

AMF[®] REECE

Better Ideas, Better Made

Vivan bolso electronica
moderna *mf*

ag-RED 2-0950-3-111

SPEEDWELT 1000

POCKET WELT MACHINE

SERVICE AND PARTS MANUAL

 - LOJA

PART NUMBER 97.0032.2.000

LIMITED WARRANTY ON NEW AMF REECE EQUIPMENT

Warranty provisions:

A ninety (90) day limited service labor warranty to correct defects in installation, workmanship, or materials without charge for labor. This portion of the warranty applies to machines sold as "installed" only.

A one (1) year limited material warranty on major component parts to replace materials with defects. Any new part believed defective must be returned freight prepaid to AMF Reece, Inc. for inspection. If, upon inspection the part or material is determined to be defective, AMF Reece, Inc. will replace it without charge to the customer for parts or material.

Service labor warranty period shall begin on the completed installation date. Material warranty shall begin on the date the equipment is shipped from AMF Reece, Inc.

Exclusions:

Excluded from both service labor warranty and material warranty are: (1) Consumable parts which would be considered normally replaceable in day-to-day operations. These include parts such as needles, knives, loopers and spreaders. (2) Normal adjustment and routine maintenance. This is the sole responsibility of the customer. (3) Cleaning and lubrication of equipment. (4) Parts found to be altered, broken or damaged due to neglect or improper installation or application. (5) Damage caused by the use of non-Genuine AMF Reece parts. (6) Shipping or delivery charges.

There is no service labor warranty for machines sold as "uninstalled".

Equipment installed without the assistance of a certified technician (either an AMF Reece Employee, a Certified Contractor, or that of an Authorized Distributor) will have the limited material warranty only. *Only the defective material will be covered.* Any charges associated with the use of an AMF Reece Technician or that of a Distributor to replace the defective part will be the customer's responsibility.

NO OTHER WARRANTY, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER IS GIVEN BY SELLER OR SELLER'S AGENT IN CONNECTION HERewith. UNDER NO CIRCUMSTANCES SHALL SELLER OR SELLER'S AGENT BE LIABLE FOR LOSS OF PROFITS OR ANY OTHER DIRECT OR INDIRECT COSTS, EXPENSES, LOSSES OR DAMAGES ARISING OUT OF DEFECTS IN OR FAILURE OF THE EQUIPMENT OR ANY PART THEREOF.

WHAT TO DO IF THERE IS A QUESTION REGARDING WARRANTY

If a machine is purchased through an authorized AMF Reece, Inc. distributor, warranty questions should first be directed to that distributor. However, the satisfaction and goodwill of our customers are of primary concern to AMF Reece, Inc. In the event that a warranty matter is not handled to your satisfaction, please contact the appropriate AMF Reece office:

AMF Reece World Headquarters
8080 AMF Drive
Mechanicsville, Virginia 23111
Service: 800-367-7332 (USA only)
(804) 559-5242
(Worldwide)
Parts: 800-237-3323 (USA only)
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AMF Reece CZECH REPUBLIC
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Fax: 42 508 262 07

AMF Reece TURKEY
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Phone: 90 212 554 78 64
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AMF Reece LATIN AMERICA
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Phone: (305) 573-3212
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Phone: 852 2 787 2273
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INTRODUCTION

The new Speedwelt 1000 pocket welter features operator ease and safety, faster and more accurate operation, and less maintenance. The microprocessor/keypad operation offers user friendly fingertip control. All programs, selected at the push of a button, feature self directing step by step guides through the program sequences. All systems are electrical or pneumatic; no oil to leak or contaminate. Controls are solid state electronics. Non-adjustable limit switches and sensors eliminate misadjustments and errors. The new drive train features fewer parts, reduced noise, less wear, and a smoother, more accurate operation. For operator safety, there is no high voltage above the table top.

This twin needle, stitch type 101 chainstitch machine is designed to make welt pocket openings in various types of garments. It will produce single and double welts, with simple variations in the automatic folding system. Pocket bags can be sewn in the pocket opening. The Speedwelt 1000 will sew the pocket openings at 1400 S.P.M. Automatic seam end dense stitching locks in the seams, and the threads are trimmed at the ends of the seams.

