



**The Fletcher-Terry Company**

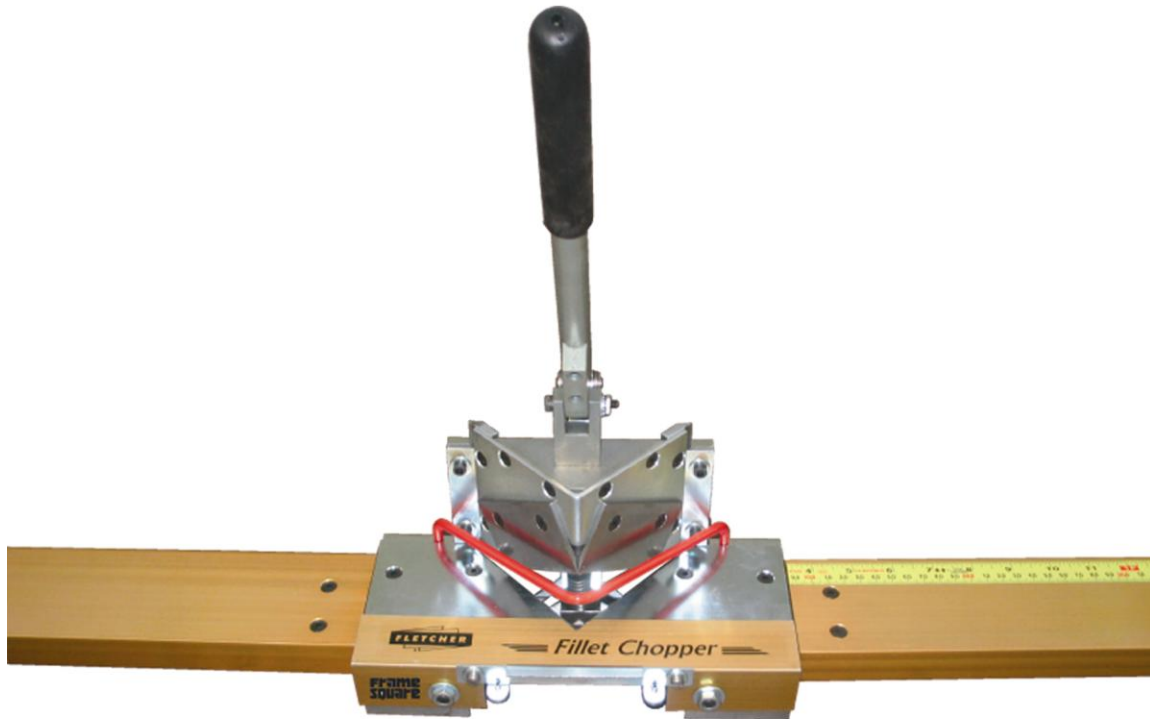
*Quality. Service. Dependability. Value.  
Since 1868*

# Owner's Manual

---

## Fletcher *Fillet Chopper*

Part # 04-900



### ***The Fletcher-Terry Company***

91 Clark Drive • East Berlin, CT USA 06023-1104

Tel 860.828.3400 or 888.888.5165 • Fax 800.329.3826 • [www.fletcher-terry.com](http://www.fletcher-terry.com)

[customerservice@fletcher-terry.com](mailto:customerservice@fletcher-terry.com)

# **Contents**

|  | <b>Page #</b> |
|--|---------------|
| <b>Introduction</b>                          | <b>3</b>      |
| <b>Product Warranty</b>                      | <b>4</b>      |
| <b>Safety First!</b>                         | <b>4</b>      |
| <b>Assembly and Mounting</b>                 | <b>5</b>      |
| <b>Let's Talk About Fillets</b>              | <b>8</b>      |
| <b>Operation:</b>                            |               |
| <b>1 – Measure Opening</b>                   | <b>9</b>      |
| <b>2 – Position Fence</b>                    | <b>9</b>      |
| <b>3 – Identify Rabbet on Fillet</b>         | <b>9</b>      |
| <b>4 – Adjust Index Fencing if Necessary</b> | <b>10</b>     |
| <b>Accessories and Spare Parts</b>           | <b>10</b>     |

# Introduction

Thank you for purchasing the **Fletcher Fillet Chopper**, our new product developed in collaboration with Frame Square Industries. You have chosen a tool that will give you the precision and quality you need to build your business—whatever its size. This new fillet chopper will handle fillets & lip liners up to 1-1/2” wide and features an indexing fence for nibbling the wider materials. The Fletcher Fillet Chopper is built with a high mechanical advantage. It’s heavy-duty construction is used throughout the machine for longer life. For a complete fillet measuring and cutting system, the Fletcher Fillet Chopper works best with the Fillet Master™ from Fletcher-Terry.

For maximum safety and productivity, please read and understand this manual thoroughly before you operate your new Fletcher Fillet Chopper.



## PRODUCT WARRANTY

The Fletcher-Terry Company warrants the machine purchased to be free from defects in parts and workmanship for \*(1) one year from the date of purchase. 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 MERCHANTABILITY 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.

\*Blades are not included in the warranty.

# **SAFETY FIRST!**

**Please read through this manual before operating the Fletcher Fillet Chopper. If after reviewing these pages you still have questions about using the machine, contact our Customer Service Department toll free at 1.800.843.3826 (in the U.S.) or 860.677.7331 (outside the U.S.)**

**You can also email us at [customerservice@fletcher-terry.com](mailto:customerservice@fletcher-terry.com).**

- It is the employer's responsibility to enforce compliance with these safety warnings and procedures by all who use the Fletcher Fillet Chopper. Keep this manual available so all employees have access to it and have the opportunity to review procedures periodically.
- The intended purpose of the Fletcher Fillet Chopper is to cut fillets for use in custom frames. It must not be modified or used for any other application or purpose.
- The Fletcher Fillet Chopper is for use in cutting wood and plastic materials, not aluminum or any other metal. Do not attempt to cut metal with the Fletcher Fillet Chopper.
- Use safety glasses. The operator of this machine, and others in the work area, must wear safety glasses with rigid side shields.
- Only use the parts, supplies, and accessories that are recommended by Fletcher-Terry.
- Do not over-reach or use the Fletcher Fillet Chopper from an awkward or insecure position. Make sure that the work area is well lit, free from clutter, and set up in a way that promotes proper ergonomics.
- Use care when cleaning under or around the Fillet Chopper. **THE BLADES ARE VERY SHARP, AND THE GUARDS CANNOT PROTECT YOUR FINGERS IF YOU REACH AROUND THEM OR UNDER THE UNIT.**

# Assembly and Mounting

## **Step 1: Attach the Handle**

After unpacking the unit from the box, locate the handle. Remove the (2) Allen Head Cap Screws from the handle pivot and attach the handle to the pivot block with the flat side of the handle towards the upright portion of the block. Tighten both screws with a 3/16" Allen wrench.

