



DELUXE STITCHER

COMPANY INC.

solving your wire stitching needs for 125 years...

ISP Stitching & Bindery Products

Machine Serial Number : _____

Head Serial Numbers : _____

Date Purchased : _____

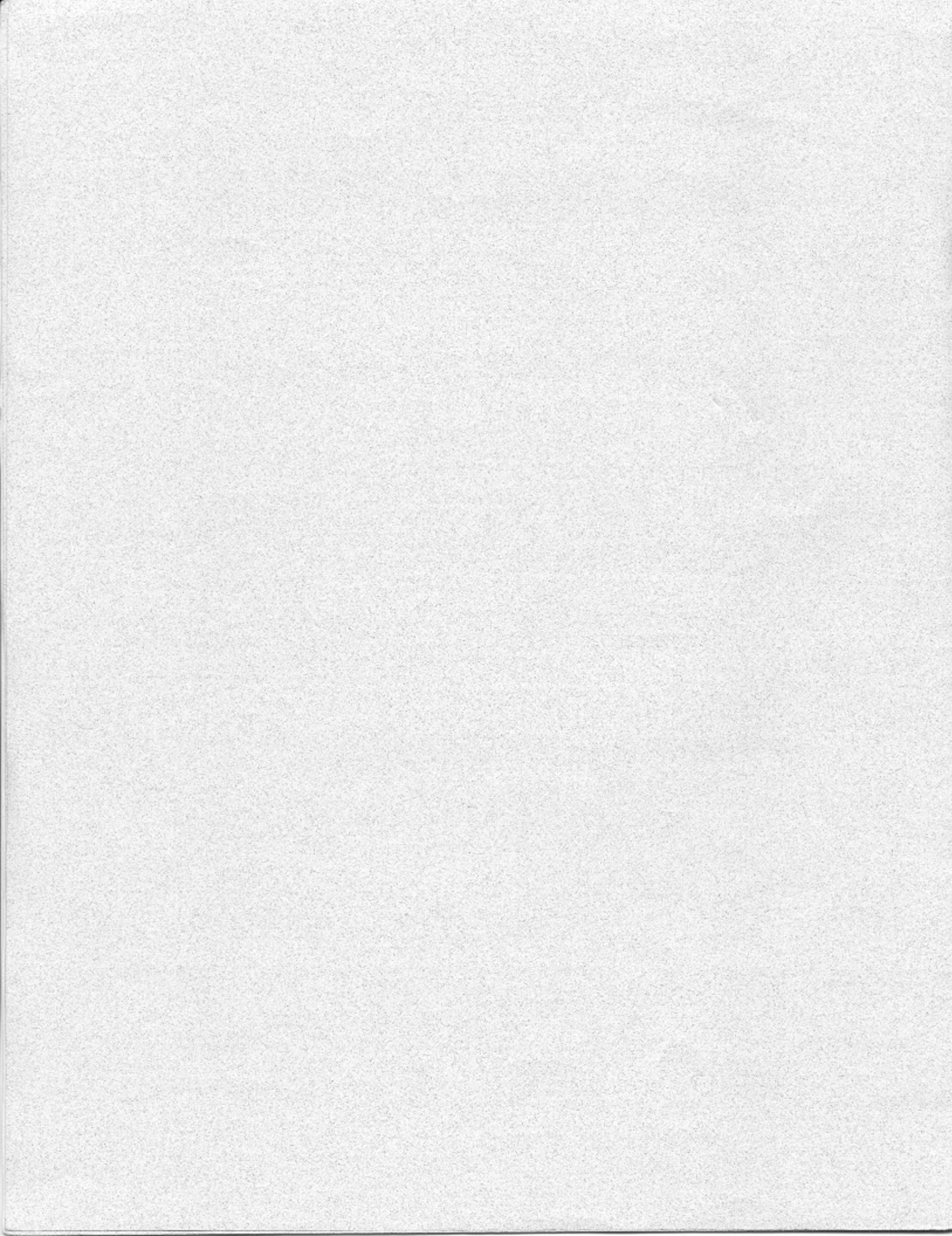
18AW Stitcher

OPERATION AND MAINTENANCE MANUAL

18-AW Stitcher w/Motor.....230V and 50HZ

18-CW Stitcher.....w/o Motor

Before using this Stitcher, all operators must study this manual and follow the safety warnings and instructions. Keep these instructions with the 18-AW Stitcher for future reference. If you have any questions, contact your local DeLuxe/Bostitch Graphic Arts Representative or Distributor.



DELUXE STITCHER

C O M P A N Y I N C .

OPERATION and MAINTENANCE MANUAL

FOR MODEL 18 SERIES MULTIPLE WIRE STITCHERS
EQUIPPED WITH WRAP SPRING ELECTRIC CLUTCH
WITH NO. 18001 DHD 2024¹/₂ STANDARD HEADS

MODEL 18-AW — with factory installed motor

MODEL 18-CW — without motor

MAX CAPACITY — ⁹/₁₆" (14.3mm)

WIRE SIZE (STD) — 20 x 20 FLAT

CROWN WIDTH — ¹/₂" (12.7mm)

ALSO WITH NO. 18001 DHD 1820 ³/₈ STANDARD HEADS

MODEL 18-AW ³/₄ with factory installed motor

MODEL 18-CW ³/₄ without motor

MAX CAPACITY — ³/₄" (19.0mm)

WIRE SIZE (STD) — 18 x 20 FLAT

CROWN WIDTH — ³/₈" (9.52mm)

▲ WARNING:

DO NOT OPERATE THIS STITCHER UNTIL ALL GUARDS ARE IN PLACE.

NEVER OPERATE MACHINE WITH WIRE FEEDING AND NO STOCK ABOVE CLINCHERS. SERIOUS DAMAGE MAY RESULT IF THIS PRACTICE IS FOLLOWED.

ALWAYS TURN POWER OFF BEFORE ANY DISASSEMBLY WORK OR WHEN MAKING ADJUSTMENTS.

INTRODUCTION

To obtain satisfactory results from a wire stitcher, it is necessary that it be properly installed and adjusted, regularly lubricated and carefully maintained.

In case of any serious trouble, you should notify the nearest sales office, sending samples of the defective work and describing the trouble in detail. Report the serial number and model of the machine when corresponding so that it may be quickly identified.

INSTALLATION

1. Carefully inspect condition of crate in which it arrives. If it is broken and there is evidence that the machine may be damaged, immediately notify carrier Claim Department as well as the Bostitch office from which the machine was purchased.
2. Uncrate the machine carefully — do not use large crowbars which may damage small parts.
3. Move machine to spot where it will be used. It should be placed where operator will have sufficient light for efficient operation. Level machine by using shims, if necessary, and lagging it to floor, if desired.

4. Remove Belt Guard (see Belt Guard Instructions, page 4). See that motor is free to revolve when large pulley or flywheel is turned by hand.
5. Examine nameplate on motor to determine if specifications fit your requirements. If these do not conform to your needs, notify Bostitch office immediately.
6. When satisfied that motor specifications are correct and before attempting to operate machine under power, it should be turned over a few times by hand with clutch engaged.

