



BETTCHER  
Industries, Inc.

**WHIZARD®**  
**EDGE MASTER**  

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**STEELING DEVICE**

---

FLAT BLADE MODELS :

SCRAPING

WS-360  
WS-505  
WS-625  
WS-850/880  
WS-1000/1500  
WS-1300/1400  
WS-1850/1880

ANGLE BLADE MODELS:

CUTTING

WS-350 CONE  
WS-350  
WS-440  
WS-500  
WS-620  
WS-750

Manual No. \*163140  
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Written permission to reproduce in whole or part is herewith granted to the legal owners of the Bettcher® Whizard® Edge Master™ Steeling Device with which these Operating Instructions have been supplied.

Operating Instructions in other languages are available on request. Additional copies of Operating Instructions are available by calling or writing the local Representative or by contacting :

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The Information Provided in These Operating Instructions are Important to Your Health, Comfort and Safety. For Safe and Proper Operation, Read This Entire Manual Before Using This Equipment.



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Original Instructions

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**WARNING**



**THE MANUFACTURER ASSUMES NO LIABILITY  
FOR ANY UNAUTHORIZED DESIGN CHANGES,  
MODIFICATIONS, OR USE OF PARTS NOT  
SUPPLIED BY THE MANUFACTURER  
OR  
THE USE OF PARTS NOT DESIGNED FOR  
USE ON THAT SPECIFIC MODEL  
AND  
INCLUDES CHANGES IN OPERATING PROCEDURES  
MADE BY THE OWNER OR ANY OF HIS PERSONNEL.**

**FOR SAFE AND PROPER OPERATION,  
READ THE ENTIRE MANUAL  
BEFORE USING THIS EQUIPMENT.**

## **SECTION 1.0      INTRODUCTION & DESCRIPTION**

The Whizard® Edge Master™ Steeling Device may be used with all standard Bettcher® Whizard® Trimmers. Its function is to raise the blade's cutting edge to the proper angle required for each specific blade style.

The Whizard® Edge Master™ Steeling Device has been designed to minimize any guess work in steeling the Whizard® blades versus using a conventional straight butcher steel.

Two concepts (flat and angled) have been created with respect to the two types of Whizard® blade shapes:

Flat blade versions will work on Whizard® Trimmer Models 360, 505, 625, 850, 880, 1000, 1300, 1400, and 1500.

Angled blade versions will work on Whizard® Trimmer Models 350, 500, 620, and 750.

The Whizard® Edge Master™ Steeling Device model number indicates which Whizard® Trimmer it should be used with.

### **The Whizard® Edge Master™ Steeling Device Is Not A Sharpener !**

You should start with a new blade, or a freshly sharpened blade off of an AutoEdge or Whizard® model 210 sharpener.

Results with the Whizard® Edge Master™ Steeling Device may be hampered if used on blades previously steeled with a conventional straight butcher steel.

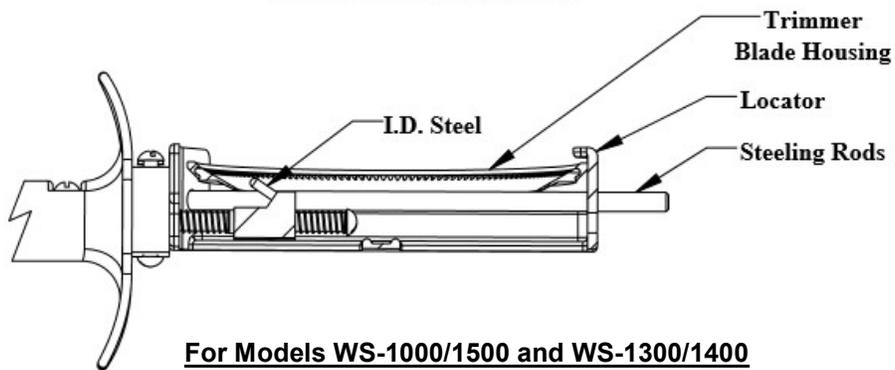
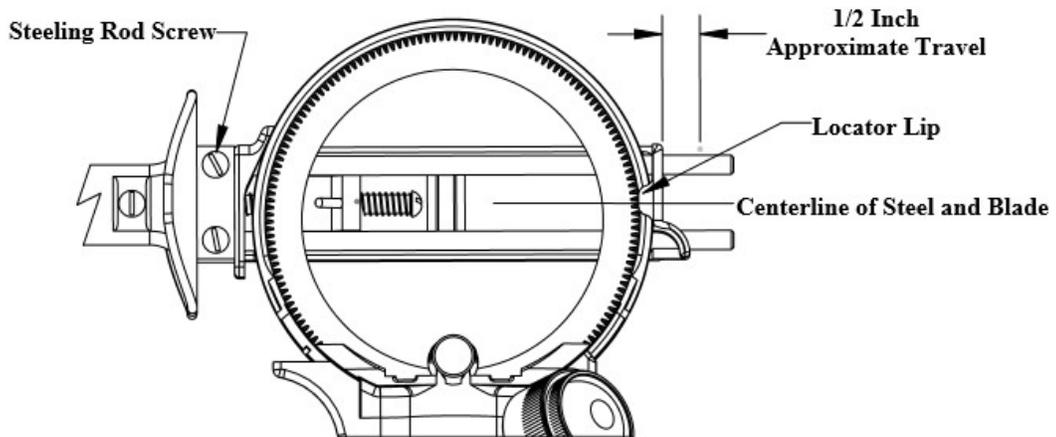
Also, built-in steeling devices on Trimmers may be removed as they are not needed if using the new Whizard® Edge Master™ Steeling Device.

