

WARNING!

G8 Stitcher Head

Watkiss Edition

The intended application of this stitcher head is limited to installation within an enclosed Watkiss book finishing system. Any other installation of this stitcher head compromises the operator safety.

No untrained operator should attempt to make any adjustments or service to the stitcher head.

Please make sure you read and understand all of the safety and interlock features built into the Watkiss book finishing system before attempting to service or make adjustments to the stitcher head.

Serious damage to the stitcher head can occur if the stitcher head is cycled with wire feed in the absence of paper stock.

Always disconnect power before attempting to service or make adjustments to the stitcher head.

Table of Contents

Specifications	4
Installation	4
Pre-Inspection.....	4
Inspection	4
Assembly Parts	5
Mounting	6
Operation	7
Wire Threading	7
Wire Straightening	9
Aligning the Wire Holder	10
Adjusting the Stitch.....	11
Maintenance.....	14
Lubrication & Maintenance	14
Appendices	15
Sub-Assembly Exploded Drawings	15
Part Number/Description Cross Reference	22
Registration Card.....	25
Replacement/Wear Parts Kit.....	26
Warranty	27

Specifications

Weight

Shipping Weight 12.6 lbs (5.7 kg)

Box Size 22 x 11 x 3 1/2

Physical Dimensions

Height 13-9/16" (345 mm)

Width 2-3/4" (70 mm)

Stitching Capacity Two Sheets to 5/16" (8 mm)

(Stitching capacities are highly dependent on wire and paper type, tensile strength and machine capacity.)

Installation

Pre-Inspection

Carefully inspect the condition of the shipping container before unpacking your G8 Stitcher Head. If the container is broken or damaged and there is evidence that the stitcher head may be damaged, immediately notify the carrier who delivered the head and the DeLuxe Stitcher Graphic Arts Representative from whom the G8 Stitcher Head was purchased.

Inspection

As you carefully unpack the head, check to make sure all components were delivered and are in good working order. Refer to **Figure 1** in this manual for reference to the following pieces:

- G8 Manual
- 2.0mm Hex Key Wrench (G20374)
- 2.5mm Hex Key Wrench (G20361)
- 3.0mm Hex Key Wrench (G20360)
- 7.0mm Open End Wrench (G20364)
- T8 Torx Wrench (G20375)

- Complete Wire Guide Spring Plate Assembly (G50808WA)
- Upper Wire Tube (G20181W) with C-Clip (G20207)
- Rear Clamp Pin (G20366)
- Rear Clamp Nut (G20367)
- Adjustment Knob Assembly (G20228A)
- Mounting Block (G50102)
- Crank Drive Link (G20340WA)
- Clincher Plate Assembly - Thick (7650WA)
- Stitch Samples

Assembly Parts (Figure 1)

Please take a few moments to fill out the registration card located on page 25-26 prior to beginning installation.

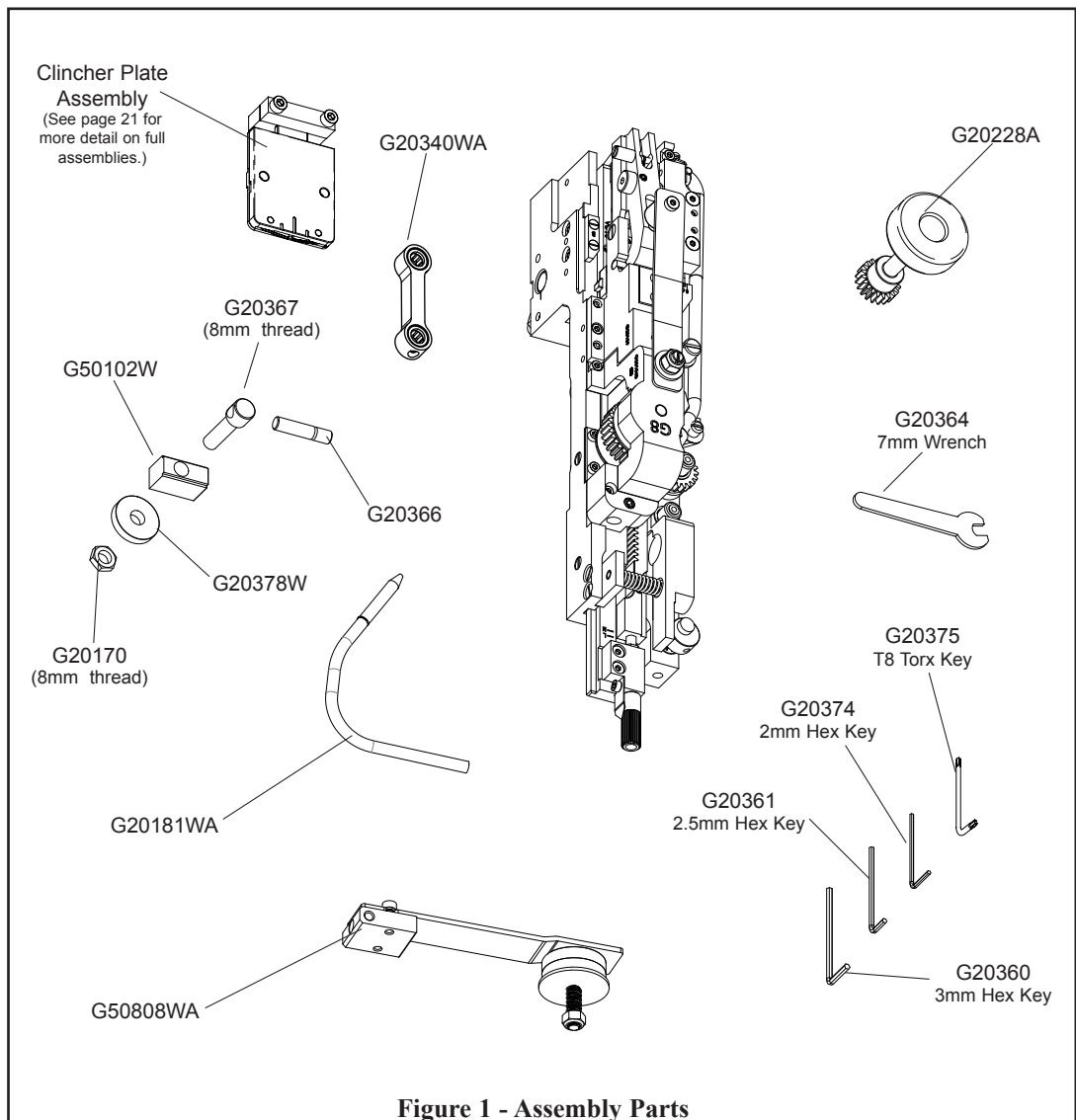
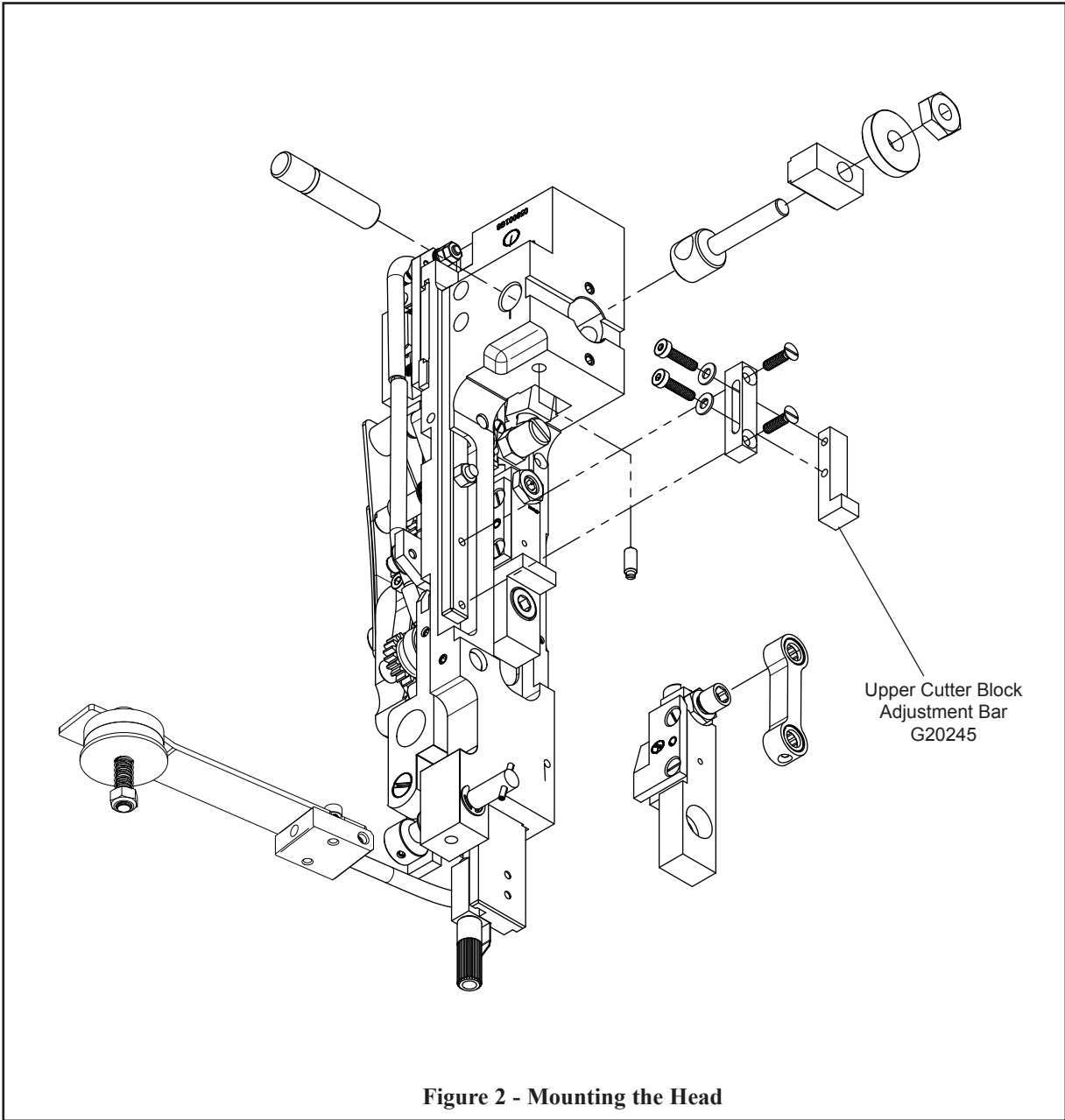