SETTING UP MACHINE

Refer to the "Instructions and Parts List Manual" for the stitcher heads for instructions on attaching heads to machine and for threading and straightening wire. As each successive head is installed, machine should be turned over at least once by hand.

1. Clinchers must be in exact alignment with the forming and driving parts of the heads. To shift clinchers, release catches at each end of work table and lower table carefully to render clinchers easily accessible. Clinchers can be removed by loosening screws enough to let the clincher slide be pushed down past lips on clincher operating bar. Clinchers can then be swung to vertical position and removed. When replacing clinchers, push down as far as they will go in clincher plate, so that lips on inside of slide will enter notch in clinchers. To secure good clinching, clinchers should be kept free from dirt and particles of wire. Clinch can be made tighter or looser by adjusting screws at each end of clincher operating bar. Care should be taken to adjust these screws equally, so that one end of bar will not be higher than the other. Back gauges are held to bar by screw catch so they may easily slide along bar or be removed altogether. The bar is held to table by a screw under table at each end and can be adjusted forward or back to suit work.
2. To adjust machine for thickness, place work under thickness gauge, which is located just over right hand end of table. This gauge is held up out of the way by a spring catch when not in use. Turn crank on right side of machine until gauge is tight on work. Crank is held on by spring catch and should be removed or placed at bottom of its movement when proper setting is obtained. If left in horizontal position, it may loosen while machine is running, changing the adjustment.
3. a. Be sure to use the proper size of stitching wire in this machine. The standard wire parts with which 18001 DHD 2024½ is equipped are No. 20 x No. 24 (.0348 x .023-.88mm x .54mm) wire, and provide stitching capacity up to 9/16" (14.3mm), No. 20 x No. 25 (.0348 x .0204-.88mm x .51mm), No. 21 x No. 25 (.0317 x .0204-.81mm x .51mm), No. 24

(.023-.58mm) round, and No. 25 (.0204-.51mm) round wires may also be used in these standard wire parts. Minimum capacity 1/16" (1.6mm). Parts for other wire sizes may be obtained on special order. When stitching through more than 3/8" (9.5mm), No. 20 x No. 24 (.0348 x .023-.88mm x .54mm) wire is recommended.

3. b. The standard wire parts with which 18001 DHD 1820¾ is equipped are No. 18 x 20 (.047 x .035-1.19mm x .88mm) wire and provide stitching capacity up to 3/4" (19.0mm). 20 x 24 (.034 x .023-.88mm x .54mm) wire may also be used with these wires forming parts up to 9/16" (14.3mm) capacity. Minimum capacity of this machine is 1/4" (6.35mm). When stitching through more than 9/16" (14.3mm) 18 x 20 (.047 x .035-1.19mm x .88mm) wire is recommended. Stitching wire must be of high quality as to temper and dimensions in order to obtain best results.

STITCHER OPERATION

The footswitch microswitch is wired N. O. The limit switch is wired N. C. Stepping on the footswitch closes the contacts in the footswitch microswitch energizing the clutch brake coil, engaging the clutch and operating the machine. The machine continues to cycle as long as the footswitch contacts remain closed.

Releasing the footswitch opens the footswitch microswitch contacts, but the machine continues to run, energized through the N. C. limit switch contacts. When the follower roll (18272) contacts the limit switch, it opens the contact and stops the machine.

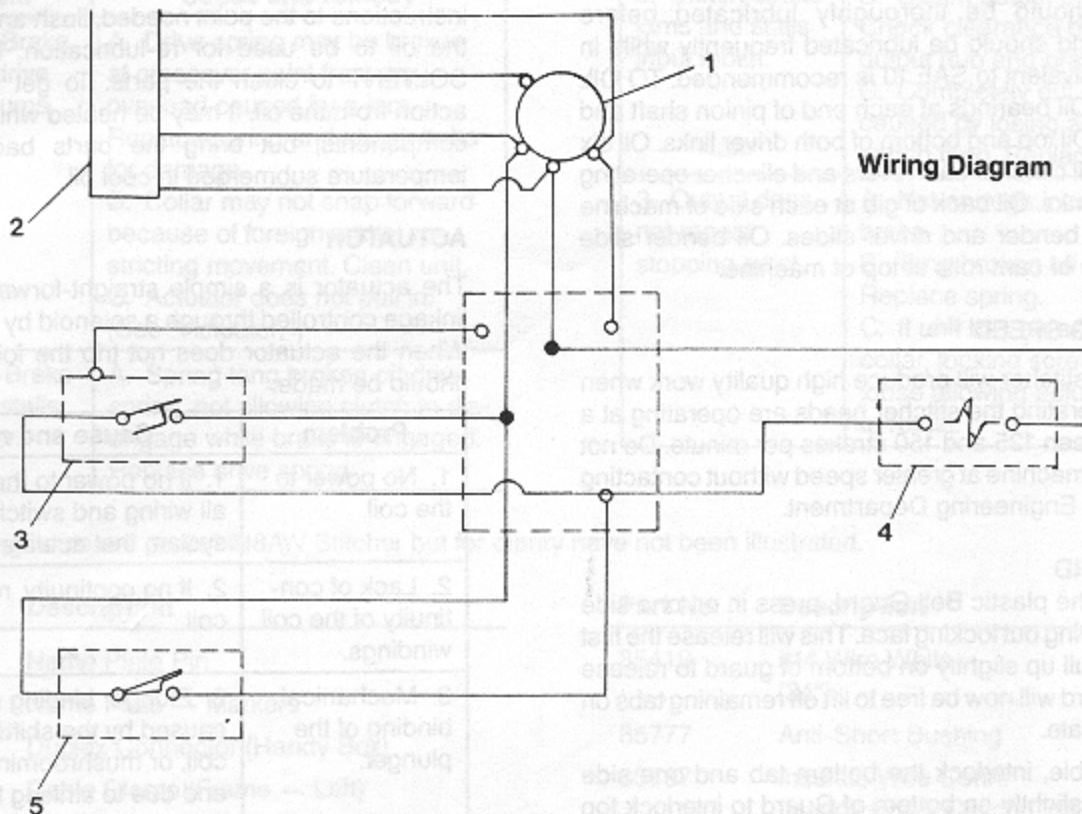
CLUTCH-BRAKE TIMING — MODELS 18AW & 18CW

The limit switch (850952) is positioned on bracket (18504) to stop the machine cycle from the minimum machine setting of the thickness gauge to the maximum setting of 9/16". If the machine continues to cycle after the footswitch is released, the following procedure should be followed:

With the gauge positioning hand crank set the machine to the minimum setting of the machine. With the electric power turned off, activate the clutch-brake solenoid lever manually releasing the control collar. Rotate the drive pulley counter-clockwise until there is 5/32" between the driving rail (18230) and the adjustment rail (18328A). At this position the rising follower roll (18272) will have contacted the limit switch (850952) and depressed the plunger.