**SECTION 2.0**      **OPERATION****2.1**    **Safety Precaution**

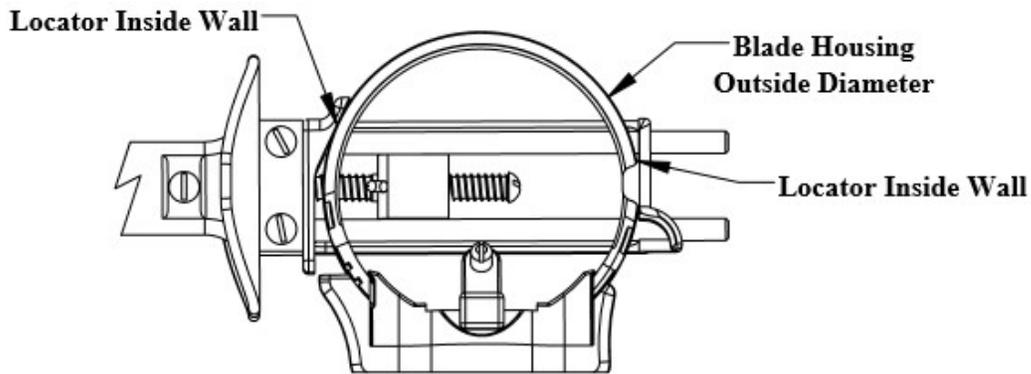
The Whizard® Edge Master™ Steeling Device is used in conjunction with the Bettcher® Whizard® Trimmer and therefore, it is advised that proper protection be worn when using a Whizard® Edge Master™ Steeling Device.



**SECTION 2.0**      **OPERATION (Continued)**



**For Models WS-1000/1500 and WS-1300/1400**



**For Models WS-850/880, 625, 505 and 360**

**FIGURE #1**

**SECTION 2.0**      **OPERATION (Continued)****2.2**    **Operating Procedure**

For Flat Blade Models WS-360, 505, 625, 850/880, 1000/1500, and 1300/1400:  
(Refer To Figure #1)

Hold the Bettcher® Whizard® Trimmer in your right hand with the blade facing down in its normal operating position and running. Hold the Whizard® Edge Master™ Steeling Device in your left hand so the steeling rods are facing up.

Holding the Whizard® Trimmer over the Steeling Device, insert the Trimmer into the locator top opening by tilting the right side of the Trimmer blade housing down at a slight angle into the opening and under the small lip on the right end of the locator. The center of the blade diameter should be between the steeling rods.

Position the outside diameter of the blade housing to the inside walls of their locator.

The Trimmers should be positioned as shown in Figure #1 with the blade resting flat on the two steeling rods. With very light pressure applied, hold the blade down on the steeling rods and slide the Trimmer along the rods toward the I.D. steel until the locator stops (approximately 1/2 inch travel).

