

COMPANY INC

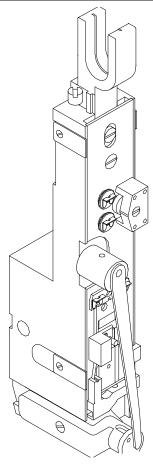
solving your wire stitching needs for 125 years...

Head Serial Number:	
Date Purchased:	
Where Installed:	

(make/model of machine)

MAGNATEK

OPERATION AND MAINTENANCE MANUAL



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

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USE ONLY REPLACEMENT PARTS DESIGNED AND MANUFACTURED BY

DeLuxe Stitcher / ISP SPECIFICALLY FOR YOUR MAGNATEK STITCHER

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Section 1 INTRODUCTION

Here are the instructions on how to install, operate, maintain and make repairs on your...

MAGNATEK STITCHER HEAD

Stitcher Head Serial Number	Stitcher Head Wire Size
Stitcher Head Part Number	
Stitcher Head Crown Width	

When ordering parts or requesting information, please state:

Stitcher Head Serial Number, Stitcher Head Part Number, Model, Wire Size, Crown Width Part Number Part Name Quantity Required

The Magnatek Stitching Head has been engineered and developed to provide you with the finest equipment available for your stitching needs. With proper care and maintenance it will give you years of satisfactory, efficient service. This manual shows you how to get top performance from your stitcher and is divided into 7 major sections.

Read the Magnatek Manual thoroughly. Study it carefully. Best stitching performance will be assured, if all the adjustments are made as instructed.

PRODUCT SPECIFICATIONS

Unit Weight:	Lbs.		
	4.5 lbs.		
Unit Envelope Size:	Height	Length	Width
Magnatek Head Without Wire Guide:	11 in.	3.12 in.	1.82 in.

Section 2 SAFETY PRECAUTIONS AND PROCEDURES

SAFETY

- 1. Make sure electrical power is turned off before performing any adjustment or maintenance.
- 2. Keep hand, tools, hair, and clothing clear of stitching area.
- 3. Become familiar with the moving components of your machine. Keep fingers away from areas that could pinch or cut.
- 4. Wear adequate safety equipment for eye and face protection. Observe your plant safety rules.
- 5. Practice "good housekeeping" in your work area. Keep it as clean and uncluttered as possible.
- 6. A well maintained machine is a safer machine. Clean and lubricate the machine at regular intervals. Check machine daily for broken or worn parts. Replace as necessary. DO NOT attempt to operate the machine if a part is broken.
- 7. Route all electrical cables away from pedestrian transportation lanes.
- 8. Make sure adequate safety guards and covers are in place. If you are unsure how to safely operate or maintain your Stitcher, contact your Service Representative.

DANGER

KEEP HANDS CLEAR OF STITCHING AREA

CAUTION

FOR YOUR SAFETY, MAKE SURE ALL COVERS ARE PROPERLY IN PLACE BEFORE OPERATING MACHINE

Section 3 ASSEMBLY, LUBRICATION INSTALLATION

Note:

These instructions must be followed to insure proper installation, efficient operation and the prevention of serious damage to your stitcher.

Before Unpacking:

Examine the outside of the crate or carton for any visible damage. If damaged DO NOT UNPACK THE STITCHER. Notify the carrier who delivered the stitcher.

After Unpacking:

Examine your stitcher carefully for any damage in transit. If damaged, DO NOT INSTALL THE STITCHER. Notify your nearest representative and the carrier who delivered your stitcher.

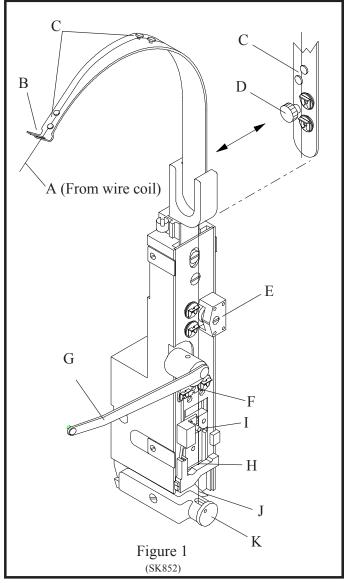
Make certain that you get a signed copy of the Carrier Inspector's Report of the damage incurred.

ASSEMBLY

- 1. Clamp or bolt the Magnatek head to your machine
- 2. Install Wire Guide Spring into wire guide bracket of Magnatek Head.

THREADING WIRE AND ADJUSTING WIRE STRAIGHTENERS (See fig. 1)

- 1. Draw wire (Index A) by hand, from the coil.
- 2. Thread the wire through the slot (Index B) at the end of the wire guide spring, through the wire guides (Index C), through the upper wire straightener (Index D), and through the lower wire straightener (Index E).



- 3. Release the rotator operating spring (Index G) from the rotator and swing it to the left. Remove Rotator (Index K).
- 4. Thread the wire between the tension pawl and tension roll (Index F). Feed the wire through the wire cutter lead-in hole (Index H) in the bottom of the face plate.
- 5. Push grip post to left to open the grip (Index I). Insert wire and release the post so that the grip engages the wire for feeding into the rotator.
- 6. To check adjustment, hold open grip (Index I and pull about 1 1/2 feet of wire from below face plate. Cycle machine once by hand to cut wire. Cycle machine again by hand to observe wire straightness. The wire (Index J) should point straight down, prior to being cut.

- 7. Adjust the upper wire straightener, beginning at position shown, (Index D) so that the wire points straight down. Adjust the lower wire straightener, beginning at the 3:00 o'clock position, (Index E) so that the wire (Index J) feeds straight down.
- 8. Replace the rotator and rotator operating spring.

NOTE:

When changing coils or wire sizes, check straighteners to insure proper wire feed.

CAUTION

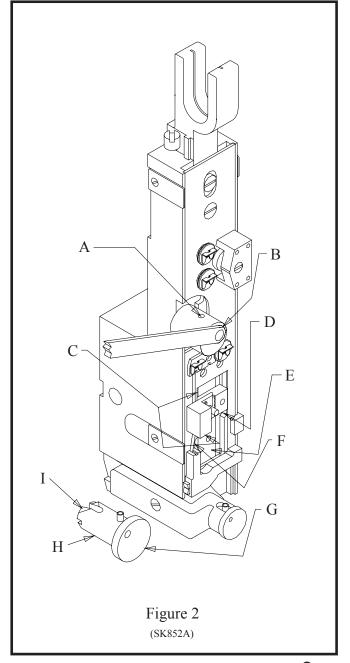
Do not operate stitcher until operating instructions have been read and understood-do not operate stitcher at anytime without work under the head.

STITCHING HEAD LUBRICATION (See fig. 2)

Important! The stitching head must be lubricated before each spool of wire (50,000 to 70,000 stitches). Use **Deluxe / ISP** lubricant #CA9640.

- A. Inject lube into hole, or remove and lube shaft.
- B. Remove rotator spring and lube shaft.
- C. Inject a small amount of lube on cam surface of driver bar above and below grip housing.
- D. Wipe area clean, and inject a small amount of lube on grip release cam.
- E. Wipe driver clean, and apply a layer of lube.
- F. Inject lube into cutter operating slide.
- G. Very important! Remove rotator and clean inside of rotator holder.
- H. Carefully clean the rotator and apply lube to its body.
- I. Apply lube to the rotator's ramp.

For heavy duty applications, periodically disassemble the head and clean the parts. Lightly lube all sliding surfaces using **Deluxe / ISP** lubricant #CA9640. Double check lube points A through I.



Section 4 OPERATION

General:

After having properly installed and set up the machine, it is now ready for stitching. It is recommended that each operator be instructed as to correct operating procedure and normal adjustments necessary for varying work conditions.

WARNING

Prevent accidents by following these rules:

- 1. Do not put your hands near area to be stitched when machine is operating.
- 2. Turn the power off when the stitcher is not in use.

CAUTION

AVOID DAMAGE TO YOUR STITCHER BY FOLLOWING THESE RULES:

- 1. Never operate your stitcher with wire feeding unless you have work material between the clinchers and formers.
- 2. Do not drive one stitch on top of an other.

