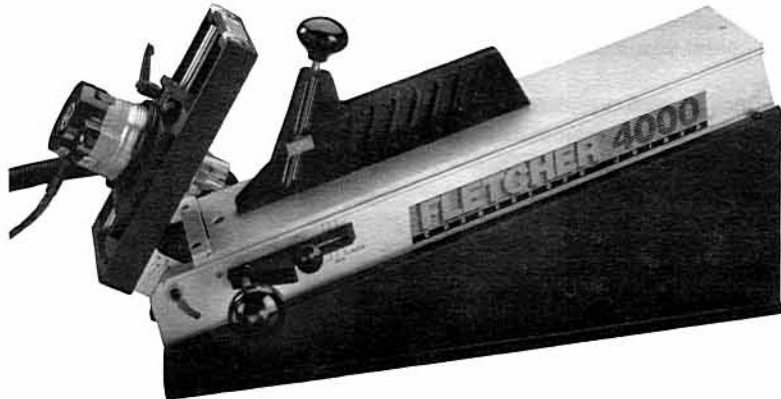




Fletcher CornerLock 4000™



INSTRUCTION MANUAL

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MANUAL DE INSTRUCCIONES

PÁGINA 13

*THE FLETCHER-TERRY COMPANY
LA SOCIÉTÉ FLETCHER-TERRY*

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FORM 496
FORMULAIRE 496
FORMULARIO 496

WARNING:



- **DISCONNECT THE POWER CORD WHEN INSTALLING A ROUTER BIT OR ADJUSTING THE ROUTER.**
- **HANDLE THE ROUTER BIT CAREFULLY, IT IS SHARP.**
- **WEAR SAFETY GLASSES WHILE USING THE CORNERLOCK 4000™**

SET UP

1. Remove the machine from the packing carton and place it on a flat surface. Report any damage to the carrier.
2. The parts bag contains a router bit, hex wrench, depth gage, router bit guard, hose clamp, vacuum hose, a micro adjusting ring, instruction manual and wood screws. 50 each of the three sizes of wedges are included, 3/8" (10mm), 5/8" (16mm), and 15/16" (24mm). The warranty is effective when the warranty card is received at The Fletcher-Terry Company.
3. Attach the machine to a table top with the wood screws provided in the parts bag. Position it near the front edge of the table so the router motor is nearest you, and adequate clearance for moulding is available.
4. Remove the **ROUTER** from its carton and save its warranty and parts list for future reference. The manufacturer, Porter-Cable, provides a one year warranty and maintains maintenance parts at its various service centers. You will also find 2 wrenches which will be used to remove or replace **ROUTER BITS**. The motor is rated at 110 volts, 60 cycles. Power source must be properly grounded. Any other electrical service will have to be modified to accommodate and protect the router motor.
5. Place the **MICRO ADJUSTING RING (A) Figure 1**, over the router motor and screw it to the far end of the motor leaving about 1/2 inch of threads.

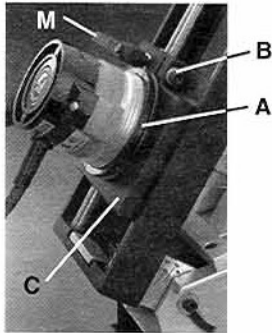


Figure 1

6. Loosen the hex screw (**B**) which locks the **ROUTER** in the **ROUTER SLIDE (C)**. Slide the **ROUTER** into the **ROUTER SLIDE** and tighten the hex screw slightly.

7. Remove the **ROUTER BIT (D)**, **Figure 2**, from the parts bag and insert it into the collet as far as it goes then retract it about 1/16 inch. Use the two wrenches, one to hold the router shaft and the other to tighten the collet securely.

8. Place the **HOSE CLAMP (E)** over the large end of the **ROUTER BIT GUARD (F)**. Place the **GUARD** over the hub on the **ROUTER** and tighten the **HOSE CLAMP**. Push one end of the **VACUUM HOSE (G)** over the 3/4 inch leg of the **ROUTER BIT GUARD**. The other end of the hose should be fed under the **CORNERLOCK 4000** and into a vacuum cleaner hose.

