

COMPANY INC

| Machine Serial Number : | |
|-------------------------|--|
| Head Serial Number: | |
| Date Purchased: | |

Model M30 Stitchers

OPERATION AND MAINTENANCE MANUAL

M30-AST Stitcher......115V and 60HZ M30-BST Stitcher.....230V and 50HZ

Before using this Stitcher, all operators must study this manual and follow the safety warnings and instructions. Keep these instructions with the M30 Stitcher for future reference. If you have any questions, contact your local DeLuxe Stitcher Graphic Arts Representative or Distributor.



THANK YOU FOR CHOOSING THE

MODEL M30

FOR YOUR BINDING NEEDS.

WARNING!

Model M30 Stitchers

Operators and others in the work area should always wear safety glasses to prevent serious eye injury from fasteners and flying debris when loading, operating, or unloading this machine.

Do not operate this stitcher without all guards in place. The stitcher will not operate without the front guard closed properly. Do not modify the guards in any way. Always disconnect the power supply before removing any guards for servicing.

Never operate the machine with wire feeding through the head unless there is stock above the clinchers, otherwise serious damage may result.

Always turn power off when making adjustments. Always disconnect the power supply before any disassembly work.

Table of Contents

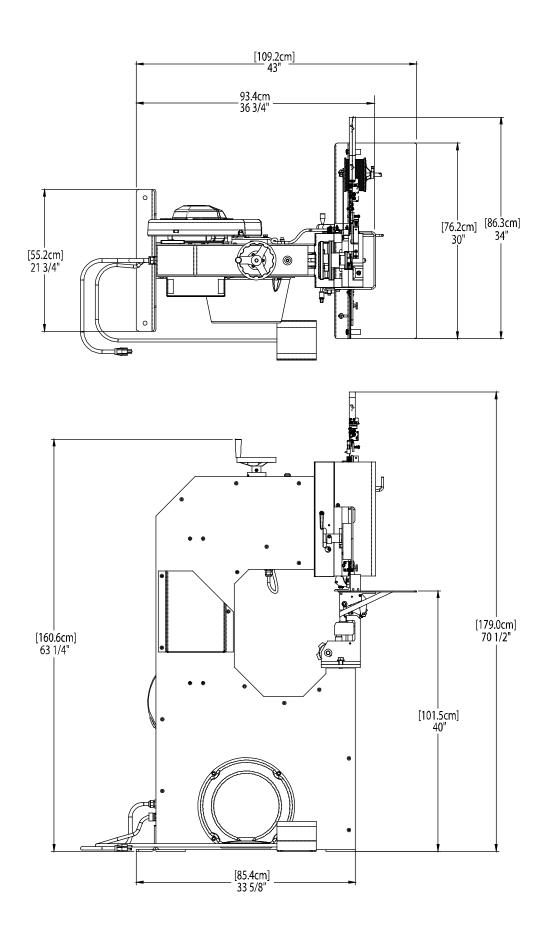
| Specification | S | 4 |
|----------------|---|----|
| Recommend | ed Wire Sizes | 6 |
| Introduction | | 7 |
| Installation | | 8 |
| | Assembly | 9 |
| Operating Ad | ljustments | |
| | Wire Threading | 13 |
| | Wire Straightening | 14 |
| | Adjusting the Machine for Thickness of Work | 15 |
| Adjustments | and Settings | |
| | Adjusting the Left Leg | 15 |
| | Adjusting the Clincher Points | 16 |
| | Adjusting the Machine for Stab Stitching | 18 |
| Maintenance | | |
| | Lubrication | 19 |
| | Troubleshooting | 20 |
| | Cycling Machine Manually | |
| | Adjusting the V-Belt | |
| | Cleaning | |
| | Disassembling the Head | |
| | Ordering & Replacing Spare Parts | |
| | Clutch-Brake Maintenance | 33 |
| Assembly Dr | awings | 38 |
| Part Number | / Description Cross-Reference | 58 |
| Registration | Card | 65 |
| Wear/Replac | cement Parts | 66 |
| Warranty | | 67 |
| Declaration of | of Conformity | 68 |

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

AWARNING

Specifications

| Weight |
|--|
| Shipping Weight |
| Wire Spool 5 lbs. [2.3 kgs] or 10lbs. [2.6 kgs] optional |
| Foot Switch 4.5 lbs. [2.0 kgs] |
| Table |
| Skid Size |
| Physical Dimensions |
| Height |
| Width |
| With Table 30" [76.2 cm] |
| Without Table 21 3/4" [55.2 cm] |
| Depth |
| Stitching Capacity |
| Wire Types 20-28 Round |
| |
| Γhroat Depth |
| Flat or Saddle |
| Side Stops |
| Power Requirements |
| M30-AST |
| M30-BST |
| Motor Size |
| Minimum Recommended Circuit Capacity |
| M30-AST |
| M30-BST |
| Cycle Speed |



Recommended Wire Sizes (Figure 1)

The wire sizes that can be used on the M30 as well as recommended uses are listed below. Note that when size changes, several parts on the Head will have to be changed to accommodate the wire size change. Instructions for changing these parts are detailed later in this manual. Wire gauges smaller than the specific size for which the head is set can still be used, but the maximum capacity for the machine will not be reached. For example, if the Head is set for 19x21-1/2 gauge wire, it will still function properly with 20x24 gauge wire, but the stitching capacity will drop. Please refer to Figure 6 stitching capacities of different wire gauges.

Two types of Clincher Points are available for the M30. When running round wire, use the Clincher Points with part number G40955R. For flat wire, use the Clincher Points with part number G40955F.

When stitching stock over 20# it is possible that high tensile wire will be required, which is available in 21x25, 20x24, 19x21-1/2, and 18x20 flat wire sizes. Note that high tensile wire may cause increased wear on certain parts. For any stock over 33# or coated, it is recommended that 19x20-1/2 or 18x20 flat wire be used. Refer to Figure 6 for a general overview of suggested wire sizes to use for specific stitch capacities.

| Wire Gauge | Type of Work | 20# Stock | | |
|-----------------------------------|--------------------------------------|-----------------------------|--|--|
| Ir | Install G40955R Clincher Points for: | | | |
| 25 Round | Light Flat or Saddle | 2-20 Sheets | | |
| 24 Round | Light Flat or Saddle | 2-30 Sheets | | |
| 23 Round | Light Flat or Saddle | 2-60 Sheets | | |
| 21 Round | Medium Flat or Saddle | e 2-80 Sheets | | |
| 20 Round | Medium Flat or Saddle | e 20-100 Sheets | | |
| Iı | Install G40955F Clincher Points for: | | | |
| 21 x 25 Flat | Medium Flat Only | Over 50 Sheets 1/4"-3/8" | | |
| 20 x 25 Flat | Heavy Flat Only | Over 50 Sheets 1/4"-1/2" | | |
| 20 x 24 Flat | Heavy Flat Only | Over 50 Sheets 1/4"-3/4" | | |
| 19 x 21 1/2 Flat | Heavy Flat Only | 1/2"-7/8" and Heavy Paper | | |
| 18 x 20 Flat | Heavy Flat Only | 7/8"-1-1/4" and Heavy Paper | | |
| Figure 1 - Recommended Wire Sizes | | | | |

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

AWARNING

Introduction

The DeLuxe Stitcher M30 Stitcher Machine is a single-head stitcher designed to accommodate both light and heavy-duty work, stitch both flat and saddle work and can reliably stitch any thickness of stock from 2 sheets to 1-1/4" (30mm). It even stab stitches up to 2" (50mm) of material. The recommended wire sizes to be used on the M30 are: 20 to 25 gauge round wire and 20x24, 20x25, 21x25, 19x21-1/2 and 18x20 flat wire.

The M30 is easily adjusted from saddle work to flat work by tilting the work table. An adjustable work guide and adjustable work stops are easily attached to the work table and provide for accurate registering of flat work for uniformly spacing the staples. In addition a work table extension is available to accommodate larger sizes of work to be stitched. The M30 is the most versatile of all single-head machines.

Because of the length of the work table, the M30 must be secured to the floor to meet CE stability requirements. Sound level readings at the normal operator position are approximately 70 dB.

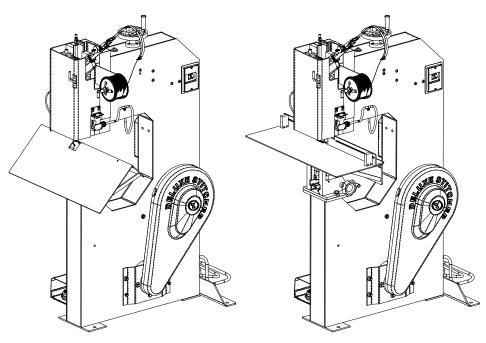


Table Set for Saddle Work

Table Set for Flat Work

Installation

Pre-Inspection

Carefully inspect the condition of the shipping container before unpacking your M30 Stitcher. If the container is broken, damaged or has been tipped over and there is evidence that the machine may be damaged, immediately notify the carrier who delivered the machine and the DeLuxe Stitcher Graphic Arts Representative from whom the M30 was purchased.

Inspection

As you carefully unpack the machine, check to make sure all components were delivered and are in good working order. Refer to **Figures 1 to 3** in this manual for reference to the following pieces:

- M30 Manual
- Complete Work Table Assembly (G40964A), the Work Guide (G40973), and two of each of the following: Large Work Stop (7423C) with Thumb Screw (63), Work Guide Screws (63), Flat Washers (PW14)
- Table Pivot Shaft (G40962)
- Upper Wire Straightening Bracket (G40767AA) and Wire Guide Spring (G40286A)
- Assembled Wire Spool Mounting Bracket (G40520) with Spool Stud (7693), Plastic Washer (M11009), Tension Spring (7690), Set Collar (7691) with Thumb Screw (P2731), 9/16" Washer (PG10271), Spool Washer (2245), 3/8" Washer (PW38), and Hex Nut (HN3816)
- Lower Wire Tube (G40599A)
- Bag of tools: 3mm Hex Key Wrench (G20360), 7mm Open End Wrench (G20364)

Pre-Installation

Please take a few moments to fill out the registration card prior to beginning installation.

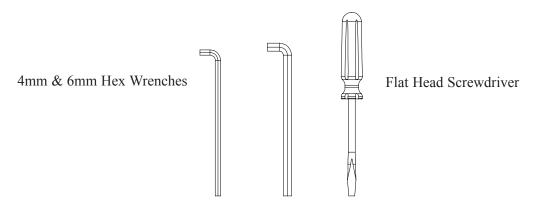
IMPORTANT: Make sure that the Shipping Tab (G40978) is removed and replaced with the Clincher Plate (G40954) before proceding to the next step. See Instruction Sheet (DBSM30UINST) in your included packet.

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

AWARNING

Assembly (Figures 2-7)

Tools required:



- 1. Remove Face Guard by lifting to disconnect it from Safety Switch and then pulling it away.
- 2. Remove screws & washers from shown locations.

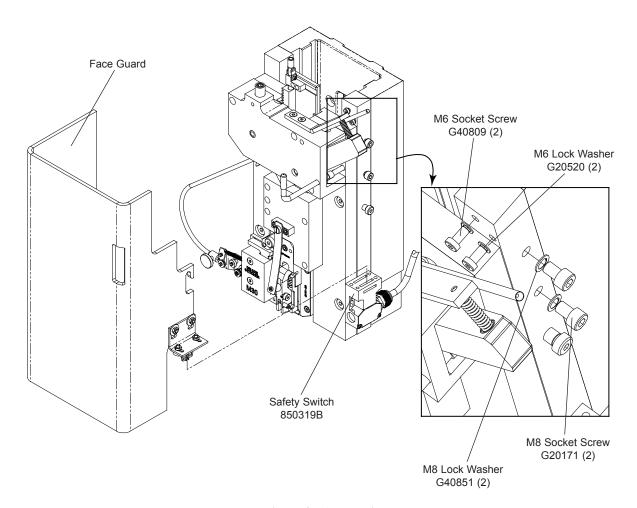


Figure 2 - Assembling

- 3. Attach the Upper Wire Straightening Bracket and the Wire Spool Mounting Bracket.
- 4. Attach the Spool Stud to the Bracket.
- 5. Install Wire Spool. Secure with the Set Collar and Thumb Screw.
- 6. Re-attach the Face Guard.

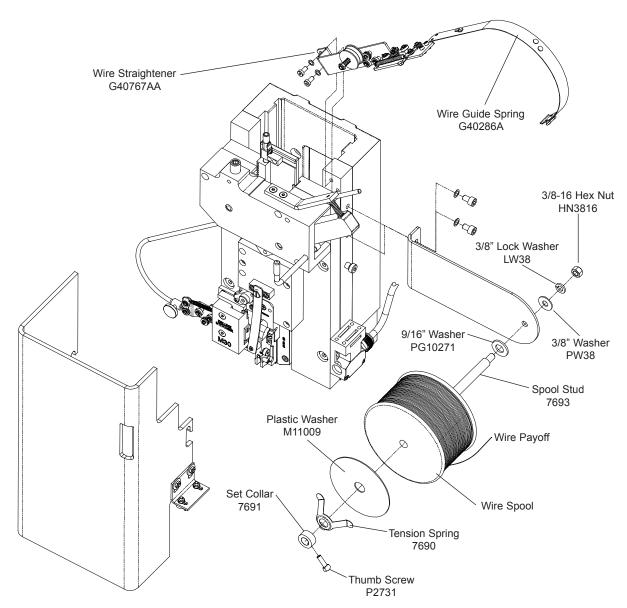
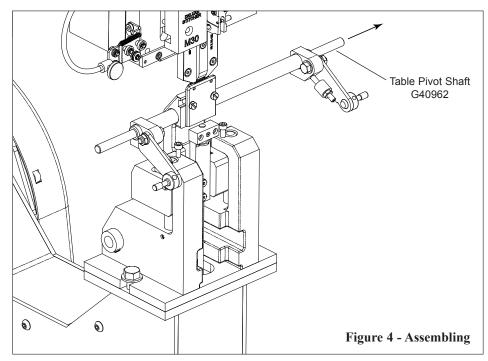


Figure 3 - Assembling

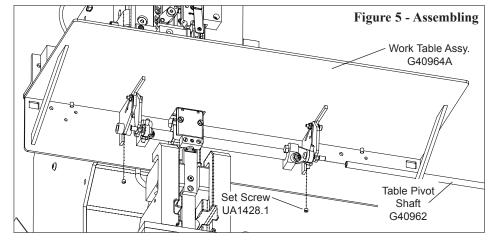
Always disconnect the power supply before making any adjustments or servicing the stitcher.

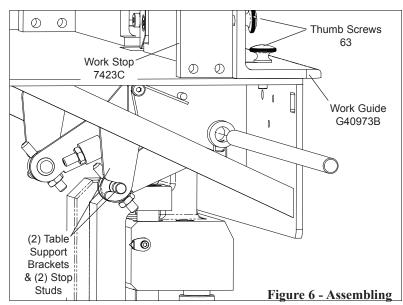
MARNING



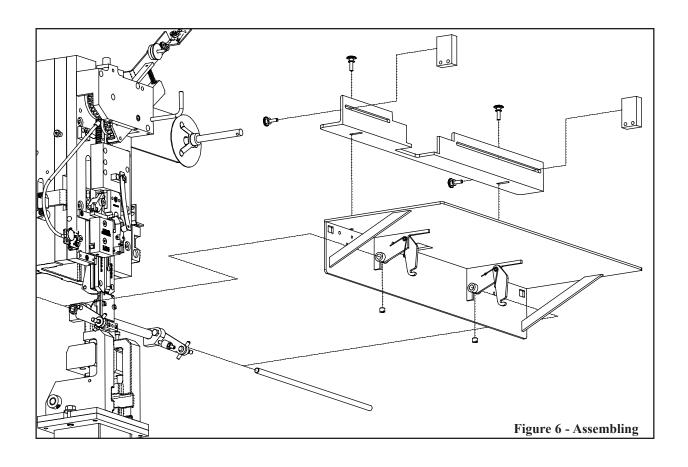
7. Prepare Work Table for install by disassembling the Work Guides.
8. Remove Table Pivot Shaft.