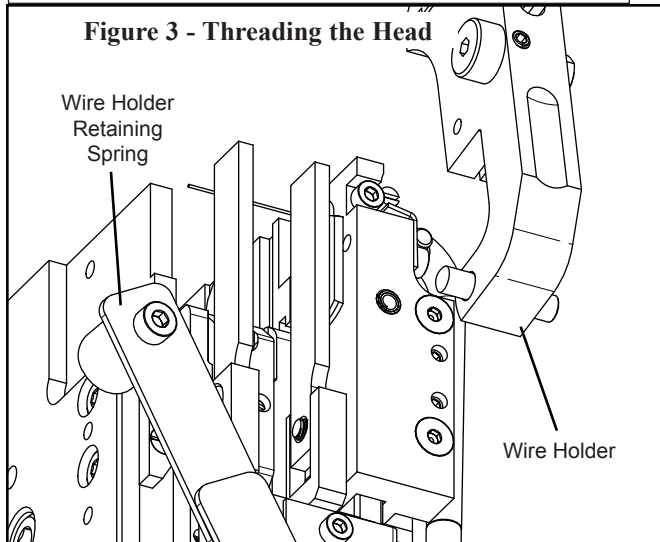
Figure 1 - Assembly Parts

Mounting (Figure 2)

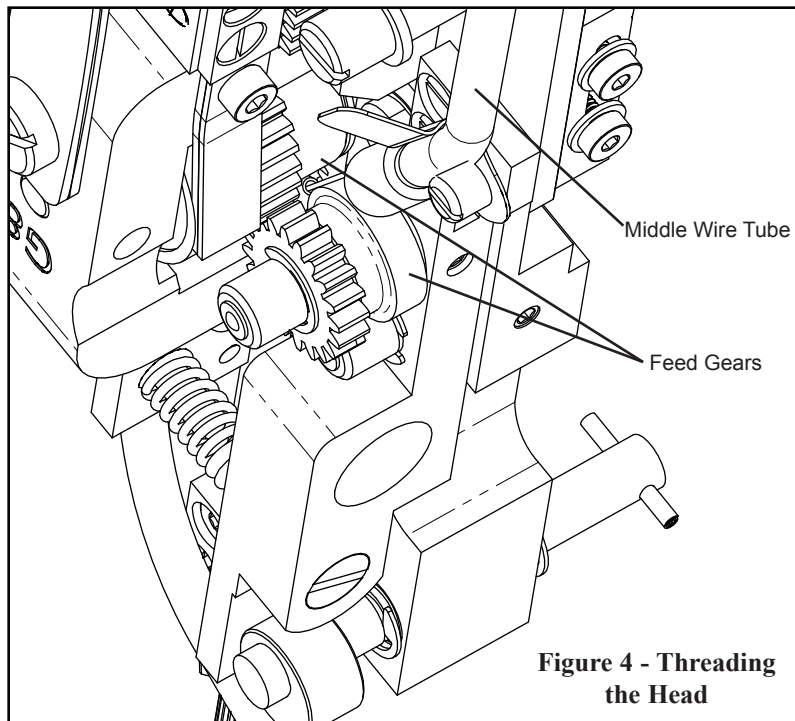


Operation

Wire Threading (Figures 3-8)



1. Remove the wire holder by first sliding the retaining leaf spring to the side (Figure 3).
2. Thread the wire from the supply spool through the center of the wire felt cleaning pads and into the stitch-wire guide block (Figure 8).
3. Continue to feed the wire until it gets through the feed gears and into the lower wire tube (Figures 4-8).
4. Run a single book with six stitches through the machine to load the wire.



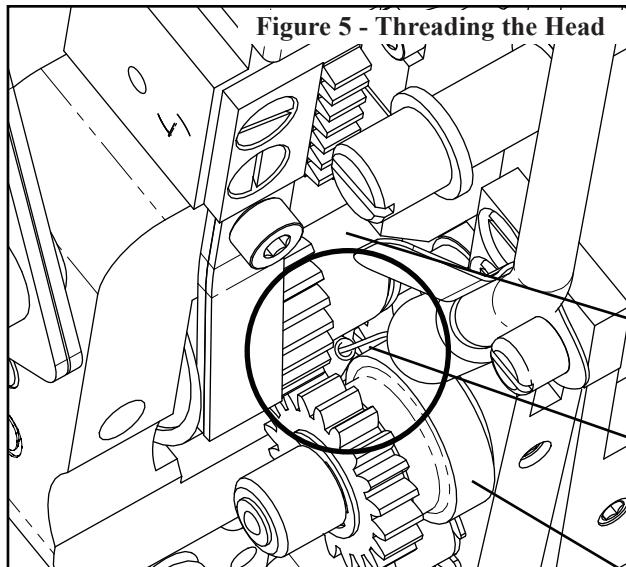


Figure 5 - Threading the Head

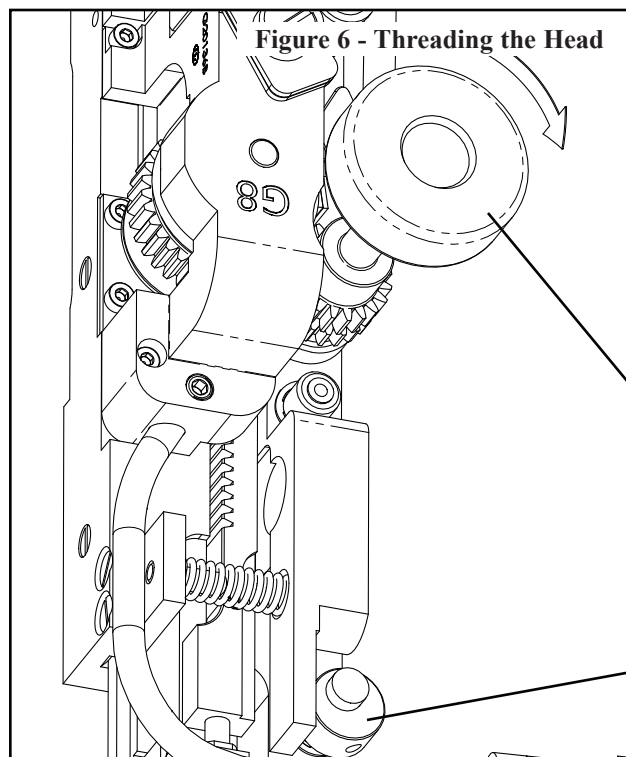


Figure 6 - Threading the Head

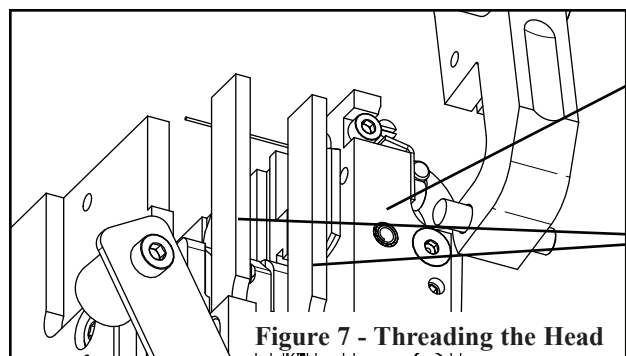
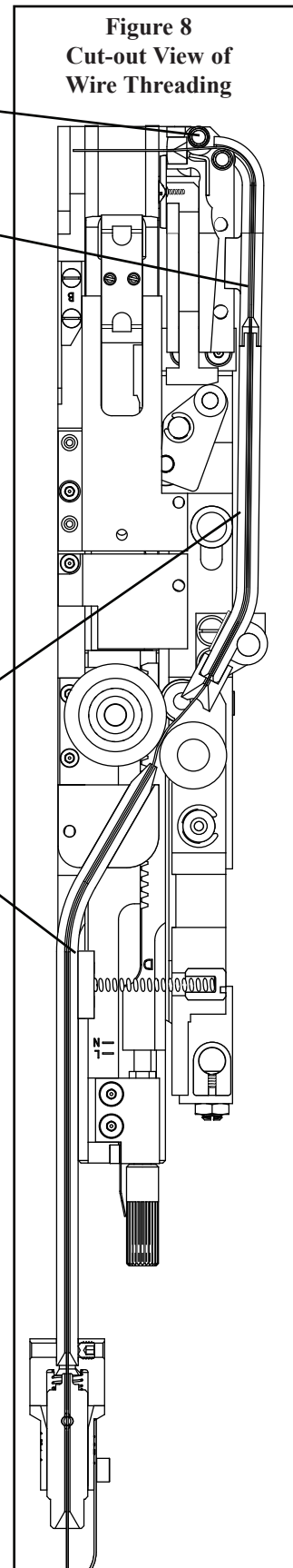


Figure 7 - Threading the Head



**Figure 8
Cut-out View of
Wire Threading**

Wire Straightener
Eccentric

Lower Wire Tube

Large Feed Gear

Wire

Small Feed Gear

Middle Wire Tube

Upper Wire Tube

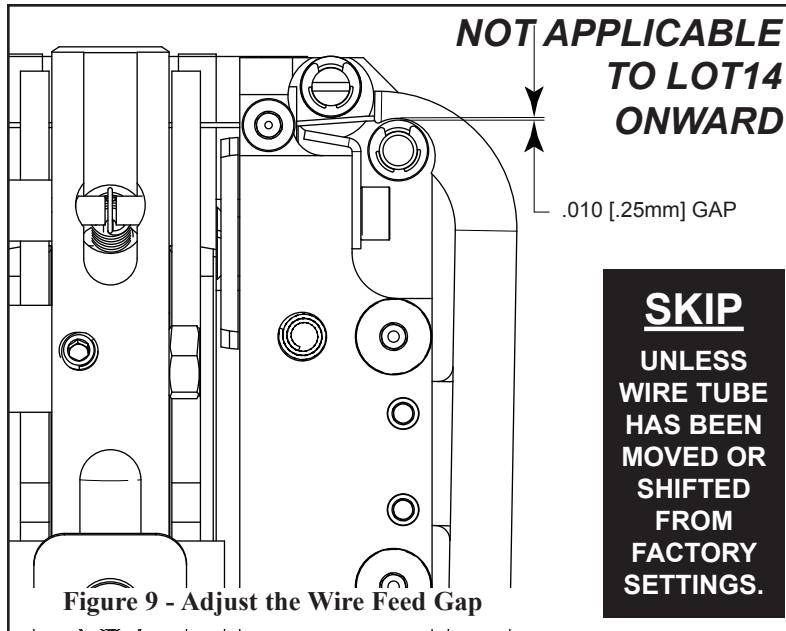
Adjustment Handle

Feed Release Shaft

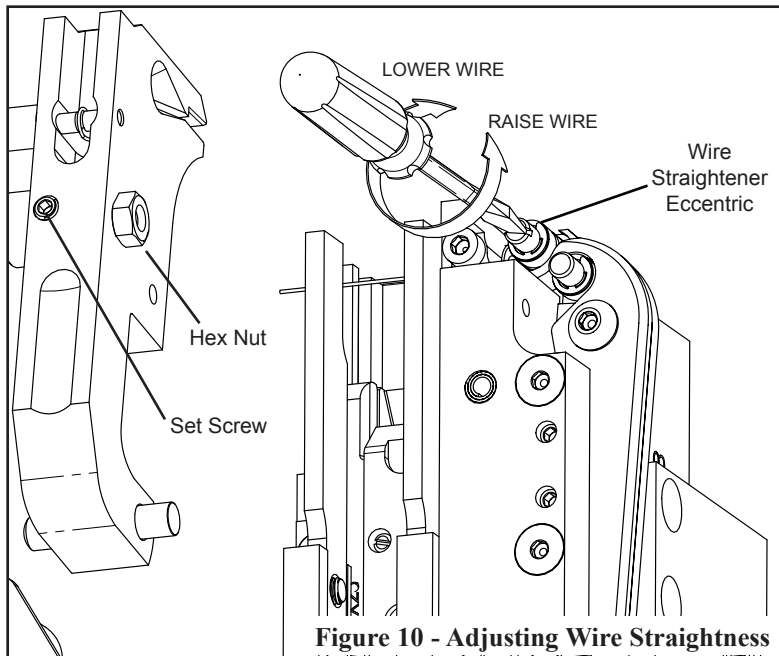
Cutter Block

Wire Guides

Adjusting Wire Straightness (Fig. 9-12)