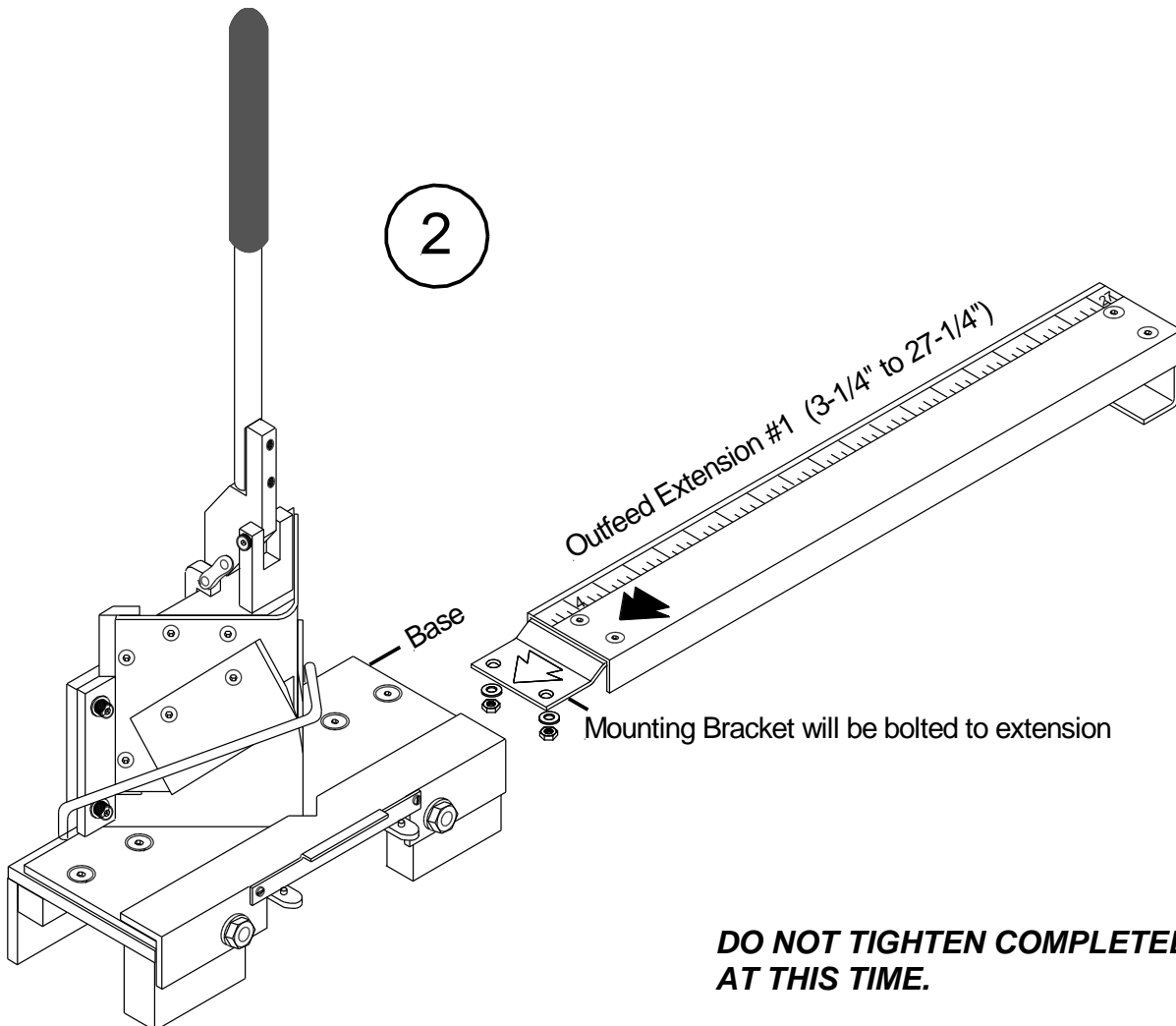
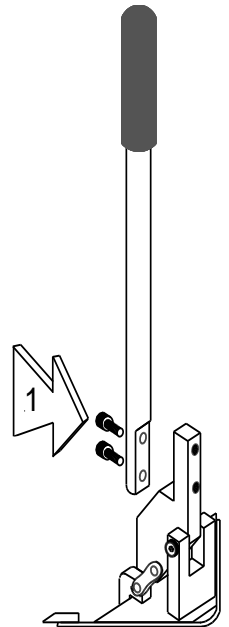
## **Step 2: Attach the Outfeed Extensions**

Unpack the (2) 24" long outfeed extensions.

**NOTE:** These 2 extensions can be joined together *first*, and then attached to the cutter as an assembly or the second extension may be left off until all alignments are done. Go to step 4 if you want to join them as an assembly first, then proceed to step 3 after mounting.

The first extension will have an offset bracket to mount to the unit. The second extension will have a flat bracket to mount onto the right side of the first extension.

Remove the (2) #10 nuts and washers from the right side of the *cutter base*. Position the first extension *under* the base plate and refasten with the (2) #10 nuts and washers. The flat head Allen socket screws require an 1/8" Allen wrench and the nuts require a 3/8" wrench or pliers to tighten. Do NOT tighten these screws completely just yet.