9. Install Work Table.





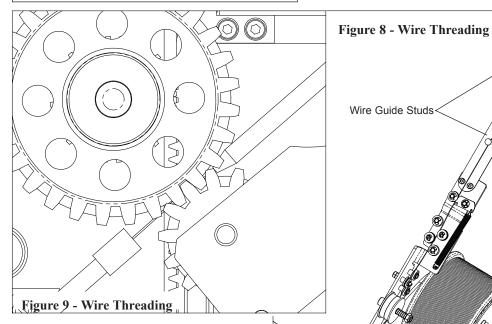
- 10. Tighten the Set Screws.
- 11. Attach the Work Guide and Work Stops as seen in Fig. 6. (NOTE: Back Guide can only be used when stitching flat work.)



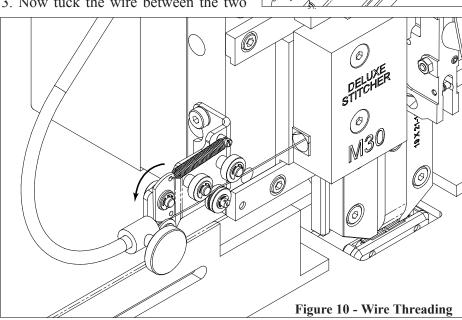
Always disconnect the power supply before making any adjustments or servicing the stitcher.

△WARNING

Wire Threading (Figures 8 - 10)



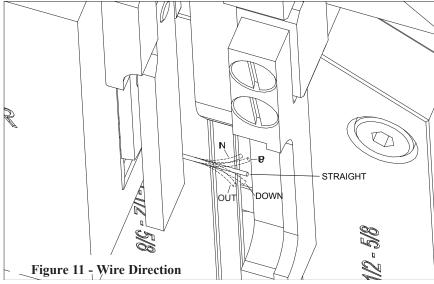
- 1. Pull wire off the spool and thread through the studs in the Wire Guide Spring Assy. (Fig. 8)
- 2. Continue between the Tension Pawl and its roller and through two sets of wire straightener rollers (Fig. 8). It may be necessary to turn the Adjustable Straightener Rollers to the full open position to make threading easier. (Figs. 12 & 13)
- 3. Now tuck the wire between the two



- Oiler Felts and on into the Upper Wire Tube Fig. 8).
- 4. With the Feed Release Handle in the off position, use a pair of plier to pull the wire past the Feed Gears and through the Lower Wire Tube (Fig. 9).
- Now 5. through the Tension Pawl, Straightener Rollers and finally into the Cutter Box.

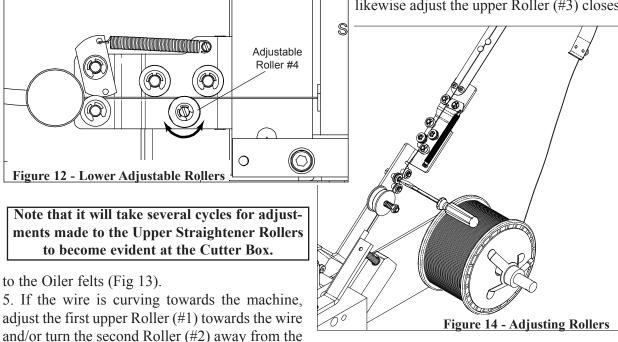
Wire Guide Studs

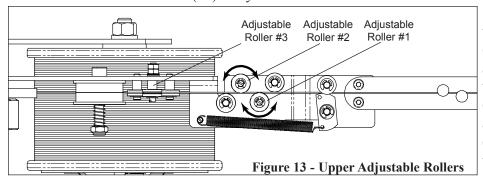
Wire Straightening (Figure 11-14)



- 1. Once through, turn each of the four Adjustable Straightener Rollers until they're just touching the wire.
- 2. Cycle the machine several times and notice which direction the wire is curving out of the Cutter Box (Fig. 11).
- 3. If curving up, adjust the Lower Straightener turning the Roller (#4) counter-clockwise until wire is emerging straight (Fig 12).

4. If not fully straight, likewise adjust the upper Roller (#3) closest



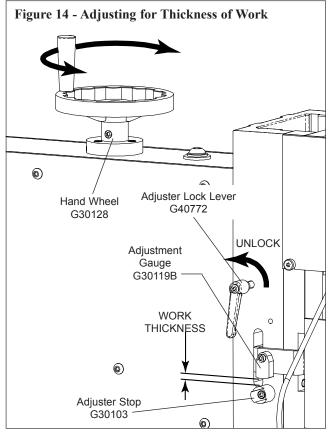


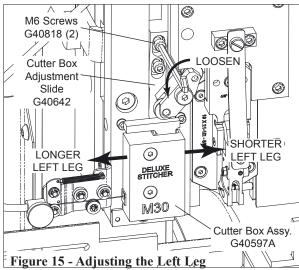
wire (Fig. 13).

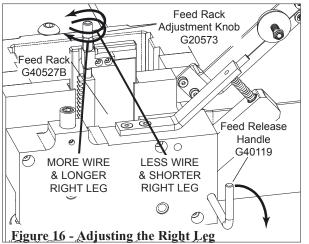
6. If the wire is turning away from the machine, turn the second Roller (#2) towards the wire and/or the first Roller (#1) away from the wire.

Adjustments and Settings

Adjusting for Thickness of Work & Legs (Figure 15-17)





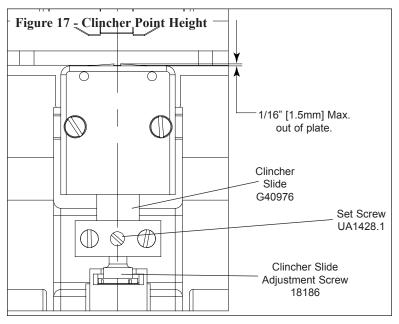


AWARNING

FAILURE TO UNLOCK lever prior to compression adjustment may result in internal damage to stitcher that will not be covered by warranty. Be sure to lock when adjustment is completed.

- 1. Unlock Adjuster Lock Lever by turning it counter-clockwise.
- 2. Using a sample of thickness, turn Hand Wheel clockwise until the Adjustment Gauge firmly clamps it in the work thickness area as shown in Fig. 15.
- 3. Back off with the Hand Wheel to release sample and then return to to it pre-release position.
- 4 Tighten Adjuster Lock Lever and test setting. Unlock and adjust with Hand Wheel to fine tune if stitch is too loose or tight and lock again.
- 5. To adjust left leg length (Fig. 16), loosen Cutter Box Adjustment Slide and move Cutter Box left or right. **NOTE: Adjustment should be minor.** Tighten, test and repeat if necessary.
- 6. To adjust the right leg length, disengage the Feed Gears by turning the Feed Release Hande and adjust with the Feed Rack Adjustment Knob (Fig. 17).
- 7. Engage, test and repeat as necessary.

Adjusting The Clincher Point Height (Figures 17)



- 1. With the Work Table in the flat work position, check the clinch by manually cycling the machine to the point of clincher activation.
- 2. Loosen the Set Screw and rotate the Clincher Slide Adjustment Screw to raise or lower the Clincher Points. Once set, tighten Set Screw.
- 3. Complete the cycle and test. Repeat if necessary.

Adjusting The Clincher Mount (Figures 18 & 19)

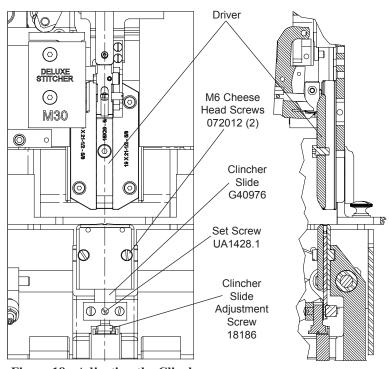


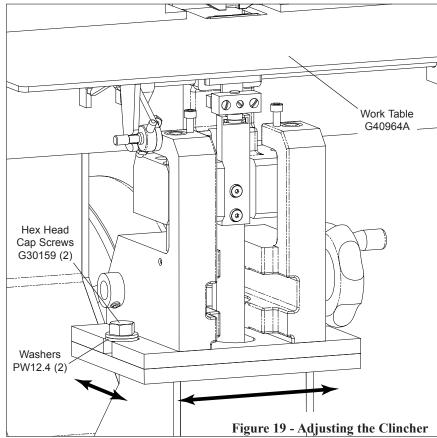
Figure 18 - Adjusting the Clincher

- 1. With the Work Table in the flat work position, check the clinch by manually cycling the machine to the point of clincher activation.
- 2. Loosen the Set Screw and rotate the Clincher Slide Adjustment Screw to raise or lower the Clincher Points. Once set, tighten Set Screw.
- 3. Complete the cycle and test. Repeat if necessary.
- If clinching properly, but legs are misaligned:(See warning below)
- 4. Align the Driver & Clinchers by loosening the (2) Hex Head Cap Screws.
- 5. Manualy cycle until until the Formers are near the top of the Clincher Plate. It is helpful to form a piece of wire so that it protrudes

<u>Warning!</u> This adjustment, if factory preset, should not be required unless Clincher Mounting is severely moved.

out past the Formers. (Best done when thickness is set to 1/4" [6mm])

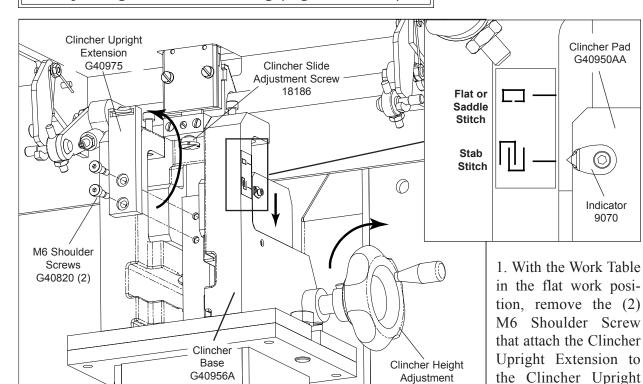
- 6. Move the Clincher Base Assy. until the front of Clincher Plate & Driver are centered and from the side the Former grooves and Driver are likewise. Tighten down when complete.
- 7. Very small additional adjustments are made by loosening the M6 Cheese head Screws and moving Clincher Plate to either side. This is method is employed primarily when Clincher Points have been changed to realign them with the Formers. (For left to right adjustment only.)

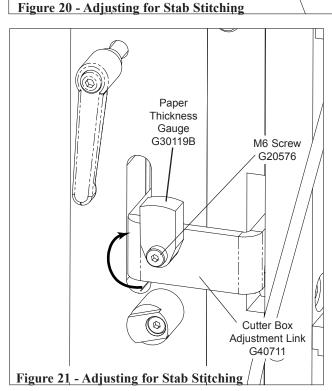


Always disconnect the power supply before making any adjustments or servicing the stitcher.

MARNING

Adjusting for Stab Stitching (Figures 20-21)





2. Disengage from the Clincher Slide Adjustment Screw and remove the Clincher Upright Extension.

Link Assy.

Wheel

G40959

- 3. Rotate it 180° (left-right, not top-over) and reattach.
- 4. Now lower the Work Table to the Stab Stitch position by turning the Clincher Height Adjustment Wheel counter-clockwise until the Clincher Pad Indicator moves to the Stab Stitch position.
- 5. Lastly, loosen the M6 Screw of the Paper Thickness Gauge and rotate 180°, then retighten.
- 6. Work thickness must now be set without the benefit of the Paper Thickness Gauge and as described previously.

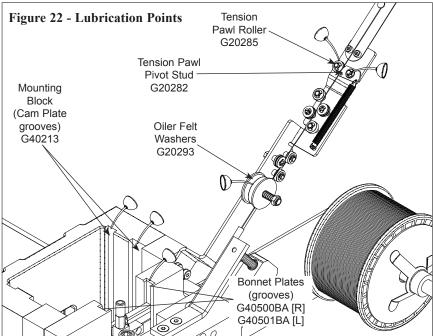
AWARNING

FAILURE TO REMOVE Clincher Slide & Upright Extension will cause serious damage to stitcher not covered by the warranty.

Maintenance

Lubrication (Figures 22-23)

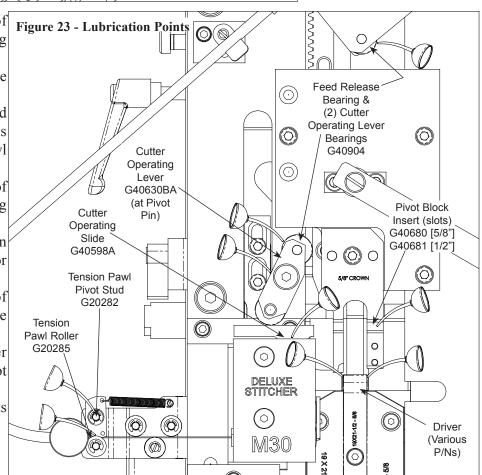
NOTE: Lubricate regularly instead of excessively.



Thoroughly oil the Felt Washer and for all else, use only one or two drop of any standard S.A.E. #10 oil in the areas shown. Excessive oiling produces oil spotting in the work. Wipe any excess oil. Lubricate as follows:

- 1. In the the Mounting Block, the grooves for the Cam Plates and
- 2. the grooves for the Crank Housing Slide Plate Assy.
- 3. In the Bonnet, the grooves for the Driving and Bending Slides.

- 4. The outside of both Cutter Operating Lever Bearings.
- 5. Each side of the Driver grooves.
- 6. Both the upper and lower Pivot Studs for the Tension Pawl Rollers
- 7. The front face of the Cutter Operating Slide.
- 8. The pivot slots in the Pivot Block for the Wire Holder.
- 9. The outside of the Feed Release Bearing.
- 10. The Cutter Operating Lever pivot area.
- 11. The Oiler Felts thoroughly.



Troubleshooting (Figure 24)

The following is a brief list of problems and solutions which should cover the majority of situations encountered when stitching with the M30. The quality and quantity of work that can be produced with the M30 Stitcher is dependent upon the operator making all adjustments as accurately as possible and carefully maintaining the machine. The cause of staple imperfections usually can be traced to inaccurate settings or normal wear of moving parts. In the event of problems of this nature occurring, the operator can, be referring to the troubleshooting chart, quickly locate the solution.

PROBLEM: The machine will not complete a cycle, under power or manually.

SOLUTION:

- 1. Make sure the compression setting is correct. If not turn the Hand Wheel (G30128) counter-clockwise to raise the Stitcher Head.
- 2. If the V-Belt is too loose, it must be tightened.
- 3. Make sure none of the Clutch Springs are broken and that the Clutch has not failed. If either is the case, the entire assembly.
- 4.Make sure the Safety Interlock Key (850343) on the plastic Head Guard (G40135) is in complete contact with the switch on the right side of the head.

PROBLEM: The stitch quality is poor.

SOLUTION:

- 1. Make sure the wire is feeding straight from the Wire Spool and through the Stitcher Head.
- 2. Make sure the compression setting is correct.
- 3. Make sure the Clincher Plate (G40952A) is lined up with the Driver, both side-to-side and front-to-back.
- 4. Make sure the Clincher Points (G40955R or G40955F) are not set too low or too high.
- 5. Make sure the left leg of the stitch is the same length as the right leg.
- 6. Check the following Head parts for wear: the Cutters (G40145 & G40600), Driver, Formers, Supporter (G40653A), and Wire Holder (G20659BA). Reverse or replace worn parts as necessary.
- 7. Make sure the Clincher Points are clear of debris and paper build-up.
- 8. Make sure the Clincher Roller Bearing (G40905), located inside the frame, is not worn or broken.

PROBLEM: Wire is dropped before it can be formed, is drawn in inconsistent lengths, or is jamming.