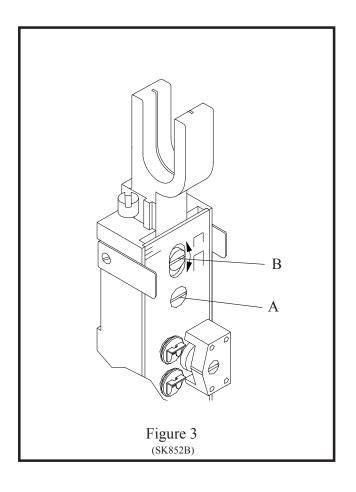
Changing Work Thickness: (See Fig. 3)

Changing work thickness will probably require a change of the wire draw length used to make a stitch. This is done by raising or lowering the face plate. Change face plate position as follows:

- 1. Switch off power, loosen the face plate screw (Index A).
- 2. Turn grip release lever (Index B) clockwise to raise face plate for more wire draw or counter clockwise to lower face plate for less wire draw.

NOTE: Raising face plate too high may: (1.) Prevent the grip from closing and drawing wire; (2.) Prevent proper compression resulting in a loose stitch.

3. Retighten faceplate screw.



Section **5**

MAINTENANCE, TROUBLE SHOOTING AND ADJUSTMENTS

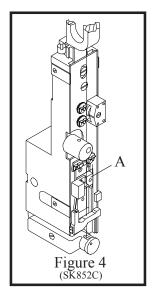
General

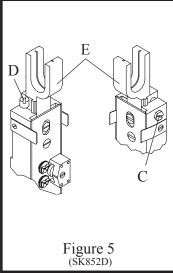
The Magnatek Stitcher is a friction-type head which depends on smooth sliding friction and proper timing to function correctly. Preventative maintenance will go far to insure trouble-free operation. Avoid production down time by keeping your stitcher lubricated and in top working condition at all times.

Recommended Spare Parts

Like any equipment that has moving parts, certain parts of your stitcher will be subjected to more wear than others and require replacement. The following listing includes all the parts required for minimum maintenance and good operation.

PART NAME	QTY.
Wire Cutters	2
Grip	1
Grip Spring	1
Driver	1
Tension Roll Clip	2
Rotator	1
Clincher Points	2





CAUTION

MAKE ALL ADJUSTMENTS WITH THE POWER OFF AND THE STITCHING HEAD IN NEUTRAL POSITION! (Fig. 4)

In neutral position, the wire grip assembly (Index A) is stopped at the top of the slot in the face plate.

Stitching Adjustments

Best stitching performance will be assured if all adjustments are made so that you get the following results:

- 1. Good Cut-Off
- 2. Uniform Wire Draw
- 3. Equal Leg Length
- 4. Proper Clincher Alignment
- 5. Sufficient Compression

To Equalize Both Legs of Stitch (See fig. 5)

- 1. Loosen the wire guide locking bolt (Index C).
- 2. Turn adjusting screw (Index D) clockwise to shorten left leg of stitch; counter clockwise to lengthen left leg.
- 3. Tap bracket (Index E) down before tightening screw (Index C).

Magnatek Head Trouble Shooting



HERE'S HOW A PERFECT STITCH LOOKS

Should stitches appear in any form other than illustrated, one or more kinds of mechanical trouble may have caused the malformation. The possible causes and remedies are given for each kind of mechanical trouble and are listed under each section. The remedies are indexed to the Adjustments Section which gives more detailed information about your stitcher, the mechanical trouble that may occur and suggested remedies. Unless you recognize the correct cause, check each possible cause given.

TROUBLE	POSSIBLE CAUSE	REMEDY
A. Defective Stitches		
1. One or both legs buckled. NOTE: Since buckled legs are often concealed in the work and may appear the same as a short leg, always remove two or more stitches to see which is occurring. 2. Wrinkled crown.	 Clincher is worn or improperly aligned. Insufficient compression. Unequal leg length Burred stitch leg. Incorrect wire size. Worn bender bar. 	"B,C" Page 12,13 "A Page 12 See "To Equalize Both Legs of Stitch" Page 8 "J" Page 16 "L" Page 17 "D" Page 13
3. Length of one leg varies	 Leg Lengths not adjusted properly Gripper is worn or dirty Grip release slide is worn Broken wire guide spring (Figs 20 page 22) Excessive tension on wire straightener Worn Driver bar Worn Tension Pawl or weak tension pawl spring Weak or broken grip spring 	See "To Equalize Both Legs of Stitch" Page 8 "I" Page 15 "I" Page 15 Replace "N" Page 18 "F" Page 14 "P" Page 19 "I" Page 15

Magnatek Head Trouble Shooting

TROUBLE	POSSIBLE (CAUSE	REMEDY
Corner of crown distorted or fractured	 Excessive compression Broken driver end Worn bender bar Clincher improperly all or worn Incorrect wire size 		"A" Page 12 "G" Page 14 "D" Page 13 "B,C" Page 12,13 "L" Page 17
5. Stitch crown not flat and legs not bent into work	1. Insufficient compressi	on	"A" Page 12
6. One or both legs turn out	1. Clincher improperly a	lligned	"C" Page 13
	2. Dull cutters		"J" Page 16
7. Flat piece of wire	 Rotator is dirty Improperly adjusted less straightener Broken or worn rotated Improperly aligned rotated 	or	"M" Page 17 "N" Page 18 "M" Page 17 "M" page 17
8. Stitches come out in pieces	 Improperly aligned ro Weak rotator operatin Improperly adjusted ustraightener Incorrect wire size Wire jammed in bendergrooves 	ng spring upper wire	"M" Page 17 "M" Page 17 "N" Page 18 "L" Page 17 "D,G" Page 13,14
9. Both stitcher legs are either too long or too short	Face plate not adjusted p	roperly	See "Changing Work Thickness" Page 7

Magnatek Head Trouble Shooting

TROUBLE	POSSIBLE CAUSE	REMEDY
B. WIRE BUCKLES		
Wire buckles above the grip and below the tension pawl	1. Worn driver bar	"F" Page 14
and below the tension pawi	2. Worn bender bar latch	"H" Page 15
(SK852E)	3. Worn or broken bender bar friction plug and/or spring	"E" Page 14
2. Wire Buckles above the wire cutters and below the	1. Improperly aligned rotator	"M" Page 17
grip	2. Worn or broken wire cutters	"J" Page 16
	3. Burrs on rotator	"M" Page 17
	Improperly adjusted lower wire straightener	"N" Page 18
	5. Worn or broken wire cutter operating slide	"K" Page 17
(SK852E)	6. Wire cutter slot in face plate worn	"J" Page 16
C. GRIP		
1. Grip does not close	1. Face plate is too high	See "Changing Work Thickness" Page 7

CAUTION

Turn Power OFF Before making Any Adjustments

A. Insufficient or Excessive Compression

Proper compression of work between the clincher and the bender bars is necessary so that the stitch penetrates the work material and clinches correctly. To test for compression, drive several stitches into sample work material. With proper compression, stitches hold the work together firmly and the clinched legs do not overlap. In the following instances, either one or all of the conditions may exist: with insufficient compression, stitch legs overlap, crown of the stitch is fractured, and the work mutilated. The method for obtaining proper wire draw and compression is detailed in the Operation Section on Page 7 under the heading, "Changing Work Thickness".

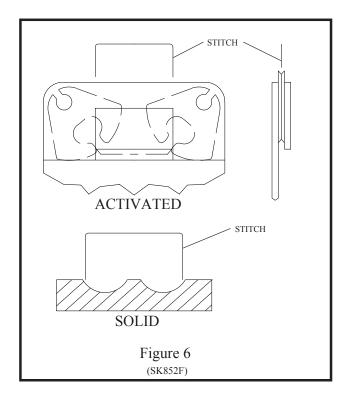
B. Clincher (See fig. 6)

The purpose of the clincher is to turn the legs of the stitch back after they have penetrated the work material. There are two types of clinchers:

- 1. Solid (stationary) Type-makes a loop clinch.
- 2. Activated (moving) Type-makes a flat clinch.

