

# OWNER'S MANUAL

## **FLETCHER 5600 CORNERPRO**<sup>™</sup>



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## INTRODUCTION

The Fletcher 5600 CornerPro<sup>™</sup> is a pneumatically powered underpinner which is designed to be operated on a bench or installed on an optional tilting **Stand**. A Plexiglas<sup>®</sup> shield is provided to safeguard against pinching your fingers with the pneumatic clamping of the moulding and insertion of nails. It is interlocked with the underpinning operation to prevent the use of the machine unless the guard is in place. Respect the importance of this safety feature for your protection.

<ul> <li>The 5600 CornerP Front Clamp (ac Upper Clamp w Flat Right A Round Righ Two Nail Pushe One for 3/16 One for 3/8" Two Thickness ( One for 1/4" One for 3/8" Tool Box Contai Metric Hex M Magnet Owner's Ma Instructional</li> </ul>	ro™ include djustable) ith: ngle Pad t Angle Pad rs: 5" and 1/4" ( ', 1/2" and 5 Compensate ' (7mm) Nai Compensate ' (10mm) Nai ning: Wrench Set nual Video	es the following: (4mm and 7mm) Nails j/8" (10mm,12mm and 15mm) Nails ors: Is ails (5)
<ul> <li>Optional Accessor Tilting Stand (04 40mm Round P Thickness Comp Thickness Comp Hexagonal Fence Fence Risers (0 Extension Wing Work Table (04-</li> </ul>	ies: 4-324) ad with felt pensator for pensator for ce and Octa 4-342) s (04-341) 343)	for Upper Clamp (04-340) <sup>•</sup> 3/16" (4mm) Nails (04-344) Note: <u>Required</u> if you wish to use 3/16" (4mm) Nails. <sup>•</sup> 1/2" (12mm) Nails (04-347) Note: <u>Required</u> if you wish to use 1/2" (12mm) Nails. gonal Fence (04-353)
•Specifications: Width Depth Total Height Working Height	13-3/4" (35 17-3/4" (49 12-5/8" (32 6" (150mn	50mm) 50mm) 20mm) າ)
Weight	61-3/4 роц	inds (28kg)
Maximum Pressure Working Pressure Recommended Pressure		115 PSI (8 BAR) 36 to 110 PSI (2.5 to 7.5 BAR) 85 to 90 PSI (5.8 to 6.2 BAR)
Moulding Capao Height* Width	city: 1/4" to 2-3/4 1/4" to 3-15	4" (5mm to 70mm) /16" (5mm to 100mm)
* Use 3/16" (4m	m) Nails on	ly for 1/4" moulding height.

## **PRODUCT WARRANTY**

The Fletcher-Terry Company warrants the Fletcher 5600 CornerPro<sup>™</sup> to be free from defects in parts and workmanship for (2) two years\* from the date of purchase, <u>with the exception of those parts and accesso-ries listed below.</u> The Fletcher-Terry Company warrants that it will repair or replace any such defective machine or replace parts, providing the machine has been under normal use and service and the defective part or machine is returned to The Fletcher-Terry Company at the purchaser's expense. The Fletcher-Terry Company must authorize the return in writing. Proof of purchase must be submitted to validate warranty coverage.

The warranty is in lieu of all other agreements and warranties expressed or implied. THE FLETCHER-TERRY COMPANY DOES HEREBY EXPRESSLY DISCLAIM ANY WARRANTIES OF MERCHANT-ABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The Fletcher-Terry Company does not authorize any company employee or representative to assume for it any other liability than that set forth in this Product Warranty. The Fletcher-Terry Company shall not be liable for any damages or losses, whether incidental or consequential or direct or indirect, arising out of the use or abuse of this machine; in any event, THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS OR ANY OTHER WARRANTY IS LIMITED TO RETURN OF THE PURCHASE PRICE PAID FOR THIS MACHINE.

Parts and accessories not included in the (2) two\* year warranty:

#### **Description**

Complete Foot Pedal Plexiglas® Guard All Locking Levers All Adjusting Knobs Complete Tool Box Hex Wrenches Magnet Rod Round Right Angle Pad Flat Right Angle Pad

#### **Description**

Thickness Compensator - 4mm Thickness Compensator - 7mm Thickness Compensator - 10mm Thickness Compensator - 12mm Nail Pusher - 4-7mm Nail Pusher - 4-7mm Nail Pusher - 10-15mm Fence Risers Extension Wings 40mm Round Felt Pad

\*Hammer is warranted for (1) one year.