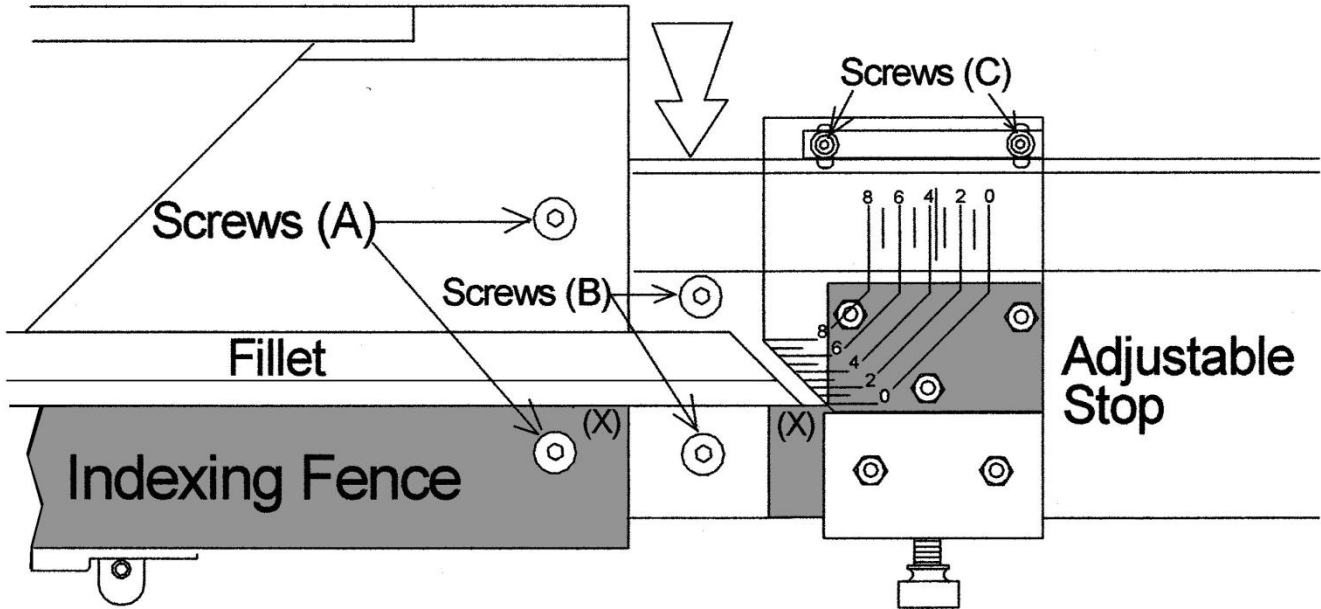


### **Step 3: Align Stop to Cutter Fence**

The production stop is adjustable (if necessary) to allow perfect alignment with the notch in the stop to the forward edge of the indexing fence on the cutter. Before making any adjustments on the stop, try to align the edges marked with (X) by moving the entire extension towards the front of the machine.

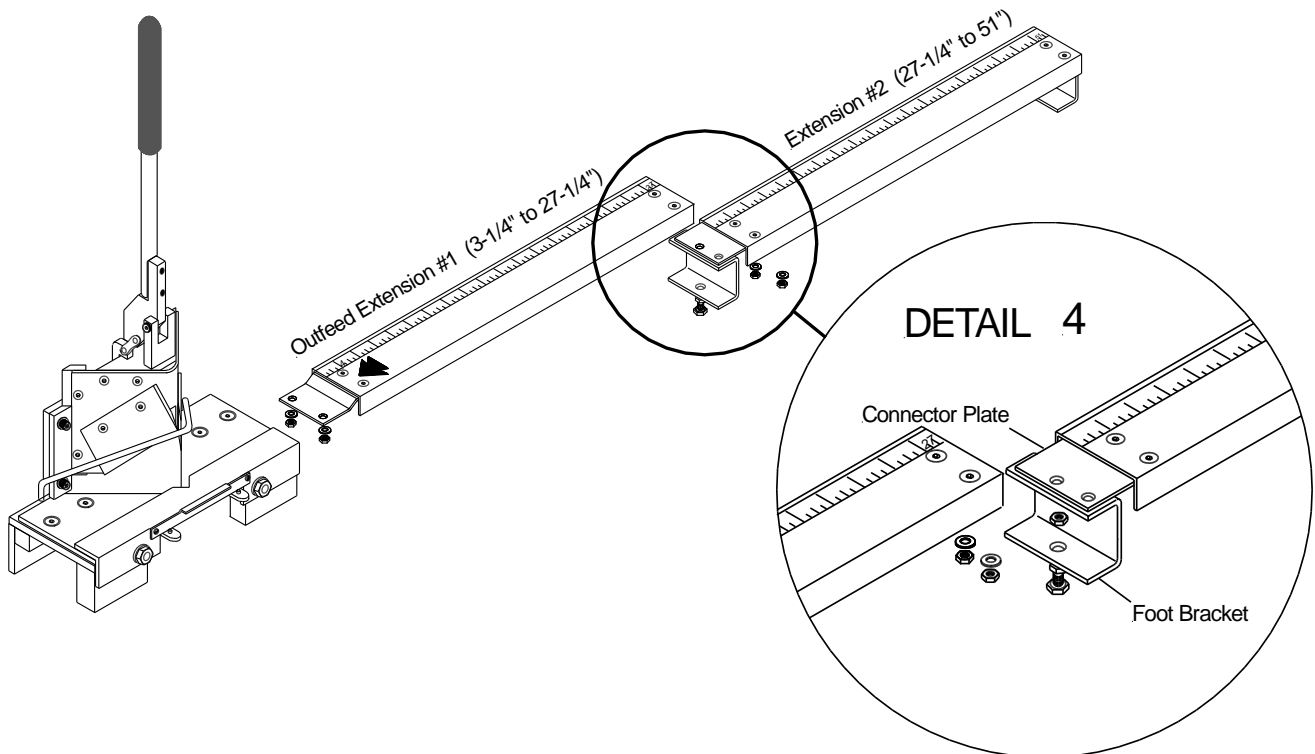
Screws (A) should still be slightly loose, to allow movement of the extension fore and aft. If the points of reference (X) still aren't close enough, loosen Screws (B) and try to get further movement of the extension.

As a last resort, you can loosen Screws (C) on the stop and move the stop assembly forward to align (X) with the fence.



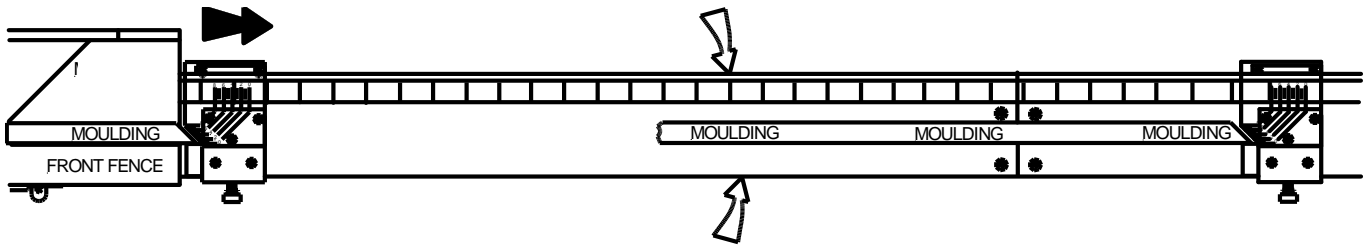
### **Step 4: Attach the Second Outfeed Extension**

Remove the (2) #10 nuts and washers from the right side of the first extension. Lift the foot bracket away from the extension and place the connector plate with the second extension under the right side of the first extension. Position the foot bracket **under** the plate and refasten with the #10 washers and nuts. Tighten the nuts while keeping the two ends of the extensions tight against each other.