With the Solid (stationary) Type clincher, the legs of the stitch must strike the clincher at the same time and with equal spacing from the outside edges of the grooves. The grooves in the clincher should be smooth. Any interference (particularly worn or pitted grooves), which change the original radii, will cause the stitch legs to buckle and/or the corners of the crown to fracture.

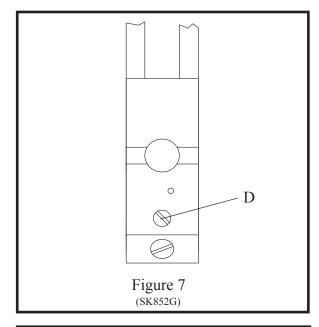
With the Activated (moving) Type clincher, the stitch legs must enter the clincher at the same time

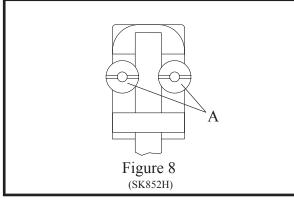


and with equal spacing from each side. When the stitch legs have penetrated the work material, the moving clinchers are raised to bend the legs towards each other and up flat against the work. The clincher points must bend both legs of the stitch against the work with the same force. Clincher points must always move freely and not bind. Dirt, wire chips, etc. will cause the points to bind.

The clincher points are in a retracted position in the clincher box until the stitch legs penetrate the work material. After the legs penetrate, the clincher points move upward to give a neat, flat clinch against the bottom surface of the work material. If the clincher points remain in the up position, the legs of the next stitch cannot penetrate the work material, causing the stitch legs to buckle and/or the corners of the crown to fracture. Examine the clincher points, clincher slide for possible binding. Clean and oil.

If clincher points rise to high, they fracture the stitch legs and/or mar the work. If the points do not rise high enough, the legs will not clinch flat. Adjust the height of the clincher points. For most work the clincher points should rise to be level with the top of the clincher housing.

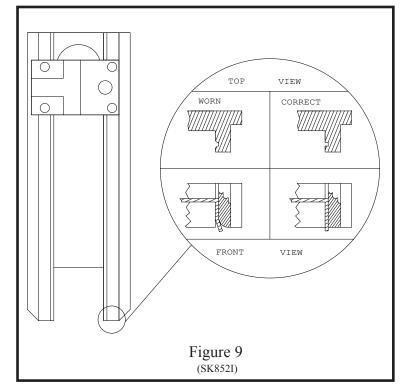






To test alignment: Drive several stitches into a section of material identical to that which is to be stitched. The clinched legs should be identical and aligned with each other. If the legs are not in alignment make one of the following adjustments:

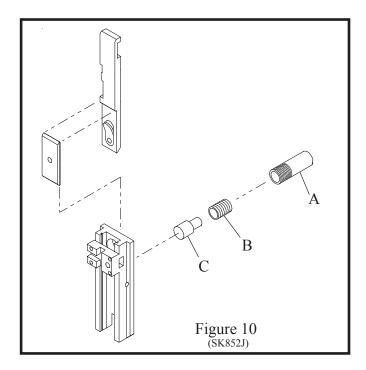
- 1. To adjust for front-to-rear alignment: (Fig. 7)
 - a. Turn power off. Cycle the stitcher by hand until legs of the stitch appear just below the bender bar to determine if the head should be moved to the front or rear.
 - b. Remove stitcher from machine.
 - c. Turn the head aligning screw (Index D) clockwise to move the head backward; counterclockwise to move the head forward.
 - d. Install stitcher head on machine.



- 2. To adjust for side-to-side alignment: (Fig. 8)
 - a. Turn power off. Cycle the stitcher by hand until legs of the stitch appear just below the bender bar to determine how far the head or clincher should be moved to the side.
 - b. Loosen clincher plate binder nuts (Index A).
 - c. Move clincher to left or right as required.
 - d. Tighten binder nuts.

D. Bender Bar (See fig. 9)

The bender bar bends the wire over the rotator and forms it into an unclinched stitch. The legs of the stitch are guided towards the work material by the bender bar grooves. The legs of the unclinched stitch should be perpendicular to the crown. When the bender bar grooves become worn, the legs tend to flare out (Figure 9) as they emerge from the grooves. This causes the legs to strike the clincher improperly. As a result, one or both legs will crumple and a broken driver bar or a broken bender bar can result. If the lower end of the bender bar grooves become chipped, it will not support the wire and may cause the stitch to break at the crown. Replace the bender bar assembly (See "H" page 15 or Fig. 10). Other bender bar functions are related to wire cutting ("J" page 16), and driving ("G" page 14).



E. Bender Bar Friction Plug And/Or Spring (See fig. 10)

Two parts furnish pressure to coordinate movement of driver bar and bender bar. If pressure is insufficient, proper timing is not maintained for the action of the grip. As a result, wire feeds backwards. Replace the plug and/or spring.

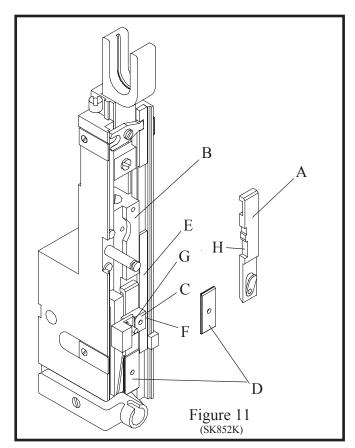
To replace bender bar friction plug and/or bender bar friction spring:

- 1. Remove bender bar assembly by following steps 1 through 16 of "Dismantling Magnatek Stitching Head", Pages 20 and 21.
- 2. Remove bender bar friction bushing (Index A). Bender bar friction plug (Index C) and spring (Index B) will be released forward from bender bar assembly.
- 3. Replace plug and/or spring and reassemble.

F. Driver Bar (See fig. 11)

The driver bar (Index A) has several functions:

- 1. It imparts the downward thrust from the driving slide assembly (Index B) to the bender bar assembly (Index C) and the driver (Index D).
- 2. It returns these parts to the neutral position on the upstroke.



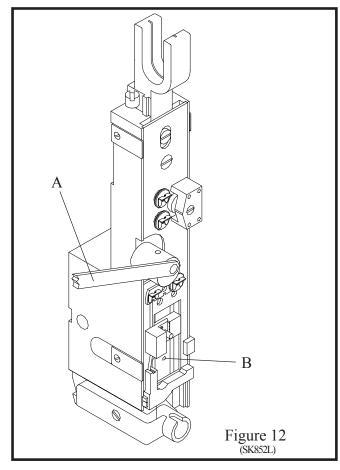
3. In conjunction with the grip release slide (Index E), it controls the movement of the bender bar latch (Index F) that opens and closes the grip (Index G).

If the notches (Index H) at the top left side of the driver bar become worn, the grip will not remain open on the upstroke. As a result the wire feeds backwards and buckles above the grip and below the tension pawl. Worn notches can also cause uneven wire draw. Replace the driver bar. While driver bar is out for inspection check the driver end retaining spring for proper tension and to make certain there is not dirt lodged behind it.

The notches shown on left side of driver bar play an important part in function of bender bar assembly therefore, corners should be free of dirt and notches not marred.

G. Driver

The driver rides within the bender bar grooves as part of the bender bar assembly. As this assembly reaches the lower contact point of the cam in the grip release slide, the bender bar latch is forced inward, releasing the wire grip and permitting the bender bar assembly to continue downward with



the driver riding on top of the formed stitch. When the bender bar is stopped against the work material, the driver continues downward to exert pressure on the crown of the stitch, driving it through the work material.

If the driver is chipped it allows the legs of the stitch to back up into the broken area. This causes the corner of the crown to fracture or a "spike" section to protrude above the crown. A chipped driver is usually the result of driving a stitch on top of another stitch. A worn driver often causes deformed stitches or fracturing at the corners of the crown. The driver is reversible for longer use.

Occasionally, a stitch is caught behind the driver. This causes improper alignment of the driver. As a result, successive stitches are distorted at the crown. Remove the driver and clean the bottom portion of the driver bar.

