



SERVICE INFORMATION

3-14

SICKLE BAR LASER BLADE COUPLER GUIDE

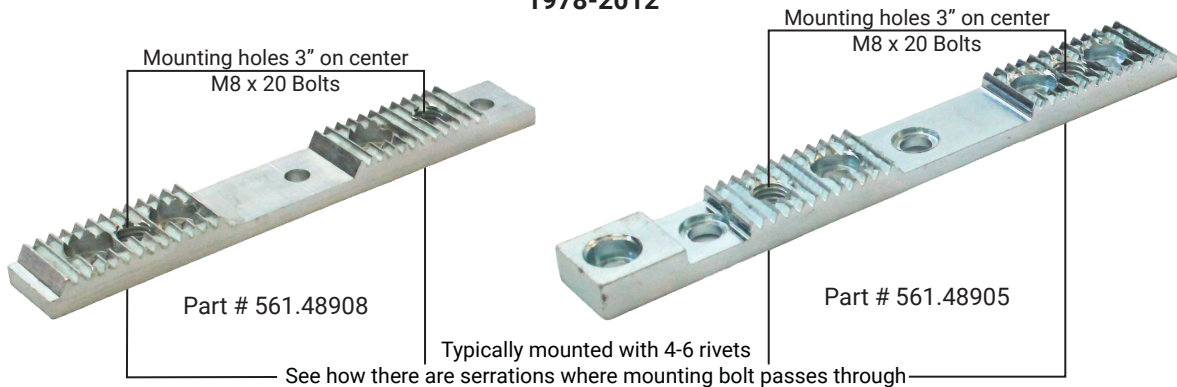
NOTE: This bulletin applies to all Cutter Bar Couplers from 1978 to Current

To support ongoing improvements in the quality of BCS cutter/sickle bar attachments, a replacement connection kit is now **REQUIRED** when servicing existing cutter bars (2012 and older).

SUMMARY OF IMPROVEMENTS:

- 1. Reinforced Socket:** A longer, higher-strength alloy steel socket increased durability and reduces the risk of breakage.
- 2. Improved Blade Support:** The new socket supports the blade base, featuring partial serrations for stronger anchorage.
- 3. Strengthened Coupler Assembly:** The laser blade coupler includes added material and longer screws, secured through a thicker coupler and updated coupler plate.

CONNECTION PLATES 1978-2012



COUPLERS 1978-2012

TO DETERMINE WHETHER A BLADE KIT IS NEEDED, REFER TO THE BLADE COUPLER HERE

1. If the blade coupler matches examples A-C, a replacement kit is **REQUIRED**. These couplers have mounting bolts that are 3" on center.
2. If your coupler does NOT match examples A-D (see figure D on page 2) and has mounting bolts spaced 4" on center, refer to page 3 of this document for information on Cutter Bars from 1995-1999.
3. Couplers A-D are designed for 37mm OD Drive pin bushings.

Part # 590.48536 1978-1994	Part # 521.46665 (NLA) 2000-2006	Part # 521.58660 (NLA) 2006-2012
FIG A Top View FIG A Bottom View 	FIG B 	FIG C

Still available if the serrated connection plate is OK Underneath the side of the coupler B & C not shown but was serrated like Photo A bottom view

This update applies only to blade assemblies with couplers that have 3" on-center mounting bolts. If your blade assembly **DOES NOT** have a serrated plate and the coupler's mounting bolts are **4" on center**, no changes are required (see page 3).