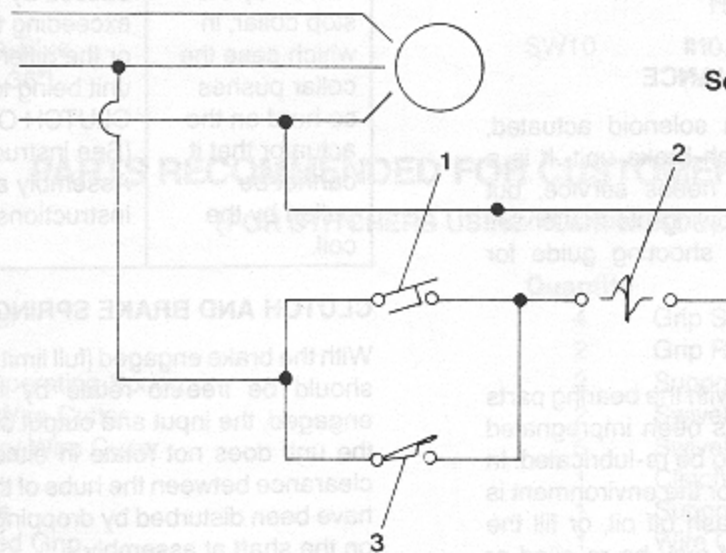
Release the retaining ring on the clutch-brake, slide the control collar off the splines, and rotate the control collar to the stop position contacting the actuator lever. Slide the collar back on the splines and replace the retaining ring.

Turn the power on and test the machine.



Wiring Diagram

ITEM NO.	DESCRIPTION
1.	MOTOR, The disconnect box and power cord installation to the motor is provided by the customer. 2HP-220V
2.	Disconnect box and power cord
3.	Footswitch microswitch N. O.
4.	Clutch-brake 220V
5.	Limit switch N. C. (Held Open)



Schematic Diagram

ITEM NO.	DESCRIPTION
1.	Foot switch N. O.
2.	Clutch-brake
3.	Limit switch N. C. (Held Open)

LUBRICATION

Machine should be thoroughly lubricated before operating and should be lubricated frequently while in use. Oil equivalent to SAE 10 is recommended. TO OIL MACHINE. Oil bearings at each end of pinion shaft and cam shaft. Oil top and bottom of both driver links. Oil six cam rolls. Oil clincher cam levers and clincher operating levers and links. Oil back of gib at each side of machine to lubricate bender and driver slides. Oil bender slide guide inside of cam rolls at top of machine.

OPERATING SPEED

Your No. 18 stitcher will produce high quality work when the rails operating the stitcher heads are operating at a speed between 125 and 150 strokes per minute. Do not operate the machine at greater speed without contacting the Bostitch Engineering Department.

BELT GUARD

To remove the plastic Belt Guard, press in on one side tab while prying out locking face. This will release the first tab. Next, pull up slightly on bottom of guard to release top tab. Guard will now be free to lift off remaining tabs on Mounting Plate.

To reassemble, interlock the bottom tab and one side tab. Pull up slightly on bottom of Guard to interlock top tab, then squeeze Mounting Plate and Guard together to lock remaining tab completing assembly.

HEAD GUARD

The clear plastic Head Guard hangs on the protrusions on each side of Stitcher and can be tilted up or lifted off for access to heads.

▲ WARNING:

DO NOT OPERATING MACHINE UNTIL ALL GUARDS ARE IN PLACE.

CLUTCH-BRAKE UNIT MAINTENANCE

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

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, or the environment is such that it may "wick-out" oil wash off oil, or fill the clutch with foreign matter, 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), 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 SOLVENT to clean the parts. To get more cleaning action from the oil, it may be heated while cleaning the components, but bring the parts back to ambient temperature submerged in cool oil.

ACTUATOR

The actuator is a simple straight-forward mechanical linkage controlled through a solenoid by the foot switch. When the actuator does not trip the following checks should be made:

Problem	Cause and remedy
1. No power to the coil.	1. If no power to the coil, check all wiring and switching in the system that actuates the clutch.
2. Lack of continuity of the coil windings.	2. If no continuity, replace the coil.
3. Mechanical binding of the plunger.	3. Plunger binding may be caused by the shifting of the coil, or mushrooming of plunger end due to striking the back stop. In the latter case the plunger may be turned or filed to its true diameter.
4. Insufficient clearance of the actuator over the stop collar.	4. No clearance over the stop collar detent would be caused by lack of continuity of the linkage. Repair or adjust as needed.
5. Actuator loaded by the stop collar, in which case the collar pushes so hard on the actuator that it cannot be pulled by the coil.	5. Actuator loading can be caused by the braking force exceeding the limits of the brake or the differential setting of the unit being too close, i.e., CLUTCH ON BRAKE ON. (See instructions of setting on Assembly and Disassembly Instructions.)

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 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 by dropping or hammering the unit on the shaft at assembly.

See Assembly and Disassembly instructions for re-adjusting.

Listed below are additional checks to be made if the clutch does not function correctly.

Problem	Cause and remedy
1. Clutch Brake does not drive but input turns.	A. Drive spring may be broken at crossover point from an overload caused by a jam. Replace spring and check hubs for damage. B. Collar may not snap forward because of foreign matter restricting movement. Clean unit. C. Actuator does not pull in. (See "Actuator.")
2. Clutch-Brake jams and stalls input motor.	A. Spring tang broken off drive spring, not allowing clutch to disengage while brake is engaged. Replace drive spring.

2. Clutch-Brake jams and stalls input motor.	B. Clutch output bound up. Check clearance between output hub and brake hub. C. Completely out of adjustment caused by losing an internal spring tang. Replace spring.
3. Output does not repeat stopping point.	A. Not enough inertia to actuate brake. B. Tang broken off brake spring. Replace spring. C. If unit has an adjustable collar, locking screw may be loose allowing adjusting screw to rotate.

The following items are part of #18AW Stitcher but for clarity have not been illustrated.

Part No.	Description	Part No.	Description
172	Name Plate Pin	85419	#14 Wire White (24")
2363D	Name Plate — Markers	85777	Anti-Short Bushing
85098	Duplex Connector (Handy Box)	85797	Insulate Wire Conn. (Handy Box + Clutch Coil)
85125	Cable Clamp (Frame — Left)	86035	#14 Wire Green (24")
85126	90° Connectors (Belt Guard — Limit switch-motor footswitch)	87583	Wire Terminal (Blue wires at limit switch)
85199	Wire Terminal (Green Wires — Handy Box wires-motor conduit Box)	850953	Handy Box
85416	Flexible Conduit (28" + 20" + 16")	850566	Connector Nut (Handy Box)
85417	#14 Wire-Black (24")	UA3308.2	#10-32 x 1/2 RD HD Machine Screw (Motor Ground — Cable Clamp — Handy Box)
85418	# Wire-Blue (28" + 36")	SW10	#10 Shake Proof Washer (Motor Ground)

PARTS RECOMMENDED FOR CUSTOMER'S STOCK

(FOR STITCHERS USING FOUR HEADS)