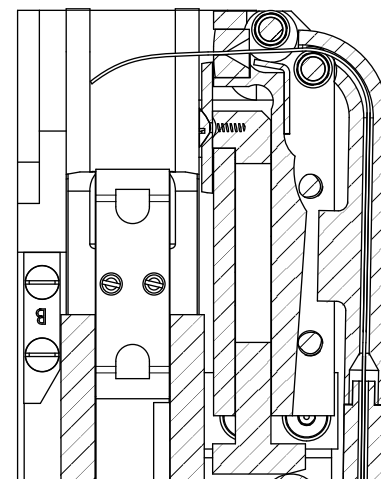
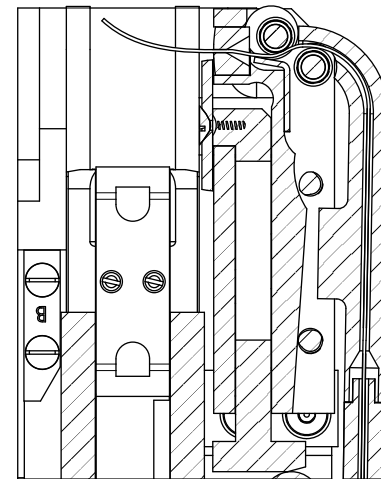
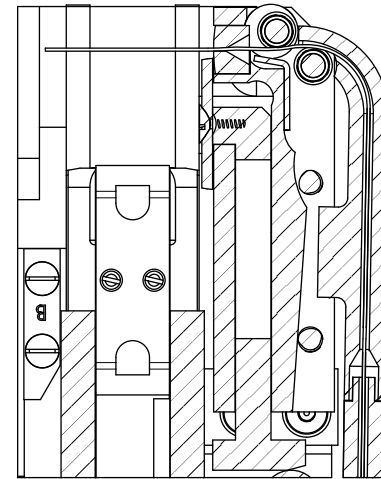


Note: Using a metal shim to set this gap will simplify this step.



Horizontal Adjustment (Figures 10-11)

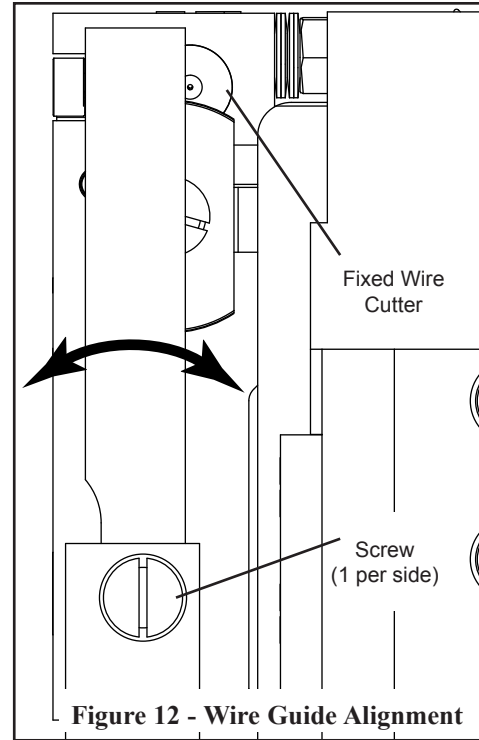
Turn the wire feed on and manually cycle the stitcher head. Observe the direction the wire is moving as it emerges. Use a slotted head screwdriver on the Wire Straightener Eccentric in the Cutter Block to adjust the wire. If the wire is curved upwards, turn the Wire Straightener Eccentric counter-clockwise. If the wire is



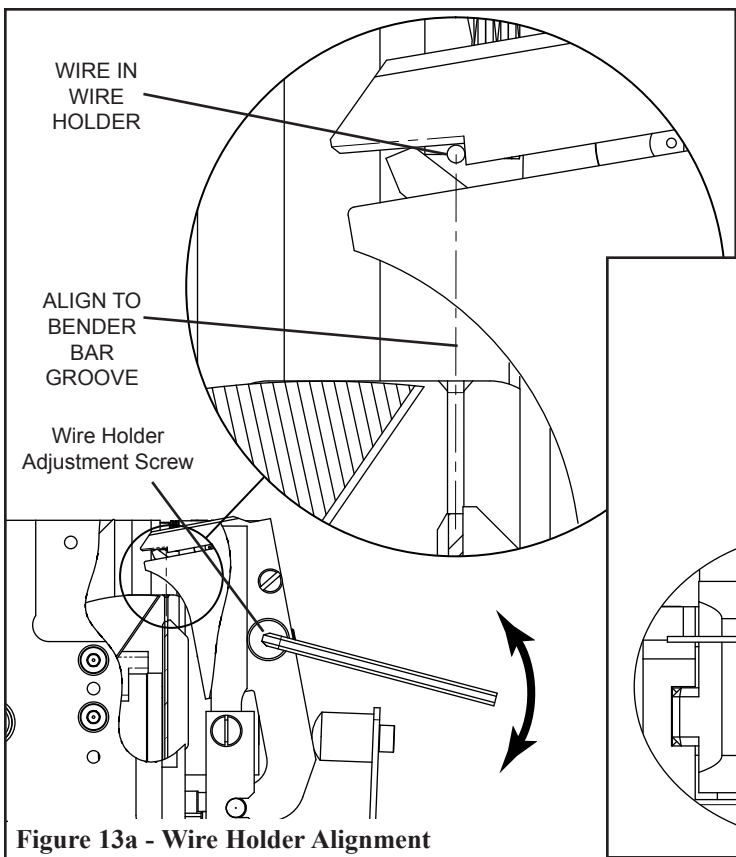
feeding downward, turn the Eccentric clockwise.

Front-to-Back Adjustment (APPLY ONLY UP TO LOT13)

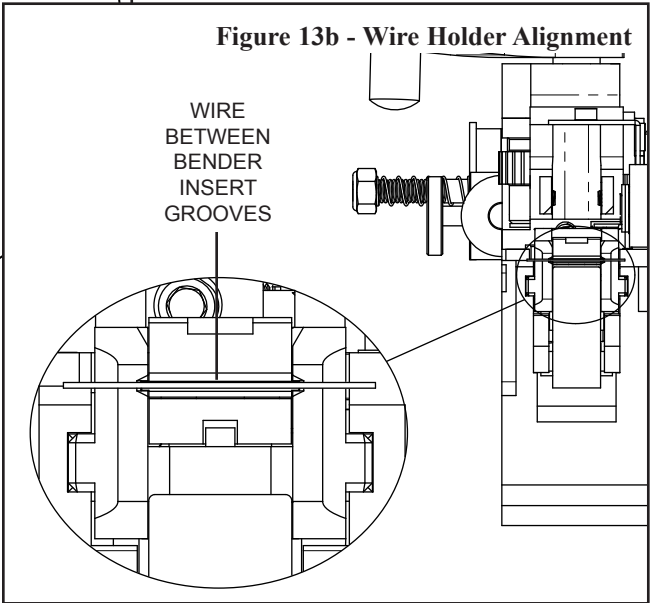
If the Wire Guide Bars are not properly positioned, the wire will rub against them as it exits the Cutter Block. Look at the G8 Head from the side past both the Right and Left Wire Guide Bars (Figure 12). Make sure there is a clear view of the opening in the Fixed Wire Cutter from the side of the G8 Head. If there is not, loosen the Flat Head Machine Screws securing the Wire Guide Bars to the Pivot Block and move them out of the path of the wire. Tighten the Screws after making sure the Wire Guide Bars are even with each other. Replace the Wire Holder and re-engage the Wire Holder Retaining Spring.



Aligning the Wire Holder (Figure 13a & b)



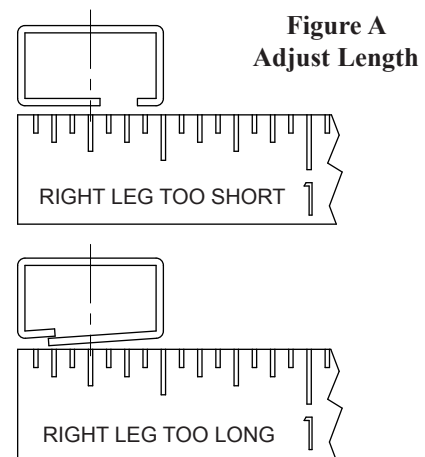
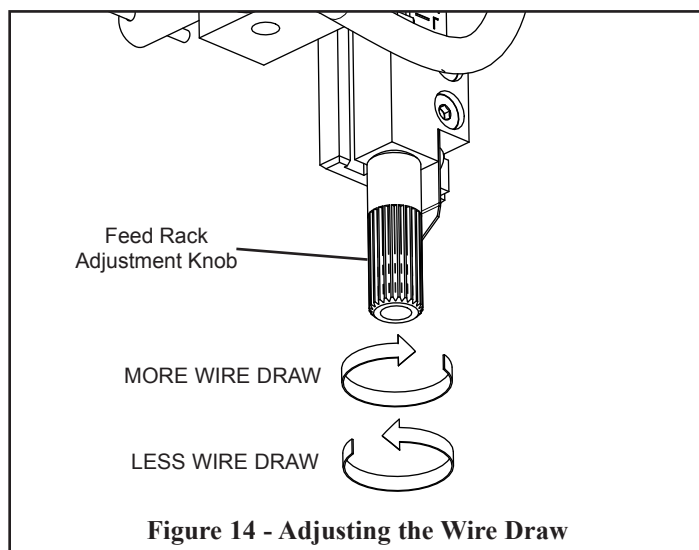
In order to form a quality stitch, the Wire Holder has to be in alignment with the Bender Bar. Specifically, the cut piece of wire held in the Wire Holder has to line up with the grooves in the Bender Bar. Poor adjustment may cause broken crowns or other poor stitching.



Load a piece of wire into the Wire Holder. Check to make sure the wire in the Wire Holder is lined up with the grooves in the Bender Bar (Figure 13b). If it is not, loosen the Socket Head Set Screw in the front of the Wire Holder and the Hex Nut (seen in Figure 10) securing the Wire Holder Adjustment Screw (Figure 13a). Turn the Adjustment Screw until the wire is aligned with the grooves in the Bender Bar. Tighten the Hex Nut and Set Screw to secure this setting.

Remove the wire in the Wire Holder and load another piece in the Stitcher Head. Verify that the setting established is accurate by again checking the piece of wire with the mirror.