To remove the driver: (See fig. 12)

1. Cut the wire at the bracket and pull the loose end out.

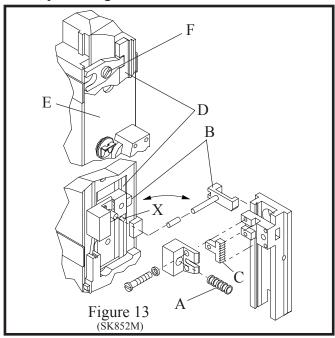
- 2. Swing the rotator operating spring (Index A) to the left.
- 3. Remove the rotator.
- 4. Insert a pointed object into the hole (Index B) on the driver and press in on the high end of the spring which is located behind it.
- 5. Slide the driver down and out of the head.
- 6. Clean, reverse or replace the driver.
- 7. Reassemble.

H. Bender Bar Latch

The bender bar latch opens and closes the grip and is actuated by the grip release slide and driver bar. If the contact points of the latch become worn, timing of the grip is erratic and uneven wire feed results. A dirty latch will decrease pressure of the grip on the wire. This causes wire slippage. Clean or replace the latch.

I. Grip, Grip Release Slide and Face Plate: (See fig. 13)

The grip spring (Index A) exerts pressure on the benderbar latch (Index B) to close the grip (Index C) at the start of the down stroke. The grip release slide (Index D) actuates the bender bar latch at point X to open the grip after the correct amount of wire has been fed to make a stitch. The serrated teeth on the grip must be sharp or slippage will occur, producing uneven wire draw.



When the face plate (Index E) is adjusted (See "Changing Work Thickness", page 7) a pivotal action (at point F) changes the position of the grip slide. When the face plate is raised, it moves the grip release slide down. The gripper can then remain closed longer, on the down stroke, feeding more wire for the stitch. When the face plate is lowered, it moves the grip release slide up. The gripper will open sooner on the down stroke, feeding less wire for the stitch.

If the grip is weak, uneven wire draw will result. Replace the grip spring. If the contact points on the grip release slide and/or the bender bar latch are worn, wire adjustment will not remain accurate.

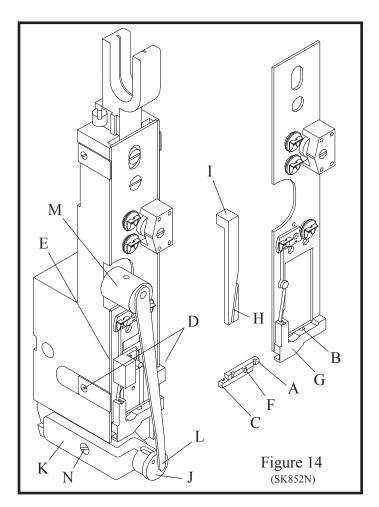
The face plate stops the bender bar assembly at the top of its stroke and allows the bender bar latch to close the grip. When the face plate is too high, too much of the upstroke has been used before the bender bar hits the face plate. In the remaining portion of the upstroke, the driver bar cannot continue upward enough to release the bender bar latch so that it can close the grip.

J. Wire Cutters: (See fig. 14)

The purpose of the wire cutters is to shear the wire cleanly. There are two wire cutters, upper and lower. The upper wire cutter (Index A) receives wire from the grip through the wire cutter lead-in-hole (Index B). It also serves as the cutoff die. The lower wire cutter (Index C) is the cutting knife. If the cutter breaks, it will cover the lead-in hole. This prevents the wire from feeding into the rotator. If the cutting surfaces become worn, burrs will result on the end of the wire. This prevents the wire from feeding into the rotator. As a result, the wire buckles between the cutters and the wire grip. Reverse, interchange or replace the cutters.

To Reverse, Interchange, or Replace the Wire Cutters:

- Loosen both face plate retaining clips (Index D) at bottom of bonnet.
- 2. Spring the face plate out 1/8" while holding the cutter slide in position (Index E).
- 3. Slide the cutters out to the left.



4. Reverse, interchange or replace the cutters.

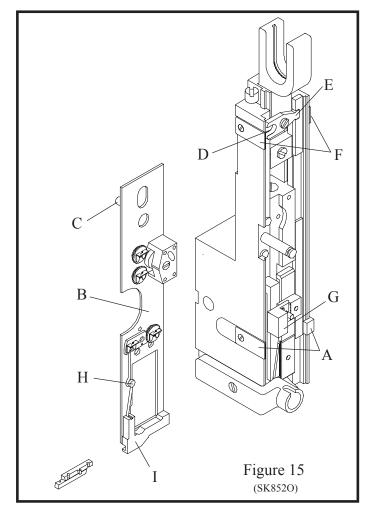
NOTE

While installing the cutters, make sure that (1): lip on upper cutter (Index F) fits into the recess behind the face plate (Index G) and (2): that the lip on the bottom cutter fits into the slot (Index H) in the wire cutter operating slide (Index I).

The wire cutter operating slide actuates the lower wire cutter. If the slide is worn or broken, the wire cutter is not actuated. Replace the operating slide. The slot in the lower part of the face plate contains the wire cutter and maintains a close fit for wire shearing. If this slot becomes oversized, the wire will not be cut off. Replace face plate. To Replace Face Plate (See Steps 1 through 8, "K" page 17).

NOTE: (See fig. 15)

The lug (Index C) in the faceplate must match the slot (Index D) in the grip release adjusting lever (Index E) or damage to the head may result.



K. Wire Cutter Operating Slide

The wire cutter operating slide actuates the lower wire cutter which acts as the cutting knife. If the slide is worn or broken, the wire cutter is not actuated. Replace the operating slide.

To Replace The Wire Cutter Operating Slide:

- 1. Cut the wire at the bracket and pull the loose end out.
- 2. Remove the stitcher head assembly.
- 3. Lift end of spring (Index L, Figure 14) out of rotator.
- 4. Swing the spring up to disengage it and lift
- 5. Slip the rotator operating cam (Index M, Figure 14) forward and off the stud.
- 6. Pull the rotator forward.
- 7. Loosen the two face plate retaining clips (Index A, Figure 15) and rotate them downward.

- 8. Push two face plate retaining clips (Index F) outward while lifting face plate up to release face plate.
- 9. Position grip spring housing (Index G) between tension pawl spring retainer (Index H) and cutter housing (Index I).
- 10. Remove face plate (Index B) by sliding face plate to the left and lifting up.
- 11. Remove the cutter operating slide (Index I, Figure 14).
- 12. Insert a new cutter operating slide.
- 13. Reassemble

L. Proper Wire

Depending on which Magnatek head is being used the wire range may be: 25 to 30 gauge round; 24 gauge round; 20x25 or 21x25 flat. 120,000 to 159,000 psi tensile strength bookbinders wire should be used.

If the wire used is larger than the bender bar grooves were designed for, it will fracture at the stitch corners and come out in pieces. Also, serious damage to the stitcher may result. If the wire used is smaller than the bender bar grooves were designed for, the legs of the stitch do not fit snugly in the grooves and may tend to buckle when they strike the work material because they are not fully supported.

M. Rotator (See fig. 14)

The rotator (Index J) (1) receives the wire from the cutoff die, (2) holds the wire while it is being cut, then (3) turns it to a horizontal position, moves it under the bender bar grooves and (4) supports the wire while it is being formed into a "U-shaped" stitch.

The wire lead-in-funnel of the rotator must be aligned with the wire as it comes through the wire cutters. If the rotator is improperly aligned, the wire hits the rotator and buckles. Adjust upper two wire straighteners until wire slips past rotator. Burrs on the rotator prevent the wire from entering the rotator. This causes wire buckling. Remove the rotator and polish the lead-in radius.

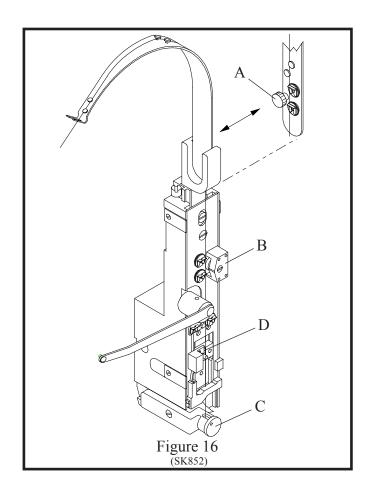
The magnets in the rotator hold the wire firmly in the rotator. If a magnet is broken or chipped the wire may fall out. To determine if the rotator has the proper holding strength, remove the rotator and insert a cut length of wire in the rotator. Hold rotator between thumb and forefinger. Attempt to jar wire loose by hitting heel of hand on top of table or against other hand. With proper magnetic holding force wire will remain in rotator. With insufficient holding force wire will fall from rotator. Replace the rotator.