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UPDATED CONNECTION DESIGN

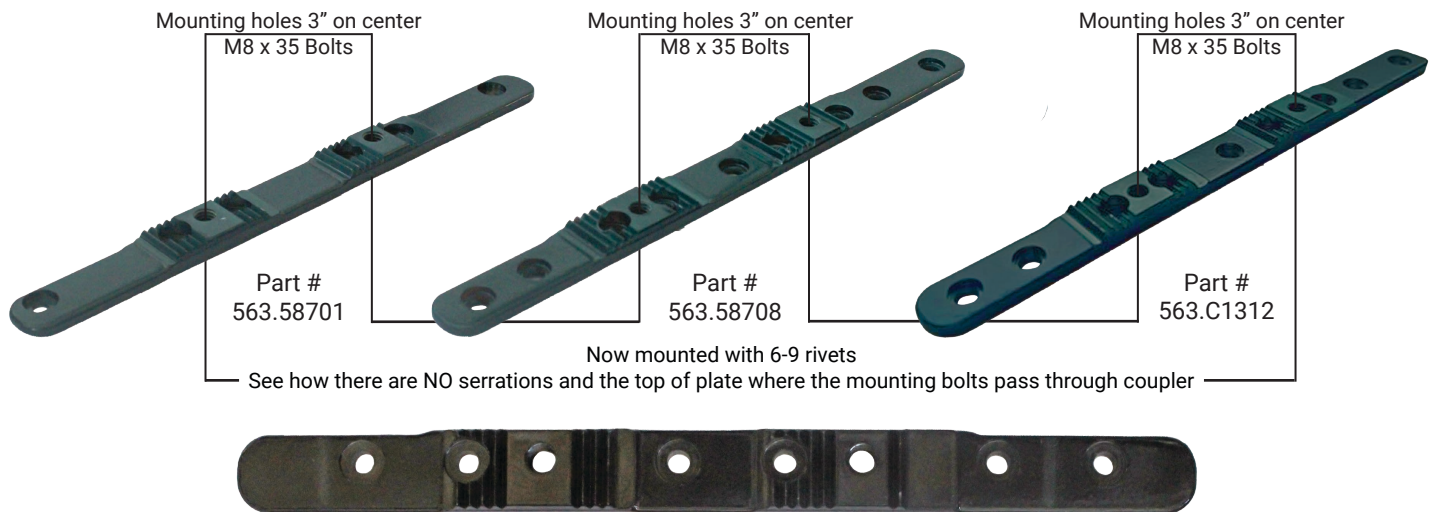
- A new design was introduced in 2013 for Laser Series Cutter Bars (Single Action and Duplex/Dual Action models) and continues in current production.
- The new connection system replaces all previous serrated coupler and plate designs used on cutter bars from 1978–1994 and 2000–2012, all featuring 3" on-center bolts.
- 1995-1999 cutter bars with 4" on-center bolts remain unchanged (see page 3).

REINFORCED BLADE PLATES

- The new reinforced plates are factory-mounted to the blade assembly and **REQUIRE** the new laser blade coupler.
- Previous versions used 4–6 rivets; the new design uses 6–9 rivets for added strength.

BLADE CONNECTION PLATE

2013+ Cutter Bars*

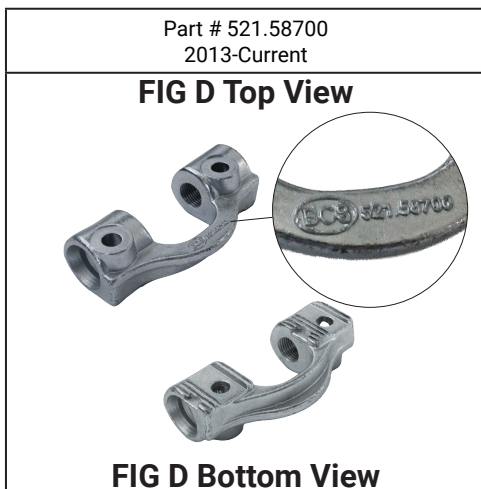


Part # 563.58717

*Now available as upgrade for Pre 1995 44", 50", 54" Mulch Cutter Bars with 3" Blades

BLADE COUPLER

2013+ Cutter Bars



- Coupler part #521.58700 was introduced in 2013 on the Single Action and the Duplex/Dual Action Laser Series Cutter Bars.
- Only this coupler stamped with the BCS logo and part # present in the casting on the top of the coupler can be retrofit to Cutter Bars made from 1978-1994 & 2000-2012.
- To verify whether an update has been performed, check the part number stamped on each tooth or blade section (see service bulletin 3-6)
- There are no serrations on underside of blade coupler where the mounting bolts pass through.

COMPLETE REPLACEMENT KIT (see pages 4 & 5)

A complete replacement kit is available and includes:

- Blade Assembly with new reinforced plate
- Laser Blade Coupler
- All required mounting hardware

Once the new coupler is installed, future servicing only requires blade assembly repairs or replacements (see pages 4–6).

The laser blade coupler mounting bolts should have medium strength thread lock applied and tightened to 20 FT LBS of torque.

This update applies only to blade assemblies with couplers that have 3" on-center mounting bolts. If your blade assembly does not have a serrated plate and the coupler's mounting bolts are 4" on center, no changes are required (see page 3).

CUTTER BAR COUPLER CONNECTIONS

1995-1999

NOTE: NO design change was made to this type of blade coupler.