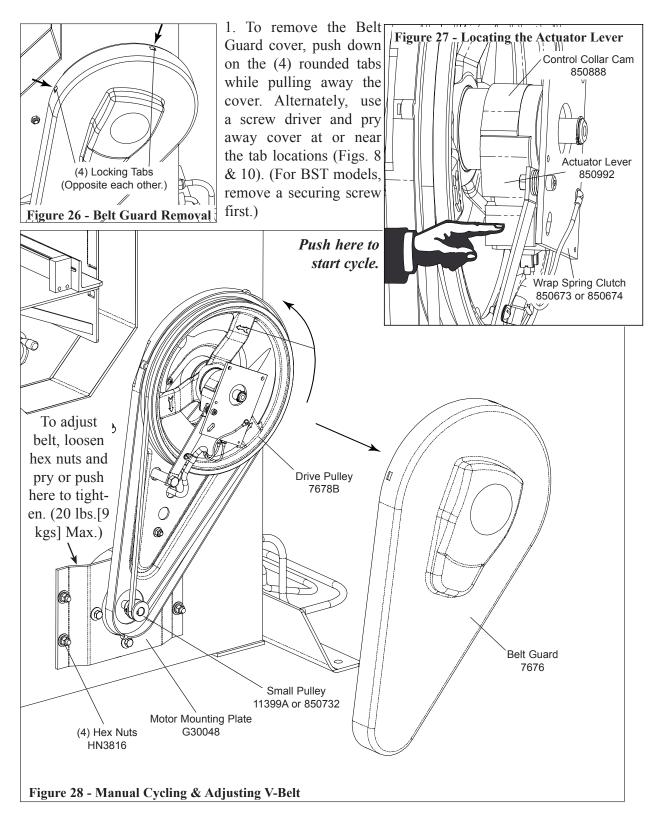
SOLUTION:

- 1. Make sure the wire is feeding straight from the Wire Spool and through the Stitcher Head.
- 2. Make sure the Clincher Points are clear of debris and paper build-up.
- 3. Check the following Head parts for wear: the Cutters (G40145 & G40600), Driver, Formers, Supporter (G40653A), and Wire Holder (G20659BA). Reverse or replace worn parts as necessary.
- 4. Verify that the Wire Holder is properly aligned with the grooves in the Formers.
- 5. Make sure the Tension Spring on the Wire Spool is not set too tightly.
- 6. Make sure the Feed Gear Friction Plug is exerting enough pressure on the Large Feed Gear. (Between
- 3 & 4 turns after contact is made).
- 7. Make sure there is enough tension on the Feed Lever Spring.

| | PROBLEM: Left Leg Short SOLUTION: Lengthen the left leg by loosening the two screws on the Cutter Box Adjustment Slide, and moving the Cutter Box to the left. |
|--|--|
| | PROBLEM: Left Leg Long SOLUTION: Shorten the left leg by loosening the two screws on the Cutter Box Adjustment Slide, and moving the Cutter Box to the right. |
| | PROBLEM: Corner Buckled SOLUTION: Check the Driver for a chipped corner and rotate or replace if necessary. |
| | PROBLEM: Leg(s) Buckled SOLUTION: Check the Wire Cutters for wear and rotate or replace if needed. |
| | PROBLEM: Crown Buckled SOLUTION: Check Supporter Spring tension. Check for correct wire size being used. Check for correct work thickness setting. |
| | PROBLEM: Stitch in Pieces SOLUTION: Clean the Wire Holder. If problem persists, file the forming corner of the Wire Holder slightly with a honing stone. Or replace the Wire Holder. |
| | PROBLEM: Corners of the Crown are Rounded SOLUTION: Replace the worn Wire Holder. |
| | PROBLEM: Loose Clinch SOLUTION: 1. Check for correct work thickness setting. Check and reset the Clincher Points height if necessary. Check Clincher Points and replace if worn. Check Clincher Slide and replace if worn. |
| | PROBLEM: Legs are Spread or Contracted SOLUTION: Readjust the Wire Straightener Eccentrics to improve straightness. Check the Wire Cutters for wear and rotate or replace if necessary. Check the Former grooves and replace if necessary. |

Figure 25 - Troubleshooting

Belt Guard Removal & Cycling Machine Manually / Adjusting the V-Belt (Figures 26-28)



- 2. To manually cycle the machine, first locate the Actuator Lever on the Wrap Spring Clutch and push it where shown (in Fig 9) to pivot it away from the Control Collar Cam. Rotate Drive Pulley (as shown by the arrows on it, see Fig. 10) for one cycle. Repeat as necessary.
- 3. To tighten the V-Belt, loosen (do not remove) the (4) Hex Nuts on the Motor Mounting Plate. Use a screwdriver as a lever between the frame and the Mounting Plate to move it down slightly. Be careful not to shift the Small Pulley out of position.
- 4. Once taut, tighten the Hex Nuts.

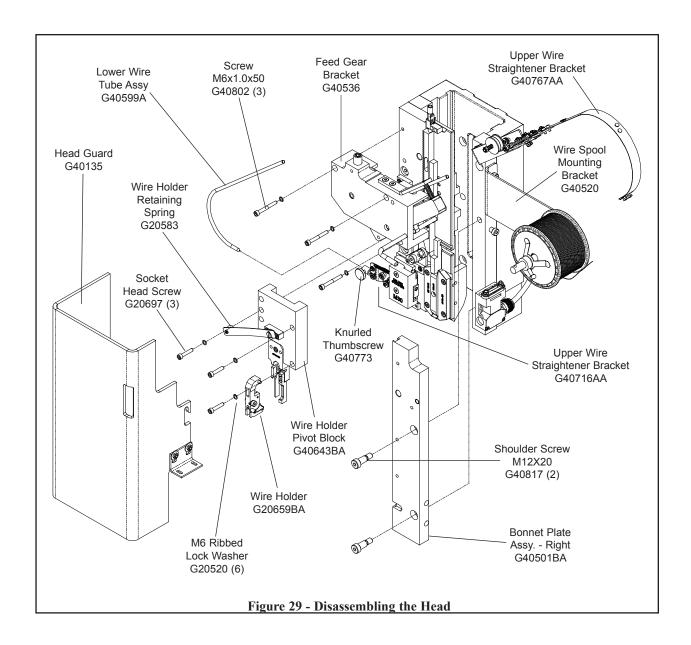
Cleaning

In addition to proper lubrication, routine cleaning is important for the maintenance of the M30 Stitcher Machine. The entire head should be torn down and rebuilt every 250,000 to 500,000 cycles. The following areas should be cleaned once a month:

- Large Feed Gear (G40510A) remove and wash in an oil-dissolving solvent; dry and relubricate the clutch and bearings. Use Isoflex NBU 15 Bearing Grease
- Anywhere that dust, oil or pieces of wire and paper have built up for example: around the Clincher Points and the Wire Straightener Rollers.
- Blow Head and Clinchers off daily with compressed air.

Head Disassembly (Figures 29 & 30)

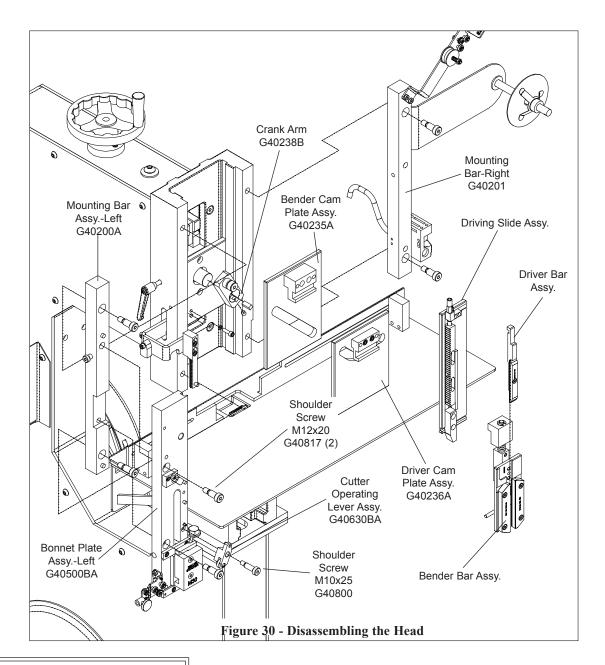
- 1. Remove the Head Guard by lifting to disengage Safety Interlock Key.
- 2. Clear away all remaining wire and perform a full manual cycle.
- 3. Swing Wire Holder Retaining Spring clear and remove the Wire Holder.
- 4. Loosen Thumb Screw and remove Lower Wire Tube.
- 5. Remove the screws holding the Pivot Block and Feed Gear Bracket and pull away. The Feed Gear Bracket may require a slight pivot downward to remove.
- 6. Remove the Safety Interlock Switch followed by the Right Bonnet Plate Assy.
- 7. The Driving Slide and Bender Bar Assemblies can now be removed by sliding out to the right.
- 8. Remove the Cutter Operating Lever Assy., the Cutter Box Adjustment Slide and then the Left Bonnet Assy.
- 9. If mounted, remove the Wire Spool and then detach the Wire Spool Mounting Bracket.
- 10. Disconnect the Upper Wire Straightening Bracket Assy. and then remove the Left and Right Mounting Bars.
- 11. The Bender and Driver Cam Plate Assemblies can now be removed by pulling them forward and off the Crank Bushings.
- 12. Now remove the Cutter Operating Connecting Link, sliding it out the side of the machine.
- 13. Loosen the Set Screw securing the Crank Arm and pull it and the Key off the Head Drive Shaft.



CAUTION: The Supporter is under tension and will spring out towards the front of the Head as these parts are removed. Keep fingers away from the Supporter to avoid injury.

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

AWARNING

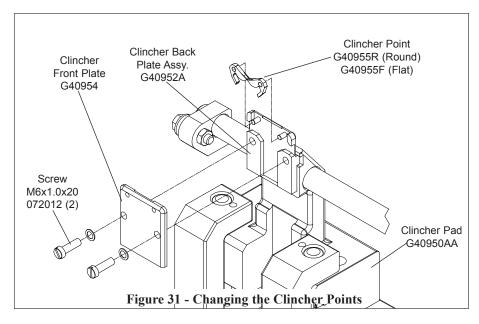


Ordering Spare Parts

In time, you will need to replace some parts in the M30 Stitcher Machine. To do this locate the DeLuxe Stitcher part number in one of the following diagrams and contact your Graphic Arts Representative to order the replacement by part number, description and quantity.

Replacing Spare Parts

The operator should periodically inspect all moving parts for signs of wear and when required, replace the worn parts. The following are some of the more common wear parts which will need to be removed and replaced in your M30 as well as step-by-step instructions to replace them.



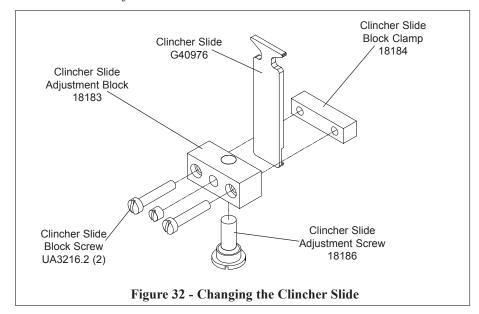
Removing and Replacing the Clincher Points and Clincher Slide

The Clincher Points are not reversible as with other styles, but are easy to replace.

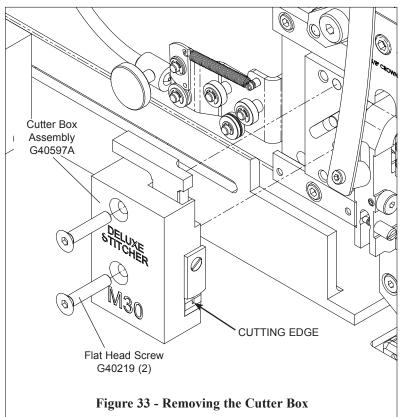
- 1. Free the entire Clincher Plate Assy. with the Clincher Slide by removing the screws securing it to the Clincher Pad.
- 2. Lift off the Clincher

Front Plate to reveal the Clincher Points.

- 3. Remove the worn Clincher Points.
- 4. To replace the Clincher Slide, loosen the two Clincher Slide Block Screws that connect the Clincher Slide Block Clamp to the Clincher Slide Adjustment Block.
- 6. Remove the old Clincher Slide and replace with a new one.
- 7. Retighten the Clincher Slide Block Screws.
- 8. To replace the Clincher Points, slide the new ones over the pins in the Clincher Back Plate Assy. making sure the large radius on the Points rests on the top of the Clincher Slide.
- 9. Replace the Clincher Front Plate.



- 10. While holding the entire assembly, move the Clincher Slide up and down a few times to ensure everything is moving freely and does not lock up.
- 11. Reattach the Clincher Plate Assy. to the Clincher Pad making sure the bottom of the Adjustment Screw rests in the cutout of the Clincher Upright Extension.
- 12. Insert the screws and lock washers and tighten.
- 13. Check the alignment of Clincher Plate Assy. with the Formers and adjust if necessary.
- 14. Cycle the machine manually to ensure the Clincher Point height prior to beginning work.



Adjusting and Replacing the Cutters

Cutters become worn or chipped and must be adjusted or replaced. The Fixed Cutter must be replaced when worn. The Moving Cutter can be adjusted 3 or 4 times before needing replacement. To adjust or replace Cutters:

1. Remove the Cutter Box Assy as shown in Fig. 33.

Moving Cutter

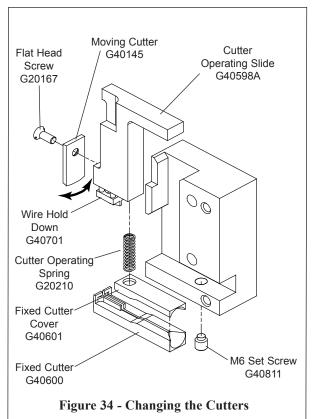
- 2. To adjust the Moving Cutter, first remove the Cutter Operating Slide. Note: The Cutter Operating Spring is compressed, take care when removing the Cutter Operating Slide.
- 3. Loosen the screw holding the Moving Cutter, rotate the Cutter so

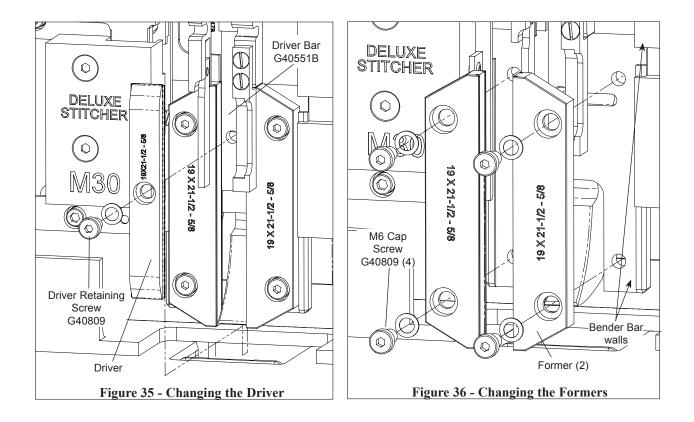
that a new cutting edge will cut the wire and then tighten the screw. (To prevent the Cutter from spin-

ning as you tighten, rest the side of the Cutter on a flat surface and while holding the Cutter Operating Slide, tighten the screw.

Fixed Cutter

- 4. To replace the Fixed Cutter, loosen the Set Screw below it and be wary of the Cutter Operating Spring, pull it out along with the Cutter Operating Slide.
- 5. Separate and retain all the other parts, replacing only the worn Fixed Cutter with a new one.
- 6. Reassemble all the parts and place them back into the Cutter Box. The spring will have to be compressed while doing this. Also ensure that the Wire Hold Down settles in the groove of the Fixed Cutter.
- 7. Adjust the Fixed Cutter by holding down the Cutter Operating Slide in the cutting position and lightly push the Fixed Cutter against the Moving Cutter. Tighten the Set Screw and release the Slide and then push the Slide down a few times to ensure free movement.
- 8. Replace the Cutter Box Assy.





Replacing the Formers & Driver

The Driver and Formers must be replaced when worn or when changing wire size. Replace them as follows:

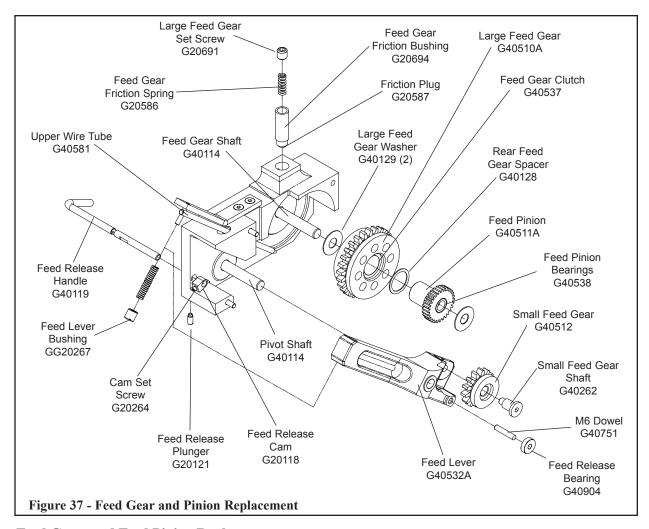
- 1. Unlock the Hand Wheel by turning the Adjuster Lock Lever counter-clockwise and raise the Head to its highest position by turning it counter-clockwise..
- 2. Swing aside the Wire Holder Retaining Spring and remove the Wire Holder Assy.