Adjusting the Stitch (Figures 14-18)



Before making any adjustments, make sure your stitching machine compression setting

is set to the proper thickness of work. Make a few sample stitches and look at the results.

Setting the Stitch Gap (Or Adjusting the Wire Draw)

To adjust the overall length (wire draw) of the stitch, disengage the Small Feed Gear by turning the Feed Release Handle 1/4 of a turn to the right as shown. Adjust the Feed Rack Adjustment Knob until the gap between the staple legs allows only the edge of a fingernail to pass between them.

- To extend the length of the stitch or decrease the gap, turn the Feed Rack Adjustment Knob clockwise. (See upper view of Figure A)
- To shorten the length of the stitch or increase the gap, turn the knob counter-clockwise. (See lower view of Figure A)

Centering the Stitch Gap (Or Setting Equal Length Legs)

The amount of wire on either side of the stitch gap should be the same. The gap position is controlled by the position of the Cutter Block. As thicker work is stitched, the Cutter Block must be moved further from the Wire Holder to keep the legs of the stitch even and the gap centered.

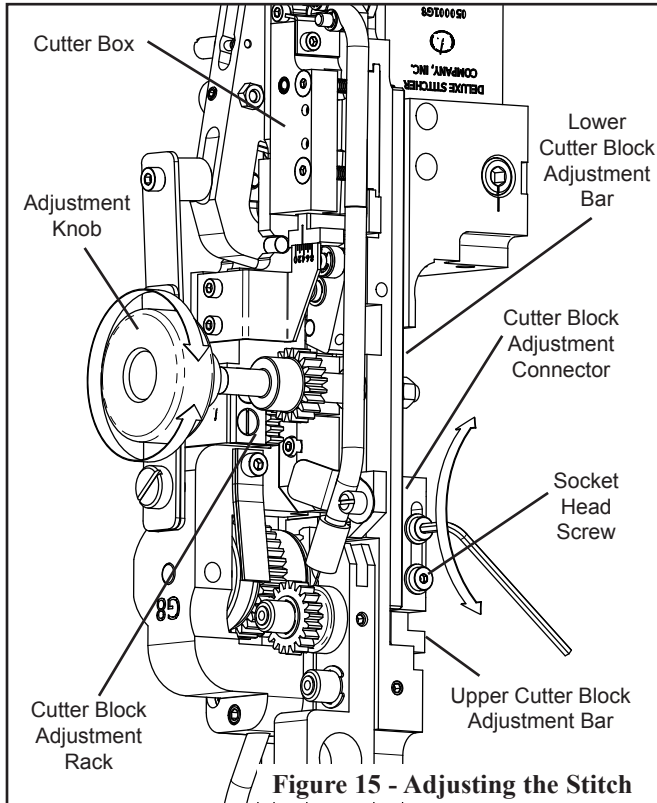


Figure 15 - Adjusting the Stitch

For G8 Heads mounted to a machine with an adjuster rail, loosen the two (2) Hex Head Screws securing the Lower Cutter Block Adjustment Bar and Cutter Block Adjustment Connector to the Upper Cutter Block Adjustment Bar. For all G8 style Heads, place the Adjustment Knob over the Cutter Adjustment Stud as shown in Figure 15 and engage the teeth of the Cutter Block Adjustment Rack and adjust as shown in the following illustrations. Be sure to run a couple of stitches after each adjustment.

⚠ WARNING

Always disconnect the power supply before making any adjustments or servicing the head.

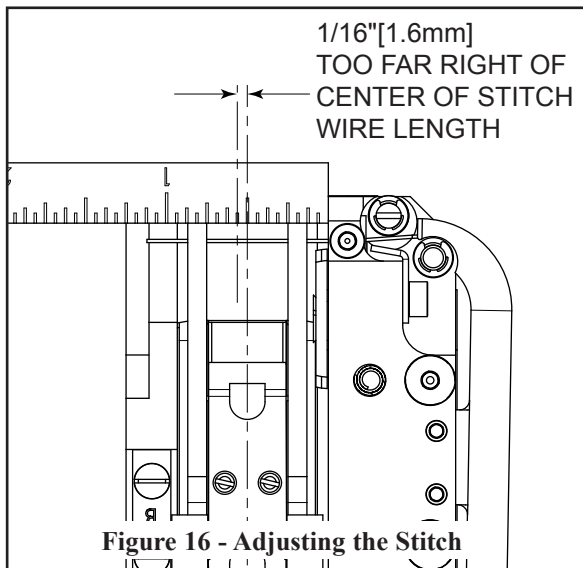


Figure 16 - Adjusting the Stitch

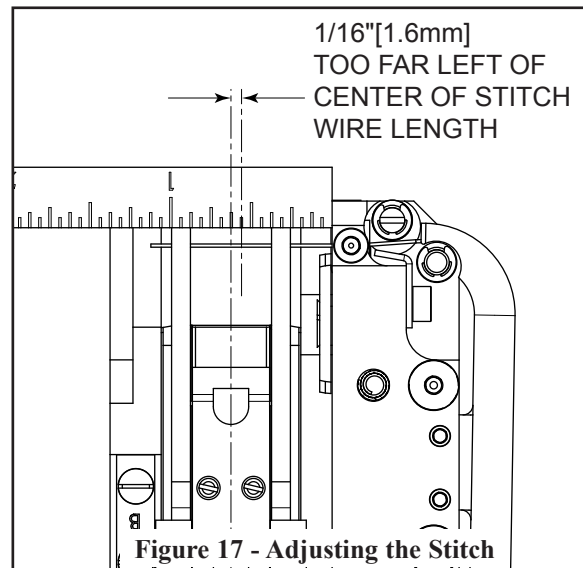


Figure 17 - Adjusting the Stitch

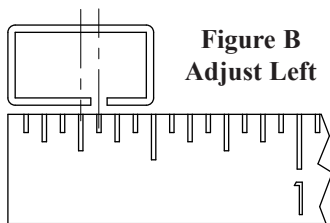


Figure B
Adjust Left

Gap of stitch is 1/16" off center to the right. To correct, turn the Adjustment Knob clockwise, to shift the Cutter Box 1/16" to the left.

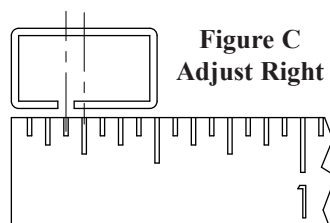
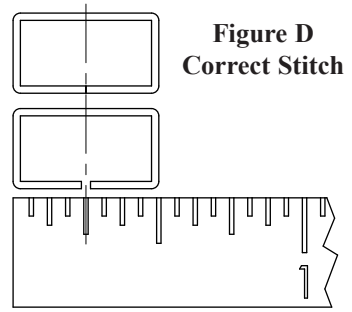
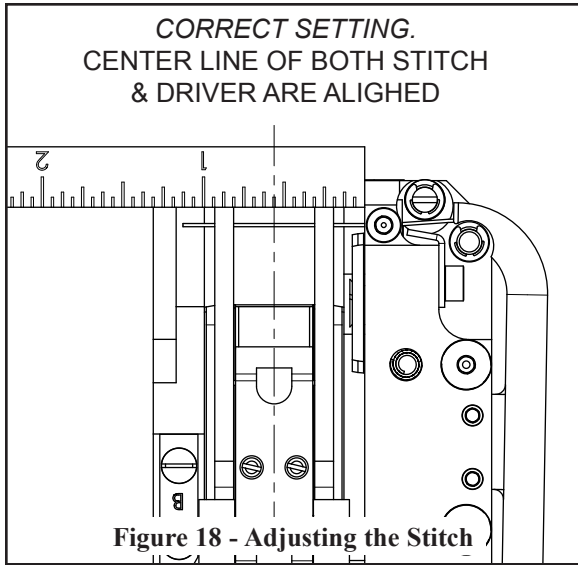


Figure C
Adjust Right

Gap of stitch is 1/16" off center to the left. To correct, turn the Adjustment Knob counter-clockwise to shift the Cutter 1/16" to the right.



The ideal stitch has the center of gap aligned to the center of the finished stitch.

Always disconnect the power supply before making any adjustments or servicing the head.

⚠ WARNING

Maintenance

Lubrication & Maintenance (Figure 19)

Your new Deluxe Stitcher head was designed to minimize both the maintenance and lubrication requirements that are normally associated with standard stitcher heads. This was accomplished by incorporating a high tech bonded coating that helps reduce friction and wear to many of the critical wear parts.

The lubrication and maintenance schedule is as follows:

Time or Cycle Interval	Required Maintenance
Monthly	<ul style="list-style-type: none"> ✓ Check for and remove any paper fiber or dust accumulation on stitcher head. Use a high pressure duster to blow out dust and debris. ✓ Lubricate driver bar (G20151) visible surface as shown in Figure 19 with small amount Kluber Isoflex NBU 15 grease.
Every wire reel change	<ul style="list-style-type: none"> ✓ Check for and remove any paper fiber or dust accumulation on stitcher head. Use a high pressure duster to blow out dust and debris. ✓ Lubricate driver bar (G20151) visible surface as shown in Figure 19 with small amount Kluber Isoflex NBU 15 grease.
Every 3 reels of wire consumption (approximately 1,000,000 cycles)	<ul style="list-style-type: none"> ✓ Remove and disassemble stitcher head per replacement part instructions. <ul style="list-style-type: none"> ✗ Clean off any residual lubrication ✗ Replace all wear parts (included in Service Kit # 914-874) ✗ Re-Lubricate stitcher head with Kluber Isoflex NBU 15 grease in specific areas shown in instructions.
Every 15 reels of wire consumption (approximately 5,000,000 cycles)	<ul style="list-style-type: none"> ✓ Remove Head and send in to Watkiss for a complete factory rebuild.

