Head Serial Number : $\qquad$
Date Purchased : $\qquad$
Where Installed: $\qquad$
(make/model of machine)

## G5 Stitcher Head

Watkiss Edition

OPERATION AND MAINTENANCE MANUAL

Wire Sizes: 25 Ga. Round ( 0.52 mm )
Crown Sizes: 1/2" (12.7 mm) and 5/8" (15.9 mm)
Capacity: 2 sheets to 13/64" (5 mm)

Before using this Stitcher Head, all operators must study this manual and follow the safety warnings and instructions. Keep these instructions with the G5 Stitcher Head for future reference. If you have any questions, contact your local DeLuxe Stitcher Graphic Arts Representative or Distributor.

# THANK YOU FOR CHOOSING THE G5 STITCHER HEAD FOR YOUR BINDING NEEDS. 



## Specifications

Weight
Shipping Weight 8.0 lbs (3.6 kg)
Physical Dimensions
Height 10-3/4" (26.3 cm) Width ..... 2" ( 5.1 cm )
Stitching Capacity Two Sheets to 5mm (3/16")
Wire Type ..... 25 round ( 0.52 mm max)
Crown Sizes 1/2" (12mm), 13/64" (5mm) Loop
Minimum Head Center ..... 1-1/2" (39mm)
Stitches Per Hour ..... 10,000 max.
Replacement for: DeLuxe Stitcher 26/26D heads as well as Hohner 43/6, 48/5, 52/8 and55/7 heads and Acme, Champion, Interlake, ISP and Magnatek heads

## Dimensions



## Installation

## Contents

- G5 Watkiss Edition Manual
- Bag of Tools with $2.0 \mathrm{~mm}, 3.0 \mathrm{~mm}$ \& 7.0mm Open End Wrenches
- T-Handle Hex Head Wrench - 4 mm
- Head Mounting Key
- Clincher Plate, Points, Slide, Nuts \& Studs
- Clincher Alignment Gauge
- Wire Guide Spring and Wire Anti-Backup Unit
- Manual Feed Gear Tool
- Stitch Samples


Figure 1 - Parts Package Contents

## Assembly (Figures 2-4



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

## Mounting (Figures 3)



Figure 3 - Mounting the Head

## Wire Threading (Figures 4 \& 5)



## Adjust the Length of the Stitch Leg (Figure 6)

Note: Any movement of the Cutter Box to the left must be accompanied by a clockwise adjustment of Adjustment Knob. Conversely, any adjustment to the right should be accompanied by a counter-clockwise adjustment of the same.

G50119A Disengage the Feed Gears when making adjustments


Figure 6 - Adjusting the Stitch Leg

Make sure all guards are in place
$\triangle$ WARNING before operating the stitcher head

## Aligning the Clincher Plate (Figure 7)



Figure 7 - Clincher Plate Alignment

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

## Lubrication (Figures 8)



## Rotating Replacement Parts (Figures 9 \& 10)



Figure 9 - Rotating the Cutters


Figure 10 - Rotating the Driver

## Compression Adjustment (Figure 11)

## AWARNING

Compression is set at the factory and should not need any adjustments beyond what is stated below.


## Cleaning

Routine cleaning is important for the maintenance of your G5 Head. Blow off dust, dirt and build-up with compressed air at every Spool changes, including:

- Large Feed Gear Assembly (G50110A):

Remove and wash in a petroleum-based, oil-dissolving solvent, dry and repack the Feed Gear with any general Lithium-based light weight Grease.

- Anywhere that dust, oil, pieces of wire and/or paper have built up:

For example, around the Clincher Points and by the Forming Pin Cam (G50117). Remove the Wire Holder and blow clean with pressurized air.

The Head should be refurbished every one million stitches.

## Troubleshooting (Figure 22)



PROBLEM: Leg[s] Buckled
SOLUTION: If the ends of an unformed piece of wire are not smooth, the Wire Cutters are worn. Check for wear and rotate or replace if needed. Make sure the Cutters are aligned properly. Make sure the correct wire size is being used and that the wire is straight.