Driver Only

- 3. Remove the Driver Retaining Screw and the Lock Washer. It will now slide out of the Head.
- 4. Slide the new Driver up the Former grooves until it stops against the Driver Bar and fasten.

Formers

- 5. After removing the Driver, remove the four Screws and Lock Washers and to separate the Formers from the Bender Bar.
- 6. Replace with new Formers by pushing them up and to the side against the walls of the Bender Bar as pointed out in Fig. 36. Reattach with Formers and Driver with aforesaid screws and washers, keeping the Driver just short of fully tightened..
- 7. Manually cycle the Machine two or three times to set the Formers, then fully tighten the Driver. Manually cycle again to ensure free movement of everything.
- 8. Return the Head to its appropriate position amd lock by turning both the Hand Wheel and Lock Lever clockwise.



Feed Gears and Feed Pinion Replacement

- 1. Remove Feed Gear Bracket Assy. as previously instructed and turn the Feed Release Handle so that the Set Screw in the Feed Release Cam is accessible. Loosen and remove the Cam from the Feed Release Handle.
- 2. Loosen the Feed Release Plunger and remove the Feed Release Handle.
- 3. Unscrew the Feed Lever Bushing from the Feed Lever and remove the Feed Lever Spring. (If necessary, the Upper Wire Tube can be removed after loosening the M6 Set Screw (G20522) securing it.)
- 4. Lay the Feed Gear Bracket flat on its front. The Feed Lever Assembly can be removed by pulling it up off its Pivot Shaft.
- 5. To remove the Small Feed Gear, unscrew and remove the Small Feed Gear Shaft from the Feed Lever.
- 6. Remove the Feed Release Bearing by pressing the Bearing and M6 Dowel out of the Feed Lever. Press the Bearing off the Dowel and press a new Bearing on the Dowel. Press the new Bearing and Dowel back into the Feed Lever.
- 7. Replace the Small Feed Gear and screw in the Small Feed Gear Shaft using a thread locking compound, being careful not to get any compound on the surface upon which the Gear rides.
- 8. To remove the Large Feed Gear loosen and remove the Set Screw in the Feed Gear Friction Bushing to relieve the pressure the Feed Gear Friction Plug is placing on the Feed Gear. Remove the Friction Plug and the Feed Gear Friction Spring from the Bushing. Check them wear and replace if

necessary.

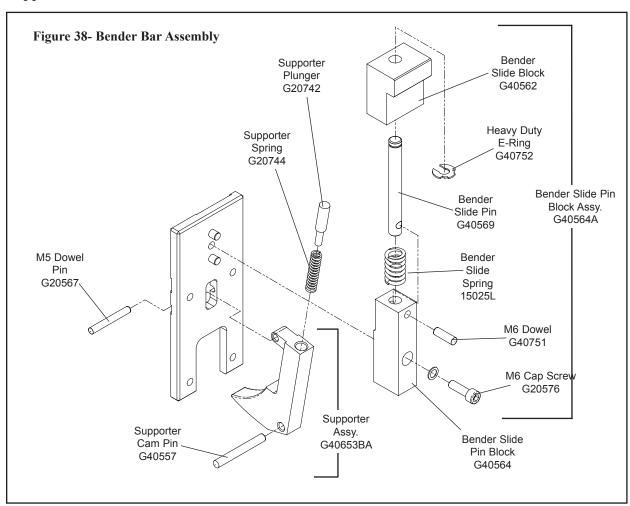
- 9. Lift the top Large Feed Gear Washers, the Large Feed Gear and the Feed Pinion off the Feed Gear Shaft and away from the Feed Gear Bracket.
- 10. Remove the Feed Pinion and Rear Feed Gear Spacer from the Large Feed Gear. If necessary, liberally apply Kluber ISOFLEX NBU 15 grease to the Feed Pinion Bearings and/or the Feed Gear Clutch and rub into the rollers using your finger and reassemble.
- 11.Replace the Feed Lever Assembly and if necessary the Upper Wire Tube. Insert the Feed Gear Friction Plug in the Feed Gear Friction Bushing. Apply any Lithium-based grease to the Feed Gear Friction Spring and insert it into the Bushing. Tighten the Set Screw, over the Spring, 3 to 4 turns after contact is made. The Feed Release Handle and Cam can be installed after the Feed Gear Bracket is re-attached to the Machine.

Bender Bar Disassembly

To begin disassembly of the Bender Bar Assembly (G40547BA):

- 1. First, if the Driver Bar and Formers are still attached, remove them now (Figs. 35 & 36)
- 2. Remove the Supporter Assy. by pushing the top of it forward and pushing the M5 Dowel Pin out towards the right.

CAUTION: Be very careful separating Supporter Assy. from the Bender Bar. The Supporter and Supporter Plunger are under pressure from the Supporter Spring and can shoot out of the Supporter.



- 3. Push the M6 Dowel out the right side of the Supporter.
- 4. Remove the Bender Slide Pin Block Assy. from the Bender Bar.
- 5. To disassemble the Bender Slide Pin Block Assy., place it in a vise. Clamp the bottom of the Bender Slide Pin Block and the top of the Bender Slide Block. With clearance left for it, pry off the E-ring with a screwdriver, and carefully unclamp the Bender Slide Pin Block Assy.

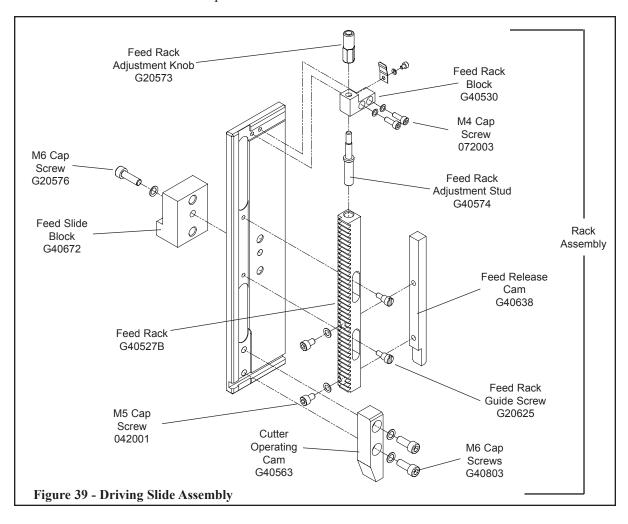
CAUTION: The Bender Slide Pin Block Assembly is under tension from the Bender Slide Spring.

6. Lift the Bender Slide Block off the Bender Slide Pin and remove the Bender Slide Spring. The Bender Slide Pin can be removed from the Bender Slide Pin Block by pressing the M6 Dowel out of the Block.

Driving Slide Disassembly

Begin disassembly of the Driving Slide Assembly (G40531BA) by:

- 1. Removing the M6 Cap Screw and Lock Washer (G20520) securing the Feed Slide Block.
- 2. Remove the Cutter Operating Cam from the Driving Slide and then the Rack Assembly by removing the Feed Rack Guide and M4 Cap Screws



- 3. Remove the Feed Rack by holding the Feed Rack Block and turning the Feed Rack Adjustment Knob counter-clockwise until the Rack comes off the Feed Rack Adjustment Stud.
- 4. Remove the Feed Release Cam (G40638).

Do not operate the M30 under power until the machine has been turned over manually to verify that the stitching head is operating freely.

AWARNING

Clutch-Brake Maintenance



Always disconnect the power supply before making any adjustments or servicing the stitcher

This stitcher is equipped with a solenoid actuated, continuous trip, wrap spring clutch-brake unit. It is a dependable device and seldom needs service. But should a malfunction occur, the following information is a service and troubleshooting guide for the maintenance of this unit.

Actuator

The actuator is a simple, straight-forward mechanical linkage. When the actuator does not trip, the following checks should be made. Refer to **Figure 40** for more details.

| <u>Problem</u> | Cause and Remedy |
|--|---|
| No power to the Coil. | Check all wiring and switching in the Clutch actuating system. |
| Lack of continuity in the Coil Windings. | Replace the Coil. (850998 - 230 VAC or 850999 - 115 VAC) |
| Mechanical binding of the Plunger. | The Coil may have shifted or the Plunger end may have mushroomed due to striking the Backstop. In the latter the Plunger may be filed to its true diameter. |
| Insufficient clearance for the Actuator over the Stop Collar. | Adjust the Linkage as needed. |
| Actuator loaded by the Stop Collar so hard that the Actuator cannot be pulled by the Coil. | Braking force is exceeding the limits of the Brake or the Differential setting of the unit is too close. (see Figure 30 for instructions) |
| Figure 40 - Actuator Checklist | |

Clutch and Brake Springs

With the brake engaged (full limit of output), the input hub should be free to rotate by hand. With the clutch engaged, the input and output hubs should rotate together. If the unit does not rotate in either of these modes, the clearance between the hubs of the unit on the shaft may have been disturbed or damaged. See Assembly/Disassembly instructions for re-adjusting.

Listed below are additional checks to be made if the clutch does not function correctly. Refer to **Figure 41** for details.

| Problem | Cause and Remedy |
|---|--|
| Clutch Brake does not drive but Input | 1. Drive Spring (850889) may be broken at thecross- |
| Motor turns. | over point from an overload caused by a jam. Replace |
| | the Spring and check the Hubs (851321 or 850892) |
| | for damage. |
| | 2. The Control Collar (850888) may not snap forward |
| | because of foreign matter restricting movement.Clean |
| | unit. |
| | 3. Actuator Assembly does not pull in. (Figure 28) |
| Clutch Brake jams and stalls the Input | 1. Spring tang broken off Drive Spring not allowing- |
| Motor. | the Clutch to disengage while the Brake is engaged. |
| | Replace the Drive Spring. |
| | 2. Clutch output is bound up. Check the clearance |
| | between the Output Hub and the Brake Hub. |
| | 3. Completely out of adjustment caused by losing an |
| | internal Spring tang. Replace Spring. |
| Output does not repeat stopping point | 1. Not enough inertia to actuate Brake. |
| | 2. Tang broken off the Brake Spring. Replace the |
| | Spring. |
| | 3. Adjustable Collar Locking Screw may be loose |
| | allowing Adjusting Screw to rotate. |
| | |
| Figure 41 - Clutch and Brake Spring Checklist | |
| | |

Disassembly (See figure 42)

To disassembly the Clutch-Brake unit (850673 or 850674) it will be necessary to remove the Drive Pulley (7678) from the stitcher by removing the V-Belt (850730), Retaining Ring (P7863), and Clutch Anchor Screw (7681). Disconnect the Ground and Solenoid wires, and swing the anchor strap (FC9656) clear of the Drive Pulley Assembly and slide it off of the Drive Shaft. Remove the three (3) Screws (UA4812.7) connecting the Drive Pulley to the Clutch-Brake unit.

When disassembling the Clutch-Brake unit, always mark the Spring Tang locations with reference to which slots they go in if the same Springs are to be used for reassembly. To disassemble the Clutch-Brake unit, proceed as follows:

Release the Actuator Lever so that the Clutch is engaged and the Brake is released. Remove the Retaining Ring and the Shim Washer, if any, from the Input Hub (851321) end. Remove the Input Hub by rotating opposite to the drive direction. Remove the Retaining Ring and the Shim Washer, if any, from the Mounting Plate end.

Remove the Output Shaft Springs and the Control Collar (850888) Assembly by rotating the Output Shaft (850891) in the drive direction. **(Do not disassemble the brake Hub (850892) from the Mounting Plate. (850890))** Remove the Control Collar from the Output Shaft and the Spring Assembly by extracting toward the Brake Spring end.

Assembly (See figure 42)

Replace the Clutch (850888), Brake (850889) and Anti-Back (850962) Springs as required. Assemble the Springs concentric and square to the Output Shaft.(850891) Assemble the Control Collar over the Output Shaft and Spring Assembly by inserting it from the Brake Spring End (it will be necessary to extend the Brake Springs using long nose pliers.) Place the Brake Spring Tang in any one (1) of the nine (9) Control Collar slots at random.

Assemble the Output Shaft, Springs and Control Collar assembly to the Mounting Plate Assembly by rotating the Output Shaft in the drive direction. Assemble the Retaining Ring (850886) to the Output Shaft at the Mounting Plate end (the smooth surface facing the Brake Hub.) Check the end play between the Hub and the Retaining Ring with a feeler gauge. There should be 0.004" to 0.010" end play. Use a Shim Washer to adjust if necessary.

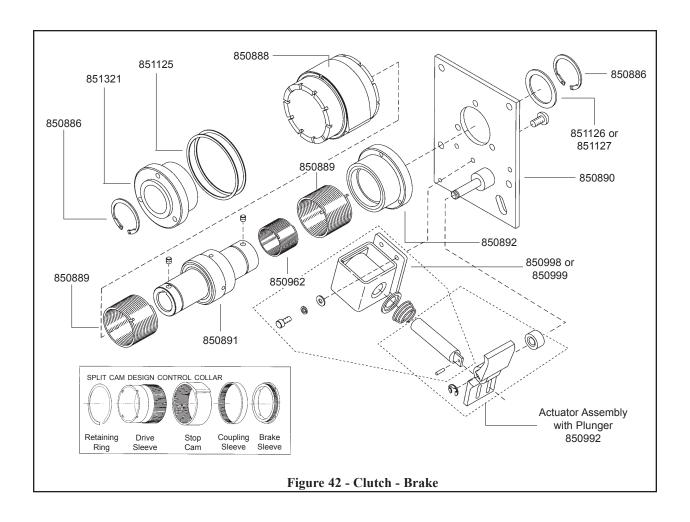
Rotate the Output Shaft in the drive direction until it reaches a full brake position. With the Clutch Spring Tang **NOT** in slot, insert the Input Hub (851321) by rotating opposite to the drive direction. Select one (1) of ten (10) Control Collar slots for the Clutch Spring Tang that will provide a 0.38" to 0.50" circumferential overtravel of the Control Collar when released.

Note: At this point it may be necessary to reselect one (1) of the nine (9) Control Collar slots for the Brake Spring Tang (release Actuator Lever, remove the Clutch Spring tang from the slot, then move Control Collar axially toward the Input Hub end and rotate it opposite to the drive direction to pick up the next slot). Continue to select Control Collar slots until the 0.38" to 0.50" specification is achieved.

Assemble the Retaining Ring to the Output Shaft at the Input Hub end (the smooth surface facing the Input Hub). Check the end play between the Input Hub and the Retaining Ring with feeler gauge. There should be 0.002" to 0.003" end play on the Input Hub.

Reassemble the unit to the machine.

Note: After the Clutch is assembled to the machine, the Clutch Plate should be free to float on bearing - the Anchor Strap is only there to prevent rotation of the plate.



Lubrication

The clutch-brake unit is designed with the bearing parts made from sintered metal that has been impregnated with oil and normally do not need to be re-lubricated. In cases where there is severe duty, the unit may be re-oiled or flushed out with minimal or no disassembly by using a light bearing oil as used in manufacture (Shell Bearing Infusion Oil #33). If disassembly of the unit for cleaning and oiling is necessary, follow the detailed disassembly instructions to the point needed, flush and wipe parts in the oil to be used for re-lubrication. **Do not use solvents** to clean the parts. To get more cleaning action for the oil, it may be heated while cleaning the components, but bring the parts back to ambient temperature submerged in cool oil.

Coil Replacement

Place the spring onto the plunger with the narrow end towards the actuator. Slide the solenoid onto the actuator and plate assembly. Assemble the solenoid to the plate assembly with the cap screws and washers. **Do not tighten** more than finger tight.

Energize the coil and adjust the gap between the actuator and the top of the collar stop to 0.015" to 0.030" by sliding the solenoid assembly. Note: push the collar toward the actuator to allow for collar movement. Tighten the cap screws.