1. These are the **ONLY** Blade Couplers with mounting holes 4" on center and 1 of the mounting bolts is of a tapered or conical design.
2. There are no serrations on the bottom side of the Blade Coupler
3. The only Blade Coupler that uses a 32mm OD Drive Pin Bushing

IDENTIFICATION CAN BE MADE BY:

1. **59015** is stamped onto each tooth or blade section
2. **No serrated strip** riveted on the blade assembly like shown on page 1
3. Mounting holes for the blade coupler are **4" on center**
4. The Drive Pin Bushing is **32mm OD**

COUPLER KIT PART # 592.46663

Kit Components	Part Number	Description
	311.12150	M8x20 Screw
	311.13093	M8x16 Screw
	314.21083	M8 Washer
	523.46697	Blade Coupler
	580.02976	Blade Pin Holder x3
	580.46698	Conical Bolt
	580.46699	Adjusting Screw

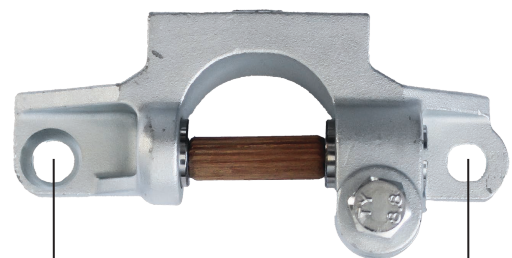
NOTE: The wood dowel in photo is removed prior to installation

PLEASE NOTE:

- If your Sickle Bar blade coupler is *NOT serrated* and looks like these pictured items, the upgrade described on pages 1 & 2 **DO NOT APPLY** and disregard the rest of this service bulletin.
- See service bulletin 3-8 for proper installation sequence and torque specs.
- The Coupler Kit 592.46663 and all parts in coupler kit are still available.
 - See page 3.0 of IPL for the 1995-2012 Single Action Cutter Bar for the parts breakdown

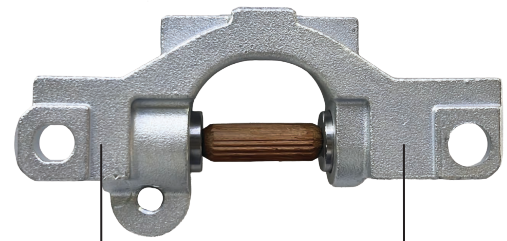
Part # 523.46697
1995-1999

Top View



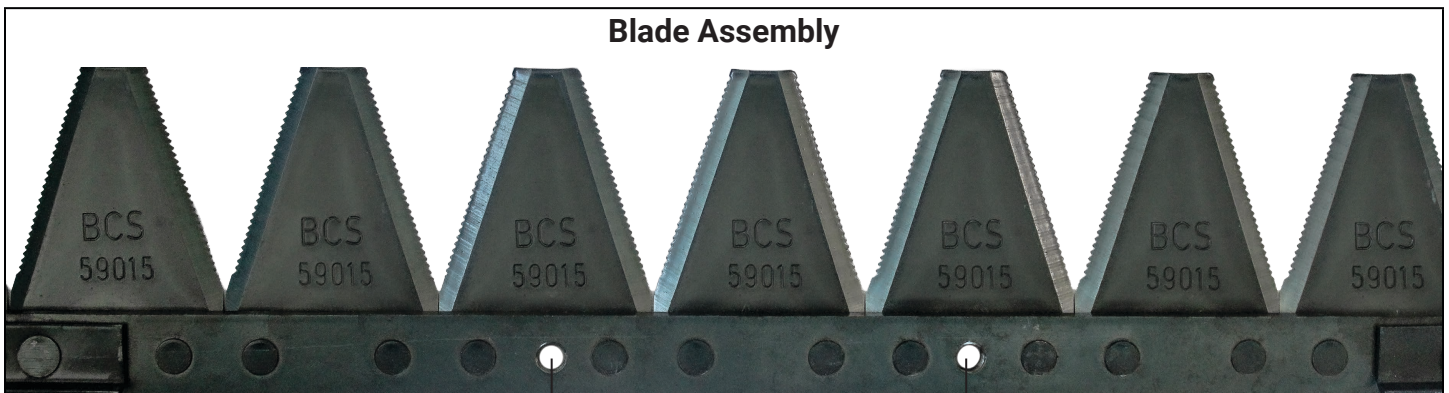
Mounting holes 4" on center

Bottom View



No serrations on the bottom of the coupler

Blade Assembly



Mounting holes 4" on center

BLADE ASSEMBLY PART #S

- 30" Blade Assembly 590.59030 (15 teeth)
- 40" Blade Assembly 590.59031 (19 teeth)
- 45" Blade Assembly 590.59032 (23 teeth)
- 53" Blade Assembly 590.59033 (27 teeth)