## Damage resulting from the use of joining nails other than CornerPro nails or unauthorized modifications to the machine will void the warranty.

## SAFETY

- Follow the operating instructions in this manual.
- · Keep your fingers away from clamping areas both front and upper.
- · Wear safety glasses during operation, maintenance assembly and disassembly activities.
- Do not rest your foot on the foot pedal until you are ready to drive a nail.
- Do not operate this machine without the Plexiglas<sup>®</sup> Guard in place.
- Disconnect air source during maintenance.

## SET UP

Unpack the machine and examine all components for shipping damage which should be reported to the carrier for claims.

- 1. Set the machine on a work table of comfortable height and place the Foot Pedal on the floor.
- 2. Remove the Plexiglas<sup>®</sup> Guard for the following three steps.
- 3. Remove the Front Clamp and the Upper Clamp. You will reinstall after loading Nails.
- 4. Three color-coded air hoses, already attached to the Foot Pedal, should be connected to the matching color-coded receivers on the machine. The connection is made by firmly pushing the hose into the receiver. When properly done, the hose will slide into the receiver about 3/8".
- 5. Attach the compressed air source to the machine with the appropriate "quick disconnect" fitting. The source should be filtered and not exceed 8 BAR or 115 PSI.

#### 6. **REINSTALL THE PLEXIGLAS® GUARD.**

7. The **Foot Pedal** is a 2 step device and should now be practiced. You will notice a felt pad under the pedal. Push the pedal down to the pad and the **Front Clamp** and the **Upper Clamp** mechanisms will operate. Push further into the felt pad and the **Hammer** will move upward. The purpose of the two step **Pedal** is to permit the stacking of one (or more) nails on top of one another. The **Pedal** is slightly released after the first **Nail**, but both **Clamps** remain operated while you push the **Pedal** down again for the next Nail. The felt pad is helpful during the learning process. When you get the feel for how far to relax the **Pedal** without deactivating the **Clamps**, you can remove the felt pad.

## HOW TO SELECT NAILS



The patented joining **Nails** are designed to apply forces which hold the frame pieces firmly together creating a tight joint. There are 5 different lengths as shown above. Each size is available for either hardwood or softwood with the order number shown for each. Select the nail length which comes no closer to the top of the frame than 3/16" to 1/4". See Figure 1. For maximum strength, place two or more nails **(A)** and **(B)** in parallel as shown.



## HOW TO LOAD NAILS

- There are two Compensators, one labeled 7mm (A) for the 1/4" Nails, and the other is labeled 10mm (B) for the 3/8" Nails. See Figure 2. Select the 10mm Compensator (B) and slide it into the nail path from the rear of the machine with its pin toward the rear and pointing downward. After pushing it in as far as it goes, press down on the rear end of the Compensator (E) in Figure 3, and the pin will lock it in place.
- Pull the spring loaded Follower (F), (Figure 3), to the rear and insert a stack of 10mm (3/8") Nails in the nail path with the glue side <u>up</u> and the bend toward the rear. Set the large Pusher (C), (Figure 2), for 3/8" Nails, over the Nail Block (U),



(Figure 4), with the notch toward the front, against the Nails. Release the Follower (F). The smaller Pusher (D) is used for 3/16" (4mm) and 1/4" (7mm) Nails.

- Operate the **Foot Pedal** and observe the **Nail** Figure 2 rising out of the **Hammer Block**. Repeat this 4 or 5 times with a new machine or one that has not been used recently.
- the **Front** and **Upper Clamps** and prepare to join frames.



R

## **HOW TO JOIN FRAMES**



Figure 5

1. Keep the **Plexiglas<sup>®</sup> Guard (E)** in place.



Figure 6

2. The first step is to position the shaft of the Upper Clamp (C) so the Clamp Pad (F) is centered over the



moulding corner. Loosen the Locking Lever (D) and slide the Clamp assembly forward or back to center the Clamp Pad (F) over the joint. Tighten the Locking Lever (D). The two included Upper Clamp Pads are shown at the left. Figure 7 is the Flat Right Angle Pad used for flat or convex rounded top mouldings, while Figure 8 is the Round Right Angle Pad used for concave curved mouldings.