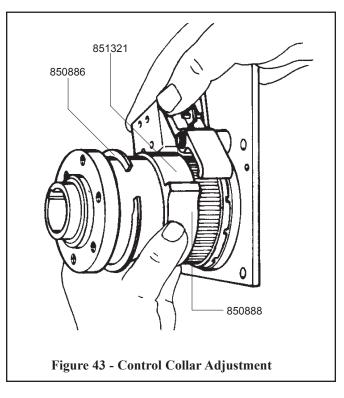
Control Collar Adjustment (Figure 43)

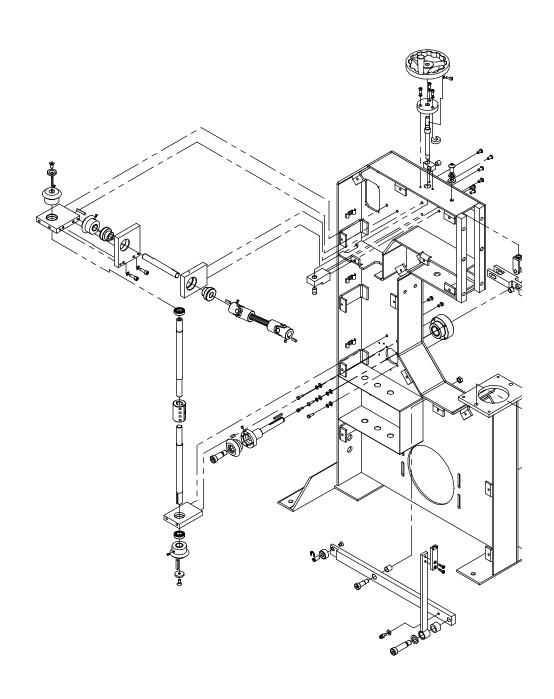
The stopping position of the head can be changed if necessary by adjusting the position of the stop cam on the control collar sleeve. Turn the machine manually until the driver is in the desired stopping position, the proceed as follows:

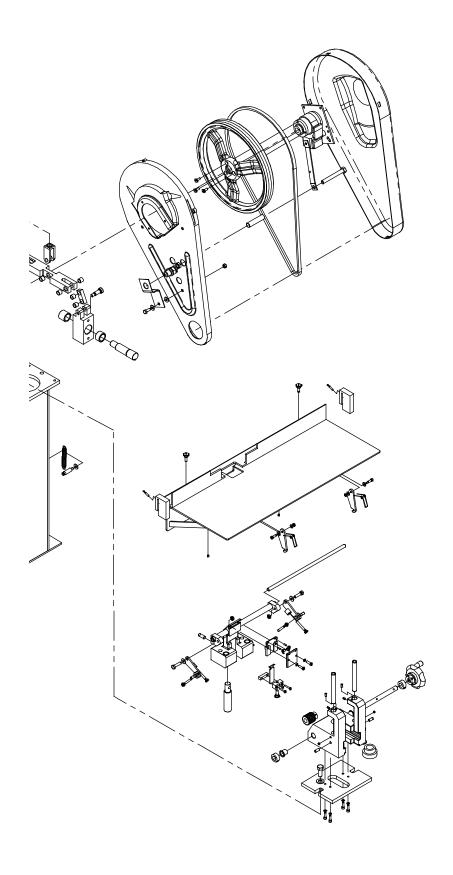
Work the Retaining Ring (850886) out of its groove and slide it forward on the Input Hub (851321). Slide the cam of the Control Collar Assembly (850888) off of the splines, rotate to align the collar stop with the actuator and slide the cam back on the splines. The actuator pawl will have to be held clear

during this operation. Slide the retaining ring back into its groove.

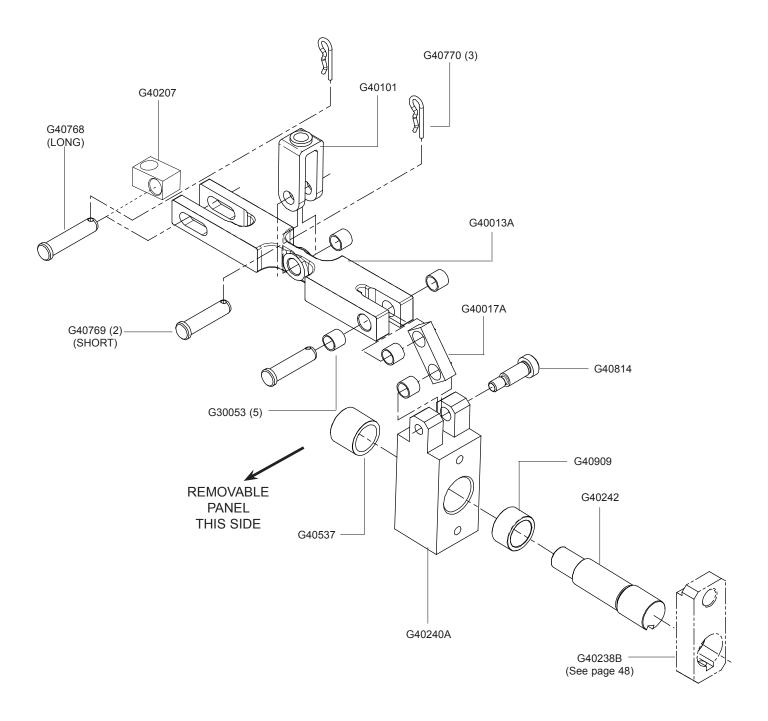
Make sure brake is locked up before proceeding, to insure the proper stop point.



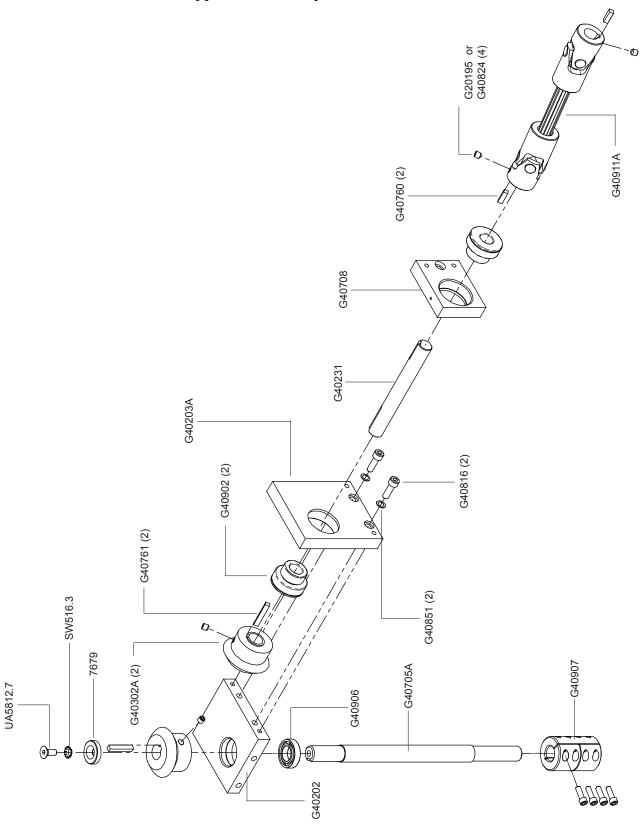




Internal Assemblies - Compression Adjustment Linkage

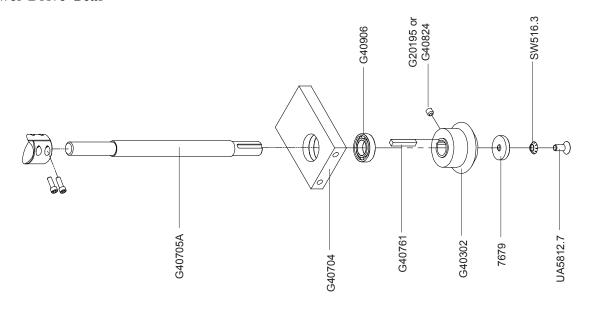


Internal Assemblies - Upper Driver Components

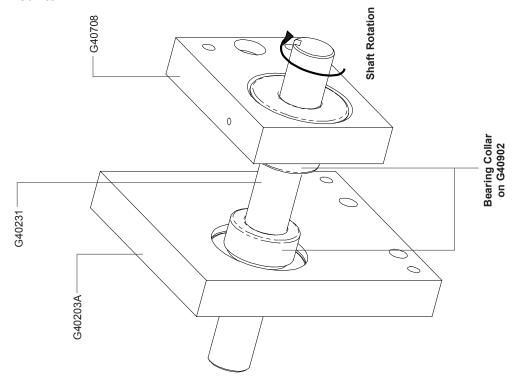


Internal Assemblies - Lower Drive Gear & Bearing Mounts

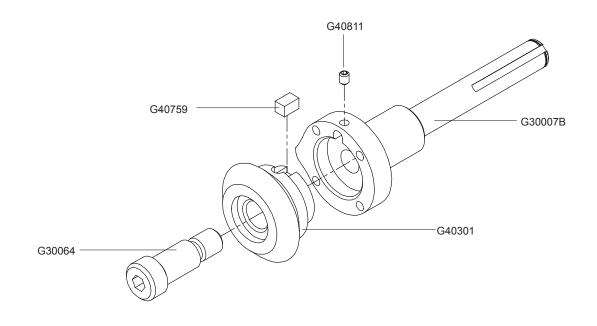
Lower Drive Gear



Bearing Mounts



Internal Assemblies - Clincher Cam & Clincher Lever Assemblies



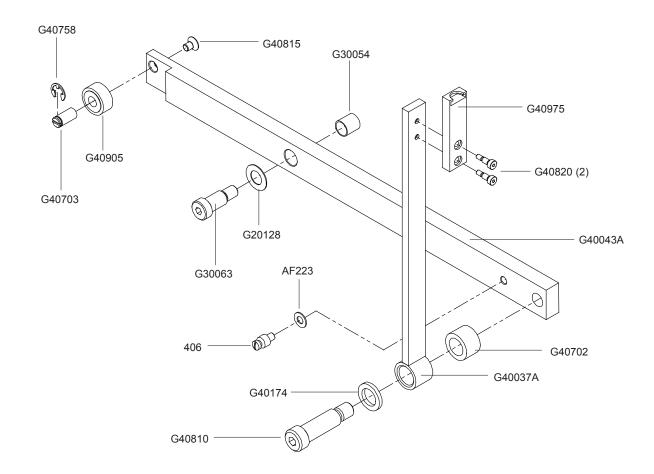
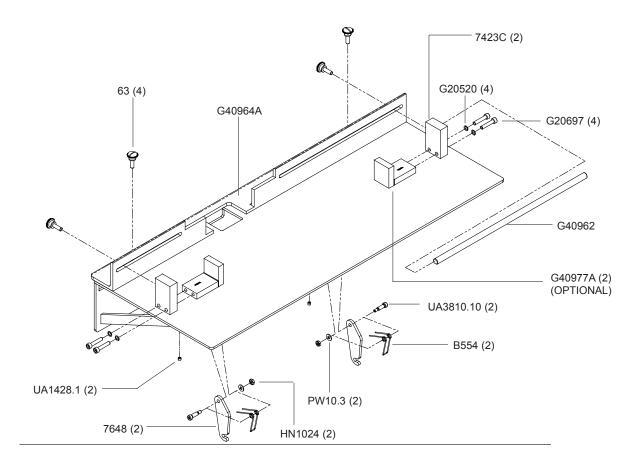


Table and Clincher Assemblies - Clincher Mount & Work Table



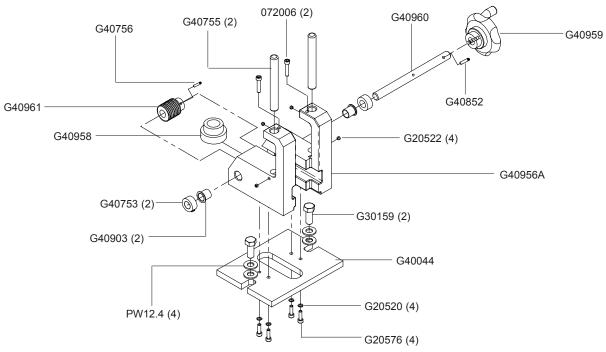
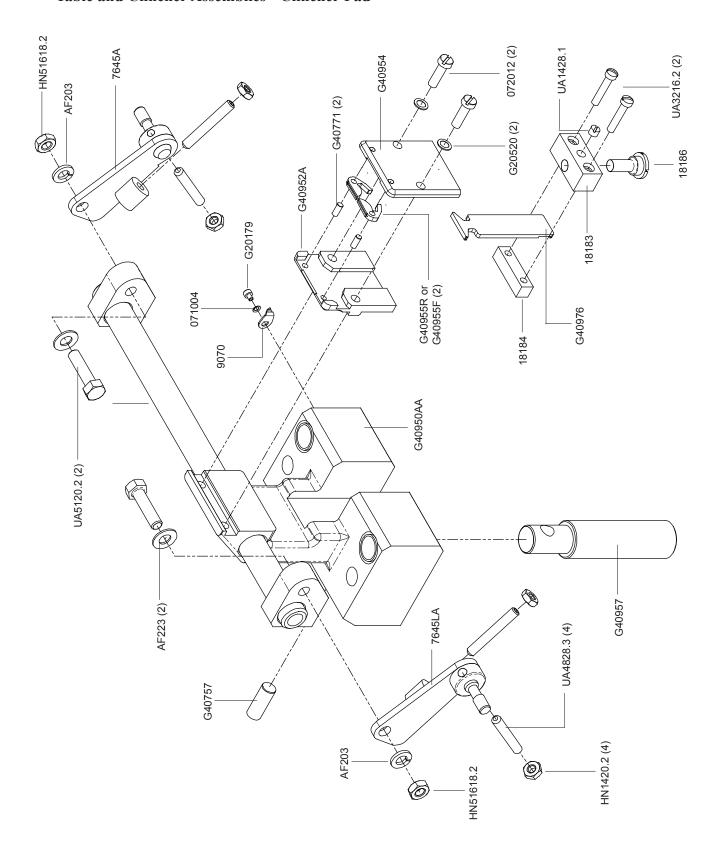
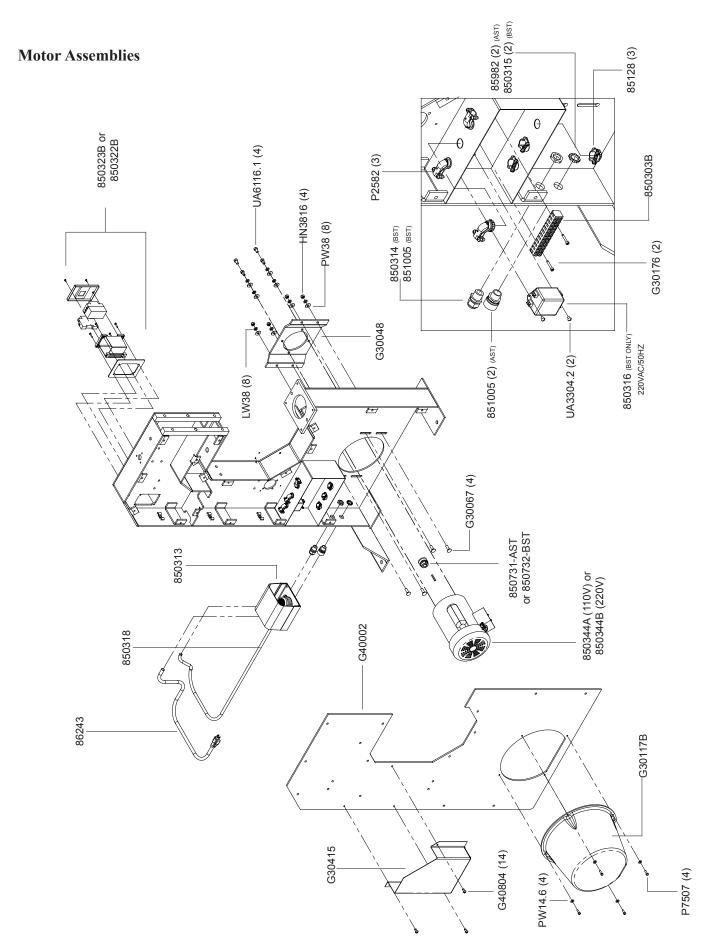
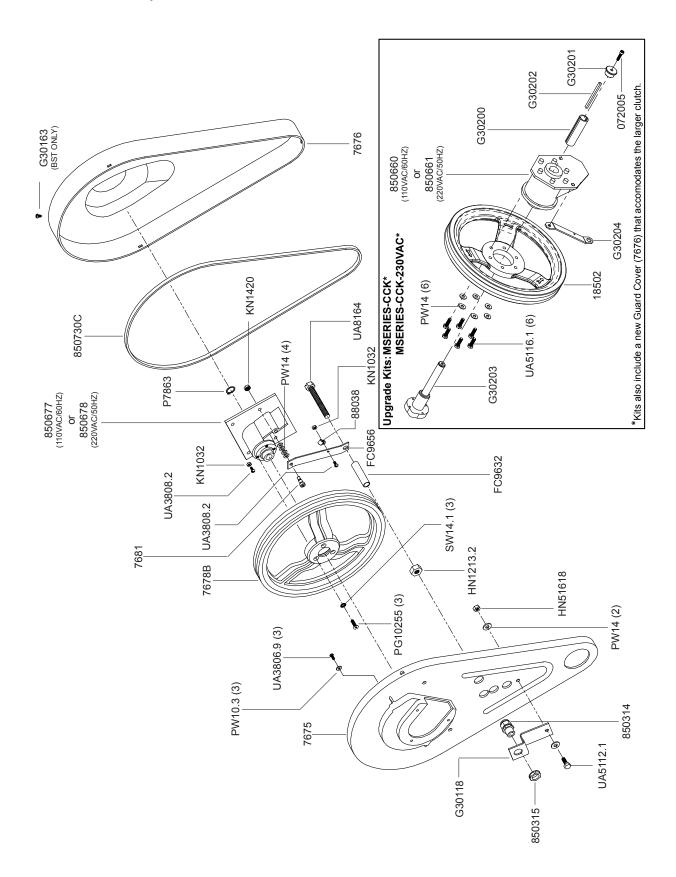


