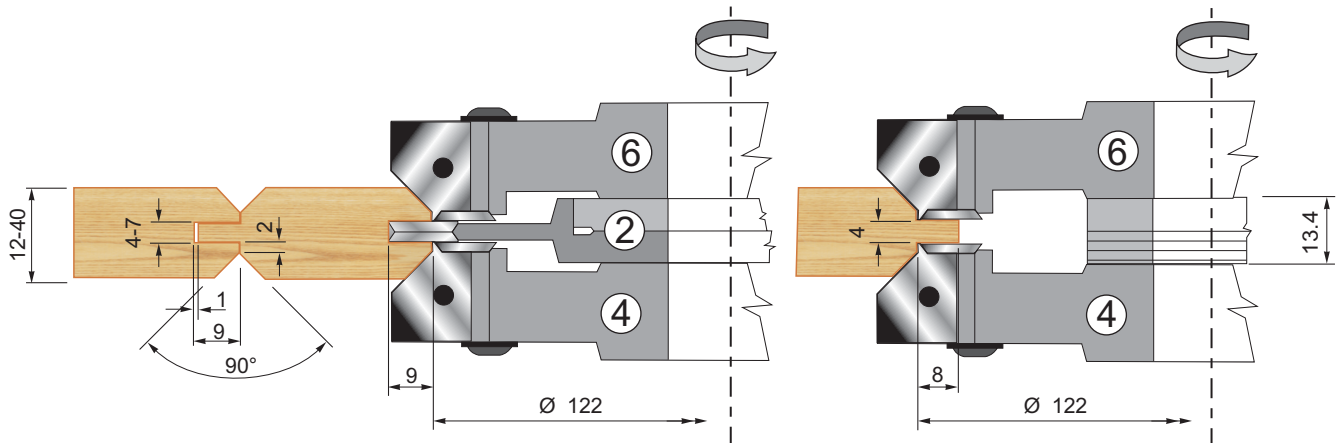
Type 2 - Tongue Groove and V

The method for type 2 is the same as Type 1 but it uses block ④ instead of block ③.



Type 3 - Tongue Groove and V both sides

The method for type 3 is the same as Type 1, but uses optional number ⑥ block on the top and number ④ block on the bottom of the spindle. Calculate tongue size in the same way.



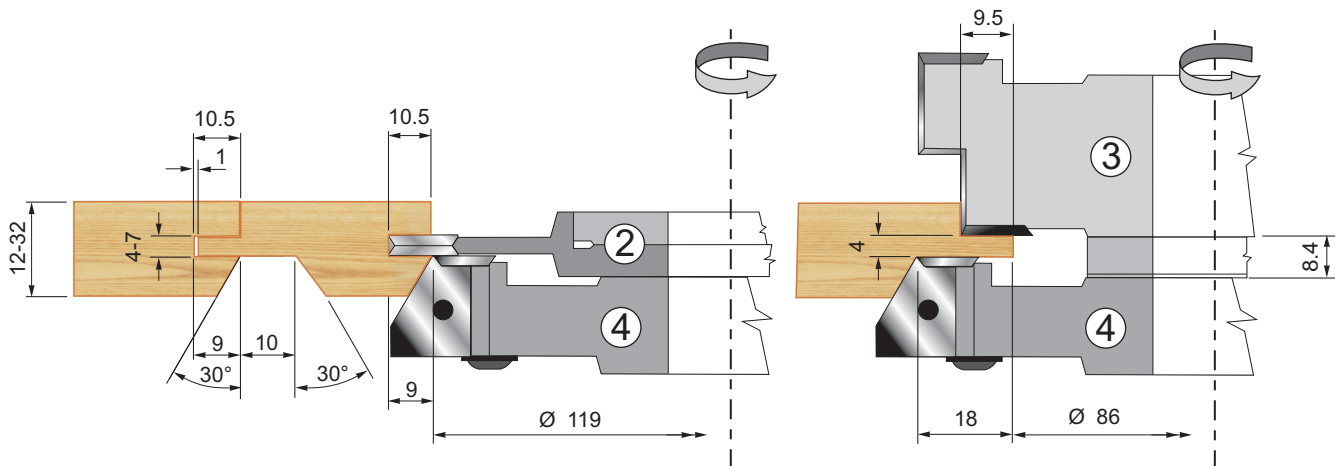
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### Type 4 - Tongue Groove and 60° V with extended shadow