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REPLACEMENT BLADE KITS Single Action Series 1978-1994

Mulch Cutter Bars with 3" Wide Blade Sections

Cutter Bar Size	Blade Assembly			Replacement Blade Kit Part #
	Old Part #	New Part #	Individual Blade #	
44" Mulch Cutter	590.43544	590.C1333	580.02466	No Kit use part # 590.C1333 & 592.58753
50" Mulch Cutter	590.43553	590.C1330	580.02466	No Kit use part # 590.C1330 & 592.58753
54" Mulch Cutter	590.43503	590.C1326	580.02466	No Kit use part # 590.C1326 & 592.58753

MUST ORDER COUPLER KIT WITH BLADE ASSY

Mulch Cutter Bars with 2" Narrow Blade Sections

Cutter Bar Size	Blade Assembly			Replacement Blade Kit Part #
	Old Part #	New Part #	*Individual Blade #	
44" Mulch Cutter	590.48946	590.C1333	580.02466	No Kit use part # 590.C1333 & 592.58753
50" Mulch Cutter	590.48948	590.C1330	580.02466	No Kit use part # 590.C1330 & 592.58753

***NOTE:** Upgrade converts old 2" 580.48945 blades to 3" wide blades

MUST ORDER COUPLER KIT WITH BLADE ASSY

Replacement Blade Kits are Available and Include:

- Blade Assembly with New Reinforced Plate
- Laser Blade Coupler
- All Required Mounting Hardware

Once the new coupler is installed, future servicing only requires blade assembly repairs or replacements.

Single Action Series 1978-1994 & 2000-2012

Single Action with 2" Narrow Blade Sections

Cutter Bar Size	Blade Assembly			Replacement Blade Kit Part #
	Old Part #	New Part #	Individual Blade #	
30" Combo Cutter	590.48928	590.58789	563.50696	592.58875
	590.59063			
40" Combo Cutter	590.48926	590.58790	563.50696	592.58876
	590.59064			
45" Combo Cutter	590.48909	590.58791	563.50696	592.58877
	590.59065			
53" Combo Cutter	590.48906	590.58792	563.50696	592.58878
	590.59066			

INCLUDES COUPLER KIT 592.58753

Self Adjusting with 2" Narrow Blade Sections

Cutter Bar Size	Blade Assembly			Replacement Blade Kit Part #
	Old Part #	New Part #	Individual Blade #	
45" Self Adjusting	590.58684	590.58796	563.50696	592.58881
53" Self Adjusting	590.58681	590.58797	563.50696	592.58882

INCLUDES COUPLER KIT 592.58753

Duplex with 3" Wide Sections 1995-2012

Duplex Sickle Bar with 3" Wide Blade Sections

Cutter Bar Size	Blade Assembly			Replacement Blade Kit Part #
	Old Part #	New Part #	Individual Blade #	
47" Duplex	59058625	59058639	580.28096	59258886
59" Duplex	59058585	59058646	580.28096	59258887
71" Duplex	59058611	59058669	580.28096	59258888

INCLUDES COUPLER KIT 592.58753

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QUICK REFERENCE

Replacement Blade Kit Reference

Description	Blade Assembly Part #	Coupler Kit Part #	Blade Kit Part #
Kit 30" Sickle Bar	590.58789	592.58753	592.58875
Kit 40" Sickle Bar	590.58790	592.58753	592.58876
Kit 45" Sickle Bar	590.58791	592.58753	592.58877
Kit 53" Sickle Bar	590.58792	592.58753	592.58878
Kit 45" Self- Adj Sickle Bar	590.58796	592.58753	592.58881
Kit 53" Self -Adj Sickle Bar	590.58797	592.58753	592.58882
Kit 47" Duplex with 3" Blade Sections	590.58639	592.58753	592.58886
Kit 59" Duplex with 3" Blade Sections	590.58646	592.58753	592.58887
Kit 71" Duplex with 3" Blade Sections	590.58669	592.58753	592.58888