Table and Clincher Assemblies - Clincher Pad

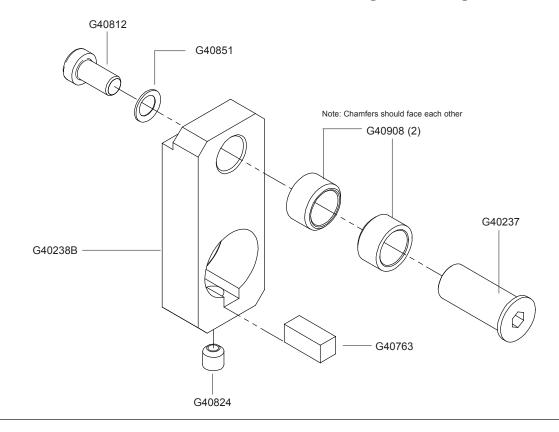


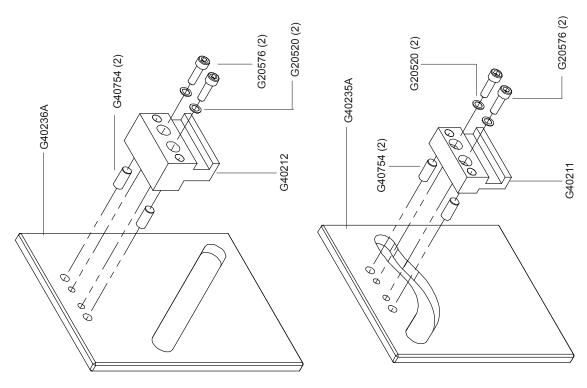


Guard Assembly

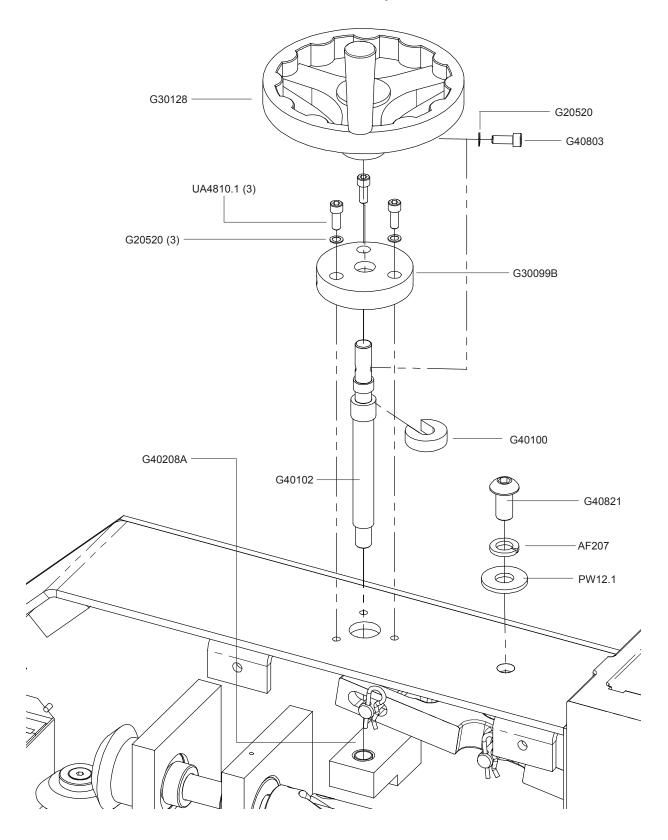


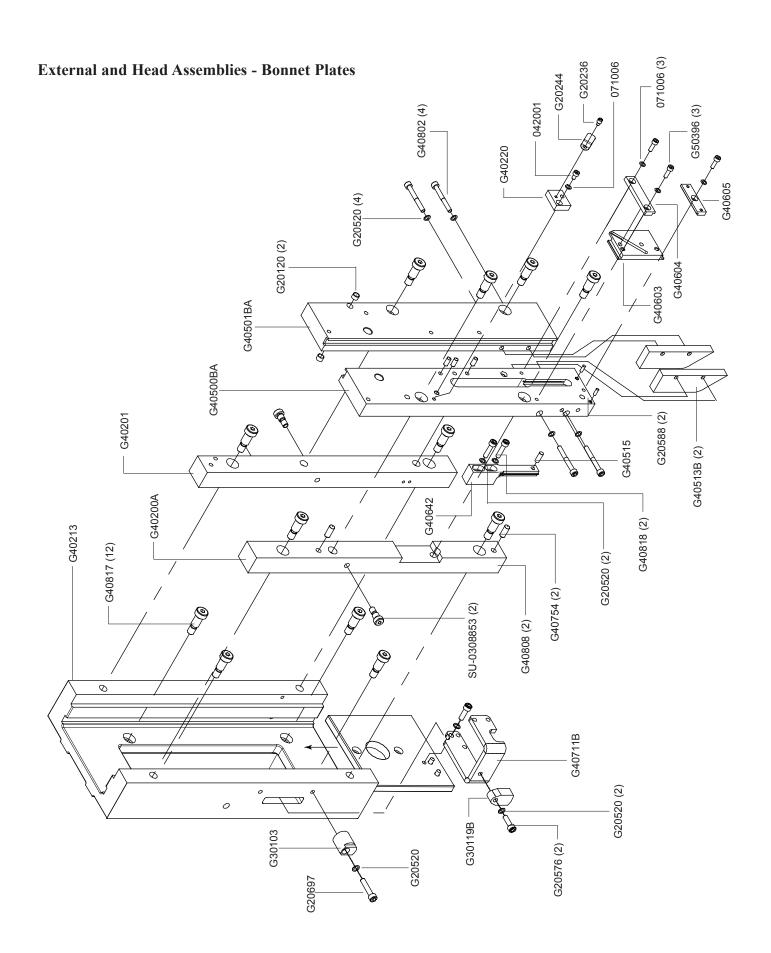
External and Head Assemblies - Head Crank & Driving and Bending Cam



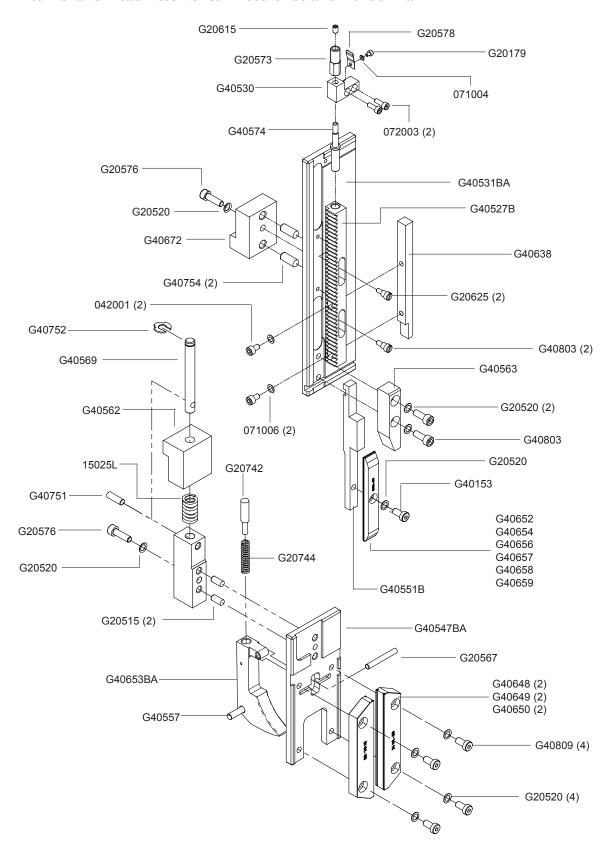


External and Head Assemblies - Hand Wheel Assembly

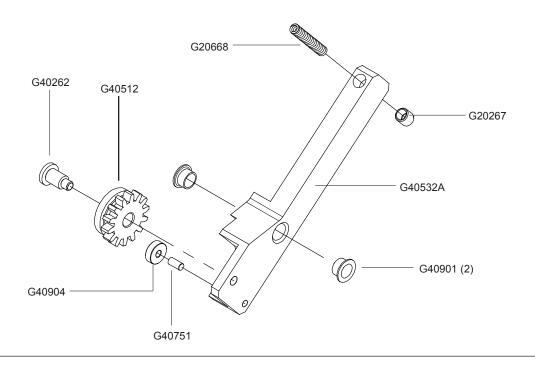


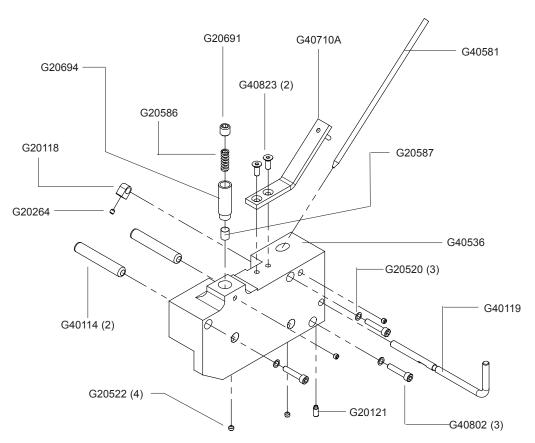


External and Head Assemblies - Feed Slide and Bender Bar

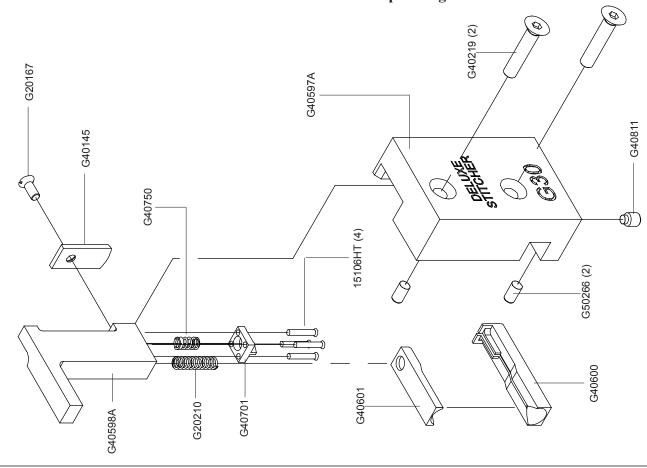


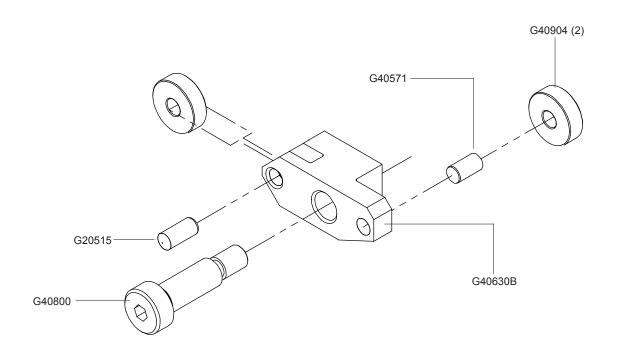
External and Head Assemblies - Feed Lever & Feed Gear Bracket



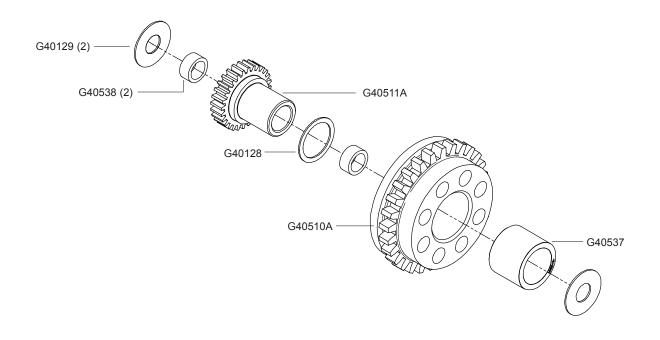


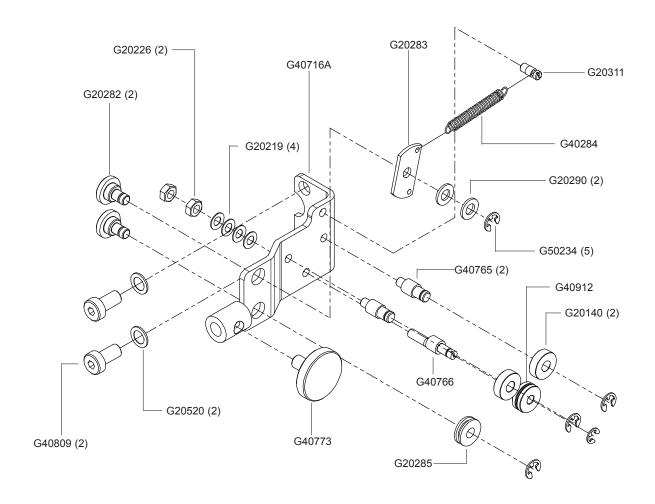
External and Head Assemblies - Cutter Box & Cutter Operating Lever



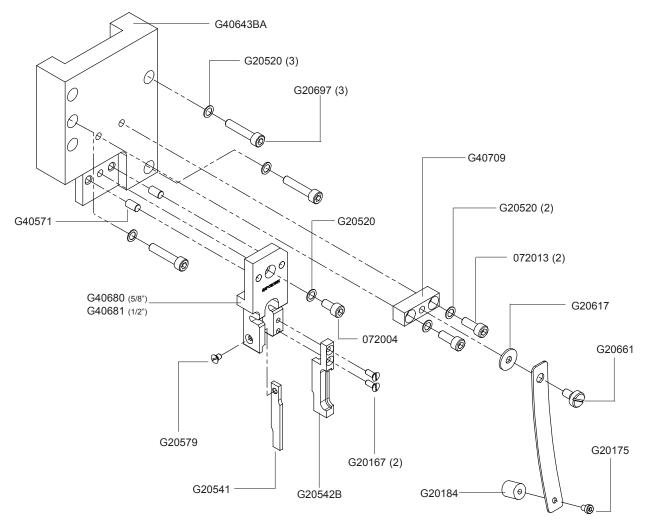


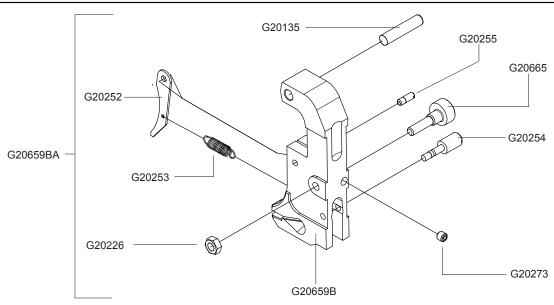
External and Head Assemblies - Large Feed Gear & Lower Wire Straightener