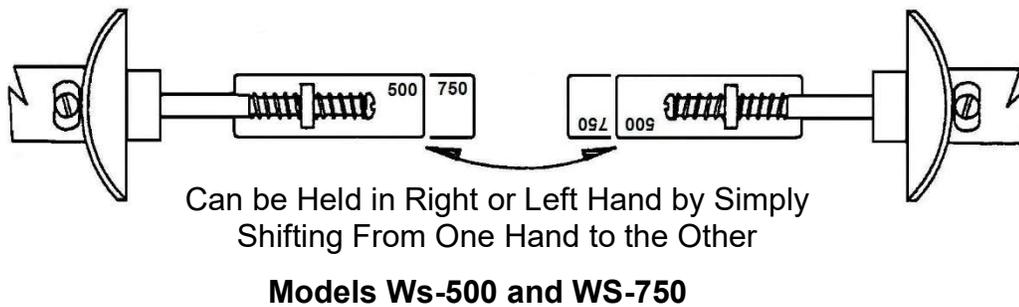
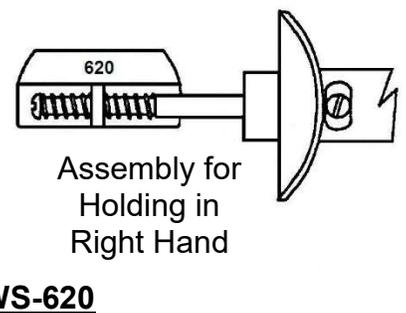
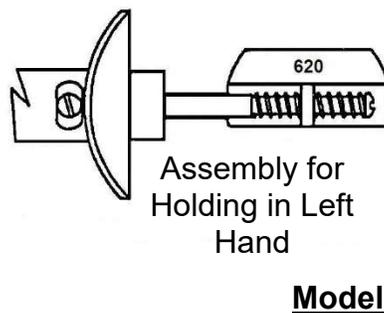
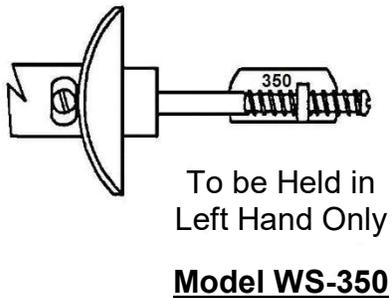
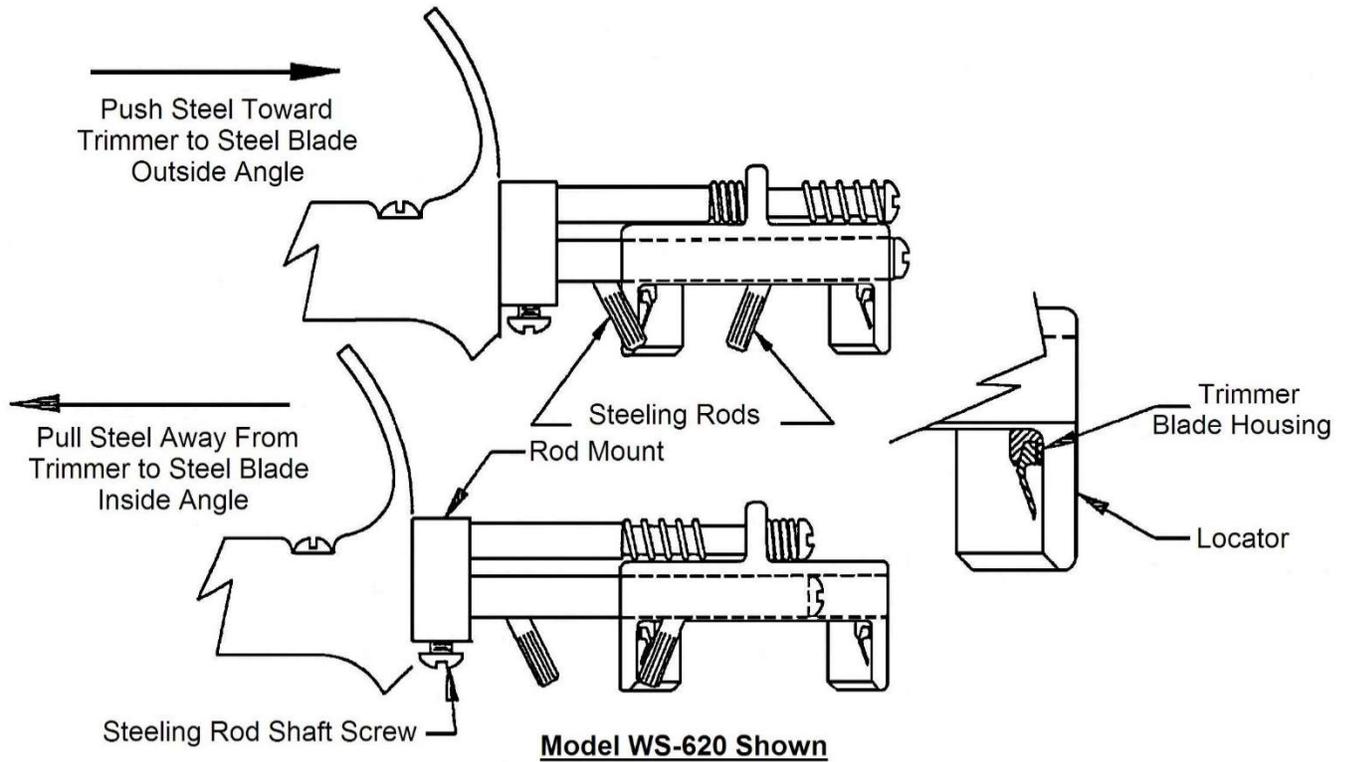
Hold the blade against the I.D. steel for a few seconds, then pull the Trimmer back away from the I.D. steel. This forward and backward motion need only be performed once and with a relatively slow stroke.

When the Trimmer is in the full back position of the locator travel, carefully lift the Trimmer from the locator by first tilting the left side of the Trimmer up at a slight angle and out of the locator.

**Steeling Rod Rotation:**

As the steeling rods become worn, a new wear surface can be positioned as follows: Loosen the steeling rod screw on top of the rod mount. Rotate the rod by hand to expose a new surface on the top side and retighten screw. There is 360 degree rotation of each rod to provide new steeling surfaces.

**SECTION 2.0**     **OPERATION** (Continued)



**FIGURE #2**

**SECTION 2.0      OPERATION (Continued)**

For Angle Blade Models WS-350, 440, 500, 620, and 750: (Refer To Figure #2)

Hold the Bettcher® Whizard® Trimmer in your right hand with the blade facing down and running. Hold the Whizard® Edge Master™ Steeling Device in your left hand with the steeling rods pointing down. Place the Steeling Device's locator above the Trimmer blade housing and lower the locator down on the blade housing so the housing "nests" up inside the locator as shown in Figure #2.

While holding the Whizard® Edge Master™ Steeling Device locator firmly down on the Trimmer blade housing, push the Steeling Device toward the Trimmer. Hold the steeling rod against the outside blade edge for a few seconds with very light pressure applied. This steels the outside angle of the blade.

Pull the Steeling Device away from the Trimmer and hold the other steeling rod against the inside blade edge for a few seconds with very light pressure applied. This steels the inside angle of the blade. The forward and backward motion need only be performed once to steel the blade's edge. This procedure turns the cutting "burr" outward by steeling the outside angle first, then the inside angle last.

To turn the cutting "burr" toward the inside, steel the inside angle first, then the outside angle last.