## **Step 5: Align Extensions to the Fletcher Fillet Chopper Fence**

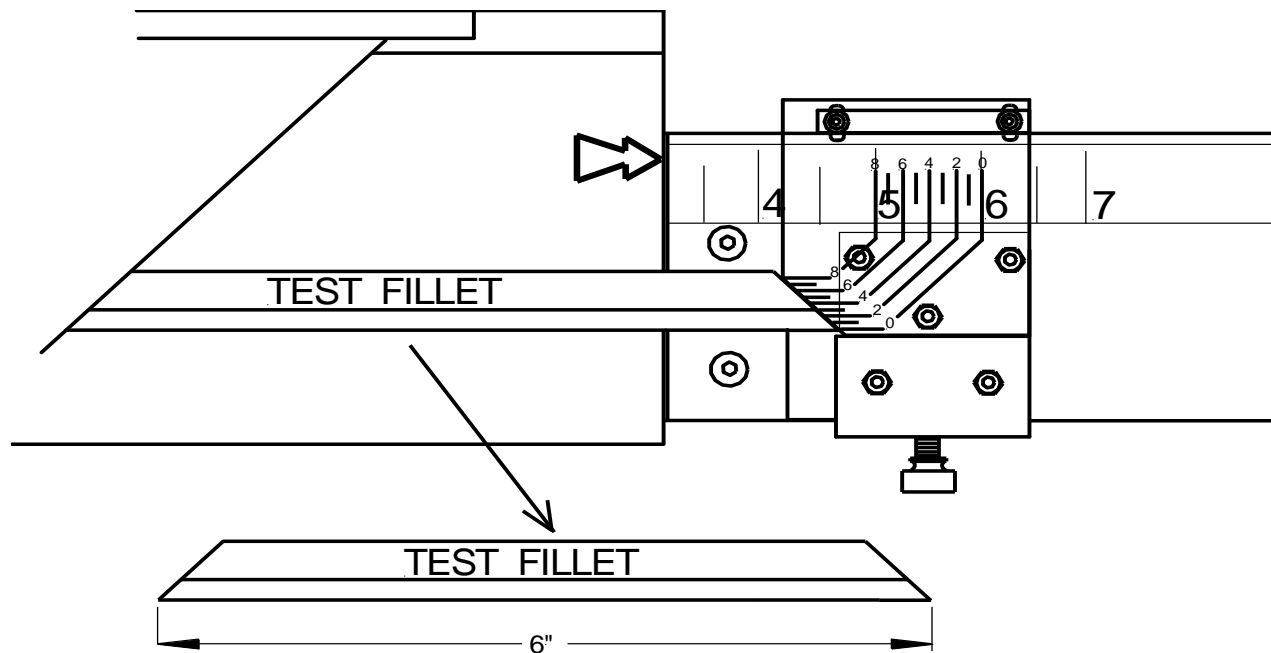
Before tightening the (2) screws that fasten the first extension to the base, it is important to make sure they are in alignment or parallel to each other. With the fence locked forward, set a straight edge or piece of aluminum moulding against the fence and check at the 24" mark and the 48" mark on the extensions to be sure the outfeed is aligned with the cutter fence.



## **Step 6: Calibrate the Stop & Scale to the Fletcher Fillet Chopper**

When the extensions are made, the scales are mounted so that they will measure a little short. This will be approximately 1/16" - 3/32" so that *any* extension can be adjusted to *any* machine. After final assembly is complete and the extensions are in alignment with the cutter unit, a test cut should be made with a piece of fillet to check actual cut dimension versus measured cut.

Using the Zero (0) line on the stop, and measuring the fillet at it longest point will give the most accurate reading. Set the (0) line at the far right of the stop to 6" on the scale. Finger-tighten the nylon screw. Insert a piece of fillet and slide it to the stop. Cut the fillet, and measure from tip to tip as shown. The fillet should measure slightly less than 6", but it could measure exactly 6". If short, loosen the Screws (B) on the extension and move the entire extension away from the cutter the amount it was short. If the fillet measured *more* than 6", check to see if the extension was tightened with a gap between the extension and the cutter. If not, call Fletcher-Terry.



## **Step 7: Mounting**

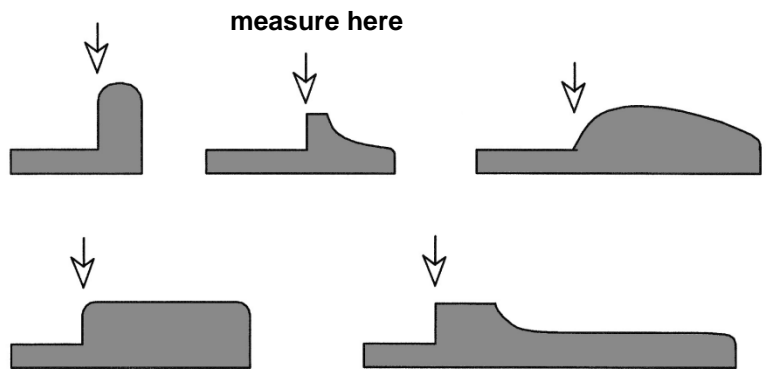
It is recommended that you mount the Fletcher Fillet Cutter either to a sturdy work table or to a strong piece of board which can then be clamped to a work table if you need more mobility. This will provide stability and safety for you and your employees during its use. Use the mounting plate attached to the rear of the Fillet Chopper. The hinges on the mounting plate allow the unit to lift for easy cleaning. **USE CARE WHEN CLEANING UNDER THE UNIT—THE BLADES ARE VERY SHARP.**

This completes the assembly and set up portion of this manual. Please be sure to read the operating instructions for complete information on cutting fillets to correct length, how to determine the cut length of any fillet or slip moulding.

# Let's Talk About Fillets

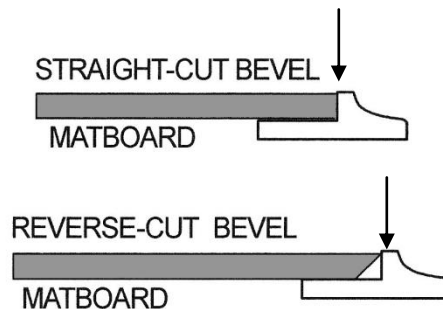
Fillets, slips, lip liners, or trim can come in various shapes and sizes. The basic half-round lip or ogee curve are some of the most popular, but many companies now make fillets to match many of their mouldings, both in finish and detail.

When cutting fillet, you have to measure the point where the rabbet edge of the fillet turns up to become the shape of the fillet. This is the normal point of reference. At right are some examples of fillet shapes as shown from the profile view. In each example, the measuring point is shown as an arrow.