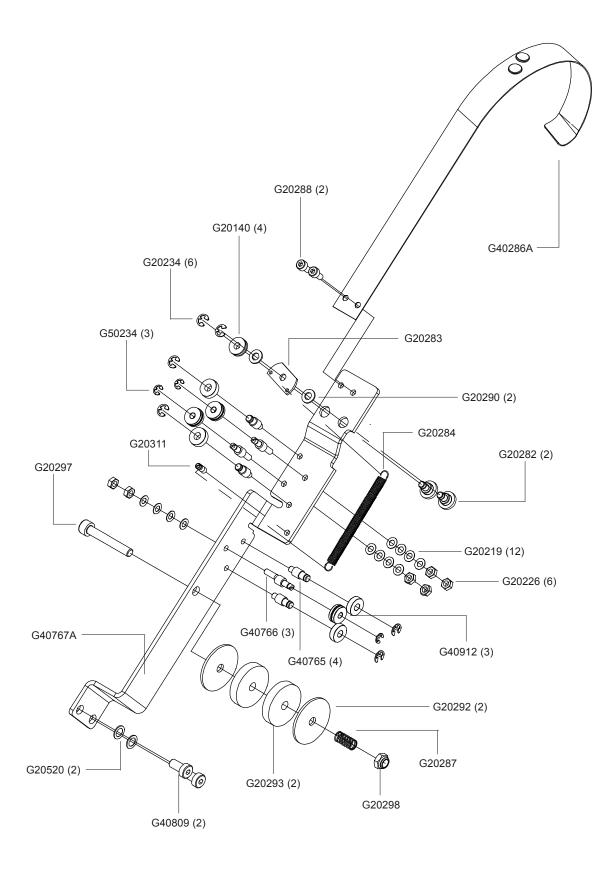


External and Head Assemblies - Pivot Block & Wire Holder

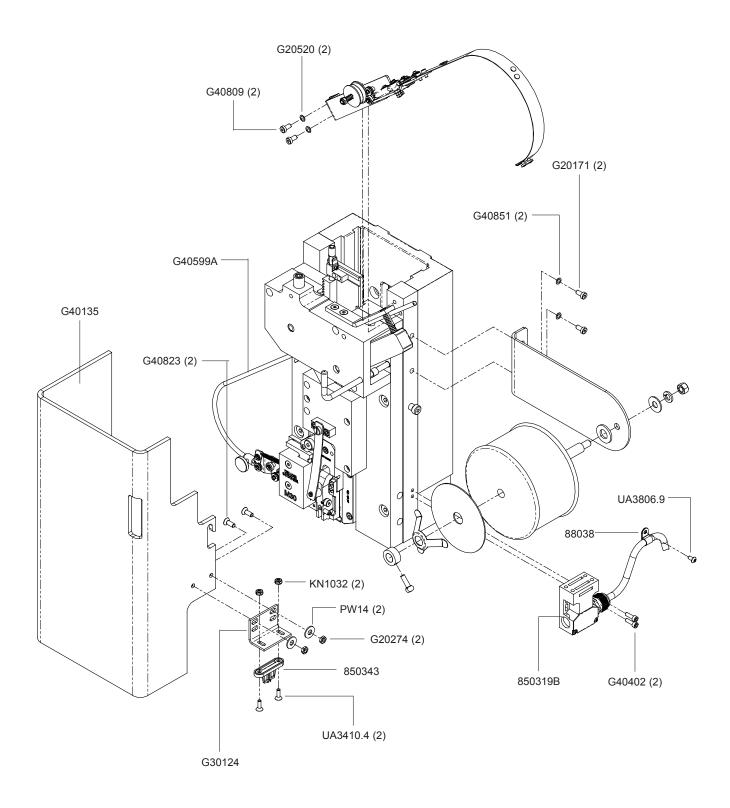




External and Head Assemblies - Wire Guide Spring



External and Head Assemblies - Head Guard



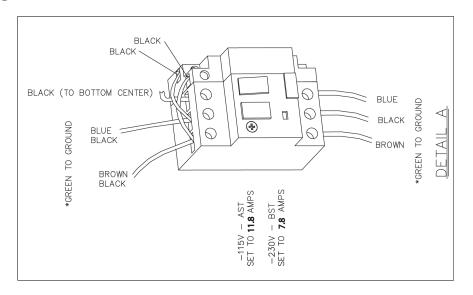
| PART NO. | DESCRIPTION | QUANTITY | PART NO. | DESCRIPTION | QUANTITY |
|------------------|--|----------|----------|---|----------|
| 042001 | Screw M5x.8x8 | 3 | 850731 | Pulley | 1 |
| 071004 | Lock Washer Ribbed | 2 | 850732 | Pulley | 1 |
| 071005 | Lock Washer Ribbed M4 | 2 | 851005 | Strain Relief | 2 |
| 071006 | Lock Washer Ribbed M5 | 6 | 85128 | Connector 3/8 | 3 |
| 072003 | Screw M4x0.7x12 | 2 | 85982 | Lock Nut 1/2 | 1-2 |
| 072004 | Screw M6x1.0x12 | 1 | 86243 | Power Cord - 115V | 1 |
| 072005 | Screw, M6X1.0X25 | 1 | 88038 | Nylon Cable Clamp | 1 |
| 072006 | Screw M6x1.0x30 | 2 | 9070 | Wire Straightener Eccentric Pointe | r 1 |
| 072012 | Screw M6x1.0x20 | 2 | AF203 | Lock Washer 5/16 Hel | 2 |
| 072013 | Screw M6x1.0x22 | 2 | AF207 | Lock Washer 1/2 Helical Spring | 1 |
| 15025L | Bender Slide Spring - Light Duty | 1 | AF223 | Flat Washer 5/16 | 4 |
| 18183 | Clincher Slide Adjustment Block | 1 | B554 | Torsion Spring | 2 |
| 18184 | Clincher Slide Block Clamp | 1 | FC9633 | Anchor Spacer | 1 |
| 18186 | Clincher Slide Adjustment Screw | 1 | FC9656A | Clutch Anchor | 1 |
| 18502 | Drive Pulley, CB-7 Clutch | 1 | G20118 | Feed Release Handle Cam | 1 |
| 19211/2G5 | Wire Spool - Galvanized | 1 | G20121 | Feed Release Plunger | 1 |
| 35 | Clincher Slide Link Spring | 1 | G20135 | Dowel Pin M5x24 | 1 |
| 36 | Pin | 1 | G20140 | Follower Ball Bearing | 4 |
| 406 | Clincher Oper. Lever Spring Screw | | G20153 | Driver Retaining Screw | 1 |
| 63 | Work Guide Screw | 4 | G20167 | Screw M4x.7x10 | 3 |
| 7423C | Work Stop - Large | 2 | G20171 | Screw M8x1.25x12 | 2 |
| 7645A | Table Support Bracket Asy - RH | 1 | G20175 | Screw M4x.7x6, with Nylon Patch | 1 |
| 7645LA | Table Support Bracket Asy - LH | 1 | G20179 | Screw M3x.5x4 | 2 |
| 7648 | Table Support | 2 | G20184 | Wire Holder Retaining Spring Foot | 1 |
| 7675 | Belt Guard | 1 | G20190 | Screw M3x.5x10 | 2 |
| 7676 | Belt Guard | 1 | G20195 | Screw M6x1.0x8 | 3 |
| 7678B | Drive Pulley - 4L | 1 | G20210 | Cutter Operating Spring | 1 |
| 7679 | Drive Pulley Washer | 2 | G20219 | Wire Straightener Disc Spring | 8 |
| 7690 | Tension Spring | 1 | G20216 | Hex Nut M4x.7 | 4 |
| 7691 | Set Collar - Reamed | 1 | G20234 | E-Ring 3/16 | 4 |
| 7693 | Spool Stud | 1 | G20236 | Tube Pivot Screw | 1 |
| 850303B | Terminal Strip - Holes | 1 | G20244 | Tube Pivot Clip | 1 |
| 850307 | Power Cord - 230V | 1 | G20250 | Screw M4x.7x14 | 2 |
| 850313 | Footswitch Guard | 1 | G20252 | Wire Hook | 1 |
| 850314 | Strain Relief | 2-3 | G20252 | Wire Hook Spring | 1 |
| 850315 | Strain Relief Nut | 2-3 | G20254 | Wire Hook Spring Screw | 1 |
| 850316 | RFI Filter | 1 | G20264 | Screw, M5 x 0.8 x 5, Nylon | 1 |
| 850317 | Clutch, Wire Harness | 1 | G20267 | Feed Lever Bushing | 1 |
| 850318 | Footswitch, Wired | 1 | G20277 | Screw M4x.7x4, with Nylon Patch | 1 |
| 850319B | Safety Switch, Wired | 1 | G20274 | Hex Jam Nut, M6x1 | 2 |
| 850322B | Starter Assembly 3/4 - 115V | 1 | G20282 | Tension Pawl Pivot Pin | 2 |
| 850323B | Starter Assembly 3/4 - 230V | 1 | G20283 | Tension Pawl | 1 |
| 850323B | Wire Terminal Ring | 1 | G20284 | Tension Pawl Spring | 1 |
| 850337 | Motor 3/4 HP - 115V | 1 | G20285 | Tension Pawl Roller | 1 |
| 850344B | Motor 3/4 HP - 230V | 1 | G20286A | Wire Guide Spring Assembly - Long | |
| 850660 | | | | Wire Guide Spring Assembly - Long Wire Oiler Felt Spring | 1 |
| | CB-7 Clutch - 230V | 1 1 | G20287 | Screw M4x0.7x8 | 2 |
| 850661 850677 | CB-7 Clutch - 230V Electric Clutch, Heavy Duty - 115V | | G20288 | | 2 |
| 850677 850679 | Electric Clutch, Heavy Duty - 115V | | G20290 | Flat Washer, M5 Wire Oil Felt Washer | 2 |
| 850678 | | 1 | G20292 | | |
| 850730C | V-Belt | 1 | G20293 | Wire Oiler Felt | 2 |

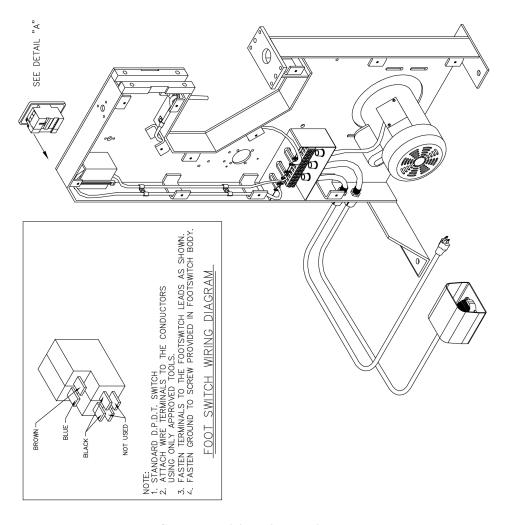
| PART NO. | DESCRIPTION | QUANTITY | PART NO. | DESCRIPTION | QUANTITY |
|----------|-----------------------------------|----------|-----------|------------------------------------|-----------|
| G20297 | Screw M6x1.0x40 | 1 | G30119B | Adjuster Gauge | 1 |
| G20298 | Nylock Lock Nut, M6x1 | 1 | G30124 | Actuator Key Bracket | 1 |
| G20311 | Spring Anchor Screw | 1 | G30127 | Starter Mounting Flange | 1 |
| G20360 | Hex Key Wrench 3.0mm | 1 | G30128 | Hand Wheel | 1 |
| G20364 | Open End Wrench | 1 | G30159 | Screw 1/2-20x1-1/4 | 2 |
| G20368 | Feed Release Handle Cap | 1 | G30163 | Self Tapping Screw | 1 |
| G20515 | Dowel Pin M6x14 | 3 | G30176 | Screw M4x.7x25 | 2 |
| G20520 | Ribbed Lock Washer M6 | 44 | G30183 | Self Tapping Screw | 2 |
| G20522 | Screw M6x1.0x5 | 8 | G30200 | Adapter, CB-7 Clutch | 1 |
| G20530 | Feed Rack Block | 1 | G30201 | End Cap, CB-7 Clutch | 1 |
| G20541 | Wire Guide Bar - Left | 1 | G30202 | Key-Rectangular, CB-7 Clutch | 1 |
| G20542B | Wire Guide Bar - Right | 1 | G30203 | Crank Shaft, CB-7 Clutch | 1 |
| G20566 | Screw M4x0.7x20 | 4 | G30204 | Clutch Anchor, CB-7 Clutch | 1 |
| G20567 | Dowel Pin M5x40 | 2 | G30415 | Tool Kit Hanger | 1 |
| G20570 | Spirol Pin M5x20 | 1 | G40001A | Frame Weldmnet | 1 |
| G20573 | Feed Rack Adjustment Knob | 1 | G40002 | Side Cover Plate | 1 |
| G20574 | Feed Rack Adjustment Stud | 1 | G40013A | Pivot Arm Assembly | 1 |
| G20576 | Screw M6x1.0x20 | 11 | G40017A | Crank Housing Connecting Link As | sv 1 |
| G20578 | Rack Adjustment Knob Detent | 1 | G40037A | Clincher Upright Link Assembly | 1 |
| G20579 | Screw M4x0.7x6 | 1 | G40043A | Clincher Lever Assembly | 1 |
| G20583 | Wire Holder Retaining Spring | 1 | G40044 | Clincher Mounting Plate | 1 |
| G20586 | Feed Gear Friction Spring | 1 | G40100 | Adjuster Crank Shaft Insert | 1 |
| G20587 | Feed Gear Friction Plug | 1 | G40101 | Compression Adjustment Yoke | 1 |
| G20588 | Dowel Pin M4x12 | 2 | G40102 | Adjustment Shaft | 1 |
| G20589 | Screw M4x0.7x10 | 1 | G40114 | Feed Gear Shaft | 2 |
| G20615 | Screw M5x0.8x8 | 1 | G40119 | Feed Release Handle | 1 |
| G20617 | Washer M6x18x1.6 | 1 | G40128 | Rear Feed Gear Spacer | 1 |
| G20625 | Feed Rack Guide Screw, Nylon | 2 | G40129 | Large Feed Gear Washer | 2 |
| G20626 | Screw M4x0.7x16 | 2 | G40135 | Head Guard | 1 |
| G20659BA | Wire Holder Assembly 5/8 | 1 | G40145 | Moving Cutter | 1 |
| G20661 | Wire Holder Retaining Spring Scre | w 1 | G40153 | Driver Retaining Screw | 1 |
| G20665 | Wire Holder Eccentric Screw | 1 | G40174 | Small Clincher Arm Spacer | 1 |
| G20668 | Feed Lever Spring | 1 | G40200A | Mounting Bar Assembly - Left | 1 |
| G20691 | Screw M12x1.75x12 | 1 | G40201 | Mounting Bar - Right | 1 |
| G20694 | Feed Gear Friction Bushing | 1 | G40202 | Upper Bearing Block - Horizontal | 1 |
| G20697 | Screw M6x1.0x30 | 4 | G40203A | Upper Bearing Block Assy - Vertica | al 1 |
| G20742 | Supporter Plunger | 1 | G40207A | Adjustment Shaft Block Assembly | 1 |
| G20744 | Supporter Spring | 1 | G40208A | Adjustment Shaft Support Brkt Ass | |
| G30006A | Bearing Housing Assembly | 1 | G40211 | Bender Rail | 1 |
| G30007B | Crank Shaft | 1 | G40212 | Driving Rail | 1 |
| G30048 | Motor Mounting Plate | 1 | G40213 | Head Mounting Block | 1 |
| G30053 | Bearing 1/2x1/2 | 5 | G40219 | Screw M6x1.0x30 | 2 |
| G30054 | Bearing 5/8x3/4 | 1 | G40220 | Spring Clip Block | 1 |
| G30063 | Shoulder Screw 5/8x1 | 1 | G40231 | Upper Gear Shaft | 1 |
| G30064 | Shoulder Screw 3/4x1-1/4 | 1 | G40235A | Bender Cam Plate Assembly | 1 |
| G30067 | Bolt 3/8-16x1 | 4 | G40236A | Driver Cam Plate Assembly | 1 |
| G30099B | Adjustment Crank Housing | 1 | G40237 | Crank Pin | 1 |
| G30103 | Adjuster Stop | 1 | G40238B | Crank Arm | 1 |
| G30117B | Motor Cover | 1 | G40239BA | Crank Housing Slide Plate Assemble | • |
| G30117B | Belt Guard Bracket | 1 | G40240A | Crank Housing Assembly | 'y ' 1 |
| 500110 | Done Guara Bracket | • | 0-102-10A | 2. ann Housing Assembly | • |