It is important to hold the Trimmer and the locator flat to one another while steeling and to only apply light pressure against the blade with the steeling rods.

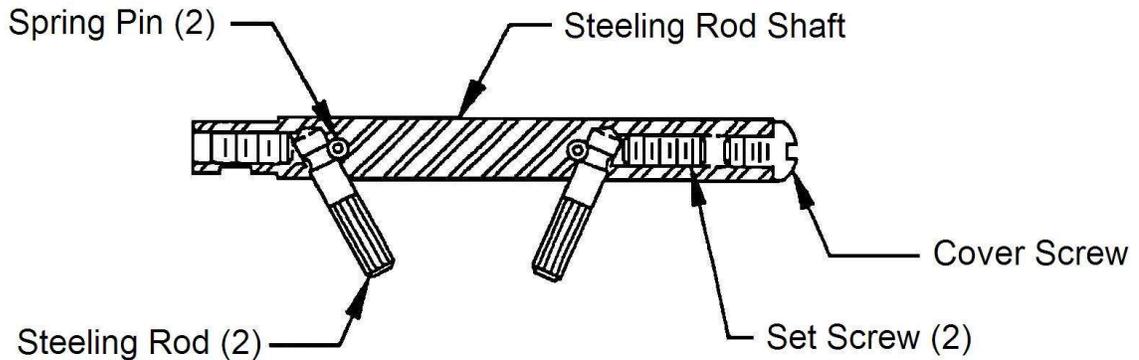
***DO NOT TILT OR ROCK THE TRIMMER IN THE LOCATOR WHILE STEELING AS THIS WILL POSSIBLY DULL THE CUTTING EDGE.***

After performing the forward and backward motion to steel the blade edge, simply lift the locator up and off of the Trimmer.

Model WS-350 can only be used or assembled to be held with the left hand.

Model WS-440 and WS-620 may be converted to right or left hand operation by reassembling the locator end for end.

Models WS-500 and WS-750 may be used in either the right or left hand.

**SECTION 2.0**      **OPERATION** (Continued)**FIGURE #2A****Steeling Rod Rotation:** (Refer To Figures #2 and #2A)

As the steeling rods become worn, a new wear surface can be positioned as follows: Remove the cover screw at the right end of the steeling rod shaft. Loosen the screw on the bottom side of the rod mount and remove the steeling rod shaft from the rod mount. (Locator need not be removed). Using a 3/32 hex Allen wrench, loosen the set screws located inside both ends of the steeling rod shaft which secures the steeling rods. The steeling rods may now be rotated by hand to expose a new wear surface. (360 degrees of rotation is available). The spring pins should **not** be removed as they prevent the steeling rods from falling out of the steeling rod shaft when the set screws are loosened.

After rotating the steeling rod, tighten the set screw against the steeling rod. Place the steeling rod shaft back into the rod mount and tighten the screw on the rod mount. Replace and tighten the cover screw on the right end of the steeling rod shaft.