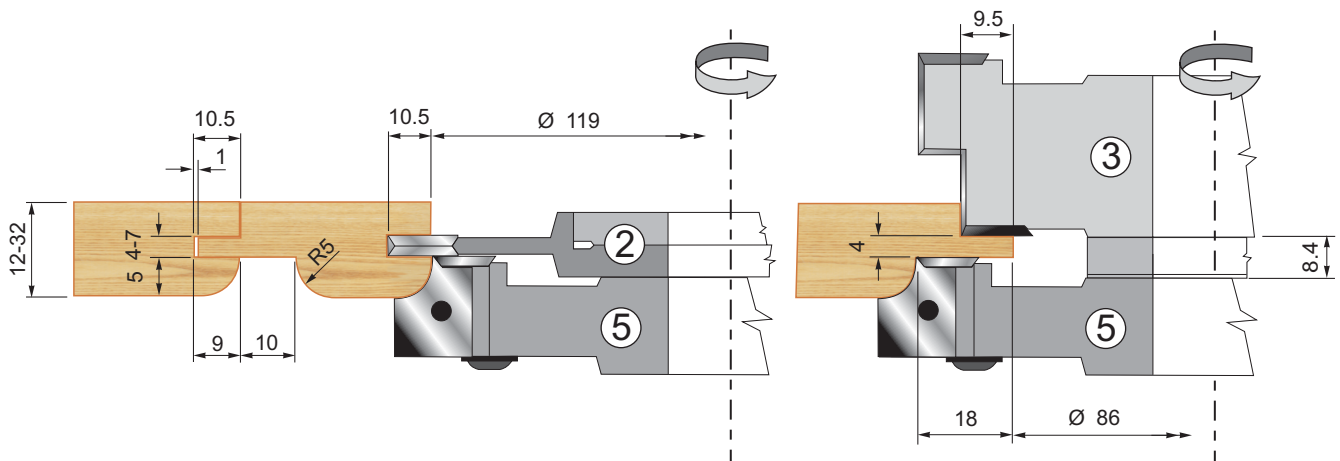
Create the groove using the same method as Type 1 but make the groove depth 10.5mm.

Fit the 60° knives to block ④ ensuring they are seated correctly to the base and setting screw. For this operation blocks ③ and ④ should be used in the orientation as shown on the reference chart. The minimum thickness of the tongue is 4mm, which is achieved by adding the 8.4mm thickness shims, therefore if you add a further 2mm of shims this will give you a 6mm groove and so on. The easy way to calculate the total thickness of shims required is 4.4mm plus the desired tongue thickness e.g. for a 6mm tongue  $4.4 + 6 = 10.4$ mm total thickness of shims. Fit the blocks with the correct shims, set the fence to take a cut of 9.5mm and do a test pass to ensure you have the required fit, adjusting shims as necessary.



### Type 5 - Tongue Groove and 5mm Round-Over with extended shadow

The method for Type 5 is the same as type 4 but uses number ⑤ block with rounding cutters. Ensure the knives are seated correctly to the base and setting screw.





SPARE PARTS

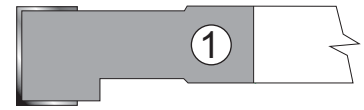
TONGUE GROOVE & V SET

REPLACEMENT KNIVES

The spares for each of the blocks are detailed below:

SET F264140 (30mm) or F264143 (1-1/4")

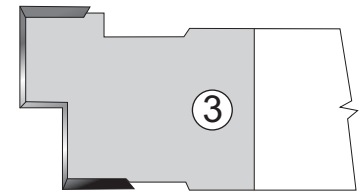
F000442		F000455	F003131	F001014	F002084



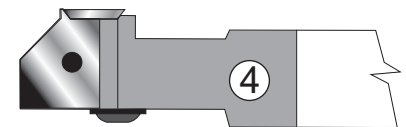
F000455	F000651	F002080	F001014	F002080	F000656



F000442		F000445	F003131	F001014	F002084

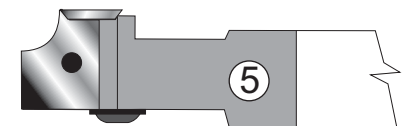


F000444	F000443	F000445	F003131	F001014	F002084
45°	30°				



OPTIONAL RADIUS BLOCKS F264140E (30mm) or F264143E (1-1/4")

F000446		F000445	F003131	F001014	F002084
R5					



OPTIONAL TOP CHAMFER BLOCKS F264140F (30mm) or F264143F (1-1/4")

F000447		F000445	F003131	F001014	F002084
45°					

