

**Important! For your safety !
Please read these instructions before using the
E21 Key Jig.**



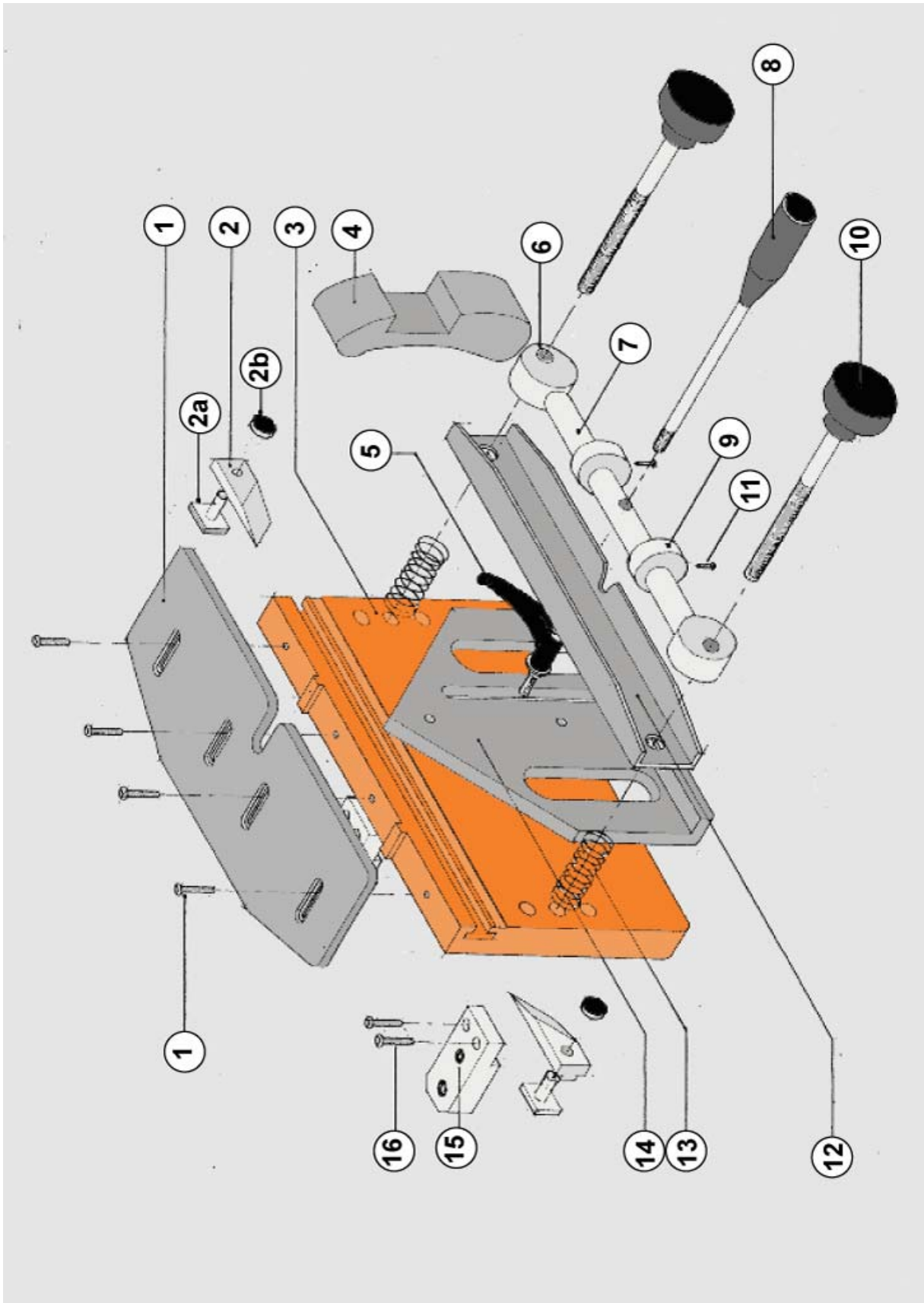
1. SAFETY WARNING

This list of do's and don'ts is not exhaustive and is not a substitute for common sense and best practices.

Woodworking machines are dangerous; it is important to observe all safety instructions while operating this machine.