## **SECTION 3.0      MAINTENANCE**

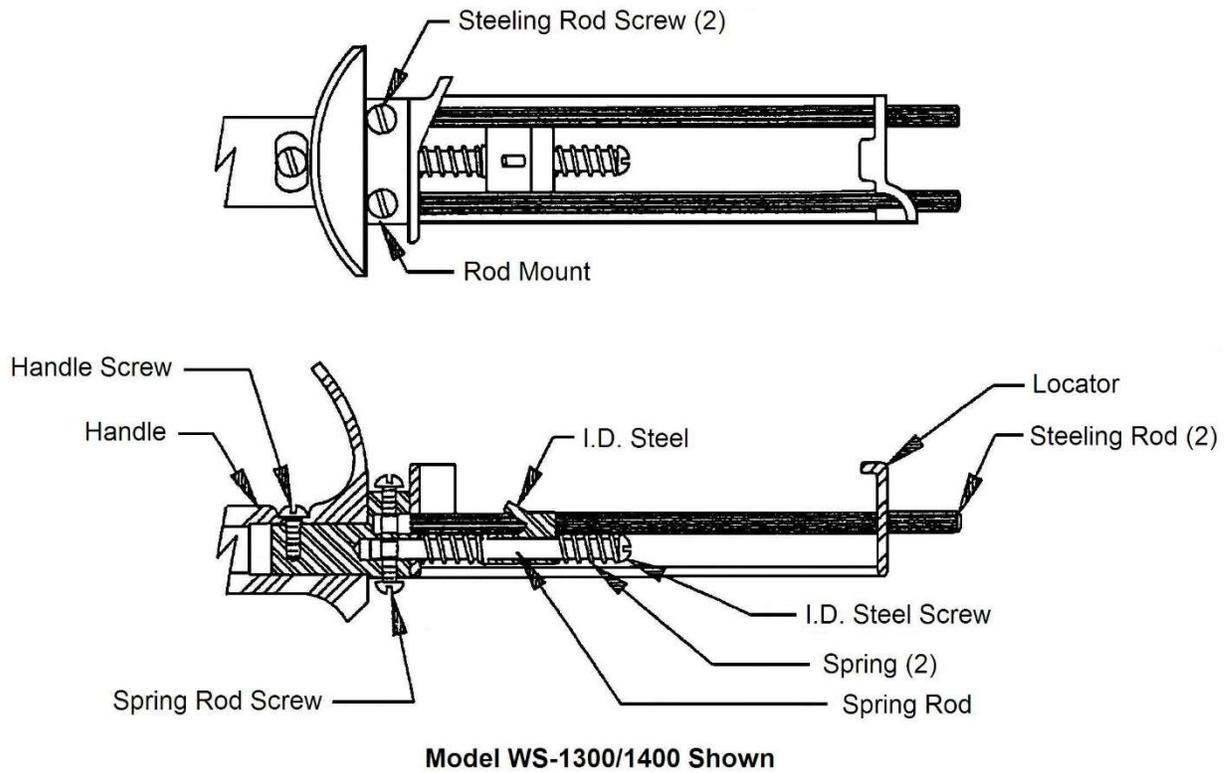
### **3.1      Daily Maintenance**

The only daily maintenance required is to clean the Steeling Device with hot soapy water and rinse with clean hot water.

### **3.2      Preventative Maintenance**

Proper cleaning and non-abusive treatment.

3.3 Disassembly And Reassembly



**FIGURE #3**

### 3.3 Disassembly And Reassembly

For Flat Blade Models WS-360, 505, 625, 850/880, 1000/1500, and 1300/1400:  
(Refer to Figure #3)

Disassembly - Remove I.D. steel screw, spring and I.D. steel. Remove spring rod screw from rod mount and remove spring rod with spring. Slide locator off steeling rods. Remove steeling rod screws and remove steeling rod from rod mount. Remove the handle screw and pull the handle and rod mount apart.

Reassembly - Install rod mount into the handle, aligning holes and secure with handle screw. Start three screws into the rod mount. Install the steeling rods into the rod mount and tighten screws. Slide locator onto steeling rods with the end having the three smallest holes against the rod mount. Slide a spring onto the grooved end of the spring rod then feed the spring rod with spring through the bottom hole of the locator and into the rod mount. Tighten the spring rod screw. The locator is now captivated between the rod mount and the spring on the spring rod. Slide the I.D. steel onto the spring rod followed by the spring and secure with the I.D. steel screw. Check that the locator and I.D. steel move freely on their rods and return against their springs.

#### Reassembly For Model WS-360 Only

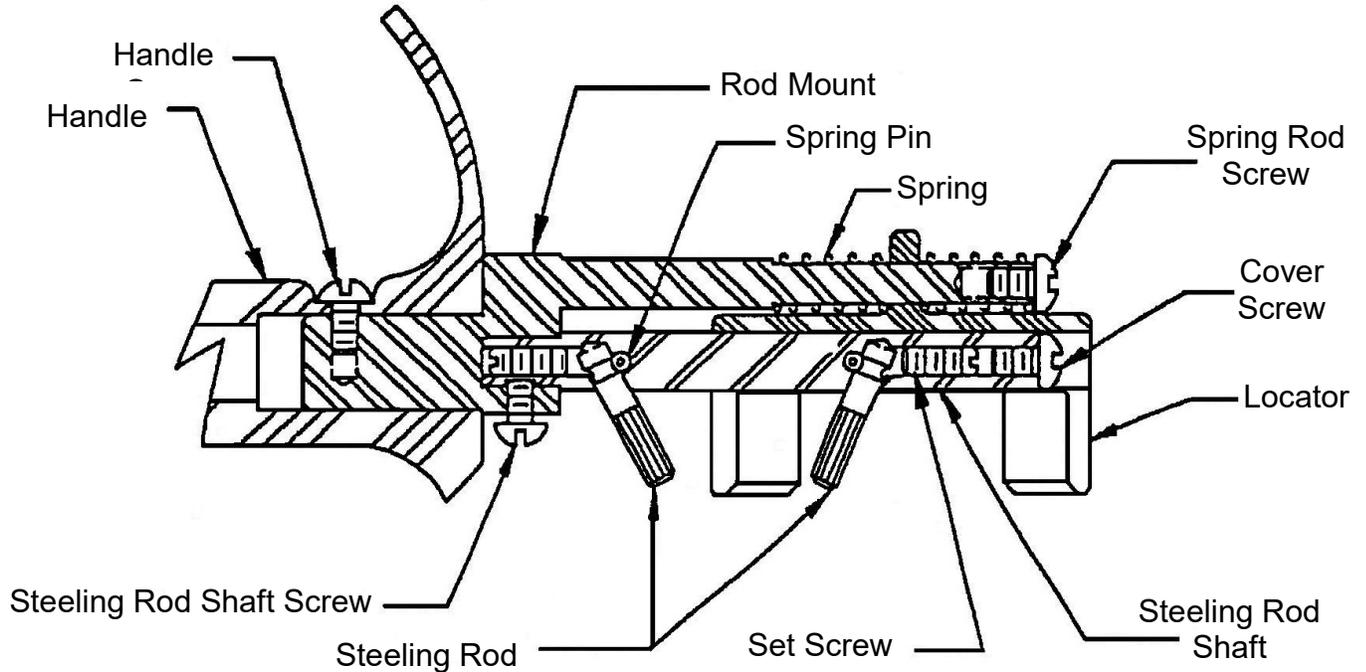
Preassemble the spring rod, I.D. steel and springs, then start the I.D. steel screw in the spring rod end. Place the preassembled spring rod inside the locator by feeding the spring rod (with the screw end first) into the large hole on the right end of the locator from the bottom side of the locator. Now install the preassembled spring rod with locator into the rod mount and tighten the spring rod screw. The locator should now be captivated between the rod mount and the front spring on the spring rod. Install the steeling rods through the locator holes into the rod mount and tighten the steeling rod screws.