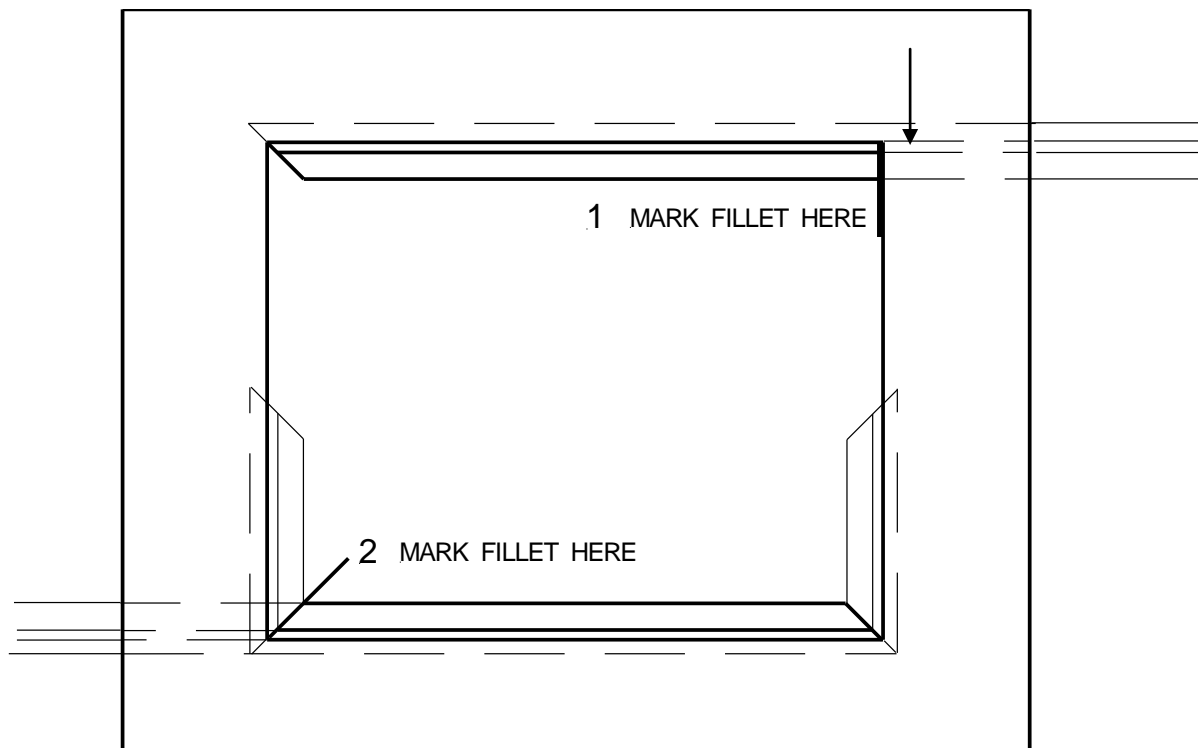
Fillets can be used in mats with a straight-cut edge, or more commonly in a mat with a reverse bevel. The latter makes it easier to fit the fillet in the opening with no mat edge showing.

Measuring fillets inside the mat opening with a tape measure or yardstick is one way to get the dimensions. The measurements would then be transferred to the scale on a cutting unit to get the final fillet sizes.



It would probably be necessary for you to check the cut piece in the mat opening and then shave the fillet to size using this method. Using a Fillet Master® from Fletcher-Terry is one way to get the dimensions without using a scale or tape measure.

There are also two ways to mark and measure a mat opening without using a tape measure. Shown below are two accepted ways. #1 shows the fillet with one end cut, then held in the opening with the rest of the fillet extending below the mat. Mark straight across the fillet with a razor blade or sharp instrument. Cut to the mark where it crosses the arrow point of the fillet as explained above. #2 shows (2) small pieces of the same fillet taped lightly into opposing sides of the opening. A fillet with one end cut is held in the opening with the rest of the fillet extending below the mat. Mark across the 45° with a sharp pencil as it crosses under the small fillet corner. Cut the fillet at the pencil mark.





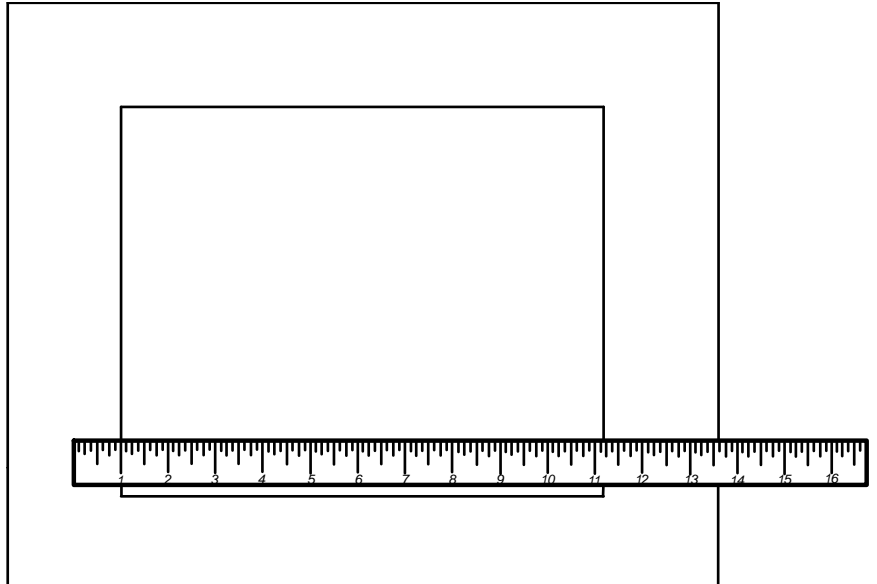
# Operation

## 1. Measure Opening

Measure the inside dimensions of the mat opening and record them. These dimensions are used to set the length of cut of the fillet.

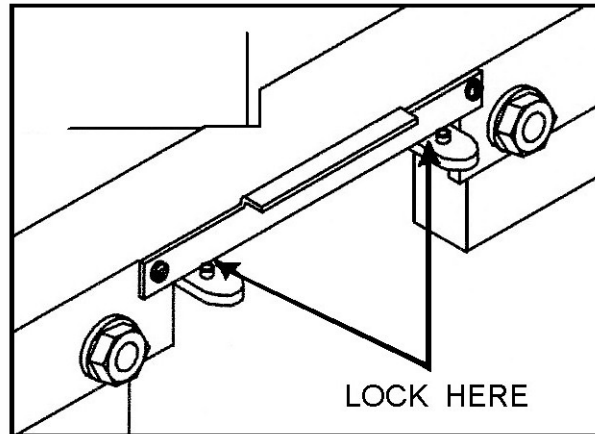
Note: If you are using a Fillet Master® from Fletcher-Terry, set the unit for the width of the fillet rabbet as explained in the instructions for the Fillet Master®. Then set the length for one side of the mat opening.

**Be sure the Fillet Master is calibrated for your Fletcher Fillet Chopper scale.**



## 2. Position Fence

Make sure the sliding fence is indexed to the forward position (towards the blades) and locked with the thumb lock bar between the lock pins and fence.