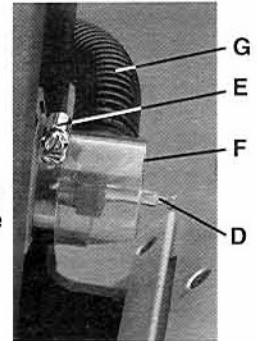


Figure 2

ADJUST THE ROUTER BIT DEPTH

Note: The **ROUTER BIT** is a unique design which easily routs hard woods. Its profile matches the shape of the Fletcher **WEDGES**, therefore, they must be used together.

1. We will explain how to set the depth of the **ROUTER BIT** for a four sided frame because it is the most frequently used. The depth will not have to be changed unless you change to something other than a four sided frame, or the **ROUTER BIT** wears out and has to be replaced.

2. This procedure requires two pieces of moulding which have been accurately mitered to 45 degrees. Place one on each side of the **FENCE (H)** and downward against the **MOULDING STOP (J)**, **Figure 3**. Tighten the **CLAMP (K)**, **Figure 7**. Loosen the hex screw on the **ROUTER SLIDE** and pull the **ROUTER** away from the moulding. Rotate the **PIVOTING BASE (L)** until the **ROUTER BIT** is in line with the end of either of the frame pieces. You may have to adjust the position of the **ROUTER** to align the **ROUTER BIT** with the ends of the mouldings. The **LOCKING LEVER (M)**, **FIGURE 1**, is loosened to move the **ROUTER SLIDE** up or down. Push the **ROUTER** toward the moulding until the tip of the **BIT** touches the mitered end of the moulding.

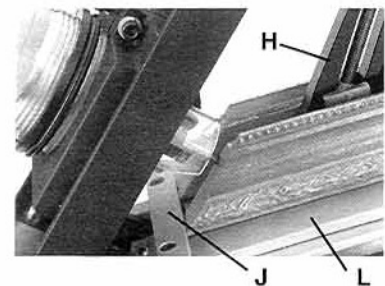


Figure 3

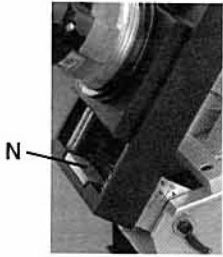


Figure 4

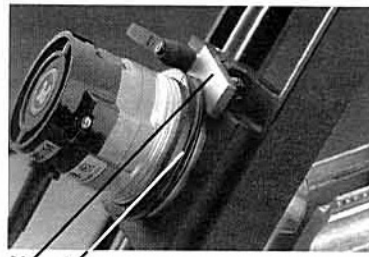


Figure 5

3. The **DEPTH GAGE (N)** should be stored on a magnet shown in **Figure 4**. Loosen the **MICRO ADJUSTING RING (A)** so you can slip the **DEPTH GAGE** between it and the **ROUTER SLIDE**, **FIGURE 5**. Finger tighten the **MICRO ADJUSTING RING** against the **DEPTH GAGE**. Remove the gage. Pivot the base so the **ROUTER BIT** is between the two pieces of moulding and push the router into its **ROUTER SLIDE** and against the **MICRO ADJUSTING RING**. Tighten the hex screw to firmly lock the **ROUTER SLIDE** around the router.

4. The previous procedure approximates the correct depth. The next step will set it precisely. Connect the power cord to the appropriate electrical source. Turn on the vacuum system and the router switch. Rotate the **PIVOTING BASE** by pushing or pulling the **CUTTING HANDLES (P)**, **FIGURE 7**. Rout the frames as deep as their width permits. (More later about the **ROUTER STOPS**.) Loosen the **CLAMP (K)** and remove the mouldings. Place the mitered ends of the frame pieces together and insert the short wedge without forcing. It should enter about half its length into the slot. If the wedge does not go into the routed slot half way, the router bit depth must be *decreased*. See **Figure 6**.