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Loosen Locking Lever (R) and position the Upper Clamp Shaft (C) so the pad is 5/8" to 3/4" above the frame and the Locking Lever (R) is seated in one of the holes in the Upper Clamp Shaft. After tightening, be sure the Locking Lever (R) is not pointing downward because it may hit the table when the Upper Clamp descends. You can pull the handle free and rotate it. Remove the Front Clamp (S) until step 5.

- 3. The front panel of the CornerPro 5600 is shown in Figure 9. The **Pressure Gauge (H)** indicates the air pressure set by the **Pressure Regulator (J)**. The **Pressure Gauge (H)** is marked with the range suggested for softwood from about 37 to 70 PSI and hardwood to 100 PSI.
- 4. Place the left piece of moulding against the left fence and push the end against the right fence. Slide the Fence to align the slot in the Hammer Block for the first Nail about 1/3 the frame width from the rabbet corner as shown in Figure 11. Loosen the Locking Knob (K) in Figure 10; slide Collar (L) against the front of the Slide Block (P) and tighten Locking Knob (K). Now slide the fence toward the front so the second Nail will be



2/3

1/3

inserted no closer then 3/16" from the corner of the moulding to prevent splitting the wood. Loosen the **J** Locking Knob (M); slide the Collar (N) against the back of the Slide Block (P) and tighten the Locking Knob (M).



Figure 10

5. Move the Fence Slide to the rear to the position for the first Nail. Position the Front Clamp (S), in Figure 5, about 3/8" to 5/8" from the rabbet of the moulding. Depress
Figure 11

the **Foot Pedal** and a **Nail** will be inserted. If you use glue, apply a small amount to the center of the end of one leg of the moulding to avoid smearing it on the **Upper Clamp Pad** and the **Hammer Block**.

- 6. Slide the **Fence Slide** to the front; re-position the **Front Clamp** and depress the **Foot Pedal** to insert the second **Nail**.
- 7. If you want a third **Nail** inserted, slide the **Fence** to an intermediate position, re-set the **Front Clamp** and drive another **Nail**. The **Slide Clamp** (**R**) is activated when the pedal is depressed, so the **Fence** is locked in place during **Nail** insertion.
- 8. If the moulding is high you may wish to stack more than one **Nail** in the same position as shown, **(T)** in Figure 12. After the first **Nail** is inserted release the **Foot Pedal** slightly and the **Clamps** will remain in place. Then, depress the **Foot Pedal** further and a second **Nail** will be inserted, which will drive the first **Nail** deeper. This can be repeated for a third **Nail**.
- If you use the Round Right Angle Pad for a contoured moulding, it may be necessary to re-position the Upper Clamp for each Nail insertion as described in step 2 above so the pad makes contact as shown in Figure 12.
- Note: The last 1/4 of the strip of Nails will not feed into the Hammer Block. This makes it easier to add Nails or change Nail Size.



### MAINTENANCE

Caution: Disconnect air source and wear safety glasses during maintenance.

Item 1 ..... Daily Item 2 ..... As required Item 3 ..... Weekly Item 4 ..... Monthly Item 6..... Weekly Item 7..... Weekly

Modify these frequencies as environment and usage dictate. This machine will provide years of quality performance if well cared for.

- 1. The most important maintenance requirement is cleanliness. Use a brush or clean cloth to wipe the table surface, shafts and pads.
- 2. If glue accumulates on the table surface or **Hammer Block (H)**, Figure 13, wipe it off before it dries, other wise, it will have to be scraped off or removed with the solvent recommended by the glue manufacturer. Be sure glue does not dry on the **Upper Clamp Pads** because it will damage the top of a frame.
- 3. Use light oil on a cloth to wipe the Vertical Shafts (J), Figure 14, which operate the Upper Clamp.



Figure 14

- 4. Disassemble the **Hammer Block** and clean as follows:
  - a. Remove Pusher, Nails, and Compensator.
  - b. Remove two screws (A) and set the

Cover Plates (B) aside. (Figure 14) c. Remove two screws (C). <u>DO NOT LOOSEN</u> <u>SCREWS (D).</u> (Figure 13)

d. Figure 15 is viewed from the rear. Remove the rear half of the **Hammer Block (E)** and wipe the hammer path **(F)** clean.

e. Depress the **Foot Pedal** to expose the **Hammer (G)** and wipe it clean.

