Your PushMaster inserts V-Nails into the base of wood mouldings.

The V-Nail pulls the corners together making a tight firm join. PushMaster can be used by hand pressure alone on most wood mouldings, or gently hit the end of the PushMaster with a wood or nylon mallet to insert the V-Nail into hard timbers. Cover the bench top with cardboard so that the frame will not be scratched or damaged during joining. Do not use carpet or soft materials, as the frame will move causing the V-Nail to tilt. This will make inserting the V-Nail more difficult.

Instructions

1. It is important that the corners of the frame you intend to join be held firmly together before V-Nailing. The pressure of the V-Nail entering the base of the moulding can force the joint to open if the frame is not held securely. The FrameCo Steel Strap Clamp was especially made for picture frame clamping and is ideal to use with the PushMaster. Glue on all joints is also recommended.

2. Select a V-Nail suitable to the moulding height. As a general rule, use a V-Nail about 50-60% of the moulding height. V-Nails are available in 5 different lengths and the PushMaster will take all sizes. Included with the kit are 3 strips of V-Nails: 7mm (1/4”) and 10mm (3/8”) - these are the most useful sizes.

FrameCo V-Nails are available in two forms - cartridges and strips. Both V-Nails are the same, only the packaging is different.

3. The V-Nail is positioned AROUND the magnetic tip of the PushMaster. (fig. A) Make sure the V-Nail is sharp edge down. Align the V-Nail across the mitre, so that the sides of the V-Nail are parallel with the frame sides. This will also be with the grain in the timber.

On top of each V-Nail is a small amount of silicone tape which acts as a lubricant and assists the V-Nail to penetrate the wood more easily. It is therefore important to use only V-Nails with a silicone top, as well as those which have a very sharp cutting edge and a sharp right angle crease down the middle. All brands of V-Nail are NOT the same, so for best results use only genuine FrameCo V-Nails.

4. For wide moulding V-Nail in two positions, i.e. front and back. Insert the front V-Nail first (i.e. near the rebate), then the second close to the centre of the moulding. Do not place a V-Nail in the back 1/3 of the joint. More “holding power” is obtained from V-Nails placed near the rebate. Usually only two V-Nails are necessary.

5. With some moulding, the front or rear may need support, if the frame does not rest flat on the table. Use cardboard pieces or the “Corner Jack” to support the underside of the moulding. The frame should not move while the V-Nail is being inserted. A good quality clamp to hold the frame firmly is essential to obtain a good joint. See Step 1.

6. V-Nails are made in two different grades - Normal (white top) and Hardwood (red top). The hardwood V-Nails are used for very hard, close-grained timbers and should not be used in soft,
pine-type moulding. Cartridges with white top contain normal V-Nails; cartridges with a red top contain hardwood V-Nails. It is suggested to try normal V-Nails first in most timbers and reserve the hardwood V-Nails for difficult to join moulding only.

7. PushMaster inserts flexipoints and backing nails. Use the groove or slots in the head of the PushMaster for this purpose. The side of the frame needs to be firmly supported with the Frame Stop when inserting backing points. If the flexipoints bend or the timber is very hard, hit the PushMaster with a mallet.

**PushMaster Options**

**BenchMaster**

The new BenchMaster allows the PushMaster hand tool to be loaded into the unit for easier joining. The powerful cam action drives V-Nails into the hardest of timbers. Ideal for both large and small frames. Precision engineered, robust construction, the BenchMaster is very stable when used. BenchMaster Model 1 is available separately.

**HANGER & HINGE KITS**

Optional kits to fit frame hangers & frame stand backs

Stand Back Hinges and Sawtooth Hangers can be applied to thick cardboard or 3mm MDF backing board. The brackets must be pressed onto the backing board. To do this, it is best to use the BenchMaster and the special Bracket Application Head, fitted into the head of the PushMaster.

**MAINTENANCE**

Because the head of your PushMaster contains a magnet, it will attract foreign particles. Periodically remove the magnet and spring to clean out the hole and also wipe the magnet and spring with a clean, dry cloth.

**Please note:** To avoid breaking the magnet do not drop the PushMaster and always ensure the PushMaster is vertical when inserting the V-Nail or driving with a hammer.

Only a sample quantity of backing nails, flexipoints & screw eyes are included with each kit. Replacement packs are available.

- #14730 PushMaster Kit - complete with accessories
- #10111 PushMaster Replacement Magnet
- #10113 PushMaster Replacement Spring
- #14720 Standback Head for PushMaster
- #14725 Sawtooth Head for PushMaster
- #15610 Corner Jack for Benchmaster and Pushmaster
- #14728 BenchMaster I Joiner - joiner only
- #14729 BenchMaster II Joiner - complete with PushMaster
- #14726 BenchMaster Beam Offset Kit
- #14727 BenchMaster Leg Extension Kit
- #15620 Frame Stop