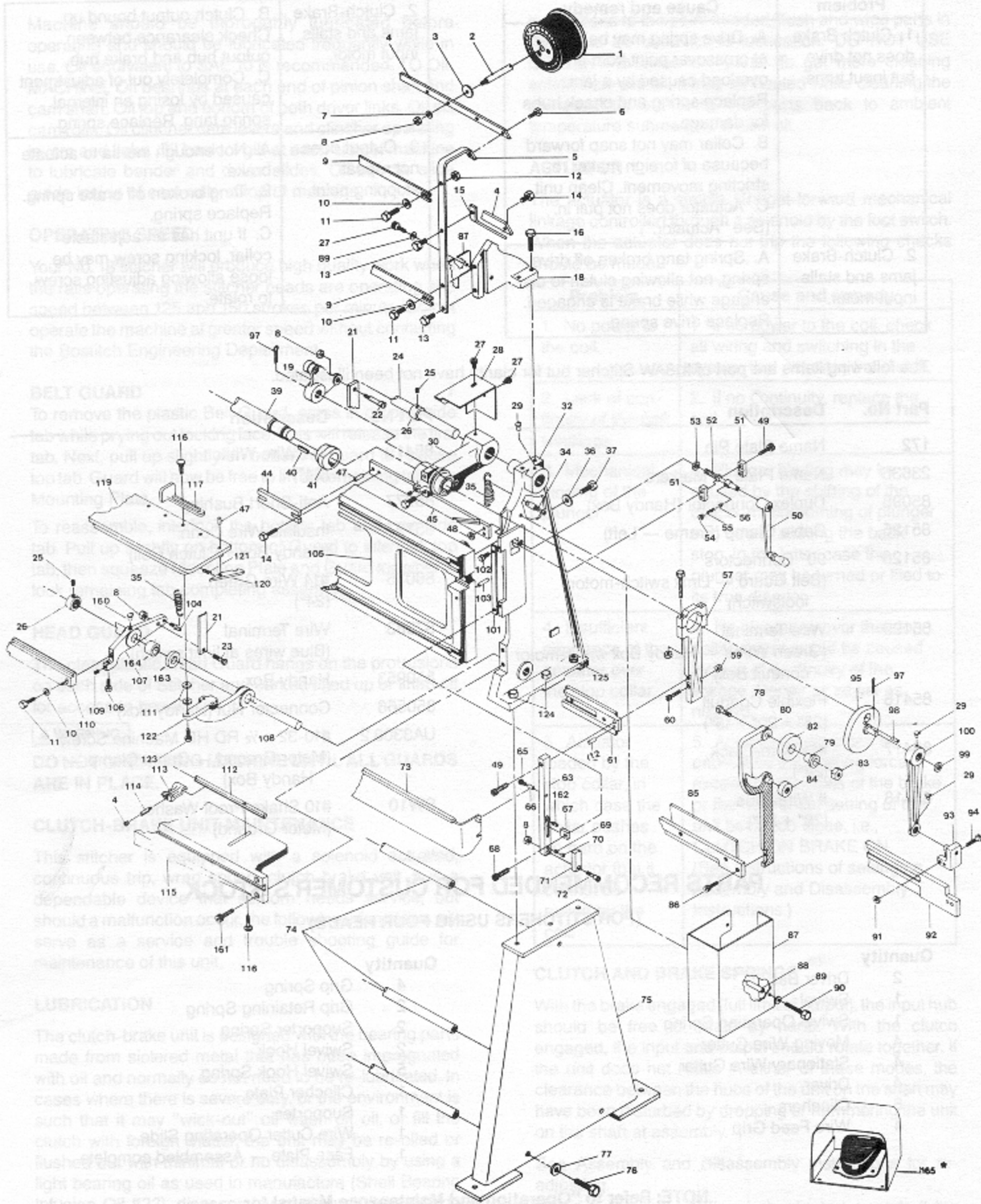
Quantity

2	Driver Bar
1	Swivel
1	Swivel Operating Spring
4	Moving Wire Cutter
4	Stationary Wire Cutter
4	Driver
8	Clinchers
4	Wire Feed Grip

Quantity

4	Grip Spring
2	Grip Retaining Spring
2	Supporter Spring
2	Swivel Hook
5	Swivel Hook Spring
1	Clincher Plate
1	Supporter
1	Wire Cutter Operating Slide
1	Face Plate — Assembled complete

NOTE: Refer to "Operation and Maintenance Manual for 15001DHD, 18001DHD & 18001D27HD Bostitch Wire Stitcher Heads" for Head part numbers.



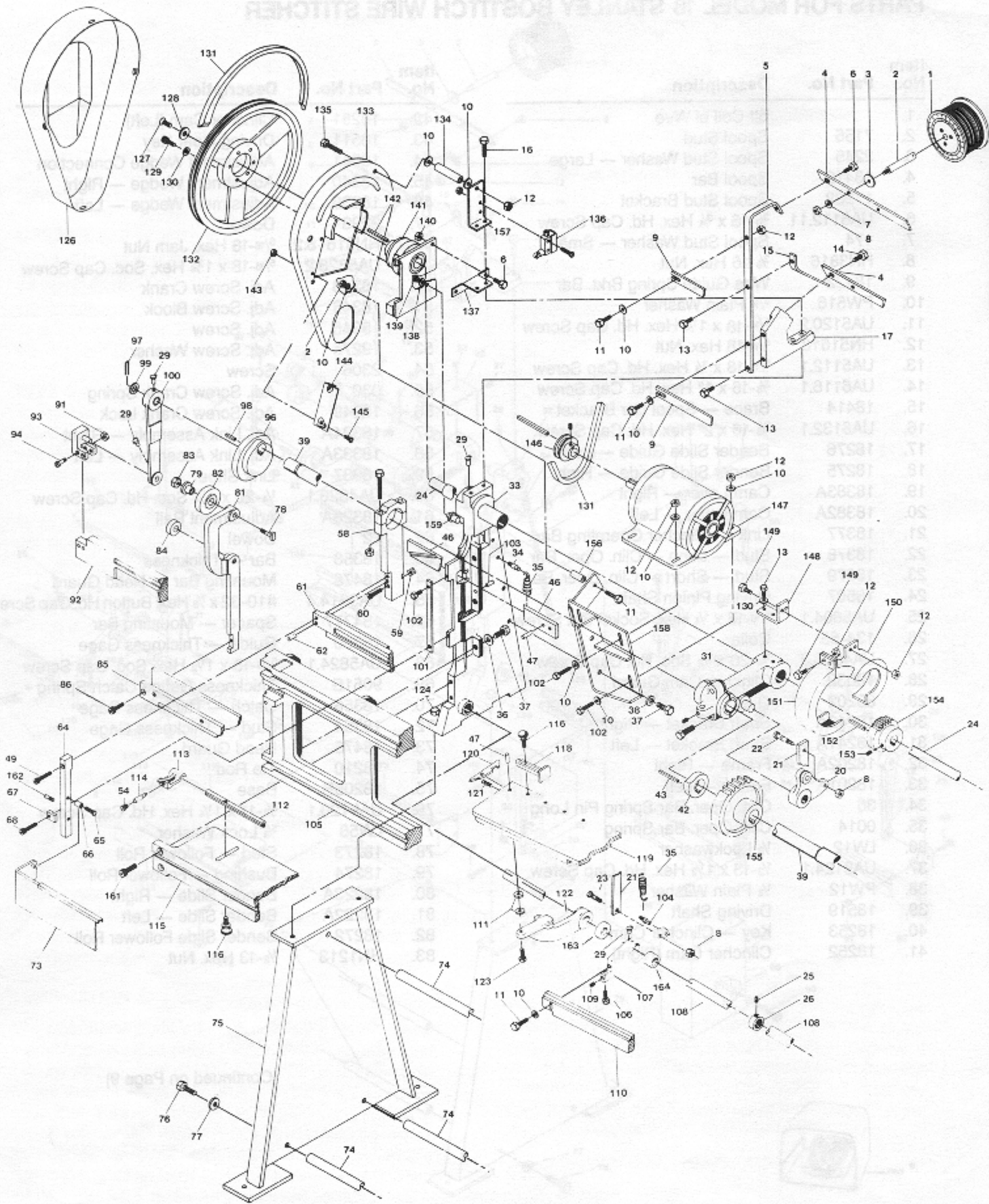
* Part 851702 is replaceable interior for footswitch