General Reference Guide

Models	Years	Coupler Part #	Connection Plate Part #	Rivet Dia.	Individual Blade Part #	Coupler Upgrade Kit
Mulch Cutter Sickles Bars 44", 50"	Pre 1995	590.50616 Nylon (NLA) 590.48494 Nylon (NLA) 590.48536 Aluminum (NLA)	561.48908	5.3 mm	580.48945 - 2"	592.58753* See Page 4
Mulch Cutter Sickles Bars 44", 50", 54"	Pre 1995	590.48494 Nylon (NLA) 590.48536 Aluminum (NLA)	521.43541 Subs to 563.58717	5.3 mm	580.02466 - 3"	592.58753
Mulch Cutter Sickles Bars 44", 50", 54"	New Upgrade	521.58700	563.58717	5.3 mm	580.02466 - 3"	592.58753
Combo Cutter Sickles Bars 30", 40", 45", 53"	Pre 1995	590.48494 Nylon (NLA) 590.48536 Aluminum (NLA)	561.48904 Subs to 561.48905 Subs to 563.58708	6.5 mm	563.50696 - 2"	592.58753
Combo Cutter Sickles Bars 30", 40", 45", 53"	1994*	590.48536 Aluminum (NLA)	561.59058 Subs to 563.58708	5.3 mm Sub to 6.5mm	563.59015 - 2" Sub to 563.50696	592.58753
Combo Cutter Sickles Bars 30", 40", 45", 53"	1995-1999	523.46697 (See pg 3 & SB 3-6)	None, See Page 3	5.3 mm	563.59015 - 2"	None
Combo Cutter Sickles Bars 30", 40", 45", 53"	1995-2012	521.46665 (NLA) Subs to 521.58660 (NLA)	561.48904 Subs to 561.48905 Subs to 563.58708	6.5 mm	563.50696 - 2"	592.58753
Combo Cutter Bars Self Adjusting 45", 53"	1995-2012	521.58660 (NLA)	561.58677 Subs to 563.58708	6.5 mm	563.50696 - 2"	592.58753
Duplex Sickles Bars 47", 59", 71"	1995-2012	521.46665 (NLA) Subs to 521.58660 (NLA)	561.58613 Subs to 563.58701	5.3 mm	580.28096 - 3"	592.58753
Duplex Sickles Bars 47", 59", 71"	2013	521.58700	561.58613 Subs to 563.58701	5.3 mm	580.28096 - 3"	N/A
Duplex Sickles Bars 47", 59", 71"	2013+	521.58700	563.58701	5.3 mm	580.28096 - 3"	N/A
Single Action Laser Sickles Bars 30", 40", 45", 53", Self-Adjusting 45", 53"	2013+	521.58700	563.58708	6.5 mm	563.58716 - 2"	N/A
Dual Action Sickles Bars 51", 67", 82"	2017+	521.58700	563.C1312	6.5 mm	563.58761 - 2"	N/A

*In 1994, BCS transitioned the Single Action Combo Cutters to use 563.59015 blades with 5.3 mm rivets. However, conversion to the new-style coupler and plate requires the use of the 563.58708 plate with 6.5 mm rivets and 563.50696 blades.



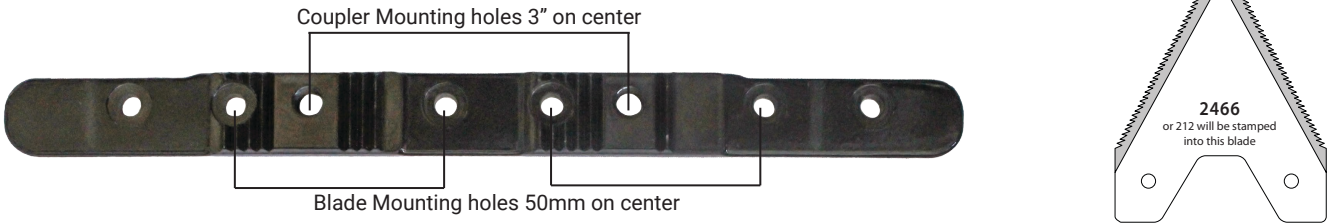
592.58753 - Laser Blade Coupler Kit

ID	QTY	Part #	Description
1	1	521.58700	Blade Coupler
2	2	311.12165	M8x35 Bolts
3	2	580.58661	Jam Nut
4	2	580.58662	Adjusting Screws