## PROBLEM: Corner Buckled

SOLUTION: Check the Driver for a chipped corner and rotate or replace it if needed. Align the Wire Holder. Straighten wire. Check the tensile strength of the wire or use thicker wire.


PROBLEM: Clinch Too Loose
SOLUTION: The Clincher Points are too low and need adjusting. The compression of the stitcher machine is insufficient and needs to be increased. The eccentric on the Driving Slide Assembly needs to be adjusted.


PROBLEM: Left Leg Too Short / Right Leg Too Long
SOLUTION: Adjust the position of the Cutter Block Assembly by moving it away from the Head.

PROBLEM: Left Leg Too Long / Right Leg Too Short SOLUTION: Adjust the position of the Cutter Block Assembly by moving it towards the Head.


PROBLEM: Staple Legs Too Long or Too Short
SOLUTION: Correct the overall wire draw by adjusting the Feed Rack Adjustment Knob.


PROBLEM: Legs are Spread or Contracted
SOLUTION: Straighten the wire. Replace worn Bender Bars.

PROBLEM: Legs Stray Forward or Backward Consistently
SOLUTION: The Clincher Points are not aligned properly front to back.
Straighten the wire.


PROBLEM: Stitch Stray Randomly In and Out and Front to Back
SOLUTION: Straighten the wire. Make sure the Cutters are aligned properly. Check the tensile strength of the wire or use thicker wire.

PROBLEM: Weak crown, crown breaks off after stitch
SOLUTION: Align the Wire Holder with the grooves in the Bender Bar. Check the tensile strength and size of the wire being used.


NO STITCH

NO STITCH MADE


PROBLEM: Wire jam
SOLUTION: Be sure the Cutter Operating Lever moves freely. Add oil to Pivot Pin if necessary. Readjust Fixed Wire Cutter. Make sure cutters are sharp. Inspect and rotate as required.

## MADE

PROBLEM: No wire being drawn
SOLUTION: Make sure the Feed Release Cam is turned to the "on" position and the Feed Gears engaged.

PROBLEM: Dropped stitches
SOLUTION: (Refer to illustration at the left and Fig. 6)

1. Pull the Wire Holder away from the Head to remove any wire that may already be loaded.
2. Move the Cutter Box all the way to the right.
3. With the Feed Gears engaged, cycle the machine, then pull the Wire Holder out away from the Head to remove the wire.
4. Cycle the machine again and measure the length of wire protruding past the right side of the Wire Holder. This length should be 6mm. If the length is not 6 mm , then increase or decrease the wire draw with the Adjustment Knob [G20245W].
5. Pull the Wire Holder out away from the Head to remove the wire.
6. Repeat the previous 2 steps until the wire protrudes 6 mm past the Wire Holder.
7. Refer to Fig. 6 to adjust the location and size of the gap.