Check that the locator and I.D. steel move freely on their rods and return against their springs.

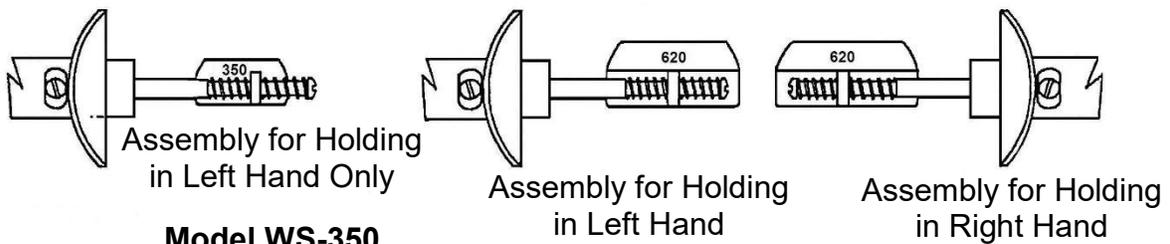
The screws have "Nyloc" thread feature to prevent coming loose. As this feature wears off from repeated use, it is advised to replace the screw.

3.3 Disassembly And Reassembly

For Angle Blade Models WS-350, 500, 620, and 750:

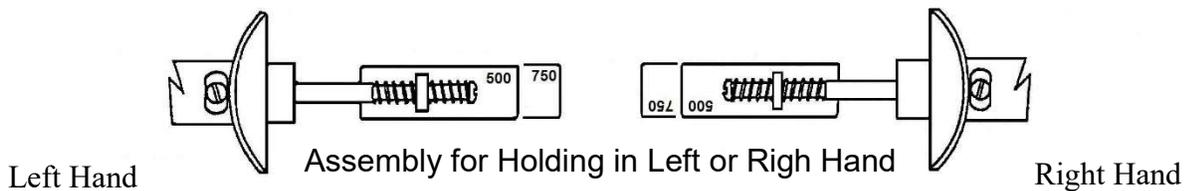


**Model WS-620 Shown**



**Model WS-350**

**Model WS-620**



**Models WS-500 and WS-750**

**Position of Locators**

**FIGURE #4**

### 3.3 Disassembly And Reassembly

For Angle Blade Models WS-350, 440, 500, 620, and 750: (Refer To Figure #4)

Disassembly - Remove the spring rod screw and slide off locator and springs. Remove steeling rod shaft cover screw. Remove steeling rod screw from rod mount and remove the steeling rod shaft. Remove the handle screw and pull apart handle and rod mount. To remove steeling rods, loosen set screws inside both ends of steeling rod shaft with a 3/32 hex Allen wrench and knock out the two spring pins with a drift punch. (Steeling rods should only be disassembled when being replaced).

Reassembly - Install rod mount into handle, aligning holes and secure with handle screw. Start screw into rod mount. Assemble steeling rods into steeling rod shaft. Press in spring pins ensuring ends of pin do not extend out past the shaft diameter. Install set screws and tighten. Now install steeling rod shaft into the rod mount. The wrench flat on the small diameter end should face down and align with the screw in the rod mount. Tighten screw. Install cover screw at right end of steeling rod shaft and tighten. Slide one spring onto the spring rod then the locator and then the other spring. Install spring rod screw and tighten. Ensure locator moves freely back and forth on the rods and returns against the springs.

The screws have "Nyloc" thread feature to prevent coming loose. As this feature wears off from repeated use, it is advised to replace the screw.

### 3.3 Disassembly and Reassembly (Continued)

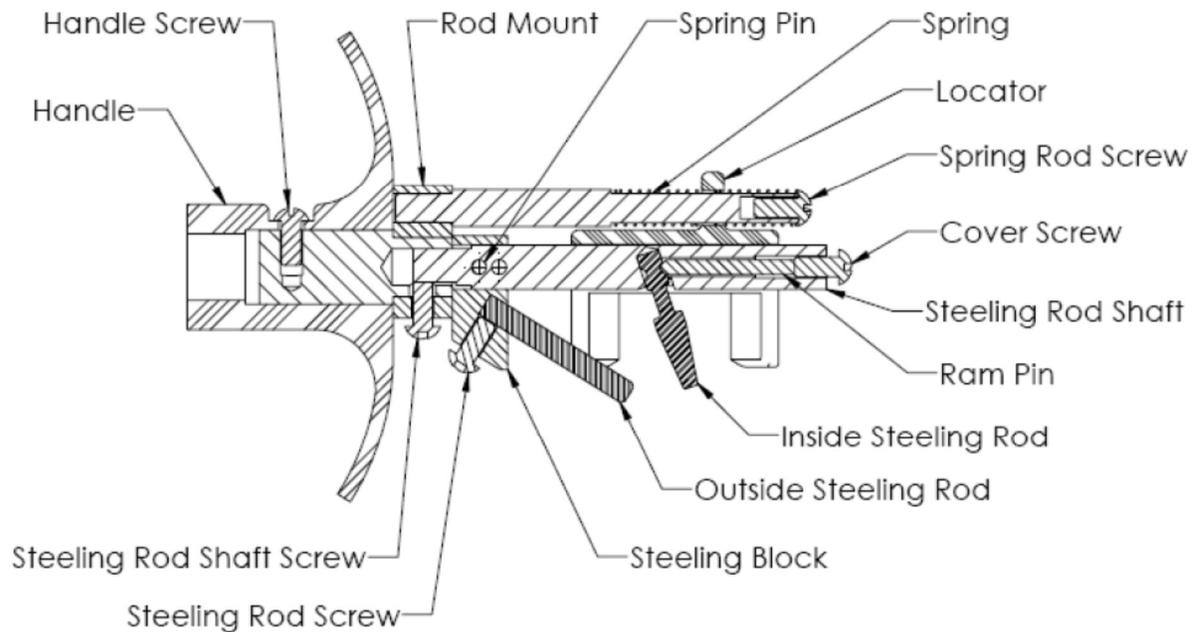
#### For Angle Blade Model WS-Cone Blade (Refer to Figure #5)