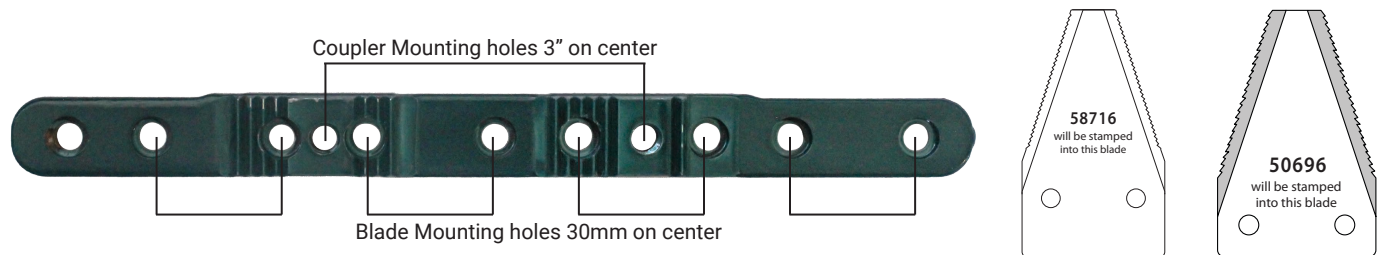
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Laser Blade Coupling Plates for 521.58700 Laser Couplers 2013 & Current

Pre 1995 600 & 700 Series Bars with 3" Blade Sections

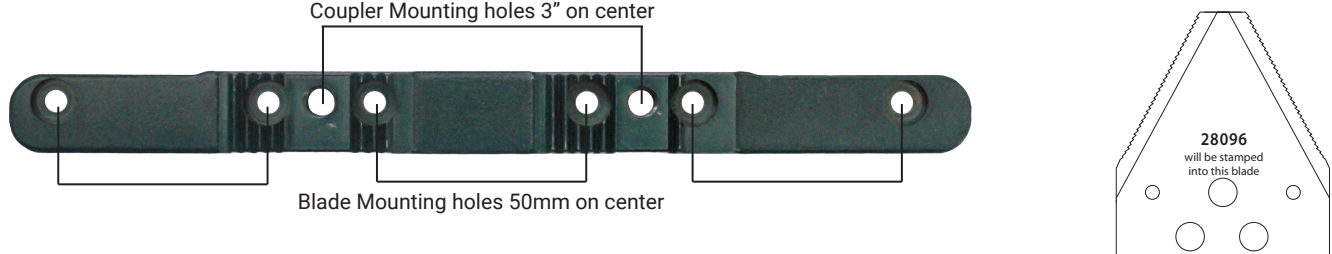
		
Blade Coupling Plate	Rivets	Blade Sections
Part # 563.58717	Uses Qty 6 5.3 mm Rivets	Part # 580.02466 - 3" Wide Blade Sections

2013 - Current Single Action Cutter Bars (30", 40", 45", 53")

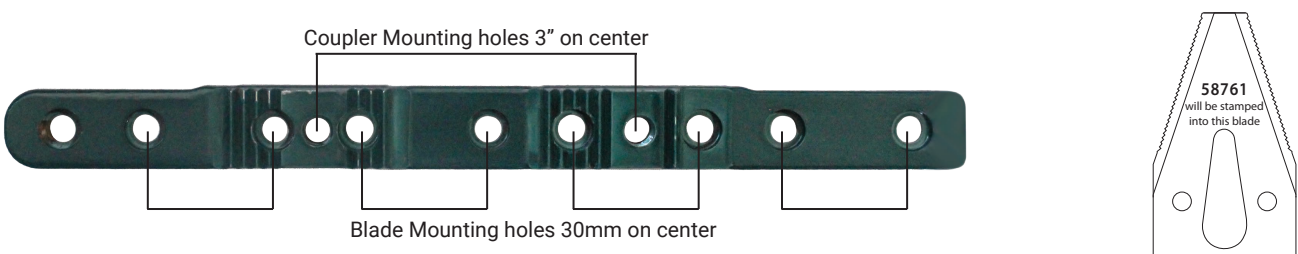
		
Blade Coupling Plate	Rivets	Blade Sections
Part # 563.58708	Uses Qty 9 6.5 mm Rivets	Part # 563.58716 & 563.50696 - 2" Narrow Blade Sections

*Also Self Adjusting (45", 53") and Select Pre 2012 30", 40" 45", 53" Single Action Bars with Coupler Upgrade Kit

2013 - Current Duplex Cutter Bars (47", 59", 71")

		
Blade Coupling Plate	Rivets	Blade Sections
Part # 563.58701	Uses Qty 6 5.3 mm Rivets	Part # 580.28096 - 3" Wide Blade Sections

2017 - Current Dual Action/Duplex Cutter Bars (51", 67", 82")

		
Blade Coupling Plate	Rivets	Blade Sections
Part # 563.C1312	Uses Qty 9 6.5 mm Rivets	Part # 563.58761 - 2" Narrow Sections