The operable pocket opening range is 52.0mm to 188.0mm (2 1/16 to 7 7/16 inches) in length, and 9.52mm to 22.22mm (3/8 to 7/8 inches) in the width of the welted pocket opening. The stitch density may be adjusted to between 9 and 14 stitches per inch.

Optional locating lights may be purchased with the machine.

The mechanical functions are performed by a system of pneumatic and solid state electronic components. The air supply requirement is 80 P.S.I. The normal electrical supply requirement is 208/ 220/ 230/ 380/ or 440 V.A.C., 3 phase, 50 or 60 cycle.

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SPEEDWELT 1000 MODELS

MODEL NO.	DESCRIPTION	PATCH GUIDE SIZE	TYPE OF MATERIAL
32.0000.0.210	3/8" Double Welt	(.725)	Light
32.0000.0.211	3/8" Double Welt	(.661)	Light/Medium
32.0000.0.212	3/8" Single Welt	(.661)	Light/Medium
32.0000.0.220	7/16" Double Welt	(.690)	Heavy
32.0000.0.221	7/16" Double Welt	(.730)	Light/Medium
32.0000.0.222	7/16" Single Welt/Overlap	(.759)	Light/Medium
32.0000.0.230	1/2" Double Welt	(.786)	Heavy
32.0000.0.231	1/2" Double Welt	(.850)	Light/Medium
32.0000.0.232	1/2" Single Welt	(.801)	Light/Medium
32.0000.0.233	1/2" Single Welt	(.945)	Light/Medium
32.0000.0.240	5/8" Double Welt	(1.100)	Heavy
32.0000.0.241	5/8" Double Welt	(1.148)	Light/Medium
32.0000.0.242	5/8" Single Welt	(1.230)	Light/Medium
32.0000.0.250	3/4" Double Welt	(1.350)	Heavy
32.0000.0.251	3/4" Single Welt	(1.470)	Light/Medium
32.0000.0.252	3/4" Single Welt/Overlap	(2.100)	Light/Medium
32.0000.0.260	7/8" Double Welt	(1.655)	Light/Medium
32.0000.0.261	7/8" Single Welt	(1.669)	Light/Medium

SPEEDWELT 1000 SPECIFICATIONS

DESCRIPTION		Speedwelt 1000 Sewing Machine
SEWING HEAD		2-Needle Chainstitch
STITCH TYPE		101 Single Thread Chainstitch
SEWING SPEED		1,400 Stitch Per Minute
NEEDLE BITE SIZES		3/8", 7/16", 1/2", 5/8", 3/4", 7/8" (9.5, 11.1, 12.7, 15.9, 19, 22.2mm)
POCKET LENGTHS		2 1/16 to 7 7/16" (52 to 188mm)
STITCH DENSITY	Center	9 to 14 spi (1.8 to 2.8mm)
	End	18 to 24 spi (0.9 to 1.3mm)
LENGTH OF END DENSITY STITCHES		2 to 8 mm
WELT STYLES		Single, Double, Offset, Overlapping
CENTER KNIFE		Scissors Type, Lower Driven
CONTROL SYSTEM		Microprocessor
LUBRICATION SYSTEM		Manual Oiling Points
ELECTRICAL REQUIREMENTS		220V, 60 Cycle, 3 Phase 380V, 50 Cycle, 3 Phase
COMPRESSED AIR	Pressure	80 psi (5.516 bar)
	Consumption	.25 cmf (7 /m)
NET DIMENSIONS	Length	32" 812mm
	Width	28.5" 724mm
	Height	50" 1270mm
	Weight	340lbs. 154kg
GROSS DIMENSIONS	Length	41" 1041mm
	Width	32" 813mm
	Height	53" 1346mm
	Weight	500lbs. 267kg

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CONTROLS

POWER SWITCH:

The power switch controls all power to the machine. It is used to power up and power down the machine. In the "OFF" position, there is no power to any component in the SPEEDWELT 1000.

MOTOR SWITCH:

The motor switch controls all power to the motor. In the "OFF" position, the drive motor does not have power; however, the machine can still have power.