- Always wear ear and eye protection.
- Always unplug the routing machine from the power source before making adjustments.
- Always use a licensed electrician for any installation or electrical repair work.
- Do not wear loose clothing, jewellery or other loose ornamentation.
- Long hair should be protected by netting or other means to prevent ingress into the machines working parts.
- Keep all safety guards in place and well maintained.
- Ensure all adjusting keys, spanners and tools are removed before machine is switched on.
- Keep children and unauthorised persons away from machine even when not in use.
- Do not use machine for any other purpose than that for which it was designed.
- Do not use excessive force, or exceed capacity of machine by attempting to take too large a cut.
- At no time should machine be unattended whilst in operation.
- Do not put hands inside machine whilst it is running.
- Wood dust is a health hazard; ensure correct dust extraction is fitted.
- Cutter blades should be kept sharp at all times. Blunt blades are a major cause of accidents and machine failure. Damage to the machine caused by blunt blades is not covered by warranty.
- This machine should be used in an area with good lighting and ventilation.
- Keep the floor and adjacent areas around the machine dry and clean.
- Always maintain a balanced stance when operating this machine.
- Do not operate this machine whilst on medication or under the influence of alcohol or drugs.

FIGURE 1



2. TECHNICAL SPECIFICATION

The E21 Key Jig is designed for the machining of a single dovetail slot in timber required for the use of Enlock keys E15 and E21.

Dovetail router bit:	0.5" x 0.5" 14° pitch
Guide bearing:	0.5"
Timber thickness range:	19mm to 35mm
Timber width range:	30mm to 75mm

(Optional accessory clamp increases width capacity to 100mm).

3. ASSEMBLY (Refer to figure 1)

- 1: Top plate.
- 2: End stops.
- 2(a): Slide block.
- 2(b): End stop knob.
- 3: Front plate.
- 4: Clamp extension arm.
- 5: Mitre plate screw.
- 6: Cam clamp end block.
- 7: Cam clamp bar.
- 8: Cam clamp handle.
- 9: Cam.
- 10: Clamp screws.
- 11: Cam screws.
- 12: Clamping rail.
- 13: Spring.
- 14: Mitre plate.
- 15: Support foot.
- 16: Support foot screw.
- 17: Top plate screw.

4. SECURING THE JIG TO A WORKBENCH

The E21 Key Jig is designed to be screwed to the workbench through holes in the support feet (figure 1: 15). Ensure that the unit is stable and securely fixed in place before use. Refer Fig 2 as an example.



FIGURE 2

5. DEPTH OF CUT

Ideally, the key groove should be cut to a depth of 13mm (figure 3). This might vary slightly depending on timber type and may require some experimentation.

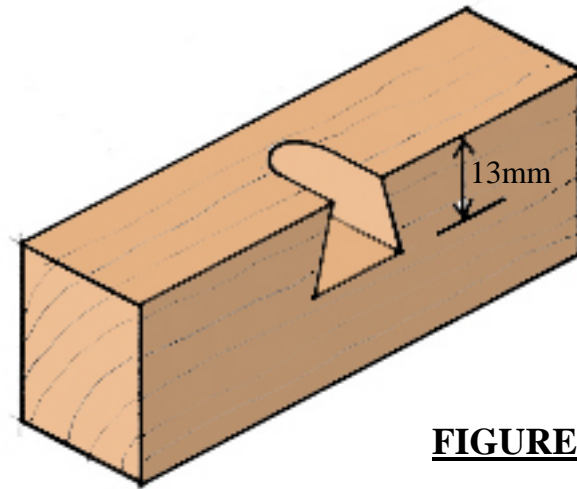


FIGURE 3

6. KEY FUNCTION

When expansion pins attached to the cap are forced into the key (use a wooden mallet, not metal). The 'wings' on the key expand, cramping the joint together (figure 4).



FIGURE 4

7. SETTING THE JIG FOR DIFFERENT TYPES OF JOINT

(a) Mitre joint

Refer Figure 5. The mitre plate is moved back and forward to centrally position the dovetail cut according to the width of the timber. The bar clamp is then used to secure the component in place before machining.

Note the lines on the underside of the top plate marked E15 and E21. The top plate is adjusted by loosening screws (figure 1: item 17) so that the surface of the timber lines up with either the E15 or E21 line (depending on the key being used). For timber over 25mm thick, the E21 key should be used. For timber less than 25mm thick, the E15 key should be used.

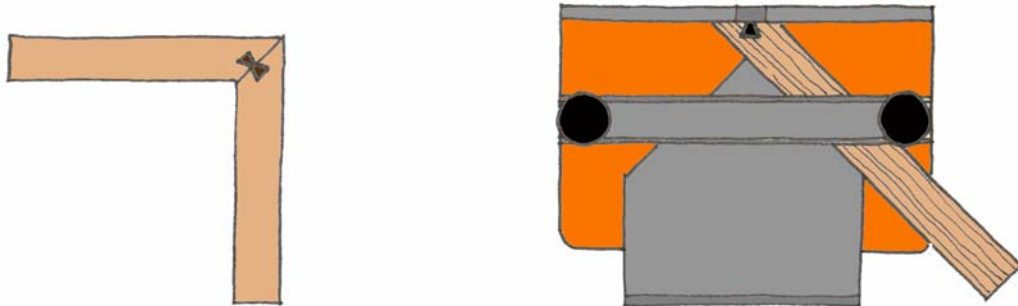


FIGURE 5

(b) T joints

Refer Figure 6. The mitre plate is removed to allow for timber to be held in place using the bar clamp. Be sure that the end of the timber component is pushed up square under the top plate. The end stop can be set for multiple components.