## G5 Stitcher Head




## Head Mounting



## Bonnet—Sub-Assembly \#1



## Bonnet—Sub-Assembly \#1



## Driver and Feed Slide Assemblies






## Part / Number Description Cross-Reference

| A9086JA | Clincher Plate Assy.-Thick | 1 | G50111A | Feed Pinion Assembly |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G20121 | Feed Release Plunger | 1 | G50112 | Small Feed Gear | 1 |
| G20140 | Follower Ball Bearing | 2 | G50114 | Feed Gear Pin | 1 |
| G20165 | Driving Slide Spring | 1 | G50117 | Forming Pin Cam | 1 |
| G20169B | Driving Slide Plunger Screw Ecc. | 1 | G50119A | Feed Release Handle Assembly | 1 |
| G20179 | Screw M $3 \times 0.5 \times 4$ | 1 | G50120 | Feed Release Handle Bushing | 1 |
| G20190 | Screw M $3 \times 0.5 \times 10$ | 2 | G50126 | Screw M5x0.8×25 | 1 |
| G20191 | Screw M4x0.7x8 | 4 | G50127 | Feed Rack | 1 |
| G20226 | Hex Nut M4x. 7 | 1 | G50128 | Pinion Washer | 1 |
| G20233 | Cutter Operating Lever Roller | 1 | G50129 | Large Feed Gear Washer | 1 |
| G20236 | Tube Pivot Screw | 1 | G50130 | Feed Adjustment Block | 1 |
| G20241 | Screw M4x0.7x6 | 2 | G50131 | Feed Slide | 1 |
| G20272 | Screw M5x0.8×12 | 1 | G50132 | Feed Lever | 1 |
| G20274 | Hex Jam Nut, M6x1 | 1 | G50132A | Feed Lever Assembly | 1 |
| G20275 | Ball Spring Plunger | 1 | G50135 | Wire Holder Pivot Pin | 1 |
| G20287 | Wire Oiler Felt Spring | 1 | G50136 | Feed Gear Bracket | 1 |
| G20290 | Flat Washer, M5 | 2 | G50137 | Feed Gear Clutch | 1 |
| G20292 | Wire Oil Felt, Washer | 1 | G50138 | Feed Pinion Bearing | 2 |
| G20293 | Wire Oiler Felt | 1 | G50141 | Wire Guide Bar | 1 |
| G20293B | Wire Oiler Felt, Thin | 1 | G50142 | Screw M $3 \times 0.5 \times 6$ | 1 |
| G20297 | Screw M6x1.0×40 | 1 | G50143 | Pivot Block | 1 |
| G20298 | Nylock Lock Nut, M6x1 | 2 | G50144A | Middle Wire Tube Assembly | 1 |
| G20360 | Hex Key Wrench 3.0 mm | 1 | G50145B | Moving Cutter | 1 |
| G20364 | Open End Wrench 7.0mm | 1 | G50147BA | Bender Bar | 1 |
| G20374 | Hex Key Wrench 2.0 mm | 1 | G50147BAA | Bender Bar Assembly | 1 |
| G20515 | Dowel Pin M6x14 | 1 | G50148 | Bender Bar Friction Plate | 1 |
| G20520 | Ribbed Lock Washer M6 | 1 | G50151 | Driver Bar | 1 |
| G20522 | Screw M6x1.0×5, Nylon | 1 | G50152 | Driver-25 Wire | 1 |
| G20573 | Feed Rack Adjustment Knob | 1 | G50153 | Driver Retaining Screw | 2 |
| G20578 | Rack Adjustment Knob Detent | 1 | G50159B | Friction Plug | 1 |
| G20579 | Screw M4x0.7x6 | 2 | G50160B | Bender Bar Friction Spring | 1 |
| G20589 | Screw M4×0.7x10 | 1 | G50161B | Friction Plug Bushing | 1 |
| G20615 | Screw M5x0.8x8 | 1 | G50162B | Driving Slide | 1 |
| G50100A | Bonnet Assembly - G5 | 1 | G50162CA | Driving Slide Assembly | 1 |
| G50101 | Clamp Block | 1 | G50163 | Cutter Operating Cam | 1 |
| G50102 | Mounting Block - Keyed | 1 | G50164C | Plunger | 1 |
| G50110 | Large Feed Gear | 1 | G50169 | Driving Slide Eccentric | 1 |
| G50110A | Large Feed Gear Assembly | 1 | G50170 | Hex Nut, M10 |  |