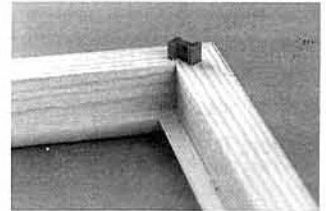


Figure 6

5. In order to decrease the **ROUTER BIT** depth, the router motor must be retracted slightly from the **ROUTER SLIDE**. Disconnect the power cord. Loosen the hex screw on the **ROUTER SLIDE**. The **MICRO ADJUSTING RING** has 8 equally spaced index marks around its face. Screw the **MICRO ADJUSTING RING** clockwise about 1/2 the distance between two index marks. Tighten the **ROUTER SLIDE** hex screw; reattach the power cord and rout the same slots again. Remove the frame pieces and test with the short wedge again.

6. If the wedge goes into a routed slot too far, the router depth must be *increased*. To do so, turn the **MICRO ADJUSTING RING** counter-clockwise. Then loosen the **ROUTER SLIDE** hex screw and push the motor so it seats against the **MICRO ADJUSTING RING**. Retighten the screw.

7. This depth setting procedure will work the same way for five, six, or eight sided frames. Each time the angle is changed the router depth must be reset.

HOW TO USE THE CORNERLOCK 4000

1. The purpose of any method of corner fastening is (1) hold the moulding tightly in the proper position while the glue sets, and (2) provide a mechanical connection at the corner in case the glue fails at a later date. The **Fletcher CornerLock 4000** accomplishes these objectives in a unique way. You should rout as deeply as possible so the wedge exerts its tightening force nearer the front surface of the frame to make a neater joint. The **CornerLock 4000** routs the slot on an arc so the deeper the wedge, the tighter the joint.

2. Place two pieces of moulding on the **PIVOTING BASE** with their bottom surfaces against the **FENCE**. Push the mitered end of the mouldings against the **MOULDING STOP**. While holding them snugly in this position, tighten the **CLAMP KNOB (K)** shown in **Figure 7**.

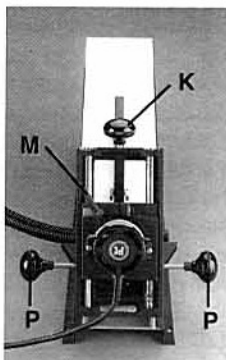


Figure 7

3. Loosen the **LOCKING LEVER (M)** and slide the **ROUTER SLIDE** up or down on its two shafts to the position where the router **BIT** will enter the wood at the thickest part of the frame. Generally only one wedge is required per corner unless the moulding is more than two inches wide. You should stand at the end of the machine and look over the router motor so you can see the router **BIT** as it travels through the wood. Start the router motor and the vacuum. Put both hands on the **PIVOT BASE KNOBS (P)** so you can push or pull the moulding into the router **BIT**, first in one frame piece, then the other. Rout as deep as you can without breaking through the side of the moulding. Turn off the router and vacuum.

4. Before removing the moulding, push the **PIVOT BASE (L)** so the **BIT** goes to the bottom of a slot and slide the **ROUTER STOP (R)** against the **PIVOT BASE KNOB (P)** and lock in this position. Do the same with the other framing piece. Now you can use the **ROUTER STOPS** to limit the

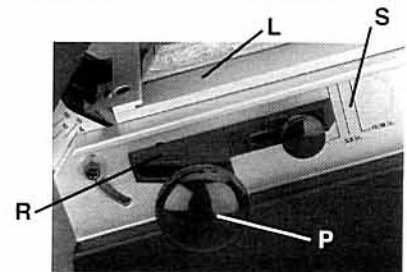


Figure 8

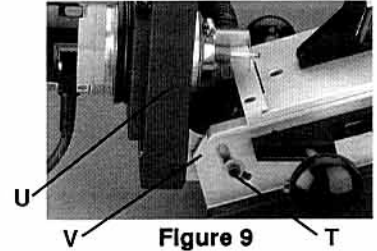
P routing on the other three corners of the frame. Proceed to rout all four pieces at both ends. Notice the index marks (**S**) on the **BASE** which help you set the stops to the depth of the three wedges. They are a guide only and may vary with wide frames.

5. Apply glue to the end of a piece of moulding. Lay it on the table upside down and against the mitered end of the adjoining piece. Push a wedge into the routed slot and stop when it is flush with the back of the moulding. Turn the frame over so you can see the upper surface of the corner. You can slide one piece against the other to align the joint precisely. Turn the frame upside down on the table again and push the wedge to the bottom of the routed slot with a screw driver or similar tool.

