

5 PIECE MORTICE CHISEL & BIT SET

INSTRUCTIONS

IMPORTANT: The following information should be read thoroughly and understood before using this tool.

Correct use of hollow square mortice chisels and bits

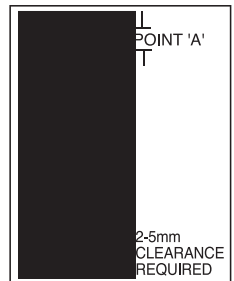
Before you set the chisel and bit, be sure to check the following points.

- Always keep the tip of the chisel and bit sharp and correctly shaped.
- If you use a badly worn bit, chip clearance will be difficult leading to chisel breakage.
- Replace the worn bit with a new one. Breakage of the chisel invariably occurs from using a damaged bit.

Adjustment of chisel and bit in machine

Refer to the instruction manual supplied with morticer for detailed mounting instructions, however, as a guide:

- Fit correct size bit through chisel shank as far as it will go.
- Raise entire assembly up into the machine socket and secure bit shank firmly in this position.
- Push the chisel firmly home into the socket and hold shank tightly.
- Make sure the entire assembly is correctly held with proper clearance of 2-5mm at point 'A'. Correct clearance at this point should be maintained in any case. If there is no clearance and the bit nose comes in contact with the cutting bevel of the chisel, friction occurs which will lead to the chisel breaking.
- Start the machine slowly to see if the bit rotates smoothly.
- Always secure the chisel and bit firmly. Breakage of the chisel can occur when there is insufficient clearance at point 'A'.



Abrasion of chisel and bit

The hollow chisel and bit is completely different to other tools and performs the boring, wood cutting and ejecting of chips from the opening of the chisel all at the same time. The chips are conveyed in the twist off bit through the hollow of the chisel and ejected from the opening. Abrasion will be seen where excess friction occurs in chip clearance.

Bit abrasion

Examine the bit nose. You will see that the tips of the spur and cutting lip are dulled when abrasion begins. Sharpen these points with a square or flat smooth file of a suitable size, but always file the inside of the spur, or cutting lip from below in the throat of the bit. Never file the outside of the spur. Never grind the bit nose. When sharpening always try to maintain the original shape. Then examine the twist. If you see any signs of wear in the twist such as irregular grooves or hollow on the external surface of the twists the bit is badly worn and impossible to reform in any way, and replacement is necessary.

The chisel is three times as durable as the bit, and if you replace a badly worn bit, the chisel will not necessarily require it.

Chisel abrasion

Look downward into the hollow of the chisel from the angle of the blade tip. When the four angles of the inside blade bevel, at the point of turning into the round hollow are dulled, or the square cut corners become round, the angles or the corners should be filed to regain the original shape. When abrasion occurs to the extent of making the thickness of the entire blade noticeably thin, the blade will be liable to break in operation. When you see excessive abrasion, it is advisable to replace the chisel with a new one.

NOTE: Wood morticing machines and attachments are available in the Draper range. Ask your local stockist for details.