The rotator holder and rotator operating spring are responsible for alignment of the wire beneath the bender bar grooves. The position of the rotator holder determines how far the rotator is pushed forward under the bender bar by the rotator operating spring (Index L, Figure 14). A weak spring will not push the rotator in far enough and with this improper alignment the bender bar will knock the wire from the rotator or will shear the wire into pieces. To secure proper alignment, check the position of the rotator holder and the tension applied by the rotator operating spring. Make any necessary adjustment of the rotator holder or replace the rotator operating spring if weak.

The wire is fed into the rotator and held for forming. If the rotator is dirty, the wire is not gripped securely enough and drops out. Remove and clean the rotator. If the edges over which the wire is formed are sharp, the corners of the stitch crown will fracture. Remove the rotator and polish the edges with a fine emery cloth.

To remove, Adjust or Replace the Rotator Holder:

- 1. Swing the rotator operating spring to the left.
- 2 Remove the rotator
- 3. Loosen the rotator holder screw (Index N, Figure 14).
- 4. Adjust the rotator holder screw.
- 5. Reassemble.



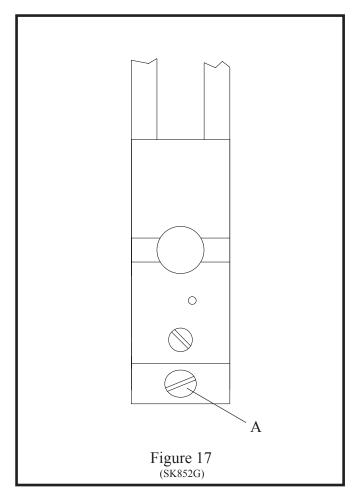
Wire Straighteners (See fig. 16)

All coils of stitching wire have a certain amount of bundle curve. The purpose of a wire straightener is to remove this curve. There is both an upper wire straightener (Index A) and a lower wire straightener (Index B) on all Magnatek Model Stitchers. See "Threading Wire and Adjusting Wire Straighteners" page 5.

The upper wire straightener should feed wire parallel to the faceplate. This insures that the wire will properly enter the rotator and will be aligned with the grooves in the bender bar.

If the wire is not parallel to the face plate the wire is sheared in the rotator as the bender bar descends. Adjust the upper wire straightener.

The lower wire straightener directs the wire straight down so that it enters the rotator (Index C). If the wire is not straight enough it hits the rotator and buckles. Adjust the lower wire straightener so that



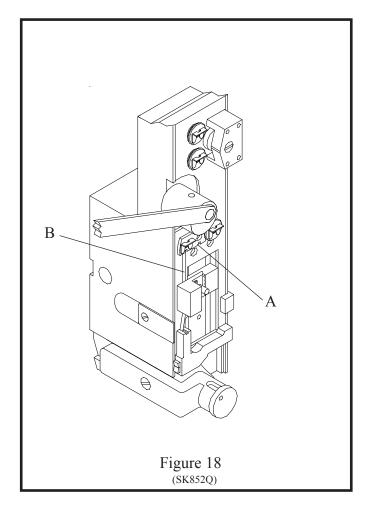
the wire points straight down as in figure 16. Improper straightening of the wire can also cause the stitch legs to buckle or turn out because they strike the clincher improperly. Excessive tension on the wire straightener prevents the grip (Index D) from feeding the wire smoothly. This causes variation in leg length.

NOTE:

Check the wire straighteners when changing the coils to insure the accurate feeding of wire.

O. Supporter

The supporter furnishes the necessary support to the inside surface of the stitch so that it does not buckle as it is being driven into the work material. A lack of (or insufficient) support will often cause the stitch crown to wrinkle or the legs of the stitch to buckle. Tighten the supporter spring bushing (Index A, Figure 17) or replace the spring.



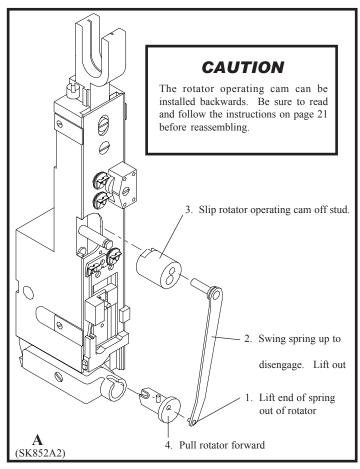
If the corners of the top surface of the supporter are too sharp, or nicked, the corners of the stitch crown will fracture. If operating properly the supporter should function as follows:

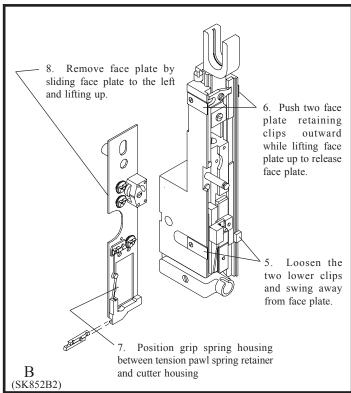
- 1. When the bender bar touches the work material and the legs of the stitch are about to leave the bender bar grooves the supporter should be touching the underside of the crown.
- 2. As the stitch is driven through the work the supporter is gradually retracted by the driver. It should remain under the crown of the stitch until the last instant before the crown touches the work material.

P. Tension Pawl: (See fig. 18)

The tension pawl (Index A) and spring (Index B) apply pressure on the wire to prevent back feed. If the pawl becomes worn or the spring becomes weak, the wire feeds backwards resulting in a short wire draw. Reverse or replace the tension pawl and/or spring.