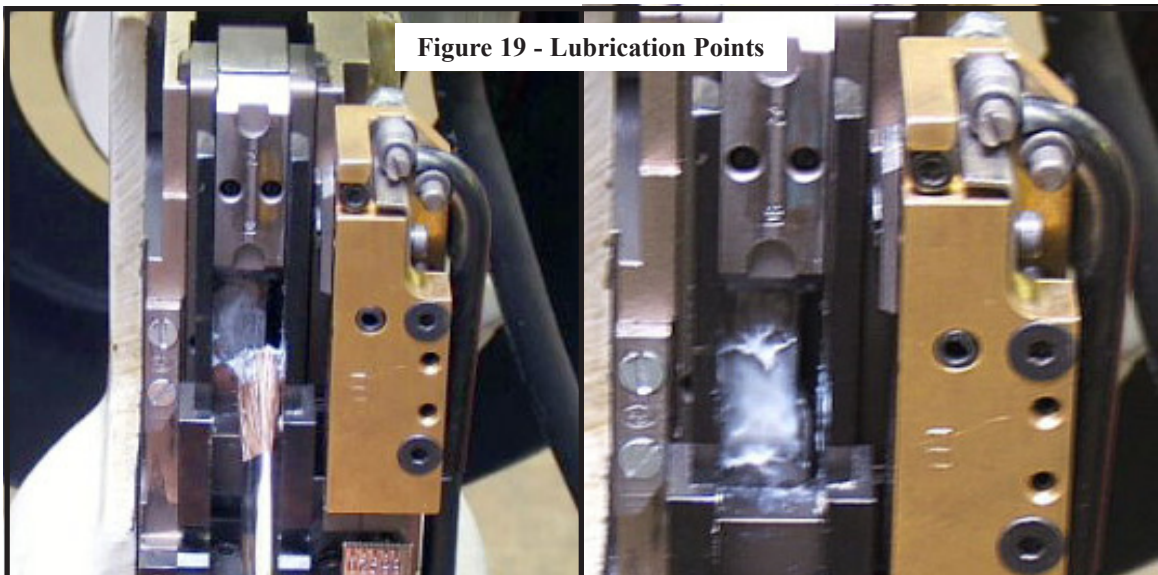
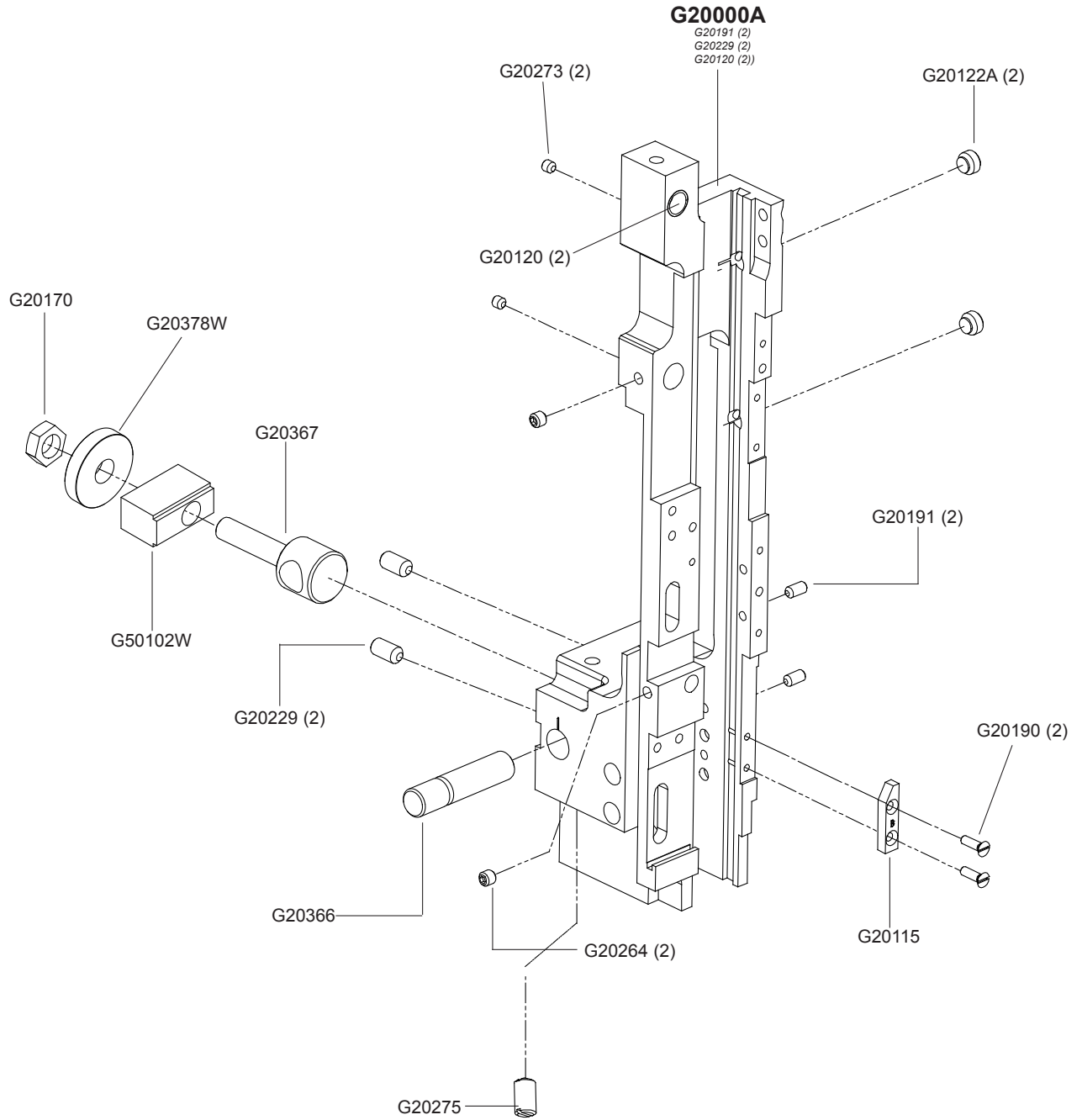
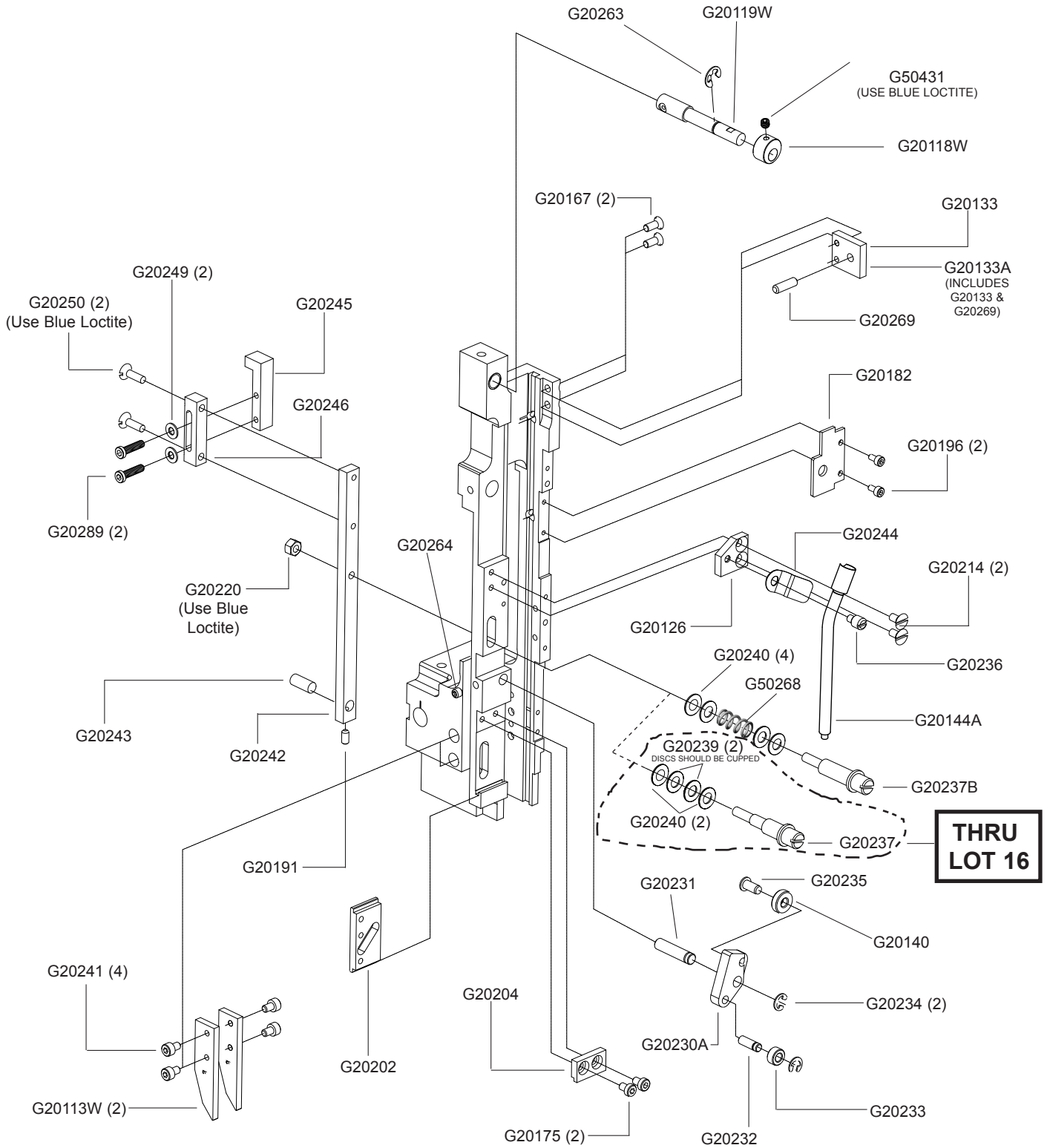


Figure 19 - Lubrication Points

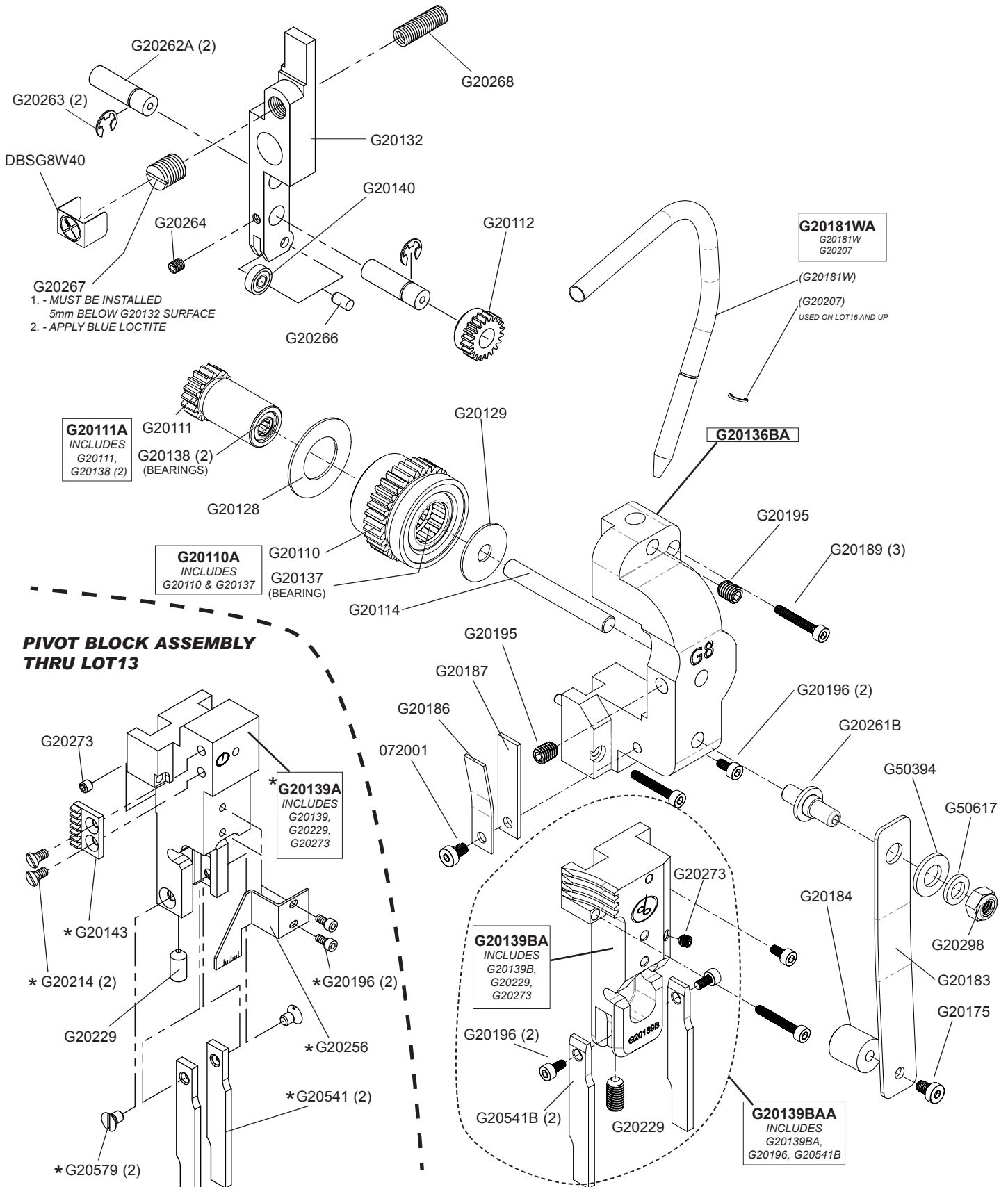
Bonnet Sub-Assembly



Bonnet Sub-Assembly



Feed Lever and Feed Gear Assemblies



G20267
 1. - MUST BE INSTALLED
 5mm BELOW G20132 SURFACE
 2. - APPLY BLUE LOCTITE

G20111A
 INCLUDES
 G20111,
 G20138 (2)