Disassembly – Remove the spring rod screw and slide off locator and springs. Remove steeling rod shaft cover screw. Remove steeling rod shaft from rod mount and remove the steeling rod shaft. Remove the handle screw and pull apart handle and rod mount. To remove the inside steeling rod, remove steeling rod shaft cover screw and ram pin. To remove the outside steeling rod, remove the steeling rod screw from the steeling block. To remove the steeling block, remove the spring pin from the steeling rod shaft.

Reassembly – Reverse the above procedure.

Ensure locator moves freely back and forth on the rods and returns against the springs.

The screws have “Nyloc” thread feature to prevent coming loose. As this feature wears off from repeated use, it is advised to replace the screws.



**FIGURE #5**

3.4 Troubleshooting

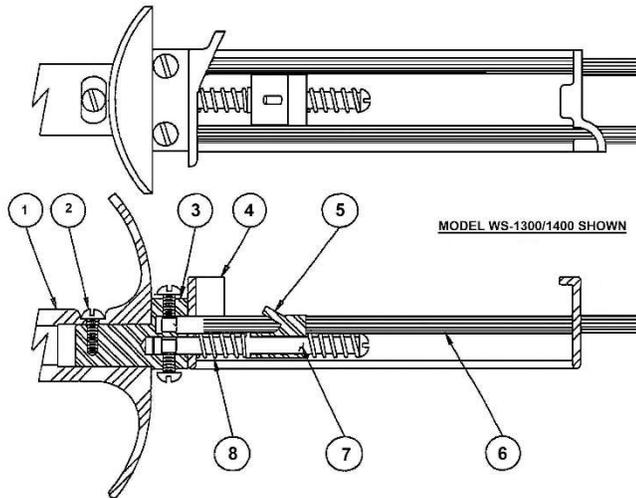
<b>Problem</b>	<b>Probable Cause</b>	<b>Remedy</b>
Dulling Blades	Worn steeling rods	Rotate rods per Section 2.2, or replace
	Improper positioning of Trimmer in locator	See Operating Procedure, Section 2.2
	Worn I.D. steel	Replace per Section 3.3
	Wrong I.D. steel or steeling shaft	Check model number on I.D. steel or steeling rod shaft and replace with correct part
	Blade not sharp to start with	Resharpen blade
	Blade angle rounded over by conventional steeling	Resharpen or replace blade
Locator / I.D. Steel Not Free Moving	Product build-up on parts	Disassemble and clean parts

**SECTION 4.0**

**SERVICE PARTS**

**4.1 FLAT BLADE STEELS: (MODEL WS-1300/1400 SHOWN)**

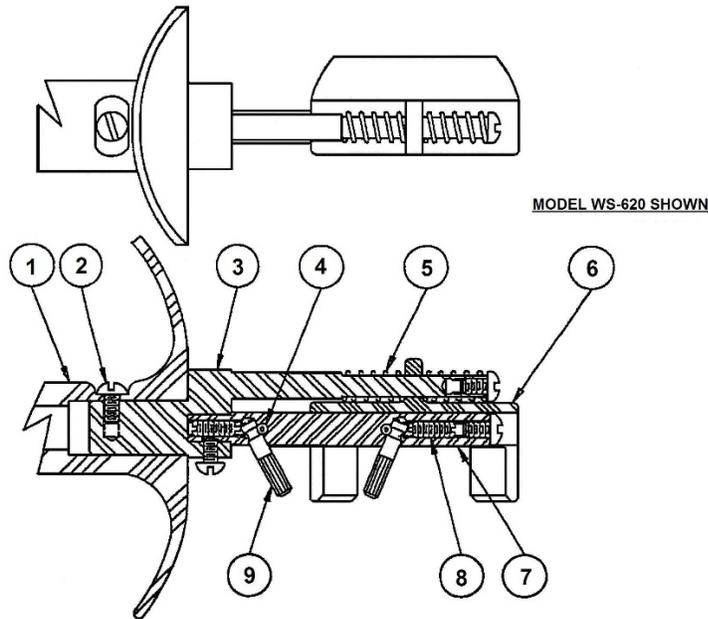
**FOR MODELS WS-360, 505, 625, 850/880, 1000/1500, AND 1300/1400, 1850/1880:**