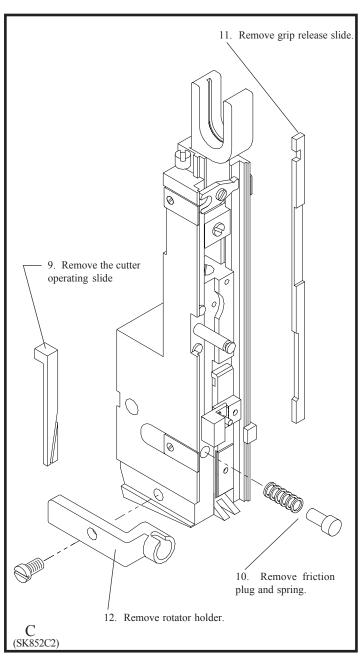
DISMANTLING MAGNATEK STITCHING HEAD



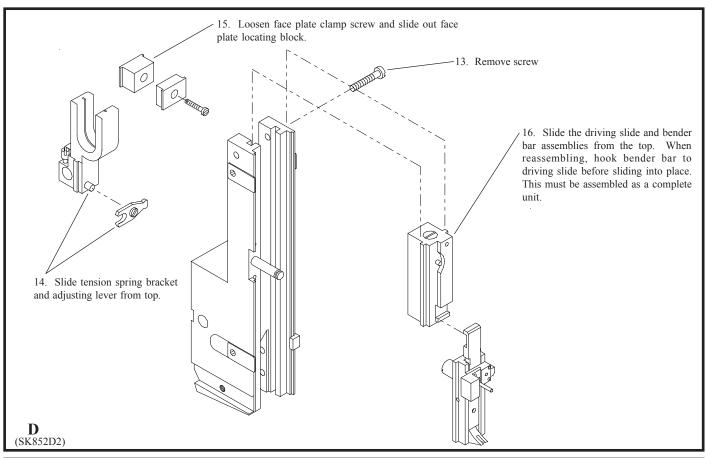


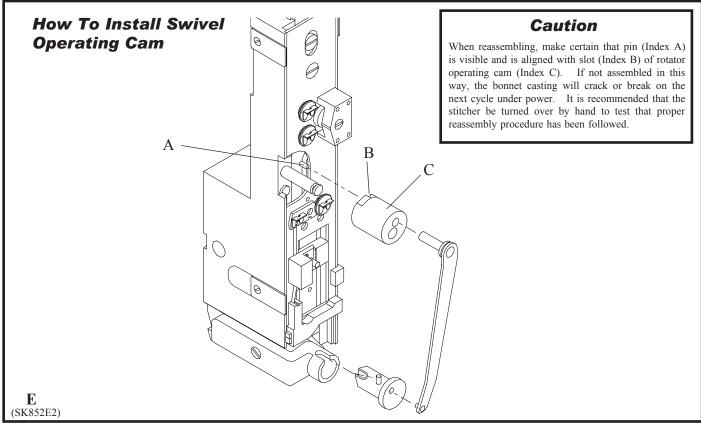
CAUTION

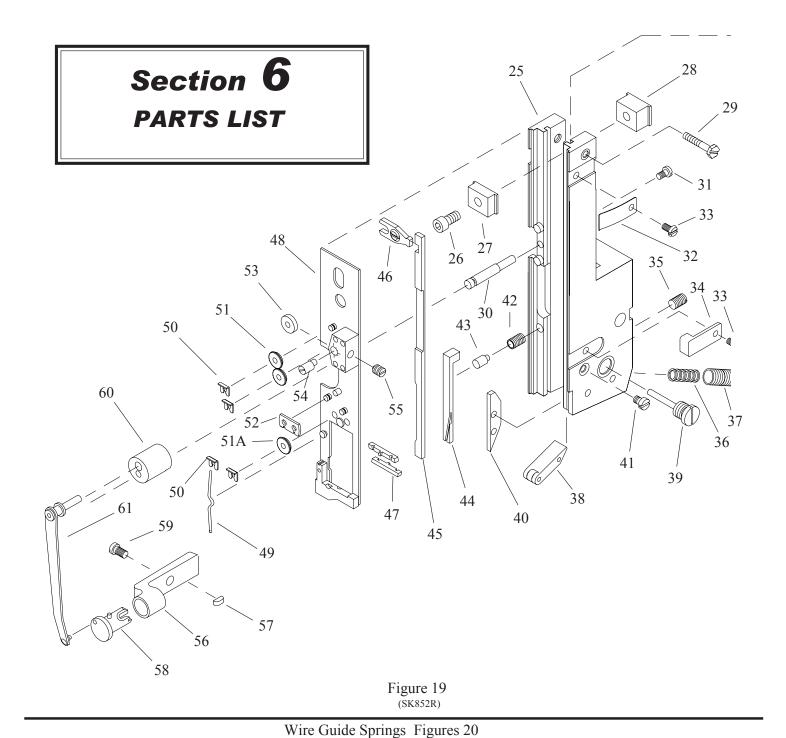
As a precautionary measure-When removing the head from any stitching machine make SURE that the power to the machine has been turned OFF or disconnected.

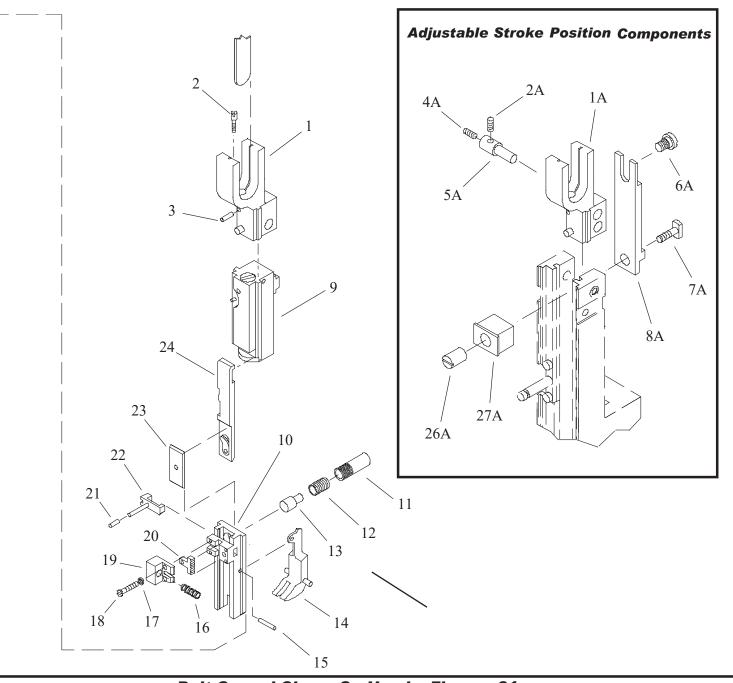


DISMANTLING/REASSEMBLING MAGNATEK HEAD

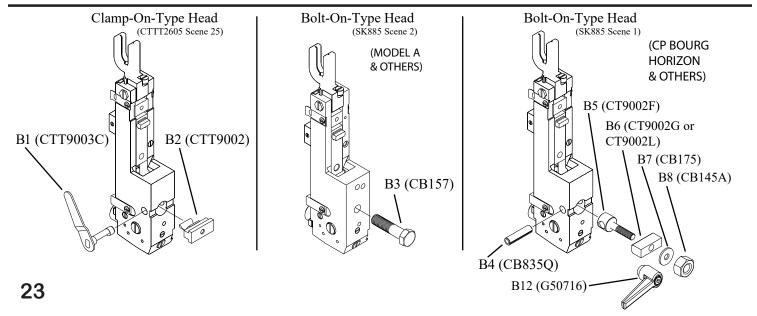








Bolt-On and Clamp-On Heads Figures 21



MAGNATEK HEAD

PARTS LIST

			-
ITEM	PART NO.	DESCRIPTION	QTY
1	CAA9074Z	WIRE GUIDE BRACKET ASSEMBLY	1
1A	CTT2615B	WIRE GUIDE BRACKET ASSEMBLY	1
2	CA9076	WIRE GUIDE SPRING BRKT ADJ SCREW	1
2A	CT56	WIRE GUIDE SPRING BRKT ADJ SCREW	1
3	CA9077	WIRE GUIDE SPRING BRKT SET SCREW	1
4A	CT1060	SET SCREW	1
5A	CT2616	WIRE GUIDE BRACKET ADJ. SCREW STUL) 1
6A	CT2614	FACE PLATE ADJ. SLIDE GUIDE STUD	1
7A	CT2612	FACE PLATE LOCATING BLOCK STUD	1
8A	CT2610	FACE PLATE ADJUSTING SLIDE	1
9	See TABLE 1	DRIVING SLIDE ASSEMBLY	1
ľ		iving Slide Assembly includes the following par	-
	1,012,11021	ring shae rasemery merades are renewing par	
		DRIVING SLIDE (ONLY)	1
a,c,d	,f	CA-2623 (standard)	
b		CT-2623 (2 sheets to .125 in. thick work)	
e		CA-2623-B (pin holds in driving slide spring)	
		DRIVING SLIDE SPRING PLUNGER	1
a,b,c	,d,f	CA-2007	
е		CA-2007-A	
١,	1.0	DRIVING SLIDE SPRING	1
a,b,c	,d,1	CA-9006	
e		CA-9006-A	1
a h a	4.6	DRIVING SLIDE SPRING SCREW CA-9021-A	1
a,b,c	,u,1	DRIVING SLIDE SPRING PIN	1
e		D-37327-F	1
		DRIVING SLIDE ROTATOR OP. PIN	1
all		CA-9028	1
Call Call		DRIVING SLIDE SPRING SCREW LOCK PIN	1
a,b,c	,d,f	CA-9028-A	_
10		BENDER BAR ASSY. COMPLETE	1
a	CAAA9013W	1/2" Cr., 25 to 30 Rd wire	
b	CAAA9013C3	1/2" Cr., 25 to 30 Rd. wire (McCain)	
c	CAAA9013G2	1/2" Cr., 24 Rd. wire	
d	CAAA9013J2	1/2" Cr., 20-21 x 25 wire	
e		1/2" Cr., 22 Rd. wire	
f	CAAA9513H CAAA9513K	3/8" Cr., 25 to 30 Rd. wire 3/8" Cr., 20-21x25 wire	
g h	CAAA9513K CAAA9613C	5/16" Cr., 20-21x25 wire 5/16" Cr., 25 Rd. wire	
11	CAAA9013C	3/10 Ct., 23 Rd. WIIC	