PARTS FOR MODEL 18 STANLEY BOSTITCH WIRE STITCHER

Item No.	Part No.	Description	Item No.	Part No.	Description
1.		5# Coil of Wire	42.	18251	Clincher Cam (Left)
2.	7155	Spool Stud	43.	18511	Driving Gear Key
3.	2245	Spool Stud Washer — Large	44.	18341	Adjustment Wedge Connection
4.	18412	Spool Bar	45.	18340	Adjustment Wedge — Right
5.	17282	Spool Stud Bracket	46.	18339	Adjustment Wedge — Left
6.	UA6112.11	3/8-16 x 3/4 Hex. Hd. Cap Screw	47.	2293	Dowel
7.	174	Spool Stud Washer — Small	48.	HN51618.2	5/16-18 Hex. Jam Nut
8.	HN3816	3/8-16 Hex. Nut	49.	UA5828.2	5/16-18 x 1 3/4 Hex. Soc. Cap Screw
9.	18422	Wire Guide Spring Brkt. Bar	50.	18348	Adj. Screw Crank
10.	PW516	5/16 Plain Washer	51.	18346	Adj. Screw Block
11.	UA5120.2	5/16-18 x 1 1/4 Hex. Hd. Cap Screw	52.	18345	Adj. Screw
12.	HN51618	5/16-18 Hex. Nut	53.	19275	Adj. Screw Washer
13.	UA5112.1	5/16-18 x 3/4 Hex. Hd. Cap Screw	54.	2306	Screw
14.	UA6116.1	3/8-16 x 1" Hex. Hd. Cap Screw	55.	030	Adj. Screw Crank Spring
15.	18414	Brace — Spool Bar Bracket	56.	18349	Adj. Screw Crank Lock
16.	UA6132.1	3/8-16 x 2" Hex. Hd. Cap Screw	57.	18334A	Adj. Link Assembly — Right
17.	18276	Bender Slide Guide — Left	58.	18333A	Adj. Link Assembly — Left
18.	18275	Bender Slide Guide — Right	59.	18337	Link Shoe
19.	18383A	Cam Lever — Right	60.	UA4820.1	1/4-20 x 1 1/4 Soc. Hd. Cap Screw
20.	18382A	Cam Lever — Left	61.	18328A	Adjustment Rail
21.	18377	Link — Clincher Operating Bar	62.	12	Dowel
22.	18378	Stud — Long — Clin. Oper. Bar	63.	18358	Bar — Thickness
23.	18379	Stud — Short — Clin. Oper. Bar	64.	18476	Mounting Bar — Head Guard
24.	18507	Driving Pinion Shaft	65.	UA3814.4	#10-32 x 7/8 Hex. Button Hd. Cap Screw
25.	UA5804.1	5/16-18 x 1/4 Hex. Socket Set Screw	66.	184777	Spacer — Mounting Bar
26.	134-65	Collar	67.	18360	Guide — Thickness Gage
27.	UA4808.3	1/4-20 x 1/2 Soc. Hd. Cap Screw	68.	UA5824.1	5/16-18 x 1 1/2 Hex. Soc. Cap Screw
28.	18032	Clincher Cam Guard	69.	9051B	Thickness Gauge Catch Spring
29.	85202	Oiler	70.	18356	Catch — Thickness Gage
30.	18242A	Shaft Bracket — Right	72.	18354	Stud — Thickness Gage
31.	18241A	Shaft Bracket — Left	73.	18475	Head Guard
32.	18202A	Frame — Right	74.	18210	Tie Rod
33.	18201A	Frame — Left	75.	18208B	Base
34.	36	Clin. Oper. Bar Spring Pin Long	76.	UA9120.1	5/8-11 x 1 1/4 Hex. Hd. Cap Screw
35.	0014	Clin. Oper. Bar Spring	77.	LW58	5/8 Lock Washer
36.	LW12	1/2 Lockwasher	78.	18273	Stud — Follower Roll
37.	UA8124.1	1/2-13 x 1 1/2 Hex. Hd. Cap Screw	79.	18274	Bushing — Follower Roll
38.	PW12	1/2 Plain Washer	80.	18223A	Bender Slide — Right
39.	18519	Driving Shaft	81.	18222A	Bender Slide — Left
40.	18253	Key — Clincher Cam	82.	18272	Bender Slide Follower Roll
41.	18252	Clincher Cam (Right)	83.	HN1213	1/2-13 Hex. Nut

DESCRIPTION	18-AM	18-CM	18-APL	18-CW3
THICKNESS GAGE	18360	18360	18360	18360
107 LEVER-CLINCHER OPER. BAR	18377	18377	18377	18377
119 DRIVE SHAFT	18507	18507	18507	18507
122 BRACKET-WORK TABLE	18391A	18391A	18391A	18391A

(Continued on Page 9)