- 5. Re-assemble the Hammer Block components in the reverse order of steps a. through e.
- Caution: Be sure the tops of the two halves of the Hammer Block (H) in Figure 13, are perfectly flush before tightening screws (C).



Figure 13



Figure 15

- 6. Check the lubricant and drain the filter at the air compressor. The lubricator should produce one drop for every 30 40 foot pedal cycles.
- 7. Use a can of compressed air to clean all porous silencers on pneumatic valves as well as various components of the machine.

#### Caution: Wear Safety glasses while cleaning with compressed air.

#### PROBLEM **POSSIBLE CAUSE** CORRECTION Sound of leaking air Leaking at the air source nipple Remove the air hose and reattach it. Leak at one of the hose connections Feel for air leak, cut off 1/2" of hose and to a valve insert it again Pressure regulator set at more than Set the regulator at less than 115 PSI 115 PSI (8 BAR) (8 BAR) Leakage in a valve or a cylinder Contact Customer Service (see below) Leak disappears when foot Hose connections between foot pedal Reattach hoses at the foot pedal and pedal is depressed and machine leaking the machine Regulator set too low Nail is not driven Set regulator above 37 PSI (2.5 BAR) Nails jammed at hammer block Remove nails and clean nail path Nails placed backwards in nail path Remove and reload strip of nails Foot pedal operated too fast Try again more slowly Spring follower not pushing strip of Remove obstruction in nail path nails into position Replace broken follower spring Verify follower spring is attached Wrong compensator or not installed Replace compensator or insert it correctly properly Edge of hammer is worn or damaged Contact Customer Service (see below) The last 1/4 of the strip of nails will not Add more nails feed No nails in the nail path Load nails Nail only partially driven Air pressure set too low Set regulator above 37 PSI (2.5 BAR) Upper clamp pad out of position Re-position the upper clamp into moulding Upper clamp set too high above the Position upper clamp 5/8" to 3/4" above frame moulding Edge of hammer is worn or damaged Contact Customer Service (see below) Foot pedal does not activate Foot pedal return spring broken Contact Customer Service (see below) Air line not connected Check line connection cycle Valve is clogged or air line is blocked Remove air line, clear obstruction, reattach Valve faulty Contact Customer Service (see below) Air pressure set too low Set regulator above 2.5 BAR (37 PSI)

## TROUBLESHOOTING

FOR ASSISTANCE, CONTACT THE FLETCHER-TERRY COMPANY CUSTOMER SERVICE DEPARTMENT AT 800.843.3826 (U.S./CANADA) OR 860.677.7331, customerservice@fletcher-terry.com.

Automatic/Manual switch set to manual

Set switch to automatic

## SPARE PARTS





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-12





## **SPARE PARTS**

<u>Ref. No.</u>	<u>Part No.</u>	<b>Description</b>	<u>Quantity</u>
1	16-001	Foot Pedal Assembly	1
1a	16-002	Foot Pedal Valve	1
2	16-003	Stop Collar	2
3	16-004	Locking Knob	2
4	16-007	Plastic Guard	1
5	16-006	Plastic Guard Knob	2
6	16-011	Upper Clamp Slide Locking Lever	1
7	16-029	Upper Clamp Shaft Locking Lever	1
8	16-010	Front Clamp Operating Screw	1
9	16-009	Regulator Knob	1
10	16-070	Front Clamp Bar	1
11	16-074	Hex Wrench Set (5)	1
12	16-013	Magnet	1
13	16-037	Round Angular Pad	1
14	16-038	Round Angular Pad Bushing	1
15	16-036	Round Angular Pad Screw	1
16	16-039	Flat Angular Pad	1
17	16-040	Flat Angular Pad Screw	1
18	16-034	Gasket Set for Hammer Cylinder	1
19	16-035	Piston Assembly for Hammer Cylinder	1
20	16-022	Follower Spring	1
21	16-027	Follower	1
22	16-041	7mm Compensator	1
23	16-042	10mm Compensator	1
24	16-044	Pusher (10mm/12mm/15mm)	1
25	16-043	Pusher (7mm)	1
26	16-020	Hammer	1
27	16-023	Nail Block	1
28	16-024	Nail Path Guide	1
29	16-025	Nail Path Guide Screw	2