		D TO COLOTION	077/
ITEM		DESCRIPTION	QTY
NO.	through item	Bender Bar Assembly includes the following ite	ms
	unough item	BENDER BAR SUB ASSEMBLY	1
a	CAA9013U	1/2" Cr., 25 to 30 rd. wire	1
b	CAA9013Z	1/2" Cr., 25 to 30 rd. wire (McCain, Macey)	
c	CAA9013F2	1/2" Cr., 24 rd. wire	
d	CAA9013H2	1/2" Cr., 20-21 x 25 wire	
e	CAA9013K2	1/2" Cr., 24 rd. wire (McCain)	
f	CAA9013P2	1/2" Cr., 22 rd. wire	
g	CAA9513G	3/8" Cr., 25 to 30 rd. wire	
h	CAA9513K	3/8" Cr., 20-21x25 wire	
i	CAA9613C	5/16" Cr., 25 Rd. wire	
11	CA9115	BENDER BAR FRICTION PLUG BUSHING	1
12	CA9113A	BENDER BAR FRICTION PLUG SPRING	1
13	CA9112A	BENDER BAR FRICTION PLUG	1
14		SUPPORTER ASSEMBLY	1
	CAA9026	1/2" Cr.	
	CAA9526	3/8" Cr.	
	CAA9626	5/16" Cr	
15	CA9029	SUPPORTER PIVOT PIN	1
16	CA168	EXTERNAL GRIP SPRING	1
17	CB371K	LOCKWASHER	1
18	CA9024A	GRIP HOUSING RETAINING SCREW	1
19	CT413A	GRIP SPRING HOUSING	1
20	CA9015D	GRIP	1
21	CA173	PLASTIC PIN CAP	1
22		BENDER BAR LATCH	1
	CAA9014E	(All Except McCain)	
	CAA9014F	(McCain)	
23		DRIVER	1
23	CA9009	1/2" Cr. 24 to 30 Rd.	1
	CA9009 CA9009C	1/2" Cr. 20x25 & 21x25 wire	
	CA9509	3/8" Cr. 24 to 30 Rd.	
	CA9509F	3/8" Cr. 21x25 wire	
	CA9609	5/16" Cr. 25 Rd. wire	
	C115005	5/10 Cl. 25 Id. Wile	
24		DRIVER BAR ASSEMBLY	1
	CAA9012A	1/2" Cr.	
	CAA9012D	1/2" Cr. (McCain)	
	CAA9512A	3/8" Cr.	
	CAA9612A	5/16" Cr	

TABLE 1 (For use in determining customer's Driving Slide Assembly)

ITEM	PART NO.	DESCRIPTION		
9		DRIVING SLIDE ASSEMBLY	Driving Slide Style/Use	<u>Lug Style</u>
a	CTT2623		standard, raised lug	.187 lg. rectangular (CT2602)
b	CTT2623A		lowered lug for 2 sheets to .125 in. thick work	.187 lg. rectangular (CT2602)
С	CTT2623C		standard, raised lug	.25 lg. rectangular (CT2602A)
d	CAA2623		standard, raised lug	round (CA2103) w/.031 thk. washer (CT32B)
e	CAA2623C		pin (D37327F) holds in driving slide spring	round (CA2103) w/.031 thk. washer (CT32B)
f	CAA2623D		standard, raised lug	round (CA2103B) w/.079 thk. washer
g	CTT2623H		standard, raised lug	.187 lg. rectangular (CT2602)
1				

MAGNATEK HEAD PARTS LIST

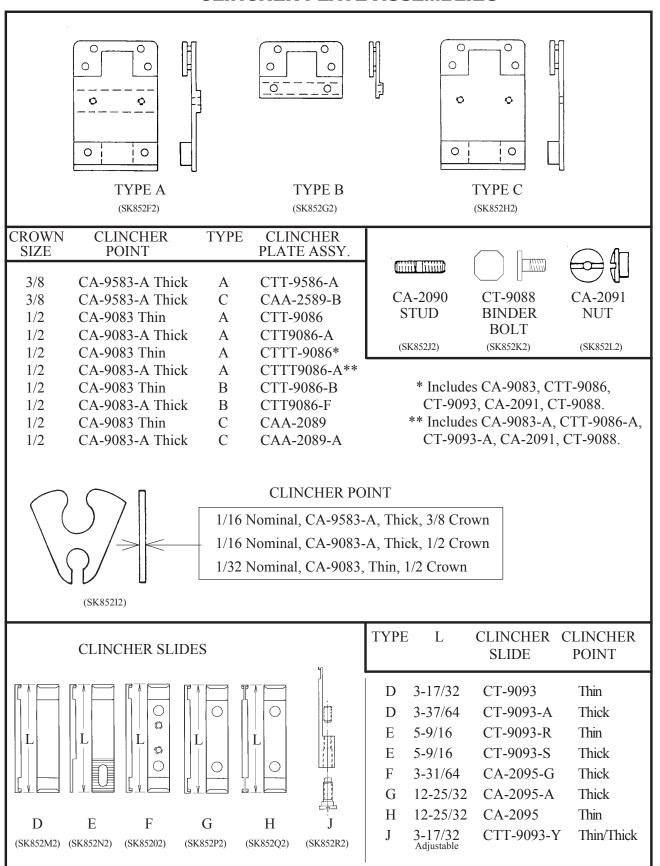
ITEM	PART NO.	DESCRIPTION QTY	
25		BONNET CASTING SUB ASSEMBLY 1	
1		*Magnatek Heads that use bonnet sub assembly	
1	CAA2004	CAAA2004	
1	CAA2004B	CAAA2004J	
1	CAA2004E	CAAA2504G,L,R, CAAA2004F,G	
1	CTT2604	CTTT2604,A,C,E,F,G,O,U,E2,R2,	
1		H3,P3,R3,G4,H4,J4,R10,W3	
1	CTT2604A2	CTTT2604A2	
1	CTT2604P	CTTT2604P2	
1	CTT2604H	CTTT2604M3	
1	CTT2604L	CTTT2604Q3	
1	CTT2604N	CTTT2604T3,V3	
1	CTT2604G	CTTT2604U3	
1	C112004G	C1112004C3	
26	CT2608	FACE PLATE LOCATING BLOCK SCREW 1	
	CT2613	FACE PLATE LOCATING BLOCK NUT 1	
27	CT2606	FACE PLATE LOCATING CLAMP 1	
	CT2611	FACE PLATE ADJ. SLIDE BLOCK 1	
28	CT2607	FACE PLATE LOCATING BLOCK 1	
29	CA9075	WIRE GUIDE BRACKET SCREW 1	
30	CA9127	ROTATOR OPERATING CAM STUD 1	
31	CA9058	ROTATOR OPERATING CAM STUD SCREW 1	
32	CA9056C	FACE PLATE RETAINING CLIP 3	
33	CA2081	FACE PLATE RETAINING CLIP SCREW 4	
34	CA9056A	FACE PLATE RETAINING CLIP 1	
35	CT9109	BONNET ALIGNING SCREW 0 to 2 as req'd.	
36	CA9032	SUPPORTER SPRING 1	
37	CA9037	SUPPORTER SPRING BUSHING 1	
38	C119037	SUPPORTER SPRING LEVER ASSEMBLY 1	
36	CAA9036	Standard (1.625 in. long)	
1	CAA9036A	Special (1.494 in. long)	
1	CAA9036B	Special (1.494 iii. long) Special (1.312 in. long)	
1	CAA9030B	Special (1.512 III. long)	
39	CA9034	SUPPORTER SPRING LEVER SCREW 1	
39	CA3034	SOLI OKTEK SI KING LEVEK SCREW	
40		SUPPORTER GUIDE PLATE 1	
40	CA9030	All except listed below. 2 Qty. used on:	
1	CA3030	CAAA2004F,G	
1	CA9030A	,	
1	CA9030A	2 Qty. used on: CTTT2604A2 (McCain)	
41	CA9081	SUPPORTER GUIDE PLATE SCREW 1	
42	CA9051A	WIRE CUTTER OPERATING SLIDE 1	
72	C/15051/1	FRICTION PLUG SPRING	
43	CA9050A	WIRE CUTTER OPERATING SLIDE 1	
1	C/17030/1	FRICTION PLUG	
1		TIGETION LOO	
44		WIRE CUTTER OPERATING SLIDE 1	
I	CA9049	1/2" Cr. (All 1/8", .155", 3/16" capacity heads, and	
1	21200	CTTT2604F4,H4 heads.)	
1	CA9049A	1/2" Cr. (All other 1/2" Cr Heads not listed above)	
1	CA9549	3/8" Cr.	
1	21230	5/16"Cr. Head (8mm)	
45		GRIP RELEASE SLIDE	
1 "	CA9022	1/2" Crown 1	
1	CA9522	3/8" Crown 1	
1	U. 17522	5,0 010,111	