G20110A
 INCLUDES
 G20110 & G20137

G20181WA
 G20181W
 G20207

(G20181W)
 (G20207)
 USED ON LOT16 AND UP

G20136BA

PIVOT BLOCK ASSEMBLY THRU LOT13

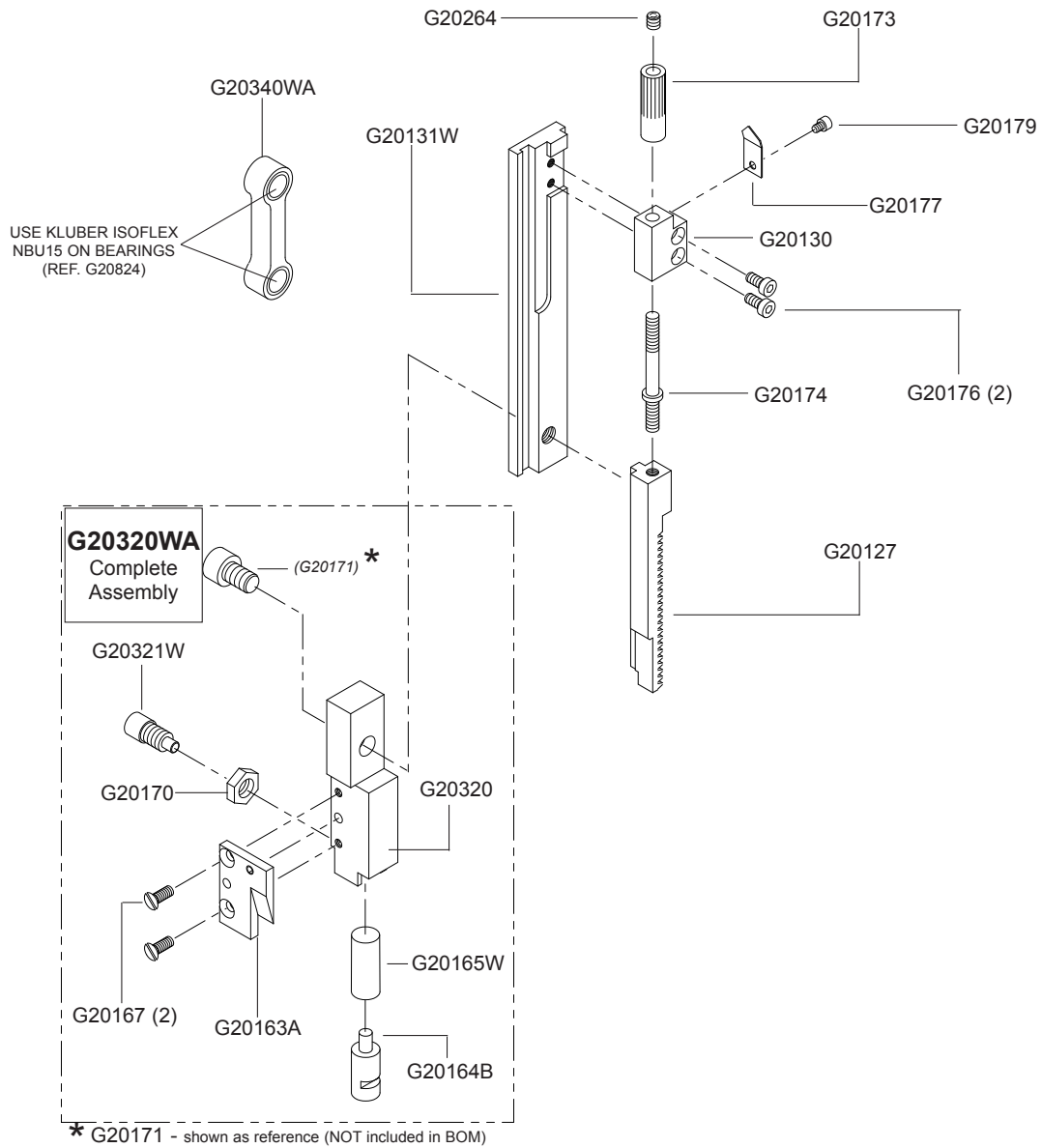
***G20139A**
 INCLUDES
 G20139,
 G20229,
 G20273

G20139BA
 INCLUDES
 G20139B,
 G20229,
 G20273

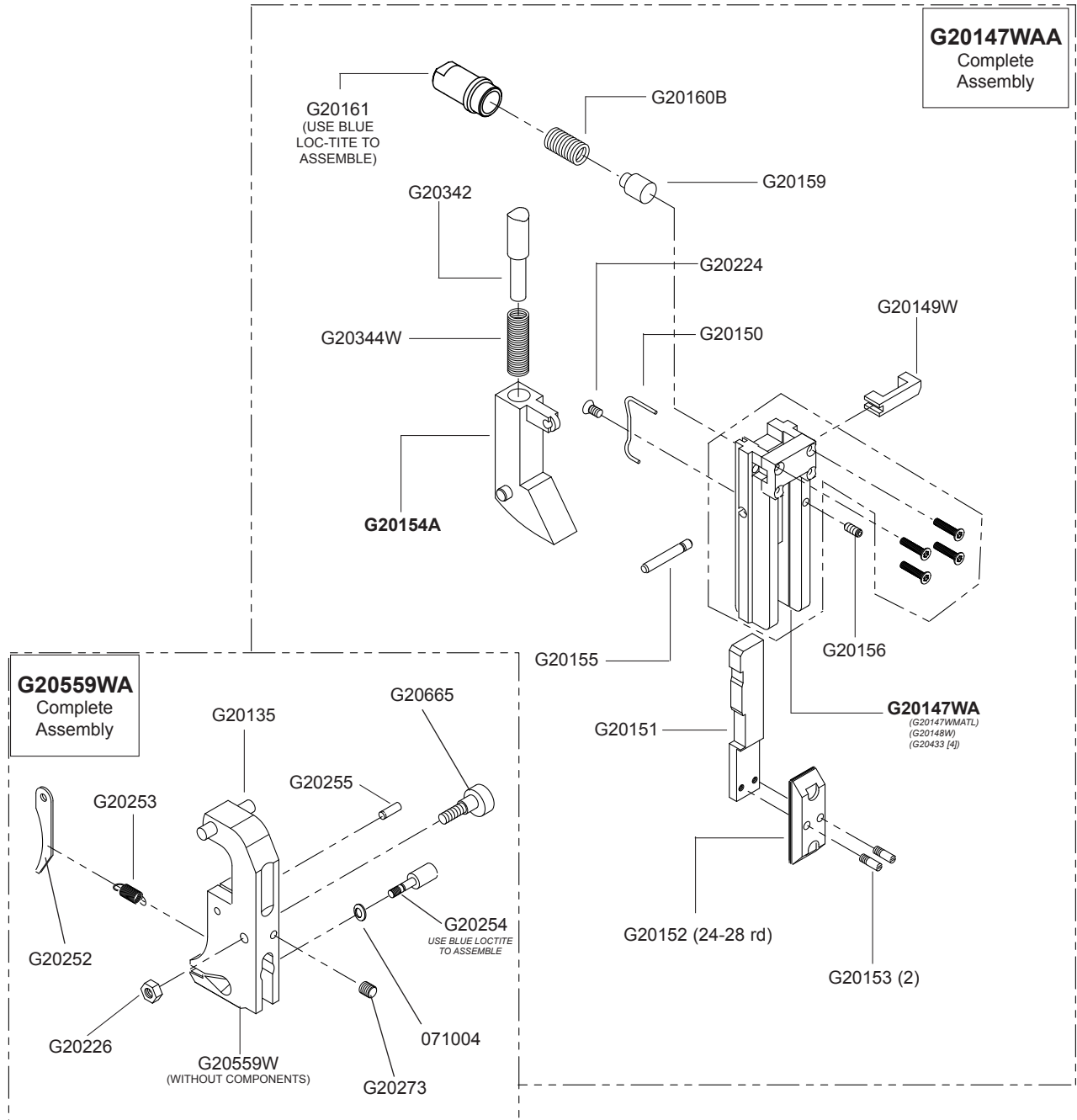
G20139BAA
 INCLUDES
 G20139BA,
 G20196, G20541B