## Part / Number Description Cross-Reference

| G50171 | Screw M6x1.0x6 | 1 | G50368W | Feed Release Handle Cap-Orange | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G50174 | Feed Rack Adjustment Stud | 1 | G50383B | Screw M3x0.5x6 | 7 |
| G50181W | Upper Wire Tube | 1 | G50391 | Cutter Box Mounting Plate | 1 |
| G50182 | Feed Gear Plate | 1 | G50394 | Flat Washer M8 | 4 |
| G50183 | Wire Holder Retaining Spring | 1 | G50397 | Shoulder Bolt M8x20 | 1 |
| G50186 | Feed Gear Friction Spring | 1 | G50399 | Screw M3x0.5x8 | 2 |
| G50187 | Feed Gear Friction Pad | 1 | G50431 | Screw M $3 \times 0.5 \times 6$ | 1 |
| G50189 | Screw M $3 \times 0.5 \times 10$ | 1 | G50559 | Wire Holder | 1 |
| G50197A | Cutter Box Assembly | 1 | G50559A | Wire Holder Assembly | 1 |
| G50198 | Cutter Operating Slide | 1 | G50604 | Cutter Box Guide Plate | 1 |
| G50199 | Lower Wire Tube | 1 | G50617 | Wire Holder Retain. Spring Washer | 2 |
| G50200 | Fixed Wire Cutter | 1 | G50646 | Cutter Box Eccentric Bearing | 2 |
| G50206 | Wire Straightener | 1 | G50665 | Wire Holder Adjustment Screw | 1 |
| G50210 | Cutter Operating Spring | 1 | G50666 | Clincher Alignment Gage, G5 | 1 |
| G50223 | Dowel Pin M3x6 | 4 | G50695 | Screw M6x1.0×20 | 1 |
| G50228A | Manual Feed Gear Tool | 1 | G50703 | Feed Lever Spring Screw | 1 |
| G50230 | Cutter Operating Lever | 1 | G50705 | Shoulder Screw M6x8 | 2 |
| G50230A | Cutter Operating Lever Assembly | 1 | G50708 | T-Handle Hex Key Wrench | 1 |
| G50232 | Dowel Pin | 1 | G50710 | Clincher Plate Nut | 2 |
| G50235 | Dowel Pin M5x12 | 1 | G50711 | Cutter Box Ecc. Screw Spring | 2 |
| G50237 | Cutter Box Adjusting Eccentric | 1 | G50713 | Hex Jam Nut M5 | 1 |
| G50244 | Tube Clip | 1 | G50714 | Feed Lever Spacer | 1 |
| G50245W | Cutter Box Adjustment Knob | 1 | G50716 | Mounting Block Handle | 1 |
| G50252 | Wire Hook | 1 | G50717 | Hex Nut M3x0.5 | 2 |
| G50253 | Wire Hook Spring | 1 | G50718 | Feed Gear Spring | 1 |
| G50254 | Wire Holder Spring Screw | 1 | G50719 | Lower Tube Clip | 1 |
| G50255 | Dowel Pin M $3 \times 10$ | 1 | G50720 | Screw M $3 \times 0.5 \times 6$ | 9 |
| G50256 | Scale | 1 | G50721 | Screw M $3 \times 0.5 \times 10$ | 6 |
| G50262A | Small Feed Gear Shaft Assembly | 1 | G50722 | Feed Release Handle Stop | 1 |
| G50264 | E-Ring 6 mm | 2 | G50800A | Wire Anti-Back Up Unit - M6 Tube | 1 |
| G50266 | Dowel M5×10 | 1 | 042001 | Screw M5x0.8x8 | 2 |
| G50268 | Feed Lever Spring | 1 | 071004 | Lock Washer Ribbed | 17 |
| G50286WA | Wire Guide Spring Asy-Watkiss | 1 | 2215 | Driving Shaft Connector | 1 |
| G50320BA | Driving Slide Assembly-Crank Drive | 1 | 9083A | Clincher Point - Thick, Round | 2 |
| G50321 | Crank Link Screw | 1 | 9086JA | Clincher Plate - Thick, Round | 1 |
| G50331BA | Forming Pin Assembly | 1 | 9088 | Clincher Plate Binder Bolt | 2 |
| G50366 | Bonnet Clamp Pin | 1 | 9093A | Clincher Slide - Thick | 1 |
| G50367 | Head Mounting Bolt, M8 | 1 |  |  |  |

DeLuxe Stitcher Company warrants to the original retail purchaser that this product is free from defects in material and workmanship and agrees to repair or replace, at DeLuxe Stitcher's option, any defective product within 90 days from the date of purchase. This warranty is not transferable. It covers damage resulting only from defects in material or workmanship and does not cover conditions or malfunctions resulting from normal wear, neglect, abuse or accident.

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To obtain warranty service you must return the product, at your expense, together with proof of purchase to an authorized DeLuxe Stitcher Company Graphic Arts Dealer.

Always use genuine DeLuxe Stitcher parts. When ordering parts, please identify the part number, the part name, the wire size and crown size of your Stitcher.

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## NOTES

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