ITEM	PART NO.	DESCRIPTION	QTY
46	CA9025 CA9025D	FACE PLATE ADJUSTING LEVER For Non-Slotted Face Plates For Slotted Face Plates	1
47	CA9048	WIRE CUTTER	2
48	CAAA2132H CAAA2132K CAAA2132L CAAA2579C	FACE PLATE ASSEMBLY 1/2" Crown, Slotted 1/2" Crown, No Slot 1/2" Crown, Fixed (Bypass) 3/8" Crown, Slotted 5/16"Crown Head (8mm)	1
	CAAA2579D	3/8" Crown, No Slot	
NOT	E: The above fa	ce plate assemblies include indexes 48 to55	
48	CAA2132H CAA2132K CAA2132L CAA2579C	FACE PLATE SUB ASSEMBLY 1/2" Crown, Slotted 1/2" Crown, No Slot 1/2" Crown, Fixed (By-Pass) 3/8" Crown, Slotted or 5/16 5/16"Crown Head (8mm)	1
49	CAA2579D CA9134	3/8" Crown, No Slot TENSION PAWL SPRING	1
50	CA9134 CA9124	TENSION ROLL CLIP	4
51	CA9103C	WIRE STRAIGHTENER ROLL	2
	CA9103A	CHECK PAWL ROLLER	1
52	CA9098	TENSION PAWL	1
53 54 55	CA9065A CA9066A CA172	STRAIGHTENER ECCENTRIC ROLL WIRE STRAIGHTENER ECCENTRIC ECCENTRIC FRICTION LOCKING SCREW	1 1 1
56	CA9043H CA9043E CA9543A	ROTATOR HOLDER 1/2" CR., 25 TO 30 RD. WIRE, TAPERED END 3/8" CR., 25 TO 30 RD. WIRE, R.H. MOUNT 3/8" CR., 25 TO 30 RD. WIRE 5/16" CR. Head (8mm)	1
	CA9043A CA9043C	1/2" CR., 25 TO 30 RD. WIRE 1/2" CR., 20-21X25 WIRE	
57	CB75B	KEY, WOODRUFF (for use with CA-9043-H Rotator Holder only)	1
58	CAA9038M	MAGNETIC ROTATOR 1/2" CROWN 5/16"Cr. Head (8mm)	1
59	CAA9538M CAA9638 CA9044A	3/8" CROWN 5/16" CROWN ROTATOR HOLDER SCREW all except below	1
	CA9044B	CTTT2604W2,Y2,Z2,A3,X3,R7 CAAA2004K	
60	CA9163C CA9163D	ROTATOR OPERATING CAM standard oiling inverted oiling	1
61	CAA9046A	ROTATOR OPERATING SPRING ASSEMBLY 5/16"Cr. Head (8mm)	1

(For use in determining customer's special components)

_				
ITEM	PART NO.	DESCRIPTION QTY	USAGE	
B1	CTT9003C	BONNET CLAMP LEVER	1	CTTT2605,C,G,R3,F4
B2	CTT9002	BONNET CLAMP ASSEMBLY	1	CTTT2605,C,G,R3,F4
В3	CB157	BONNET BINDER SCREW	1	
В4	CB835Q	ROLL PIN	1	CTTT2605P2,P4,Q3,R2
B5		BONNET BINDER STUD	1	
	CT9002A	.500-13 NC Thread		CTTT2605R2
	CT9002F	M8 X 1.25-8g Thread		CTTT2605P2,P4,Q3
B6		TEE BAR	1	
	CT9002G	.625 Long		CTTT2605P2
	CT9002L	.841 Long		CTTT2605Q3
В7	CB175	WASHER	1	CTTT2605P2,Q3
B8	CB145A	NUT, .500-13 NC	1	CTTT2605R2
B9	CT9109A	BONNET ALIGNMENT PIN	2	CTTT2605Q3
B10	CT9111	CONE POINT SET SCREW	2	CTTT2605Q3
B11	CA44	HEAD OPERATING LINK	1	CTTT2605R2 (For use only with round lug driving slide assemblies)
B12	G50716	MOUNTING BLOCK HANDLE	1	

CLINCHER PLATE ASSEMBLIES



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	_
Machine(s) Purchased :	
Serial Number(s) :	
With Head(s) : (Type/Quantity Purchased)	
Serial Number(s) :	_
Head(s) Purchased :	
Serial Number(s) :	
DE LUXE STITCHER GRAPHIC ARTS REPRESENTATIVE	
Date Received :	
Dealer Name_:	
Dealer Street Address:	_
City:	-
Country:	
Dealer Phone :	_

REGISTRATION

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

	Name :		
3 K	(First)	(Middle Initial)	(Last)
H W	Company :		
Ο,	Street Address :		
L S	City:	State/Provinc <u>e</u> :	Zip:
C N	Country:		
	Phone:	Fax:	E-m <u>ail</u> :
	Machine(s) Purchased :	ed :	
Т	Serial Number(s) <u>:</u>		
С	With Head(s):		
U C		(Type/Quantity Purchased)	
ΙO	Serial Number(s) :		
ЬК	Head(s) Purchased :		
[. (2)20 4cm (A) ciao		
	Serial Inumber(s):		
	Date Received :		
<i>I B</i>	Dealer Nam <u>e :</u>		
ΓΕ	Dealer Street Addres <u>s :</u>	<u>. SS</u> :	
A E	C <u>ity</u> :	State/Province :	Zip:
D I	Country :		
	Dealer Phone :		
	Other Bindery Products Used :	ucts Used :	
		oformation sept to	to boro weathode
	that would bene	would you like Illioi Hatioil selic to you about frew products that would benefit volur company?	About new products No

Common Replacement Parts for 1/2" Crown

Below is a list of the most common wear/replacement parts for the G8 Stitcher Head. 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 on pages 38-40 in this manual.

Item Number	CA9083A	G20115	G20122A	G20140	G20145	G20149	G20150	G20151	G20152	G20153	G20159	G20160B	G20184	G20187	G20200	G20252	G20307
Description	Clincher Point - Thick, Round	Latch Release Cam	Feed Slide Retain Screw Asy	Follower Ball Bearing	Moving Wire Cutter	Bender Bar Latch	Bender Bar Latch Spring	Driver Bar	Driver, 24W	Driver Retaining Screw	Bender Bar Friction Plug	Bender Bar Friction Spring	Wire Holder Retaining Spring Foot	Feed Gear Friction Strip	Fixed Wire Cutter	Wire Hook	Lever Pivot Pin

^{*} You can purchase the G8RPK which includes these and other common replacement parts.

PLACE STAMP HERE

DELUXE STITCHER
COMPANY INC.
3747 N. Acorn Lane
Franklin Park, IL 60131U.S.A.

Attn: Customer Service

WHEN ORDERING PARTS, PLEASE STATE: QUANTITY REQUIRED, PART NUMBER, PART NAME, WIRE SIZE AND CROWN WIDTH OF YOUR STITCHER.



3747 Acorn Lane • Franklin Park • Illinois 60131 Phone: 847-455-4400 • 800-634-0810 Fax: 847-455-4900 • 800-417-9251 http://www.deluxestitcher.com

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