AIR VALVE:

The air valve controls the air supply to the pneumatic system. The system operating pressure is 80 PSI. The thread pickup arms, tab knives, center knife, clamping, and patch folding are pneumatically operated.

ON SWITCH:

The ON switch turns the microprocessor power on.

EMERGENCY STOP SWITCH:

The emergency stop switch turns the microprocessor and the motor power off.

SEW INTERRUPT SWITCH:

The sew interrupt switch immediately stops the sewing operation and activates the keypad. It serves as a reset button when the clamping table is in the front or rear position. If the table stops in an interim position, the keypad must be used to reset the table position.

THREAD SAFETY SWITCH:

The thread safety switch is used when a thread breakage occurs. This switch, when pressed, prevents the machine from sewing, enabling the operator to re-thread the machine. When the operator is ready to continue sewing, the switch, when pressed again, returns the machine to the sewing position before the thread breakage occurred.

KNEE SWITCH:

The knee switch starts the sewing cycle.

CONTROLS

TREADLE:

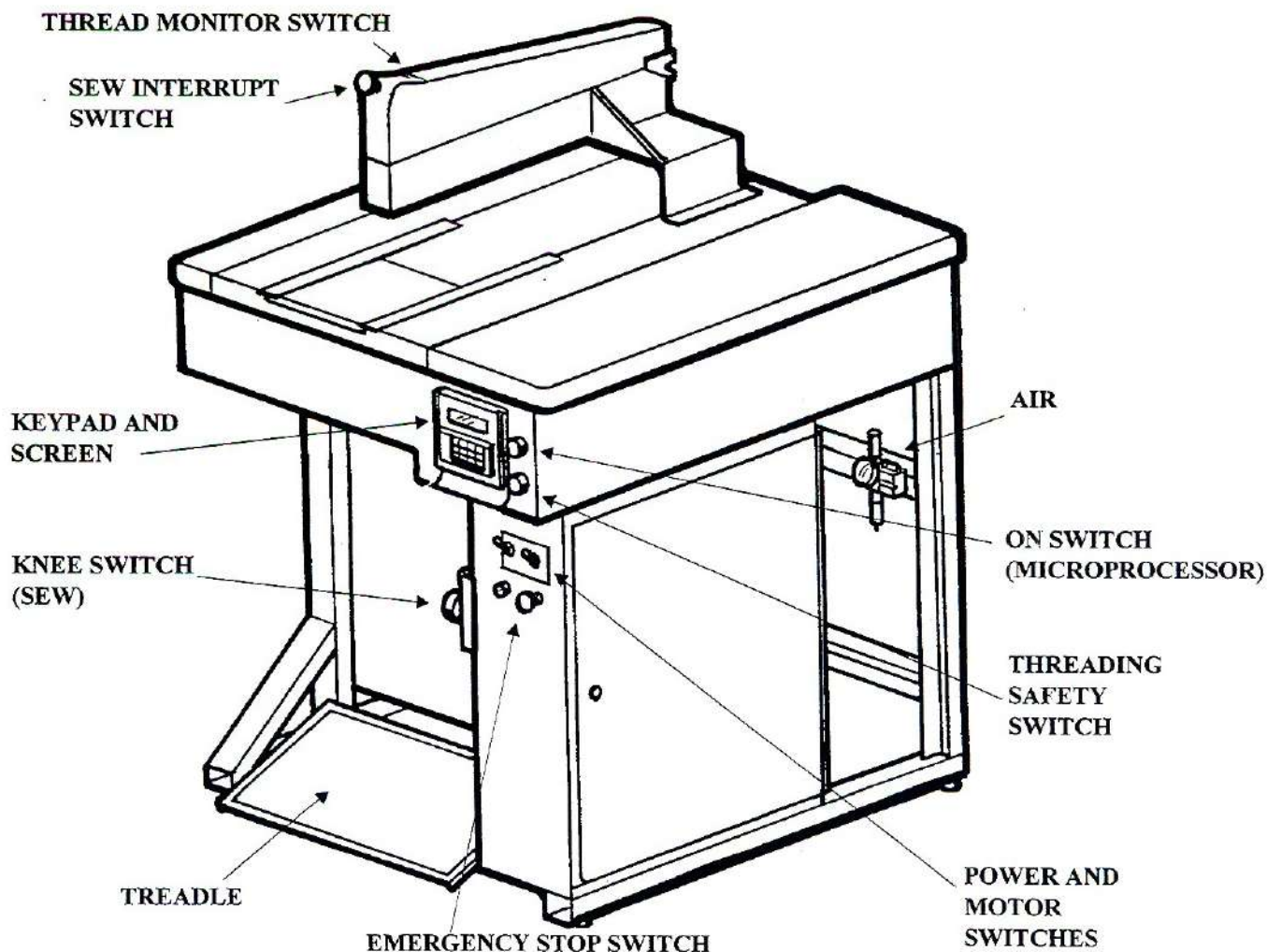
The treadle operates by two different position switches which control the operation of the clamping table, clamps, and brushes. Positions are halfway down (Position Switch #1), and all the way down (Position Switch #2).