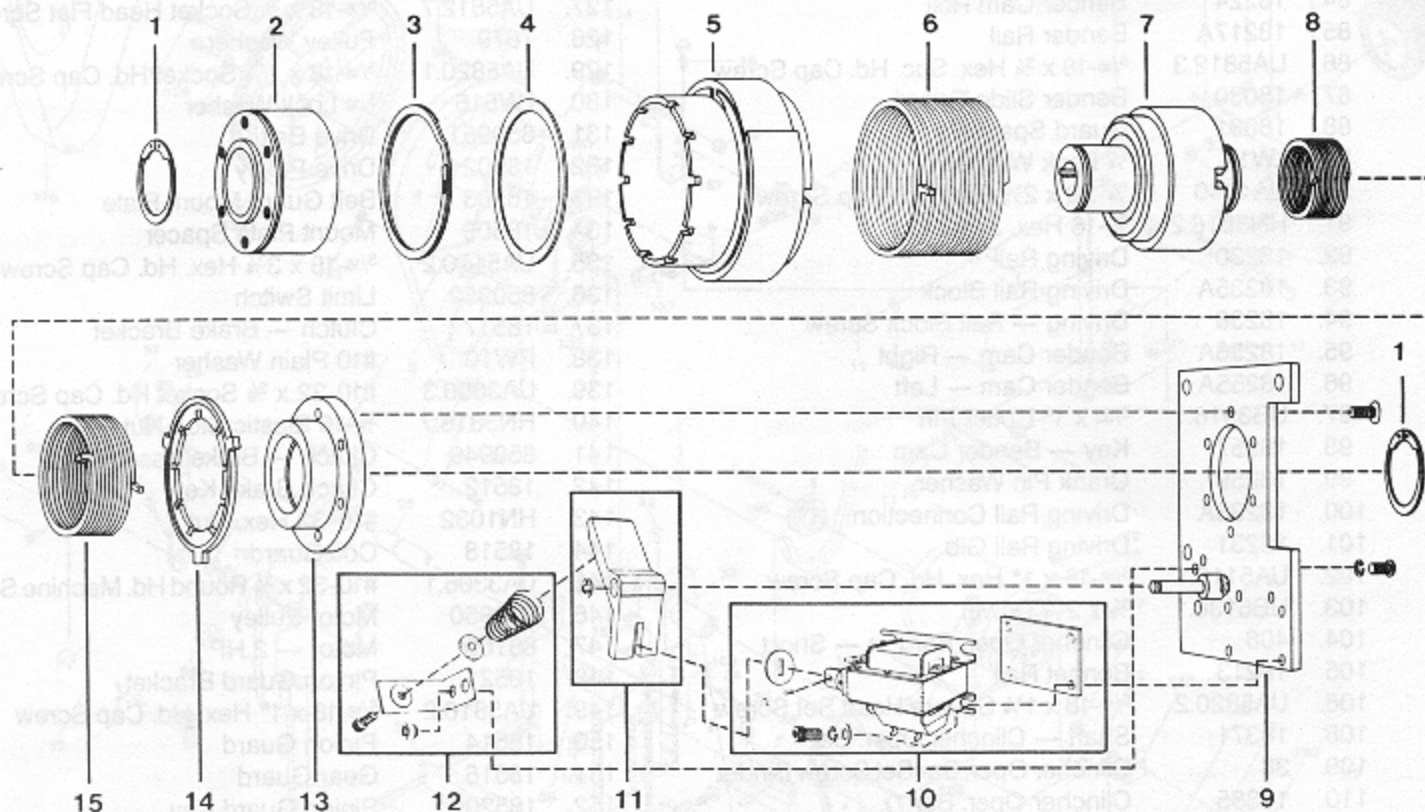


PARTS FOR MODEL 18 STANLEY BOSTITCH WIRE STITCHER (Cont'd)

Item No.	Part No.	Description	Item No.	Part No.	Description
84.	18224	Bender Cam Roll	127.	UA5812.7	5/16-18 x 3/4 Socket Head Flat Screw
85.	18217A	Bender Rail	128.	7679	Pulley Washer
86.	UA5812.3	5/16-18 x 3/4 Hex. Soc. Hd. Cap Screw	129.	UA5820.1	5/16-18 x 1 1/4 Socket Hd. Cap Screw
87.	18030	Bender Slide Guard	130.	LW516	5/16 Lock Washer
88.	18031	Guard Spacer	131.	850951	Drive Belt
89.	LW14	1/4 Lock Washer	132.	18502	Drive Pulley
90.	UA4840	1/4-20 x 2 1/2 Hex. Hd. Cap Screw	133.	18503	Belt Guard Mount Plate
91.	HN3816.2	3/8-16 Hex. Jam Nut	134.	18505	Mount Plate Spacer
92.	18230	Driving Rail	135.	UA5160.2	5/16-18 x 3/4 Hex. Hd. Cap Screw
93.	18235A	Driving Rail Block	136.	850952	Limit Switch
94.	18236	Driving — Rail Block Screw	137.	18517	Clutch — Brake Bracket
95.	18256A	Bender Cam — Right	138.	PW10	#10 Plain Washer
96.	18255A	Bender Cam — Left	139.	UA3806.3	#10-32 x 3/8 Socket Hd. Cap Screw
97.	UB3916.1	5/32 x 1" Cotter Pin	140.	HN3816.7	3/8-16 Elastic Stop Nut
98.	18257	Key — Bender Cam	141.	850949	Clutch — Brake Assembly
99.	18259	Crank Pin Washer	142.	18512	Clutch Brake Key
100.	18233A	Driving Rail Connection	143.	HN1032	#10-32 Hex. Nut
101.	18231	Driving Rail Gib	144.	18518	Coil Guard
102.	UA5116.1	5/16-18 x 1" Hex. Hd. Cap Screw	145.	UA3306.1	#10-32 x 3/4 Round Hd. Machine Screw
103.	UB6136.1	3/8 x 2 1/4 Dowel	146.	850950	Motor Pulley
104.	406	Clincher Oper. Bar Pin — Short	147.	86105	Motor — 2 HP
105.	18213	Bonnet Rail	148.	18521	Pinion Guard Bracket
106.	UA5820.2	5/16-18 x 1 1/4 Square Head Set Screw	149.	UA5816.2	5/16-18 x 1" Hex. Hd. Cap Screw
108.	18371	Shaft — Clincher Oper. Bar	150.	18514	Pinion Guard
109.	38	Clincher Oper. Bar Set Screw Binder	151.	18516	Gear Guard
110.	18365	Clincher Oper. Bar	152.	18520	Pinion Guard Key
111.	228-69	Clincher Oper. Bar Link Spacer	153.	UA5808.3	5/16-18 x 1/2 Hex. Hd. Cap Screw
112.	18405	Bar — Back Gage	154.	18509	Driving Pinion
113.	18400	Back Gage	155.	18510	Driving Gear
114.	18402	Catch — Back Gage	156.	18506	Mount Plate Spacer
116.	63	Screw	157.	18504	Mount Plate Bracket
117.	18574A	Work Stop — Right	158.	18508	Motor Bracket
118.	18575A	Work Stop — Left	159.	18522	Clutch — Brake Link Post
119.	18389	Work Table	160.	851128	Oiler
120.	18392	Catch — Work Table	161.	UA6820.3	3/8-16 x 1 1/4 Socket Hd. Cap Screw
121.	0087	Work Table Catch Spring	162.	2302	Thickness Gage Stop Screw
123.	UA6120.1	3/8-16 x 1 1/4 Hex. Hd. Cap Screw	163.	851328	Thrust Bearing
124.	UA9132.1	3/8-11 x 2 Hex. Hd. Cap Screw	164.	851322	Bearing
125.	UA9832.4	5/16-11 x Socket Head Cap Screw	* 165.	851701	Foot Switch
126.	18561	Belt Guard			

ITEM NO.	DESCRIPTION	18-AW	18-CW	18-AW3/4	18-CW3/4
71	THICKNESS GAGE	18353	18353	18540	18540
107	LEVER-CLINCHER OPER. BAR	18370A	18370A	18559A	18559A
115	CLINCHER RAIL	18363	18363	18557	18557
122	BRACKET-WORK TABLE	18391A	18391A	18558	18558

CLUTCH AND BRAKE UNIT



Item No.	Part No.	Description
1.	850801	Retaining Ring
2.	850977	Input Hub
3.	850978	Retaining Ring
4.	850979	Spacer
5.	850980	Control Collar
6.	850981	Driver Spring
7.	850982	Output Ass'y
8.	850983	Anti-back Spring

Item No.	Part No.	Description
9.	850984	Plate Ass'y
10.	851239	Coil Ass'y 220V
11.	851240	Actuator
12.	850987	Limit Stop Ass'y
13.	850988	Brake Hub
14.	850989	Brake Ring
15.	850990	Brake Spring

DISASSEMBLY

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 in reassembly.