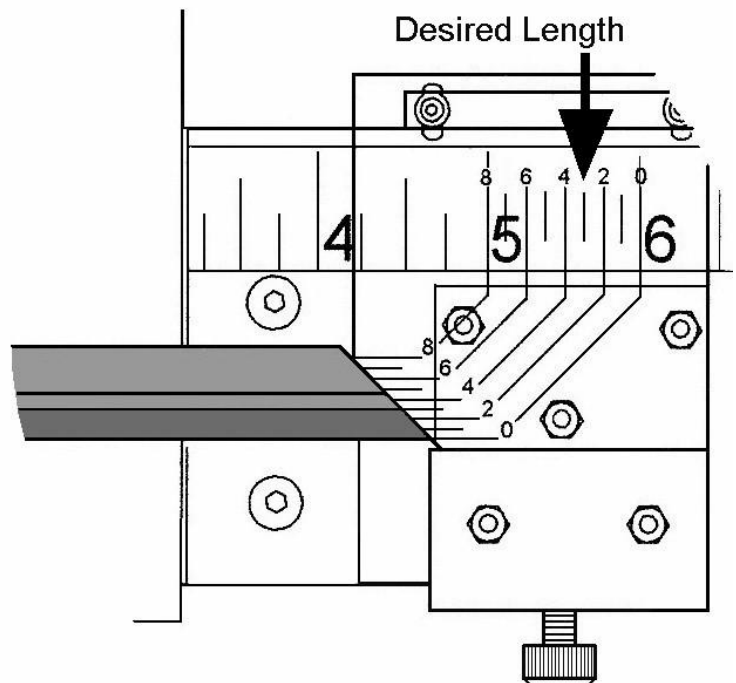


## 3. Identify Rabbet on Fillet

Set the fillet into the machine from the left side and cut one 45° end. Slide the cut fillet over to the production stop and align the rabbet edge of the fillet with one of the horizontal lines on the stop. As shown at right, the fillet aligns with line #3 (hash mark between line 2 and line 4).

Using the projected line to the scale, slide the stop out to the desired dimension for one side of the mat opening and tighten the screw on the production stop.

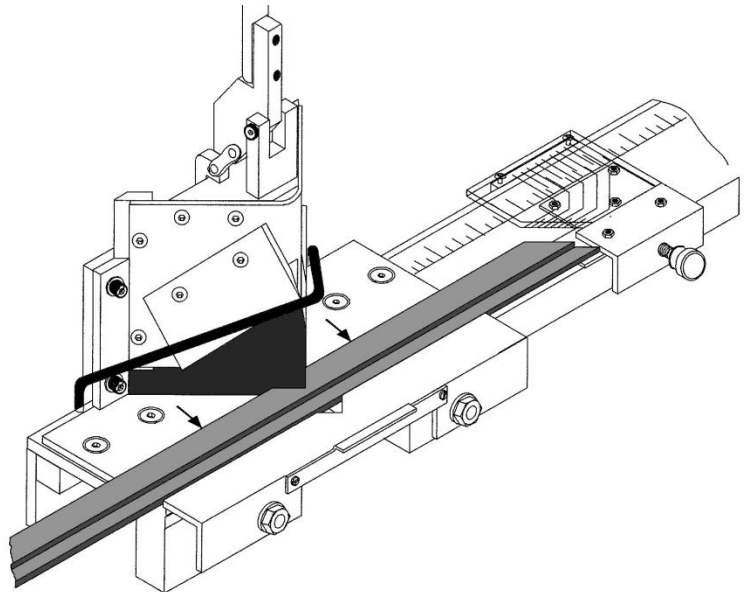
Note: If you are using the Fillet Master®, set the unit into the throat of the Fletcher Fillet Chopper making sure the stop is set far enough to the right to be out of the way. Start with the knob in the center of the blades. Slide the Fillet Master gently back against fence and right side of the machine vee opening. Slide the production stop to the left until it touches the tip of the Fillet Master® and engages the notch in the stop. This setting will cut the correct size of fillet if the Fillet Master® is set properly.



#### 4. **Adjust Indexing Fence (if necessary)**

If the fillet/trim being cut is 1/4" - 1/2" wide and can be cut easily in one chop, the fence should stay in the forward locked position during all cutting (toward the blades).

If the fillet is wider than 1/2" or is very hard wood, you might want to index the fence backward (away from the blades) to allow for nibbling or multiple cuts. For very wide fillets such as 1" to 1-1/4" in width, multiple cuts will give you the best results. (It may only require one extra cut.) The production stop is designed so the fillet can slide forward and backward after lifting the end over the thin flag.

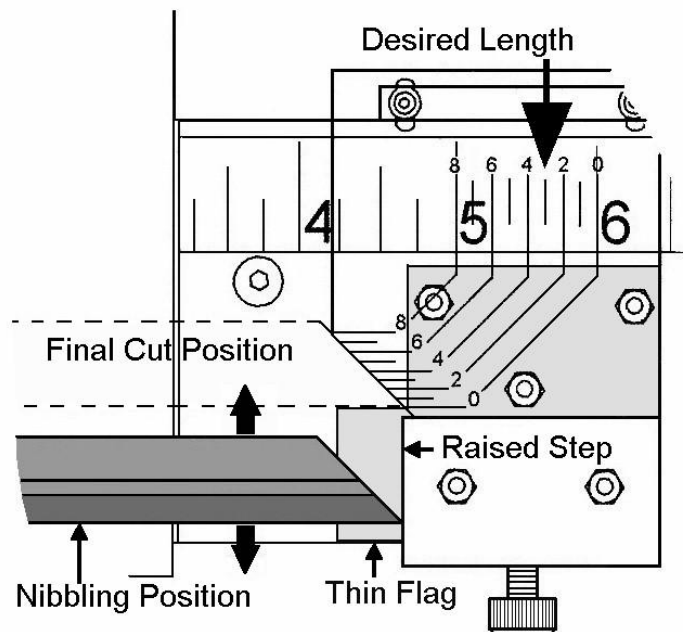


**Always set the stop to the desired measurement while the fence is in the locked position.** The locked position is important to achieve accuracy on the final cut.

The thumb lock bar is raised to clear the lock pins so the fence can index backward or forward. The nibble cut positions are estimated.

The final cut position is with the fence in the full forward and locked position (toward the blades). The thumb lock plate (position plate) is locked in place by the two small pins.

*Note: When nibbling, the end of the fillet slides over the thin flag of the stop and the outside angled cut of the fillet slides along the raised step on the stop.*



#### **Accessories**

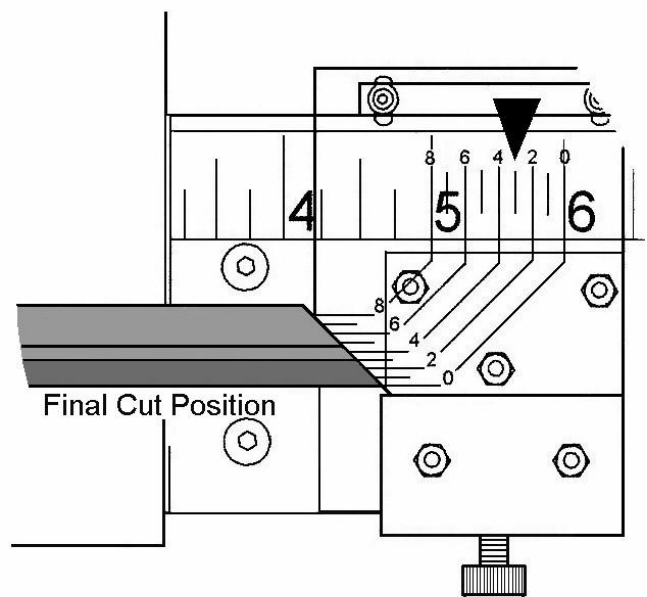
Left Infeed Table                      Part # 04-901  
Replacement Blades (set of 2)      Part # 05-700

Call your local distributor for ordering information.