MULTI-ANGLE FRAMES

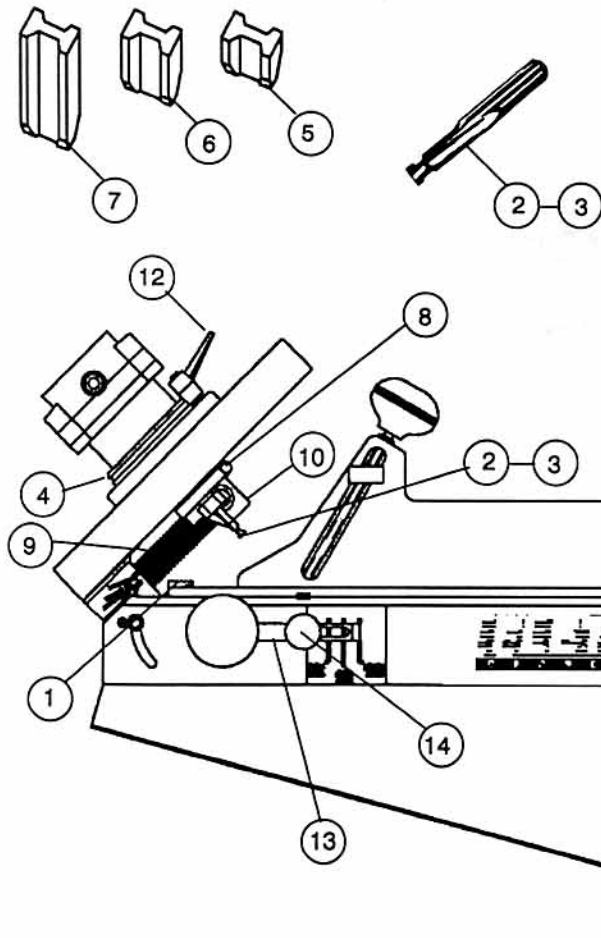
The procedure to change the **Fletcher CornerLock 4000** to join a 5, 6, or 8 sided frame is as follows:

1. Disconnect the power cord. Loosen the two hex head pivot screws (**T**) on the sides of the base which lock the **ROUTER ASSEMBLY (U)** in position for 4, 5, 6, or 8 sided frames. Rotate the **ROUTER ASSEMBLY** on its pivot screws to the index mark labelled 5, 6, or 8 (**V**). Notice the detent action at each of the 5, 6, and 8 positions. Tighten the locking screws at any of the positions.
2. Readjust the router bit depth using the **MICRO ADJUSTING RING** the same way you did after **SET UP**.
3. The **Fletcher CornerLock 4000** can be set to any intermediate multi-angle position. It will be necessary to re-adjust the depth of the router bit.



OPERATING TIPS

1. Remember, use caution when operating a power tool such as the **CornerLock 4000**. Use the router bit guard; **wear safety glasses**; and **keep your fingers away from the BIT**.
2. The weight and profile of the frame will determine the size wedge you use. A short wedge driven to the bottom of the routed slot is more desirable than using a longer wedge than the frame needs.
3. Use two wedges in the corner of a wide frame and locate them as far apart as possible for added rigidity.



MAINTENANCE PARTS LIST

REF. NO.	DESCRIPTION	QUANTITY	ORDER
1	MOULDING STOP	1	12-435
2	ROUTER BIT (STEEL)	1	05-411
3	ROUTER BIT (CARBIDE)	1	05-412
4	MICRO ADJUSTING RING	1	12-430
5	3/8" (10mm) WEDGE	500	08-412
6	5/8" (16mm) WEDGE	500	08-413
7	15/16" (24mm) WEDGE	500	08-414
8	HOSE CLAMP	1	12-431
9	VACUUM HOSE	1	12-432
10	ROUTER BIT GUARD	1	12-433
11	DEPTH GAUGE	1	12-434
12	LOCKING LEVER	1	12-436
13	ROUTER STOP	2	12-437
14	PLASTIC KNOB	2	12-438