⚠ WARNING: ALWAYS DISCONNECT STITCHER MACHINE POWER CORD FROM POWER OUTLET BEFORE ANY DISASSEMBLY WORK.

To disassemble the clutch-brake unit it will first be necessary to remove the drive pulley from the stitcher by removing the V-belt, pulley washer (7679) and disconnecting the clutch-brake bracket (18517) from clutch plate.

Disconnect wires from solenoid, and carefully slide pulley and clutch off as a unit. Remove drive pulley from input hub then:

- Release Actuator Lever so that clutch is engaged and brake released.
- Remove Retaining Ring and Shim Washer, if any, from the input Hub end.
- Remove Input Hub, by rotating opposite to the drive direction.
- Remove Retaining Ring and Shim Washer, if any, from the Mounting Plate end.

(e) Remove Output Shaft, Springs, and control Collar assembly, by rotating Output Shaft in the drive direction. (DO NOT DISASSEMBLE BRAKE HUB FROM MOUNTING PLATE.)

(f) Remove Control Collar from the Output Shaft and Spring assembly, by extracting towards the Brake Spring end.

ASSEMBLY

(a) Replace Clutch and Brake Spring as required. (Assemble springs concentric and square to the Output Shaft.)

(b) Assemble Control Collar over the Output Shaft and Spring assembly, by inserting from the Brake Spring end. (It will be necessary to extend Brake Spring using long nose pliers.)

(c) Place the Brake Spring tang in any one of the nine (9) Control Collar slots at *random*.

(d) Assemble Output Shaft, Springs, and Control Collar assembly to the Mounting Plate assembly by rotating Output Shaft in the drive direction.

(e) Assemble Retaining Ring to Output Shaft at the Mounting Plate end (smooth surface facing Brake Hub).

(f) Rotate Output Shaft in the drive direction, until it reaches a full brake position.

(g) With the *Clutch Spring Tang* *not* in slot, insert the Input Hub by rotating opposite to the drive direction.

(h) Select the one of ten (10) Control Collar slots for the Clutch Spring Tang that will provide a .62 to 1.00" 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 Clutch Spring Tang from slot, then move Control Collar axially towards the Input Hub end and rotate it opposite to the drive direction to pick up next slot.)

(i) Repeat Step (h) until the .62" to 1.00" specification is achieved.

(j) Assemble Retaining Ring to Output Shaft at the Input Hub end (smooth surface facing Input Hub).

(k) Reassemble unit to machine.

IMPORTANT: After Clutch is assembled to machine, the Clutch Plate should be free to float on bearing — the clutch-brake bracket is only to prevent Plate rotation.

CONTROL COLLAR ADJUSTMENT

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 power off, trip clutch by hand and rotate drive pulley until driver is in desired stopping position then proceed as follows:

(a) Work retaining ring "A" out of groove and slide forward on sleeve "C" (See illustration below).

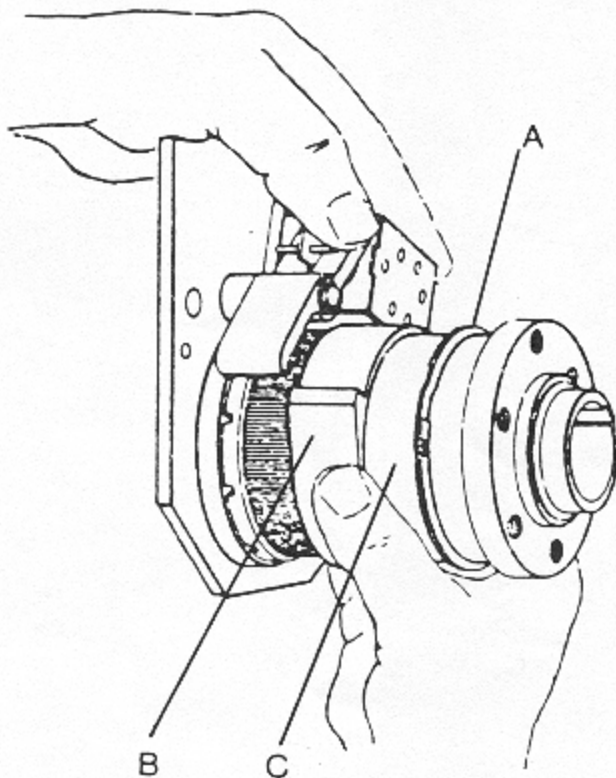
(b) Slide cam "B" off splines, rotate to desired relationship of stop to shaft keyway, and slide back on splines. The actuator pawl will have to be held clear during this operation.

(c) Slide retaining ring back into groove.

Note: Make sure brake is locked up before proceeding to insure getting proper stop point.

INSTRUCTIONS FOR COIL REPLACEMENT

1. Place the spring onto the plunger with the narrow end towards the actuator then slide the nylon washer onto the plunger. Slide the solenoid and spacer plate onto the actuator and spacer plate with the cap screws and washers. DO NOT tighten more than finger tight.
2. Energize the coil and adjust the gap between the actuator and the tap of the collar stop .015 to .030 inches by sliding the solenoid assembly, (Note: push the collar towards the actuator to allow for collar movement). Tighten the cap screws.



(d) Remove Output Shaft Spring and Control Collar assembly by rotating Output Shaft towards desired direction. DO NOT DISASSEMBLE BRAKE HUB FROM MOUNTING PLATE.

(f) Remove Control Collar from the Output Shaft and Spring assembly by extracting towards the Brake Spring end.

(g) Assemble Control Collar over the Output Shaft and Spring assembly by inserting from the Spring end. It will be necessary to extend Brake Spring using long nose pliers.

(h) Place the Brake Spring tang in any one of the nine (9) Control Collar slots at random.

(i) Assemble Output Shaft Spring and Control Collar assembly in the Mounting Plate assembly by rotating Output Shaft in the drive direction.

(j) Assemble Retaining Ring to Output Shaft at the Mounting Plate end (assembly without Brake Hub).

(k) Rotate Output Shaft in the drive direction until it reaches a full brake position.

(l) With the Clutch Spring tang not in slot, rotate Input Hub by rotating opposite to the drive direction.

(m) Select the one of ten (10) Control Collar slots for the Clutch Spring tang that will provide a 82 to 100° circumferential overtravel of the Control Collar when released.

Note: At this point it may be necessary to reinsert one (1) of the nine (9) Control Collar slots. Brake Spring tang (release, rotate, reverse, rotate) Spring tang from slot, then move Control Collar tang towards the Input Hub end and rotate it opposite to the drive direction to pick up tang.

(n) Repeat Step 12 through 15. Repeat operation is achieved. Input Hub Brake Spring tang is achieved.

(o) Assemble Retaining Ring to Output Shaft at the Input Hub end (assembly without Input Hub).

(p) Assemble used to machine.

IMPORTANT: All Clutch assemblies for action. Clutch Brake Spring tang is 1.00 inch. Clutch Brake Spring tang is only to prevent Brake Spring.

(a) Release Clutch assembly. Clutch Brake Spring tang is 1.00 inch. Clutch Brake Spring tang is only to prevent Brake Spring.

The retaining position of the head can be changed if necessary by adjusting the position of the stop cam on the control collar sleeve. Full power of the clutch by hand and electric drive (clutch) will be obtained.