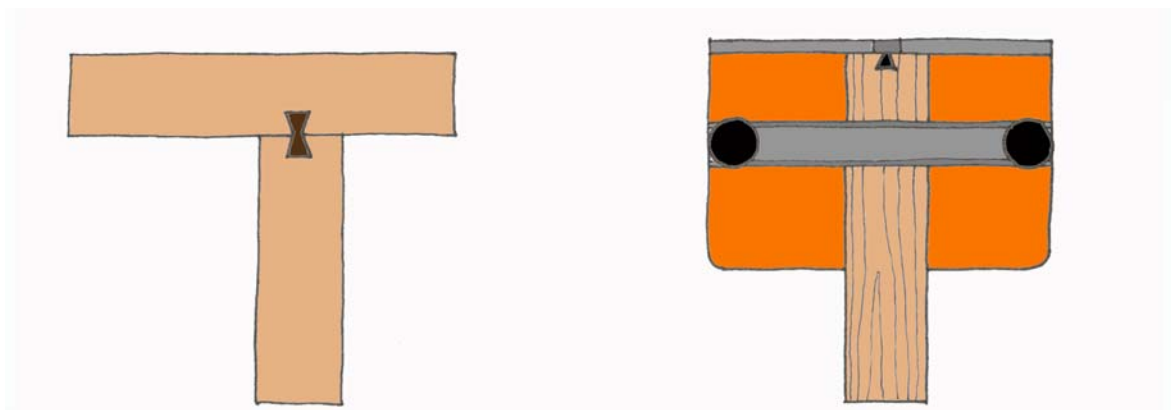
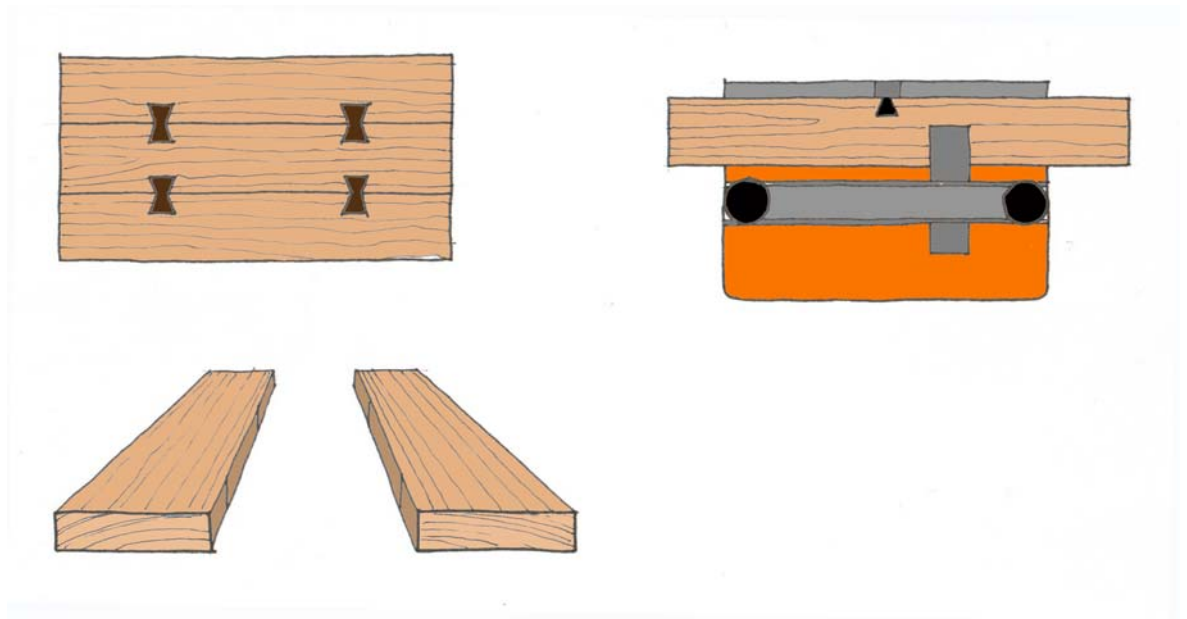


FIGURE 6

(c) Widening joints

Refer to Figure 7. When cutting key slots for widening joints, mark the position of the cut on both members. This mark can then be lined up with the centre line on the Enlock jig.

Once again, the mitre plate is removed and the cramp extension foot (figure 1: D) is clipped under the cramp rail. Final adjustment is achieved through the cramp screws.

**FIGURE 7**