#### **Spare Parts**

If you require spare parts, please contact Fletcher-Terry for assistance at 1.800.843.3826 (in the U.S.) or 860.677.7331 (outside the U.S.).

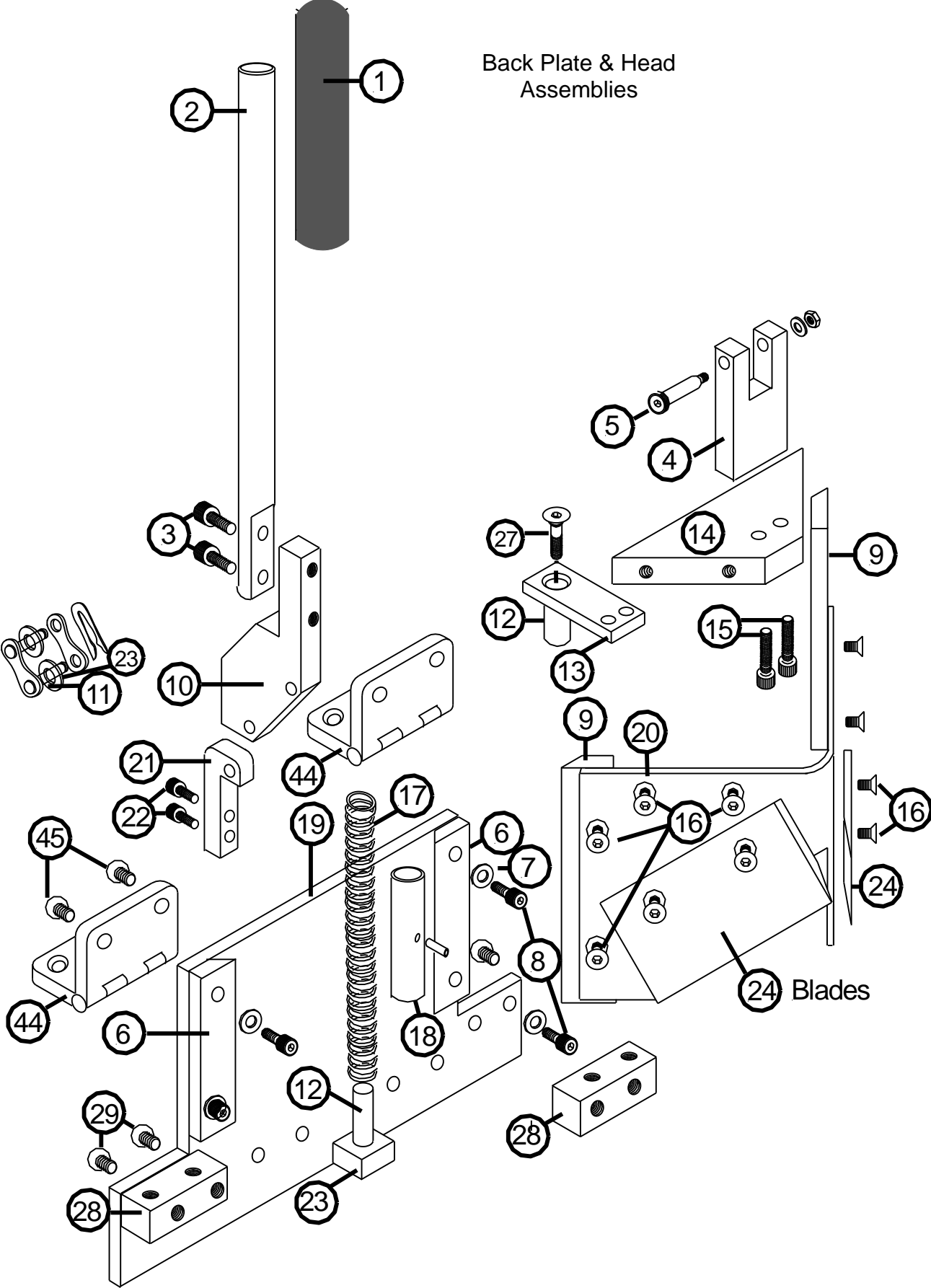
A list of spare parts and corresponding diagrams are provided in the following pages for reference:



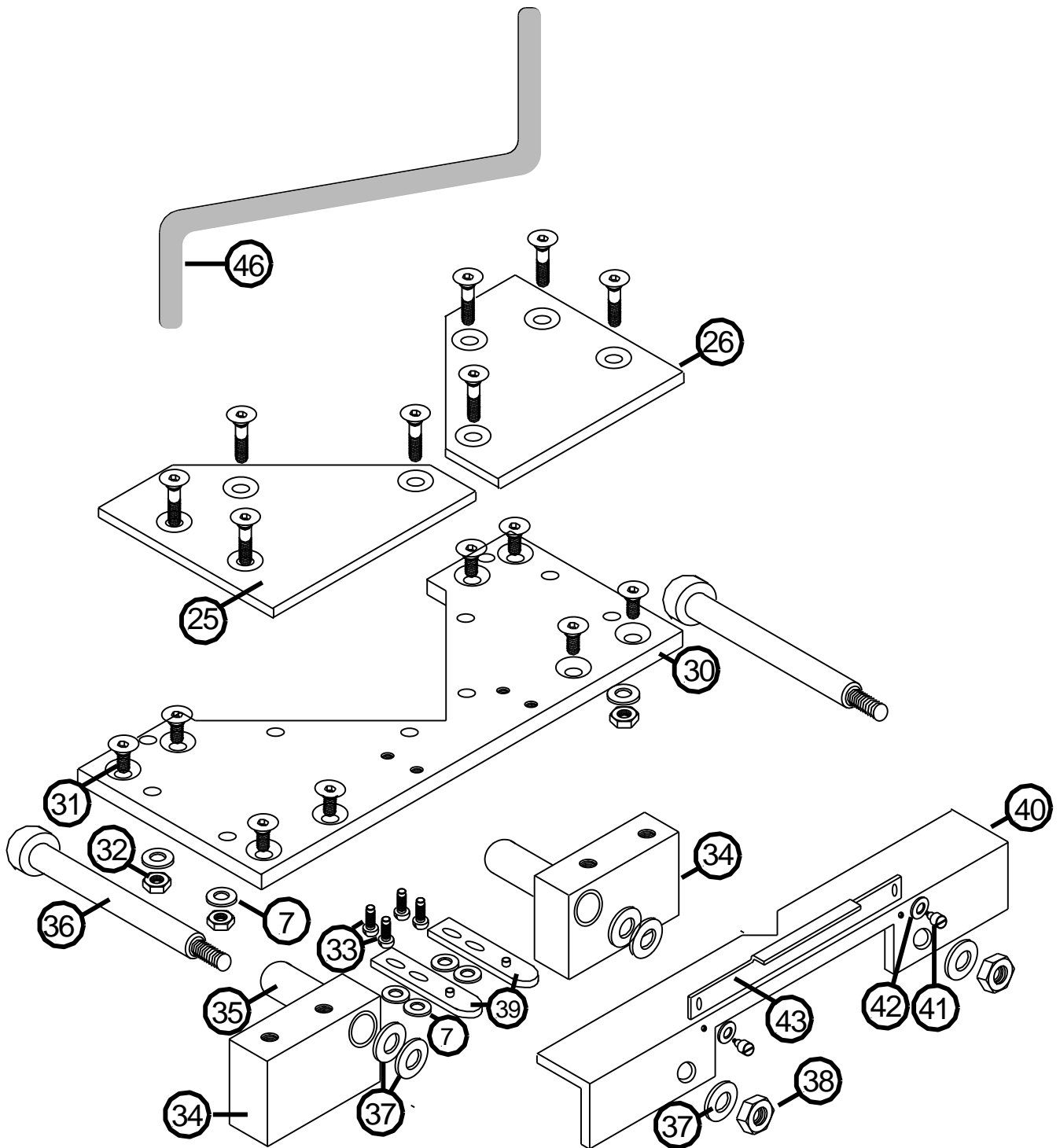
**SPARE PARTS**

| <b>REF. NO.</b> | <b>QTY</b> | <b>PART NUMBER</b> | <b>DESCRIPTION</b>                       |
|-----------------|------------|--------------------|--|
| 1               | 1          | 460 013 550        | HANDLE RUBBER GRIP                       |
| 2               | 1          | 460 013 537        | HANDLE                                   |
| 3               | 2          | 460 013 541        | 1/4-20 x 1" SOCKET HEAD CAP SCREW        |
| 4               | 1          | 460 013 533        | HEAD PIVOT BLOCK                         |
| 5               | 1          | 460 013 505        | 1/4" x 1" SHOULDER SCREW                 |
| 6               | 2          | 460 013 503        | GIBB                                     |
| 7               | 21         | 406 004 130        | #10 FLAT WASHER                          |
| 8               | 4          | 460 013 540        | #10-24 x 1/2" SOCKET HEAD CAP SCREW      |
| 9               | 2          | 460 013 504        | HEAD WAY                                 |
| 10              | 1          | 460 013 535        | HANDLE PIVOT BLOCK                       |
| 11              | 1          | 460 013 536        | CHAIN CONNECTING LINK                    |
| 12              | 2          | 460 013 579        | SPRING DOWEL                             |
| 13              | 1          | 460 013 578        | TOP SPRING PLATE                         |
| 14              | 1          | 460 013 576        | HEAD BLOCK                               |
| 15              | 2          | 460 013 541        | 1/4-20 x 1" SOCKET HEAD CAP SCREW        |
| 16              | 12         | 460 013 538        | #10-24 x 1/2" FLAT HEAD SOCKET CAP SCREW |
| 17              | 1          | 460 013 586        | SPRING                                   |
| 18              | 1          | 460 013 585        | SPRING TUBE                              |
| 19              | 1          | 460 013 562        | BACK PLATE                               |
| 20              | 1          | 460 013 575        | HEAD BRACKET                             |
| 21              | 1          | 460 013 534        | BACK PIVOT BLOCK                         |
| 22              | 2          | 460 013 539        | #10-24 x 3/4" FLAT HEAD SOCKET CAP SCREW |
| 23              | 6          | 460 013 546        | 1/4" x 1/16" FLAT WASHER                 |
| 24              | 2          | 060 005 700        | BLADES                                   |
| 25              | 1          | 460 013 530        | LEFT BED PLATE                           |
| 26              | 1          | 460 013 531        | RIGHT BED PLATE                          |
| 27              | 10         | 460 013 539        | #10-24 x 3/4" FLAT HEAD SOCKET CAP SCREW |
| 28              | 2          | 460 013 561        | MOUNTING BLOCK                           |
| 29              | 4          | 460 013 538        | #10-24 x 1/2" FLAT HEAD SOCKET CAP SCREW |
| 30              | 1          | 460 013 560        | BASE PLATE                               |
| 31              | 8          | 460 013 538        | #10-24 x 1/2" FLAT HEAD SOCKET CAP SCREW |
| 32              | 8          | 406 204 000        | #10-24 HEX NUT                           |
| 33              | 4          | 460 013 542        | #10-24 x 3/8" SLOT ROUND HEAD SCREW      |
| 34              | 2          | 460 013 563        | FRONT FOOT BLOCK                         |
| 35              | 2          | 460 013 564        | BRONZE BUSHING                           |
| 36              | 2          | 460 013 544        | 3/8" x 2" SHOULDER SCREW                 |
| 37              | 6          | 460 013 547        | 5/16" x 1/16" FLAT WASHER                |
| 38              | 2          | 460 013 543        | 5/16-18 HEX JAM NUT                      |
| 39              | 2          | 460 013 508        | POSITION PLATE ASSEMBLY                  |
| 40              | 1          | 460 013 565        | FENCE                                    |
| 41              | 2          | 460 013 567        | 8-32 SLOTTED SHOULDER SCREW              |
| 42              | 2          | 406 004 130        | #10 FLAT WASHER                          |
| 43              | 1          | 460 013 566        | RATCHET PLATE                            |
| 44              | 2          | 460 013 545        | SURFACE MOUNT HINGE                      |
| 45              | 4          | 460 013 538        | #10-24 x 1/2" FLAT HEAD SOCKET CAP SCREW |
| 46              | 1          | 460 013 532        | BLADE GUARD                              |
| 47              | 1          | 460 013 549        | CAUTION LABEL                            |
| 50              | 1          | 060 013 501        | STOP ASSEMBLY                            |
| 51              | 1          | 460 000 001        | 1/4-20 NYLON THUMB SCREW                 |
| 52              | 1          | 460 013 592        | BASE-EXTENSION MOUNTING BRACKET          |
| 53              | 2          | 460 013 591        | ALUMINUM EXTENSION                       |
| 54              | 1          | 460 013 597        | EXTENSION-EXTENSION MOUNTING BRACKET     |
| 55              | 2          | 460 013 593        | OUTFEED SUPPORT BRACKET                  |
| 56              | 2          | 406 204 000        | 1/4-20 HEX NUT                           |
| 57              | 2          | 460 013 594        | 1/4-20 x 1 1/4" HEX HEAD SCREW           |
| 58              | 1          | 460 013 595        | RIGHT OUTFEED SUPPORT - 48"              |

Back Plate & Head  
Assemblies



Base Plate &  
Fence Assemblies



Extension Plates &  
Adjustable Stop