Retaining Ring and Shim Washer. Place end.

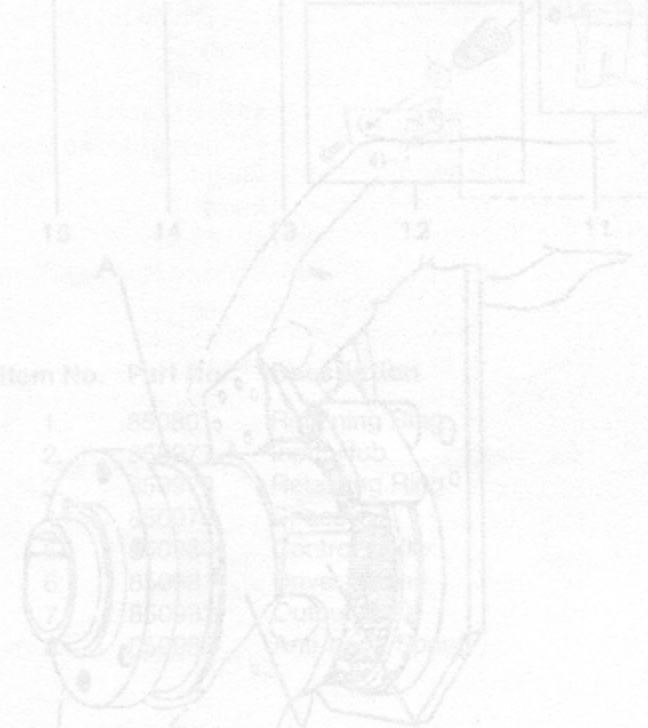
(a) Check retaining ring "A" out of groove and slide retaining ring "B" into groove. (See illustration below).
(b) Slide cam "B" off splines, rotate to desired relationship of stop to shaft keyway, and slide back on splines. The actuator pawl will have to be held clear during this operation.

(c) Slide retaining ring back into groove.
Note: Make sure brake is locked up before proceeding in case setting proper stop position.

INSTRUCTIONS FOR COIL RE-PLACEMENT

Place the spring into the plunger with the narrow end towards the actuator then slide the nylon washer into the plunger. Slide the solenoid and spacer plate onto the actuator and spacer plate with the cap screws and washers. DO NOT tighten more than finger tight.

2 Energize the coil and adjust the gap between the actuator and the top of the collar stop (0.005 to 0.010 inches) by sliding the plunger assembly to the right. The collar towards the actuator to allow for collar movement. Tighten the cap screws.



DISASSEMBLY

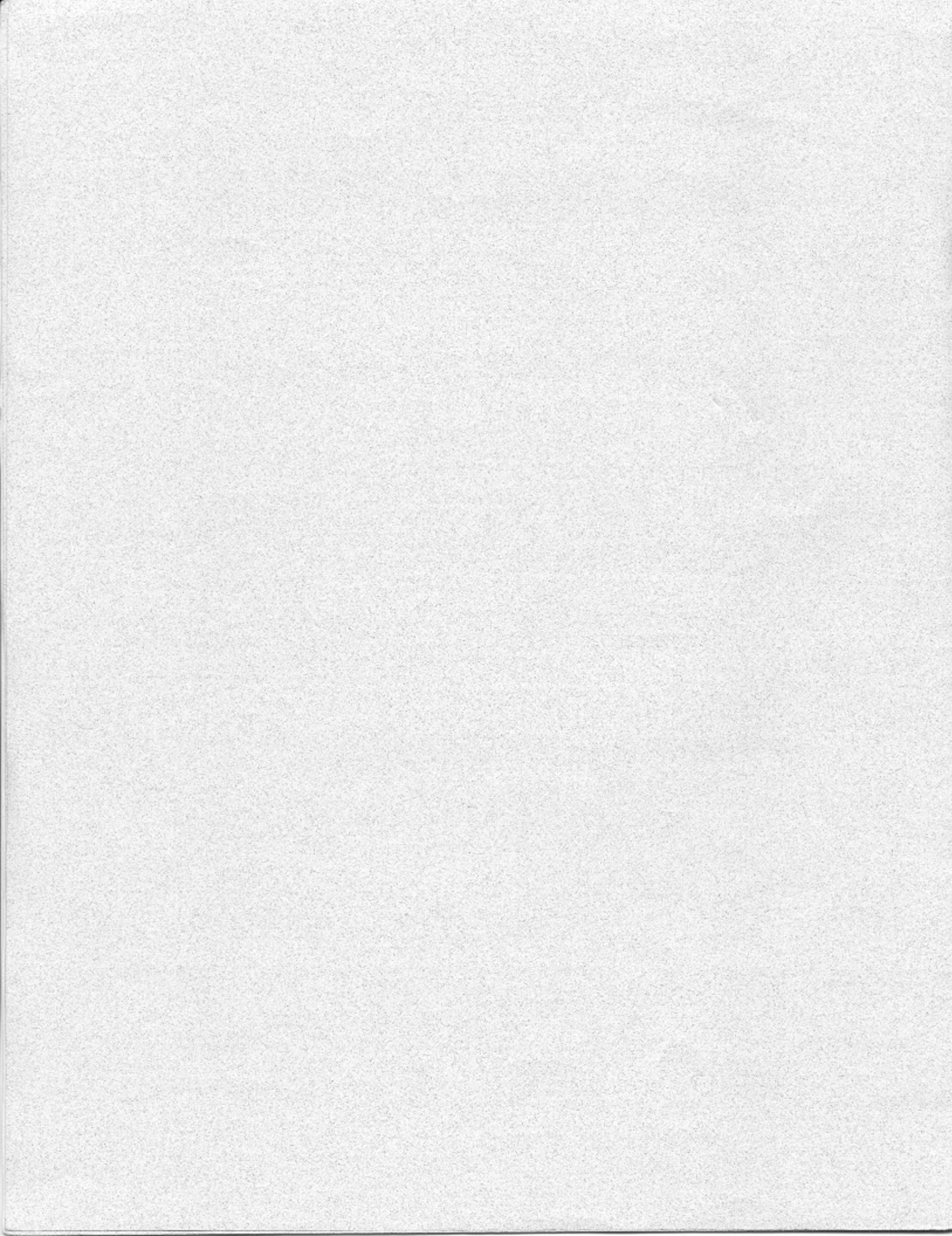
When disassembling the clutch-brake unit, always mark the spring tang position with reference to which slot it fits into. This is important as it will be used in reassembly.

WARNING: ALWAYS DISCONNECT STITCHER MACHINE POWER CORD FROM POWER OUTLET BEFORE ANY DISASSEMBLY WORK.

To disassemble the clutch-brake unit, it is necessary to remove the drive pulley. To remove the V-belt, pull the V-belt washer by disconnecting the clutch-brake bracket.

DELUXE STITCHER

COMPANY INC.



LIMITED WARRANTY

DeLuxe/Bostitch Stitcher Corporation 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/Bostitch's option, any defective product within 30 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/Bostitch 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/Bostitch Graphic Arts Dealer.

Always use genuine De/Luxe/Bostitch 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.

ISP Stitching & Bindery Products

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>