| PART NO. | DESCRIPTION | QUANTITY | PART NO. | DESCRIPTION | QUANTITY |
|----------|--|----------|----------|------------------------------------|----------|
| G40242 | Head Drive Shaft | 1 | G40657 | Driver 5/8 - 19x21-1/2 Wire | 1 |
| G40262 | Small Feed Gear Shaft | 1 | G40658 | Driver 5/8 - 20 Wire | 1 |
| G40284 | Lower Tension Pawl Spring | 1 | G40659 | Driver 5/8 - 18x20 Wire | 1 |
| G40286A | Wire Guide Spring | 1 | G40672 | Feed Slide Block | 1 |
| G40301 | Drive Cam Gear | 1 | G40680 | Pivot Block Insert-5/8" | 1 |
| G40302 | Drive Gear | 3 | G40701 | Wire Hold | 1 |
| G40402 | Screw M5x0.8x16 | 3 | G40702 | Large Clincher Arm Spacer | 1 |
| G40500BA | Bonnet Plate Assembly - Left | 1 | G40703 | Cam Follower Stud | 1 |
| G40501BA | Bonnet Plate Assembly - Right | 1 | G40704 | Lower Bearing Block | 1 |
| G40510A | Large Feed Gear Assembly | 1 | G40705A | Vertical Drive Shaft | 2 |
| G40511A | Wire Feed Pinion Assembly | 1 | G40708 | Bearing Mounting Plate | 1 |
| G40512 | Small Feed Gear | 1 | G40709 | Wire Holder Spring Block | 1 |
| G40513B | Supporter Guide Plate | 2 | G40710A | Feed Lever Spring Bracket Assemb | oly 1 |
| G40515 | Dowel Pin M6x18 | 1 | G40711B | Cutter Box Adjustment Link | 1 |
| G40520 | Wire Spool Mounting Bracket | 1 | G40716A | Lower Wire Straightener Bracket | 1 |
| G40527B | Feed Rack | 1 | G40716AA | Lower Wire Straight Brkt, Complete | e 1 |
| G40530 | Feed Rack Block | 1 | G40750 | Wire Hold Spring | 1 |
| G40531BA | Feed Slide Assembly | 1 | G40751 | Dowel Pin M6x20 | 1 |
| G40532A | Feed Lever Assembly | 1 | G40752 | E-Ring - Heavy Duty | 1 |
| G40536 | Feed Gear Bracket | 1 | G40753 | Lock Collar | 2 |
| G40537 | Feed Gear Clutch | 1 | G40754 | Dowel Pin M8x20 | 2 |
| G40547BA | Bender Bar Assembly | 1 | G40755 | Clincher Pad Guide Shaft | 2 |
| G40551B | Driver Bar | 1 | G40756 | Spring Pin M4x24 | 1 |
| G40557 | Dowel Pin M6x50 | 1 | G40757 | Dowel Pin M10x28 | 1 |
| G40562 | Bender Slide Block | 1 | G40758 | E-Ring 12mm | 1 |
| G40563 | Cutter Operating Cam | 1 | G40759 | Keyway - 8mm x 1/2 | 1 |
| G40564A | Bender Slide Pin Block Assembly | 1 | G40760 | Keyway - 6mm x 3/4 | 2 |
| G40569 | Bender Slide Pin | 1 | G40761 | Keyway - 6mm x 1-1/2 | 3 |
| G40571 | Dowel Pin M6x12 | 1 | G40763 | Keyway - 8mm x 3/4 | 1 |
| G40574 | Feed Rack Adjustment Stud | 1 | G40764 | E-Ring 1/2 | 3 |
| G40581 | Upper Wire Tube | 1 | G40765 | Wire Straightener Roll Stud | 4 |
| G40597A | Cutter Block Assembly | 1 | G40766 | Straightener Eccentric | 3 |
| G40598A | Cutter Operating Slide Assembly | 1 | G40767A | Upper Wire Straightener Brkt Asy | 1 |
| G40599A | Lower Wire Tube Assembly | 1 | G40767AA | Upper Wire Straight Brkt - Complet | e 1 |
| G40600 | Fixed Wire Cutter | 1 | G40768 | Clevis Pin 1/2x1-1/2 | 1 |
| G40601 | Fixed Cutter Cover | 1 | G40769 | Clevis Pin 1/2x2 | 2 |
| G40603 | Cutter Box Guide Plate | 1 | G40770 | Hitch Pin | 2 |
| G40604 | Upper Cutter Box Guide Plate | 1 | G40771 | Dowel Pin M4X10 | 2 |
| G40605 | Lower Cutter Box Guide Plate | 1 | G40772 | Adjuster Lock Lever | 1 |
| G40630BA | Cutter Operating Lever Assembly | 1 | G40773 | Thumbscrew - Knurled | 1 |
| G40638 | Feed Rack Cam | 1 | G40800 | Shoulder Screw M10x25 | 1 |
| G40642 | Cutter Box Adjustment Slide | 1 | G40802 | Screw M6x1.0x50 | 7 |
| G40643BA | Wire Holder Pivot Block 5/8 | 1 | G40803 | Screw M6x1.0x16 | 5 |
| G40648 | Bender Insert 5/8 - 20x24 & 23 Wire | e 2 | G40804 | Screw M8x1.25x16 | 29 |
| G40649 | Bender Insert 5/8 - 19x21-1/2 & 24 \ | Nire 2 | G40808 | Screw M6x1.0x12 - Dog Point | 2 |
| G40650 | Bender Insert 5/8 - 18x20 & 20 Wire | e 2 | G40809 | Screw M6x1.0x12 - Low Head | 8 |
| G40652 | Driver 5/8 - 24 Wire | 1 | G40810 | Shoulder Screw | 1 |
| G40653BA | Supporter Assembly 5/8 | 1 | G40811 | Screw M6x1.0x8 - Dog Point | 1 |
| G40654 | Driver 5/8 - 23 Wire | 1 | G40812 | Screw M8x1.25x16 - Low Head | 1 |
| G40656 | Driver 5/8 - 20x24 Wire | 1 | G40813 | Shoulder Screw | 2 |
| | | | | | |

| PART NO. | DESCRIPTION | QUANTITY | PART NO. | DESCRIPTION | QUANTITY |
|-----------|----------------------------------|----------|------------|----------------------------|----------|
| G40814 | Shoulder Screw | 1 | KN1420 | Kep Nut 1/4 | 1 |
| G40815 | Screw M8x1.25x12 | 1 | LW14 | Lock Washer | 4 |
| G40816 | Screw M8x1.25x25 | 2 | LW38 | Lock Washer | 9 |
| G40817 | Shoulder Screw M12x20 | 12 | M-TOOL KIT | Kit - M-Series Tool | 1 |
| G40818 | Screw M6x1.0x25 | 2 | M11009 | Plastic Washer | 1 |
| G40820 | Shoulder Screw M6x10 | 2 | P2582 | Connector 3/8x90 Degrees | 3 |
| G40821 | Screw 1/2-13x1 | 1 | P2731 | Thumb Screw 1/4-20x3/4 | 1 |
| G40823 | Screw M6x1.0x16 | 4 | P7507 | Screw 1/4-20x3/4 | 8 |
| G40824 | Screw, NM8 x 1.25 x 8, Nylon | 1 | P7863 | Retaining Ring | 1 |
| G40851 | Lock Washer Ribbed M8 | 5 | PG10219 | Terminal 1/4x90 | 5 |
| G40852 | Spring Pin, M5 x 30 | 1 | PG10255 | Screw, 1/4-20 x 3/4", FHM | 3 |
| G40901 | Feed Lever Pivot Bearing | 1 | PG10271 | Washer 9/16 | 1 |
| G40902 | Upper Drive Shaft Bearing | 2 | PW10 | Washer | 2 |
| G40903 | Worm Shaft Bearing | 2 | PW10.3 | Flat Washer 3/16 | 4 |
| G40905 | Clincher Cam Follower | 1 | PW12.1 | Washer Black 1/2 | 1 |
| G40906 | Ball Bearing | 1 | PW12.4 | Washer Black 1/2 | 4 |
| G40907 | Drive Shaft Coupling | 1 | PW14 | Flat Washer | 2-8 |
| G40908 | Crank Bushing | 2 | PW14.2 | Washer Zinc | 4 |
| G40909 | Head Drive Shaft Bearing | 1 | PW14.6 | Washer | 4 |
| G40911A | U-Joint & Splined Shaft Assembly | 1 | PW38 | Washer | 8 |
| G40912 | Grooved Straightener Roller | 2 | SU-0308853 | Screw 3/8X3/8 | 2 |
| G40950AA | Clincher Pad Assembly | 1 | SW14.1 | Lock Washer | 3 |
| G40952A | Clincher Back Plate Assembly | 1 | SW516.3 | C'Sunk Lock Washer | 2 |
| G40954 | Clincher Front Plate | 1 | UA1428.1 | Set Screw 1/4-28X1/4 | 3 |
| G40955F | Clincher Point - Flat | 2 | UA3216.2 | Clincher Slide Block Screw | 2 |
| G40955R | Clincher Point - Round | 2 | UA3410.4 | Screw, 10-32 x 5/8" | 2 |
| G40956A | Clincher Base Assembly | 1 | UA3806.2 | Screw 10-32x3/8 | 2 |
| G40957 | Clincher Adjustment Shaft | 1 | UA3806.9 | Screw 10-32x3/8 | 3 |
| G40958 | Clincher Adjustment Worm Gear | 1 | UA3808.2 | Screw 10-32x1/2 | 2 |
| G40959 | Clincher Height Adjust Handle | 1 | UA3810.10 | Shoulder Screw 1/4x5/8 | 2 |
| G40960 | Worm Shaft | 1 | UA4810.1 | Screw 1/4-20x5/8 | 3 |
| G40961 | Clincher Adjusting Worm | 1 | UA4812.7 | Screw 1/4-20x3/4 | 3 |
| G40962 | Table Pivot Shaft | 1 | UA4828.3 | Set Screw - Cup Point | 4 |
| G40964A | Work Table Assembly | 1 | UA5112.1 | Screw 5/16-18x3/4 | 1 |
| G40973B | Work Guide | 1 | UA5116.1 | Screw 5/16-18x1 | 6 |
| G40975 | Clincher Upright Extension | 1 | UA5120.2 | Screw 5/16-18x1-1/4 | 2 |
| G40976 | Clincher Slide | 1 | UA51618.1 | Screw, 5/16-18 x 7/8 | 4 |
| G50125 | Screw M5x0.8x20 | 3 | UA5812.7 | Screw 5/16-18x3/4 | 2 |
| G50234 | E-Ring 4mm | 2 | UA6112.1 | Screw 3/8-16x3/4 | 4 |
| G50266 | Dowel M5x10 | 2 | UA6116.1 | Screw 3/8-16x1 | 4 |
| G50396 | Screw M5x.8x12 | 3 | UA8164 | Screw 1/2-13x4 | 1 |
| HN1024 | Nut 10-24 | 2 | | | |
| HN1213.2 | Hex Jam Nut 1/2-13 | 1 | | | |
| HN1420.2 | Hex Jam Nut 1/4-20 | 4 | | | |
| HN3816 | Hex Nut 3/8-16 | 5 | | | |
| HN51618 | Hex Nut 5/16-18 | 1 | | | |
| HN51618.2 | Hex Jam Nut 5/16-18 | 2 | | | |
| KN1032 | Kep Nut 10-32 | 3 | | | |
| | • | | | | |

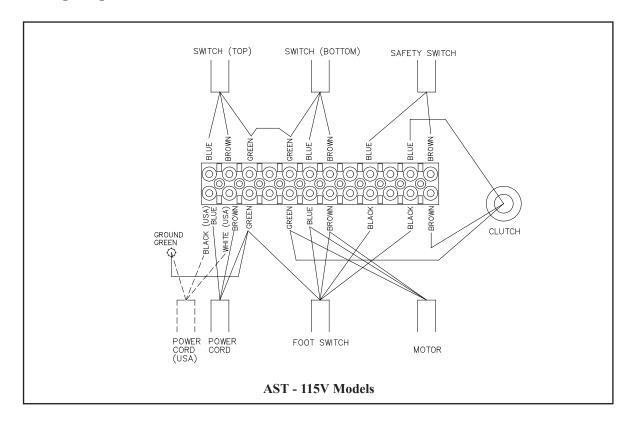
Wiring Diagram

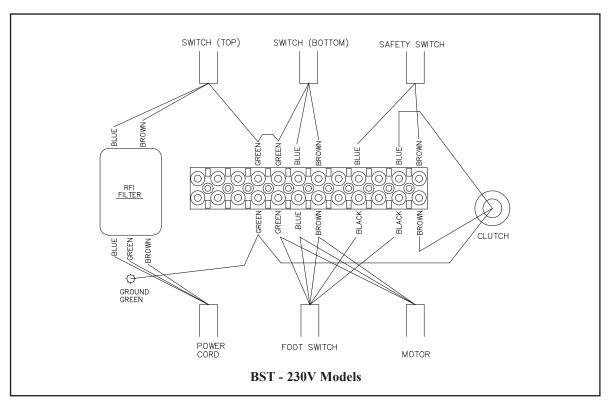




Complete Wiring with Detail

Wiring Diagram





NOTES

Please take a moment to fill out the attached card and mail it to DeLuxe Stitcher Company, Inc.
In addition, duplicate the information for your records to assist when making further inquiries.

PRODUCT

| | | | | (Type/Quantity Purchased) | | | | |
|-----------------------|---|-------------------|----------------|---------------------------|--------------------|--------------------|-------------------|--|
| Machine(s) Purchased: | - | Serial Number(s): | With Head(s) : | | Serial Number(s) : | Head(s) Purchased: | Serial Number(s): | |

DELUXE STITCHER GRAPHIC ARTS REPRESENTATIVE

| Date Received : | | |
|------------------------|------------------------|--|
| Dealer Name : | | |
| Dealer Street Address: | | |
| City: | State/Province : Zip : | |
| Country: | | |
| . 09040 201000 | | |

Would you like information sent to you about new products

■ Yes

that would benefit your company?

REGISTRATION

To better service your wire stitching needs, please take a moment to fill out and return this registration card.

| Name : | | |
|---------------------------|-------------------------------|----------|
| (First) | (Middle Initial) | (Last) |
| Company: | | |
| Street Address : | | |
| City: | State/Province : | Zip: |
| Country: | | |
| Phone : | Fax : | E-mail : |
| Machine(s) Purchased : | rchased : | |
| | (s). | |
| | | |
| n a | (Type/Quantity Purchased) | |
| Serial Number(s) : | [5] | |
| Head(s) Purchased : | ased: | |
| Serial Number(s) | : (s) | |
| | | |
| Date Received : | | |
| Dealer Name : | | |
| ■ Dealer Street Address : | Address : | |
| City: | State/Province : | Zip : |
| Country: | | |
| | | |
| | | |
| Other Bindery | Other Bindery Products Used : | |
| | | |

Common Replacement Parts

Below is a list of the most common wear/replacement parts for the M30 Stitcher. This guide should help you when ordering replacement parts. If the part you need is not listed below, please refer to the more detailed parts list in this manual.

| Description | Item Number |
|------------------------------|-------------|
| Screw, M4x0.7x10 | G20167 |
| Moving Cutter | G40145 |
| Fixed Wire Cutter | G40600 |
| Driver, 5/8", 19x21-1/2 Wire | G40657 |
| Clincher Point - Flat | G40955F |
| Clincher Point - Round | G40955R |
| Clincher Slide | G40976 |

PLACE STAMP HERE

DELUXE STITCHER COMPANY, INC.

6635 West Irving Park Road Chicago, Illinois 60634-2410 U.S.A. Attn: Customer Service

LIMITED WARRANTY

DeLuxe Stitcher Company, Inc. 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.

This warranty is in lieu of all other express warranties. Any warranty of merchantability or fitness for a particular purpose is limited to the duration of this warranty. DeLuxe Stitcher shall not be liable for any incidental or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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.

DeLuxe Stitcher Company, Inc. Chicago, Illinois 60634-2410 Phone: 773-777-6500 800-634-0810 Fax: 773-777-0156 800-417-9251 E-mail: info@deluxestitcher.com

Web Site: http://www.deluxestitcher.com





Declaration of Conformity

We, DeLuxe Stitcher Company

6635 West Drving Park Road Chicago, Ollinois 60634-2410 U.S.A Celephone 773-777-6500 Facsimile 773-777-0156

hereby declare under our sole responsibility that the

M30-BST Stitching / Stapling Machines

to which this declaration relates is in conformity with the following European product safety directives:

Machinery Safety Directive

(89/392/EEC and amendments 91/368/EEC, 93/44/EEC, 93/68/EEC)

Electromagnetic Compatibility Directive

(89/336/EEC and amendments 91/C162/08, 92/31/EEC, 93/68/EEC)

as is verified by compliance with the following standards:

EN 60204-1:1992 prEN 894-1:1992 prEN 953:1992 EN 294:1992 prEN 894-3:1992 EN 55014:1193 prEN 614-1:1991 prEN 1050:1993 EN 55104:1995

Executed for DeLuxe Stitcher Company

this first day of January in the year 2009

By Frank P. Cangelosi Signature Frank P. Carylon

Citle President