Item	Description	Model WS-360	Model WS-505	Model WS-625	Model WS 850/880	Qty.
	Complete Assembly	163074	163072	163073	163071	1
1	Handle	163081	163081	163081	163081	1
2	Screw	123236	123236	123236	123236	5
3	Rod Mount	163109	163109	163109	163109	1
4	Locator	163125	163104	163105	163103	1
5	I.D. Steel	163085	163084	163085	163084	1
6	Steeling Rod	163099	163097	163098	163096	2
7	Spring Rod	163108	163107	163108	163107	1
8	Spring	103123	103123	103123	103123	2

Item	Description	Model WS 1000/1500	Model WS 1300/1400	Model 1850/1880	Qty.
	Complete Assembly	163069	163070	185682	1
1	Handle	163081	163081	163081	1
2	Screw	123236	123236	123236	5
3	Rod Mount	163109	163109	163109	1
4	Locator	163102	163102	163103	1
5	I.D. Steel	163082	163083	163082	1
6	Steeling Rod	163095	163095	163096	2
7	Spring Rod	163107	163107	163107	1
8	Spring	103123	103123	103123	2

**4.2 ANGLED BLADE STEELS: (MODEL WS-620 SHOWN)**  
**FOR ANGLE BLADE MODELS WS-350, 440, 500, 620, and 750**



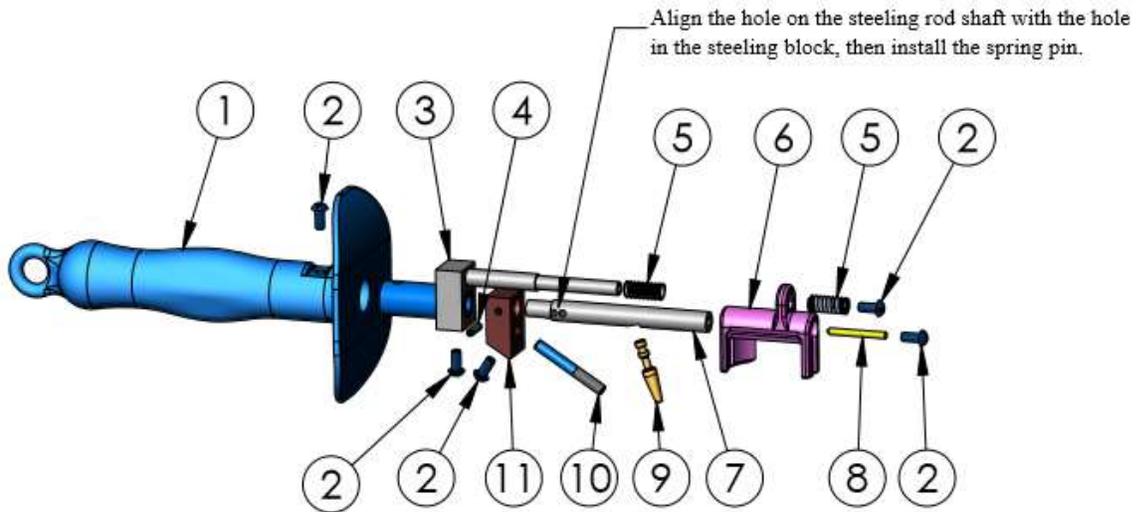
Item	Description	Model WS-350 M2/Q	Model WS-440 M2/Q	Model WS-500 M2/Q/X	Model WS-620 M2/Q/X	Model WS-750 M2	Model WS-Q750/X750	Qty.
	Complete Assembly	163080	173364	163077	163079	163076	102976	1
1	Handle	163081	163081	163081	163081	163081	163081	1
2	Screw	123236	123236	123236	123236	123236	123236	4
3	Rod Mount	163119	163119	163119	163119	163119	163119	1
4	Spring Pin	122431	122431	122431	122431	122431	122431	2
5	Spring	103123	103123	103123	103123	103123	103123	2
6	Locator	163115	173368	163117	163116	163118	102977	1
7	Steeling Rod Shaft	163112	163112	163112	163114	163112	163112	1
8	Set Screw	120054	120054	120054	120054	120054	120054	2
*9	Steeling Rod with Pin	163147	163147	173586	163147	163147	173586	2

\*NOTE: INCLUDES ITEM #4, SPRING PIN

Item	Description	Model X350	Model X440	Qty.
	Complete Assembly	107237	107238	1
1	Handle	163081	163081	1
2	Screw	123236	123236	4
3	Rod Mount	163119	163119	1
4	Spring Pin	122431	122431	2
5	Spring	103123	103123	2
6	Locator	163115	107201	1
7	Steeling Rod Shaft	163114	163114	1
8	Set Screw	120054	120054	2
*9	Steeling Rod with Pin	163124	163124	2

4.2 ANGLED BLADE STEELS (Continued)

FOR ANGLED BLADE MODEL 350 CONE



Item	Description	Model 350 Cone Blade	Qty.
Complete Assembly		173609	1
1	Handle	163081	1
2	Screw	123236	5
3	Rod Mount	163119	1
4	Spring Pin	120166	1
5	Spring	103123	2
6	Locator	163115	1
7	Steeling Rod Shaft	173512	1
8	Ram Pin	173513	1
9	Steeling Rod (inside)	185727	1
10	Steeling Rod (outside)	173610	1
11	Steeling Block	173511	1

**4.3** OPTIONAL EQUIPMENT AVAILABLE

<b>Item</b>	<b>Description</b>
122740	Tool Positioner Reel

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