* INDICATED PARTS NOT USED ON LOT14 ONWARD

Driving and Feed Slide Assemblies



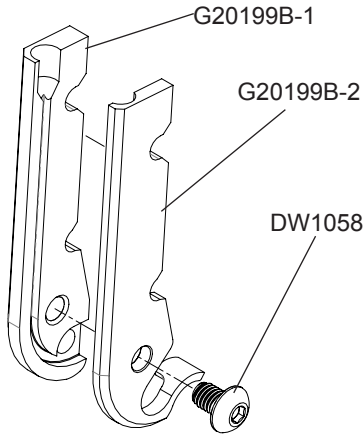
Bender Bar and Wire Holder Assemblies



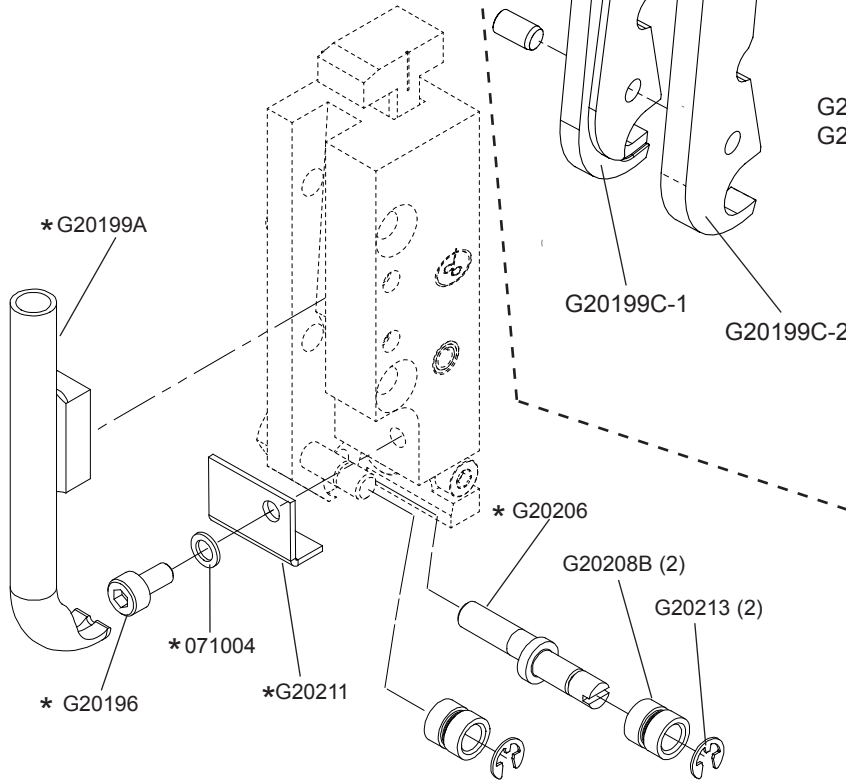
Cutter Block Assembly

G20197WAA
 LOT20 ONWARD
 Complete Assembly
 (All parts on this page)

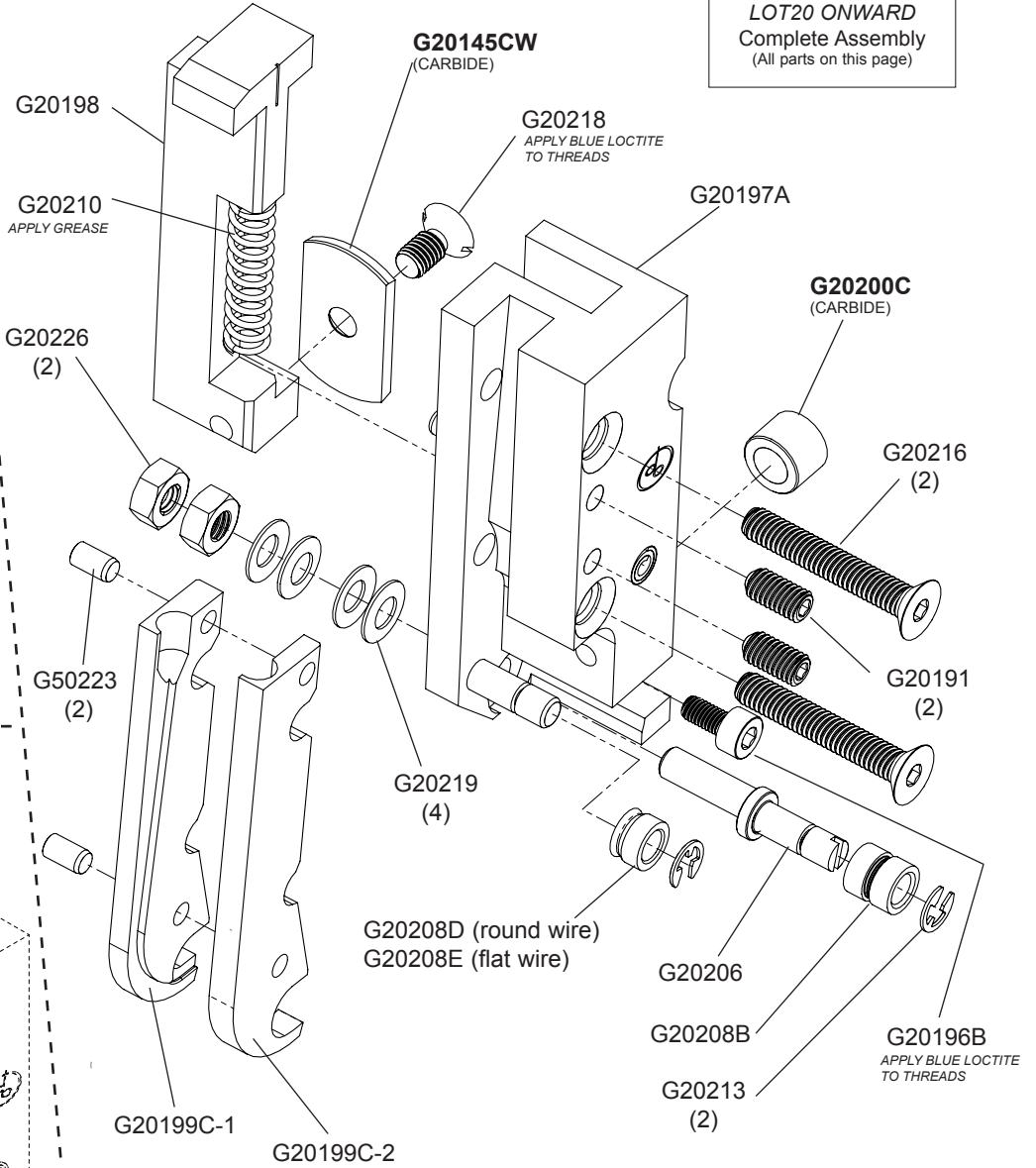
**LOWER WIRE TUBE PARTS
 LOT13 TO LOT19**



**LOWER WIRE TUBE PARTS
 THRU LOT13**



* INDICATE PARTS NOT USED ON LOT14 ONWARD



**LOWER WIRE TUBE
 UPGRADE KIT**

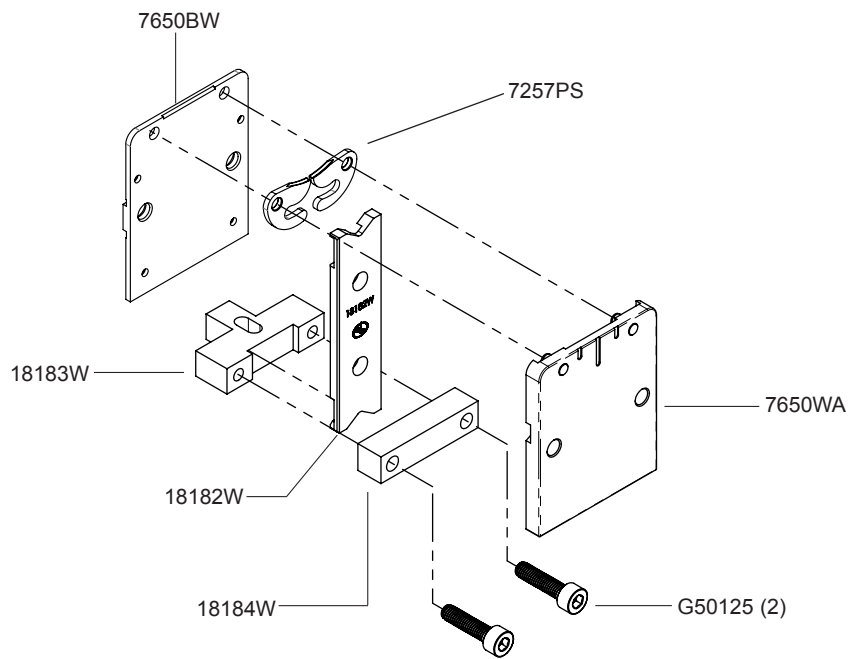
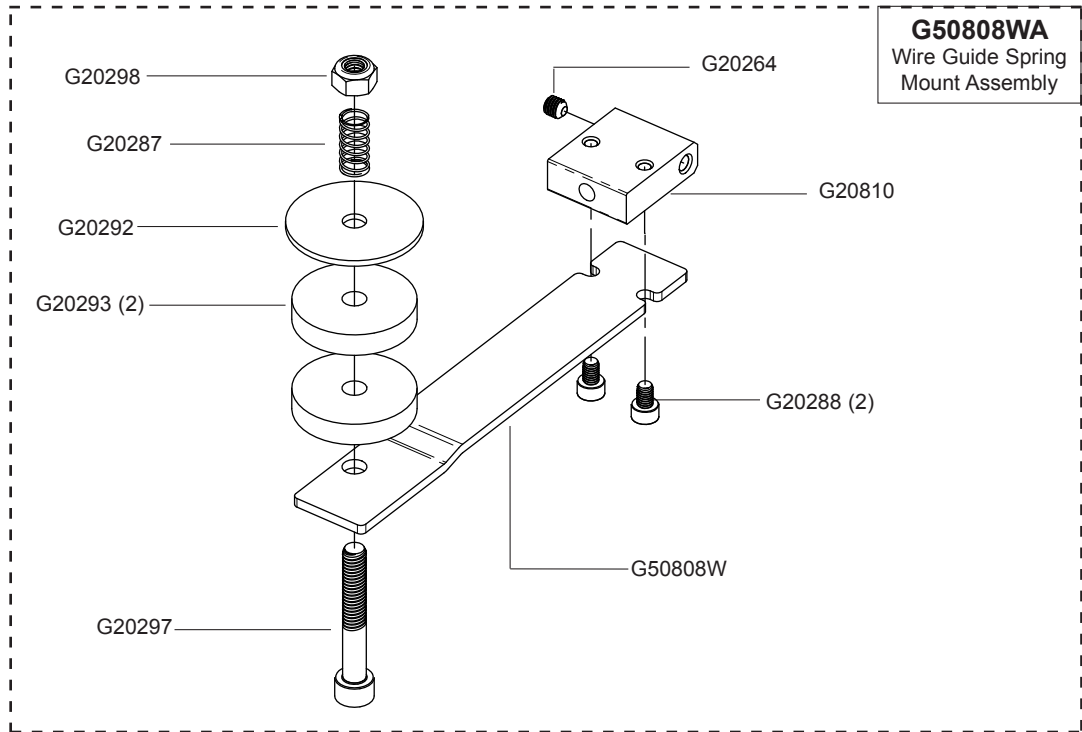
LOT20

ORDER KIT #: **G20199WAA**

KIT INCLUDES:

- G20199C-1,
- G20199C-2,
- G20206B,
- G20208D,
- G20213,
- G50223

Wire Guide and Clincher Plate Assemblies



Part Number / Description Cross-Reference

(1) - APPLIES TO LOT13 AND LOWER
 (2) - APPLIES TO LOT14 AND HIGHER

071004	Washer M3, Lock	1	G20140	Follower Ball Bearing	1
072001	Screw M4x0.7x8	1	G20143 ⁽¹⁾	Cutter Block Adjustment Rack	1
18182W	Clincher Slide	1	G20144A	Middle Wire Tube Assy.	1
18183W	Clincher Slide Adjustment Block	1	G20145CW	Moving Cutter - Carbide	1
18184W	Clincher Slide Block Clamp	1	G20147WA	Bender Bar Assy., Watkiss	1
7257PS	Clincher Point - Watkiss Power Square	2	G20147WAA	Bender Bar Assy., Complete, Watkiss	1
7650BW	Clincher Back Plate, Watkiss	1	G20147WMATL	Bender Bar, 24 GA	1
7650WA	Clincher Front Plate Assy., Watkiss	1	G20148W	Latch Housing, Removable-Watkiss	1
DBSG8W40	Label, "NO ADJUST"	1	G20149W	Bender Bar Latch	1
DW1058 ⁽²⁾	Screw M4 x 6mm Button Head	1	G20150	Bender Bar Latch Spring	1
G20000A	Bonnet Assembly - G8	1	G20151	Driver Bar	1
G20110	Large Feed Gear	1	G20152	Driver, 24W	1
G20110A	Large Feed Gear Assembly	1	G20153	Driver Retaining Screw	2
G20111	Feed Pinion	1	G20154A	Supporter Assembly	1
G20111A	Feed Pinion Assembly	1	G20155	Supporter Pivot Pin	1
G20112	Small Feed Gear	1	G20156	Supporter Pivot Pin Screw	1
G20113W	Supporter Guide Plate	2	G20159	Bender Bar Friction Plug	1
G20114	Feed Pinion Shaft	1	G20160B	Bender Bar Friction Spring	1
G20115	Latch Release Cam	1	G20161	Bender Bar Friction Bushing	1
G20118W	Feed Release Handle Cam, Watkiss	1	G20164B	Driver Slide Plunger Eccentric	1
G20119W	Feed Release Handle, Watkiss	1	G20165W	Driving Slide Spring	1
G20120	Feed Release Bushing	2	G20167	Screw, M4x0.7x10 FHC	2
G20122A	Feed Slide Retaining Screw Assy.	2	G20170	Hex Jam Nut M8x1.25	1
G20126	Tube Pivot Plate	1	G20171	Screw M8x1.25x12	1
G20127	Feed Rack	1	G20173	Feed Rack Knob - Knurled	1
G20128	Large Feed Gear Washer	1	G20174	Feed Rack Adjustment Stud	1
G20129	Small Feed Gear Washer	1	G20175	Screw M4x0.7x6 SHC	4
G20130	Feed Adjustment Block	1	G20176	Screw M4x.7x12 SHC-Low Head	2
G20131W	Feed Slide	1	G20177	Feed Rack Adjustment Knob Pointer	1
G20132	Feed Lever	1	G20179	Screw M3x0.5x4, SHC	1
G20133A	Feed Release Spring Block	1	G20180	Flat Washer M6	1
G20133A	Feed Release Spring Block Assy.	1	G20181W	Upper Wire Tube-G8, Watkiss	1
G20135	Dowel Pin M5x24	1	G20182	Feed Gear Shaft Plate	1
G20136BA	Feed Gear Bracket Assembly	1	G20183	Wire Holder Retaining Spring - Long	1
G20137	Feed Gear Bearing	2	G20184	Wire Holder Retaining Spring Foot	1
G20138	Feed Pinion Bearing	2	G20186	Feed Gear Friction Spring	1
G20139 ⁽¹⁾	Pivot Block	1	G20187	Feed Gear Friction Strip	1
G20139A ⁽¹⁾	Pivot Block Assy.	1	G20188	Dowel Pin 1/8"x 3/8"	4
G20139B ⁽²⁾	Pivot Block	1	G20189	Screw M3x0.5x20 SHC	5
G20139BA ⁽²⁾	Pivot Block Assy	1	G20190	Screw M3x0.5x10 FHM-Slotted	4
G20139BAA ⁽²⁾	Pivot Block Assy	1	G20191	Screw, M4x0.7x8 SHS-Nylon	5

Part Number / Description Cross-Reference

(1) - APPLIES TO LOT13 AND LOWER
 (2) - APPLIES TO LOT14 AND HIGHER

G20195	Screw M6x1.0x8 SHS	2	G20240	Cutter Block Adjustment Washer	4
G20196	Screw M3x0.5x6 SHC	5	G20241	Screw M4x0.7x6 SHC	4
G20196B	Screw M3x0.5x6 SHC	1	G20242	Cutter Adjustment Bar - Lower	1
G20197A	Cutter Block Assembly	1	G20243	Dowel Pin 1/4x9/16	1
G20197WAA	Cutter Block Complete Assy	1	G20244	Tube Pivot Clip	1
G20198 ⁽¹⁾	Cutter Operating Slide	1	G20245	Cutter Adjustment Bar - Upper	1
G20199A ⁽²⁾	Lower Wire Tube Assembly	1	G20246	Cutter Block Adjustment Connect	1
G20199C-1 ⁽²⁾	Lower Wire Tube Base	1	G20249	Cutter Block Washer	2
G20199C-2 ⁽²⁾	Lower Wire Tube Cover	1	G20250	Screw M4x0.7x14 FHM	2
G20200C	Fixed Wire Cutter-Carbide	1	G20252	Wire Hook	1
G20202	Cutter Block Slide Plate	1	G20253	Wire Hook Spring	1
G20204	Upper Cutter Block Guide	1	G20254	Wire Hook Spring Screw	1
G20206 ⁽¹⁾	Wire Straightener Eccentric	1	G20255	Hook Pivot Pin	1
G20206B ⁽²⁾	Wire Straightener Eccentric Less Adj.	1	G20256 ⁽¹⁾	Cutter Block Scale	1
G20207	E-Ring C-Clip	1	G20261B	Wire Holder Spring Stud	1
G20208B	Wire Straightener Roller	2	G20262A	Feed Lever Pin Assembly	2
G20208D ⁽²⁾	Wire Straightener Roller	1	G20263	Feed Lever E-Ring	2
G20210	Cutter Operating Spring	1	G20264	Screw M5x0.8x5 SHS-Nylon	6
G20211 ⁽¹⁾	Cutter Wire Shield	1	G20266	Follower Bearing Pin	1
G20212	Wire Straightener Roll Stud	1	G20267	Feed Lever Bushing	1
G20213	Wire Straightener Roll Clip	2	G20268	Feed Lever Spring	1
G20214	Screw M4x0.7x8 FHM	4	G20269	Spirol Pin 3/16x5/8	1
G20215	Screw M5x0.8x10, FHM	4	G20273	Screw M4x.7x4 SHS-Nylon	2
G20216	Screw M4x0.7x25 SFH	2	G20275	Ball Spring Plunger	1
G20217	Spirol Pin M5x12	1	G20287	Wire Oiler Felt Spring	1
G20218	Screw, M4x0.7x8, Small Head	1	G20288	Screw, M4x0.7x8 SHC	4
G20219	Wire Straightener Disc Spring	4	G20289	Screw M4x0.7x16 SHC	2
G20220	Hex Nut M5x.8	1	G20292	Wire Oil Felt Washer	1
G20223	Dowel Pin 1/8x1/4	1	G20293	Wire Cleaning Felt	2
G20224	Bender Bar Latch Spring Screw	1	G20297	Screw, M6x1.0x40 SHC	1
G20226	Hex Nut M4x.7	2	G20298	Nylock Lock Nut, M6x1	1
G20228A	Adjustment Handle Assembly	1	G20320	Driving Slide - Crank Drive	1
G20229	Screw M6x1x12 SHS	2	G20320WA	Driving Slide Assy.-Crank Drive	1
G20230A	Cutter Operating Lever Assy.	1	G20321W	Crank Link Screw	1
G20231	Cutter Operating Lever Pivot Pin	1	G20323A	Cutter Operating Ramp Assembly	1
G20232	Cutter Operating Lever Roll Pin	1	G20340WA	Crank Drive Link Assy., Watkiss	1
G20233	Cutter Operating Lever Roller	1	G20342	Supporter Spring Plunger	1
G20234	E-Ring- 3/16"	2	G20344W	Supporter Spring, Watkiss	1
G20235	Follower Bearing Shaft	1	G20346B	Supporter Guide Pin, Composite	1
G20236	Tube Pivot Screw	1	G20360	Hex Key Wrench 3.0mm	1
G20237B	Cutter Block Adjustment Stud	1	G20361	Hex Key Wrench 2.5mm	1

Part Number / Description Cross-Reference

(1) - APPLIES TO LOT13 AND LOWER
 (2) - APPLIES TO LOT14 AND HIGHER

G20364	Open End Wrench	1	G20665	Wire Holder Eccentric Adj Screw	1
G20366	Rear Clamp Pin	1	G20810 ⁽¹⁾	Wire Guide Spring Mount	1
G20367	Rear Mounting Bolt	1	G50102W	Mounting Block	1
G20374	Hex Key Wrench 2.0mm	1	G50125	Screw M5x0.8x20 SHC	2
G20375	Torx Key Wrench, T8	1	G50268	Feed Lever Spring, G5	1
G20378W	Mounting Spacer	1	G50394	Flat Washer M8	1
G20433	Screw, M2.5x.45x12 Torx	4	G50431	Screw M3x0.5x6 SHS	1
G20541	Wire Guide Bar-Left	2	G50617	Wire Holder Retaining Spring Washer	1
G20541B	Wire Guide Bar-Left	2	G50808W	Wire Oiler Felt Plate, Watkiss	1
G20559WA ⁽¹⁾	Wire Holder Assembly 1/2	1	G50808WA	Wire Guide Spring Mount Assembly	1
G20579 ⁽²⁾	Screw M4x0.7x6 FHM-Slotted	2	PW516	Washer 5/16	1

G8 Head Service Kit

The G8 Head Service Kit (P/N 914-874) is available with the most common wear parts for replacement service. See the table below for a list of the parts included in the kit.

For more information about purchasing this service kit or for technical support, contact your local Graphic Arts Representative.

914-874 - G8 Head Service Kit			
DeLuxe Part No.	Watkiss Part No.	Description	Qty.
7257PS	801-704	Clincher Point 1/2 - Watkiss	2
DBSG8W40	801-650	Label, "NO ADJUST"	1
G20148W	801-623	Latch Housing, Removable - Watkiss	1
G20151A	801-620	Driver Bar Assembly	1
G20159	801-621	Bender Bar Friction Plug	1
G20187	801-628	Feed Gear Friction Strip	1
G20199A	801-610	Lower Wire Tube Assembly <i>(NOT USED ON LOT14 AND HIGHER)</i>	1
G20210	801-612	Cutter Operating Spring	1
G20218	801-624	Screw, M4 x 0.7 x 8, Small Head	1
G20263	801-622	Feed Lever E-Ring	2
G20293	801-614	Wire Cleaning Felt	2
G20346B	801-627	Supporter Guide Pin, Composite	1
G20375	952-445	Torx Key Wrench, T8	1
G20433	801-652	Screw, M2.5 x 0.45 x 12, Torx-w/Nylon Patch	4
914-875 - G8 Supplementary Head Maintenance Kit			
DeLuxe Part No.	Watkiss Part No.	Description	Qty.
18182W	801-604	Clincher Slide - Watkiss	1
G20147WMATL	801-600	Bender Bar Material - Watkiss	1
G20152	801-608	Driver, 24 wire	1
G20321W	801-625	Crank Link Screw - Watkiss	1
G20559WA	801-626	Wire Holder Assembly, 1/2 - Watkiss	1