

the most part, the correct speed is determined by the size of the mortise you want to make and the material you're using. Generally, you can use faster speeds with softer woods or smaller mortises. Use slower speeds as the materials get harder and the mortises get larger.

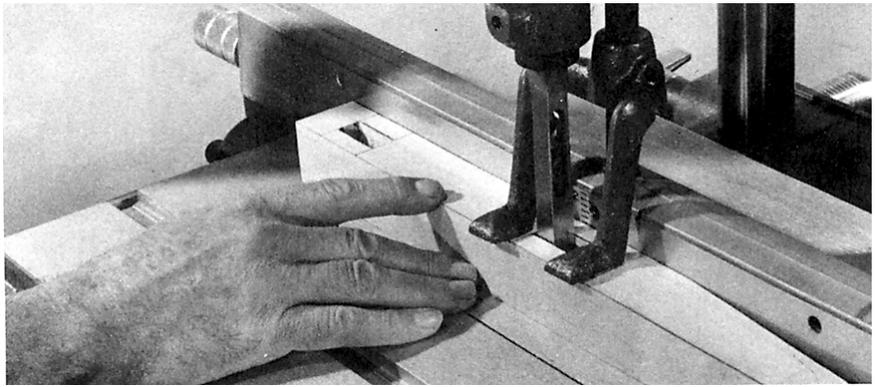


Figure 8-6. Work with the correct speed and use only enough feed pressure to keep the bit cutting. Mortising cuts need a heavier feed than simple drilling, but if you must really lean on the feed lever, check the chisel and bit for sharpness.

MORTISING

All the joints shown in Figure 8-5 can be made using the mortising accessory.

Position the workpiece on the table and depress the chisel to do the cutting. Use only enough pressure to keep the bit cutting (Figure 8-6). Pressure required will vary with the size of the chisel and the hardness of the wood. Softwoods such as pine cut easily, while hardwoods such as maple require considerably more pressure. If you can't make the cut without exertion, it is probably because the edges on the bit and/or the chisel are dull.

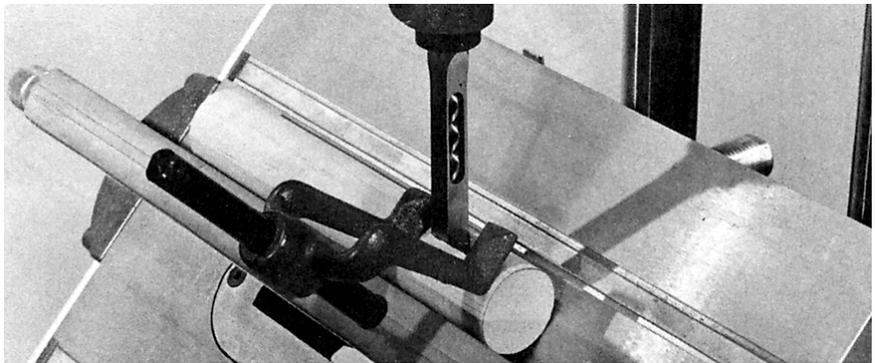


Figure 8-7. The fence/table V-block arrangement can be used to hold round workpieces for mortising. Be sure to mark the workpiece so the cuts will begin and end on the same line.

The rip fence/worktable V-block arrangement can be used to hold round workpieces. Be sure to mark the workpiece so the cuts will begin and end on the same line (Figure 8-7).

Two factors which tend to spoil a mortise are illustrated in Figure 8-8. To eliminate these, cuts should be made as shown in the order given in the second detail of the drawing. The general rule is: Always make the end cuts first. Start with 1/4" deep cuts, never less than threequarters of the full width of the chisel. This may not be possible on the last cut, but keep as close to it as you can. Repeat until desired depth is achieved.

Avoid narrow shoulders. The chisel will drift away, leaving a tapered side. Many workpieces split because tenons are forced into mortises with sloping sides. If necessary, use a smaller chisel.

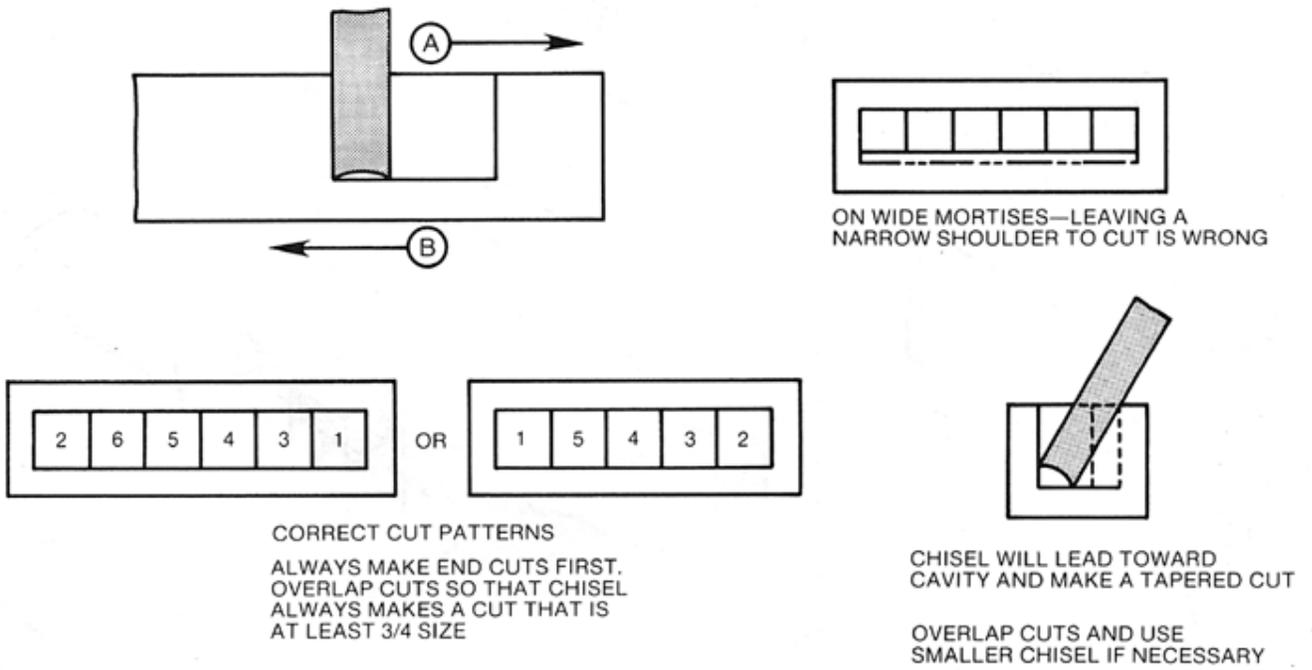


Figure 8-8. Two factors that may spoil a mortise: (A) Chisel tends to lead off toward the cavity already formed, and (B) workpiece tends to drift away from the chisel as the cut is being made.