KEYPAD:

The keypad is locked during normal operation to avoid accidental program changes. The SEW INTERRUPT switch stops the operation and activates the keypad for approximately 30 seconds. Striking a key keeps the keypad active until the [ENT] button is pushed, which returns the screen display to the sew program selected, and locks the keypad.

THREAD MONITOR SWITCH:

This switch, located under the head cover, will detect a slack or broken thread and will stop the machine from sewing and initiate the repair mode.



OPERATOR KEYPAD AND DISPLAY SCREEN

The Keypad/Microprocessor controls all functions of the SPEEDWELT 1000 and displays the active function on the screen. There are INPUT/OUTPUT tests which perform diagnostic checks on component operations. They isolate problems quickly and simply. The tests read each selected input or output, monitor its operation, and displays the results on the keypad screen.

All power to the SPEEDWELT 1000 is controlled by the POWER switch. The microprocessor power is controlled by the ON switch. Both of these switches must be in the "ON" position before the screen will illuminate, displaying the currently selected program. The programs are menu driven and can be easily changed (see pages 1-9 and 1-10).

The keypad is locked during sewing operations to prevent accidental program changes. The SEW INTERRUPT switch accesses the keypad for about 30 seconds. To keep it active, *press* one of the following keys:

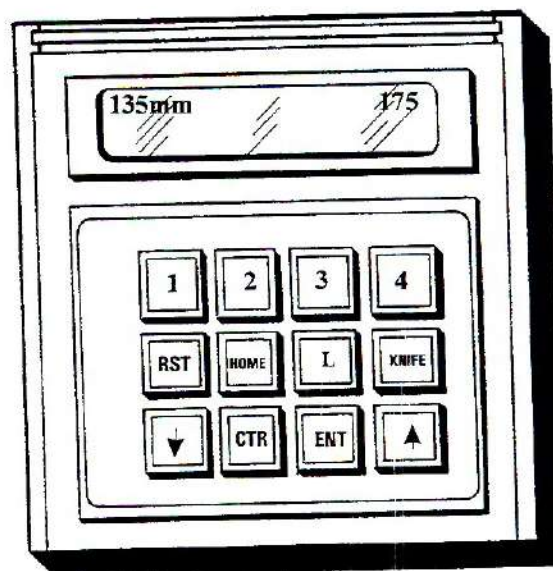
[RST]; [L]; [KNIFE]; [CTR]; or either of the two arrow keys.

To deactivate the keypad, *press* any of the following keys per screen instructions:

[ENT]; [HOME]; [CTR]; or the SEW INTERRUPT switch

The key functions are as follows:

- | | |
|---------|--|
| [RST] | -Resets the counter to zero. |
| [HOME] | -At start-up, this key returns the clamp table to the LOAD position currently selected (front to back or back to front). |
| [L] | -Selects the loading position, front or back. |
| [KNIFE] | -Turns the TABKNIFE and CENTERKNIFE operation on or off (cut-no cut). |
| [CTR] | -Accesses the Mechanics Diagnostic Programs. |
| [ENT] | -Enters into memory any changes made. |



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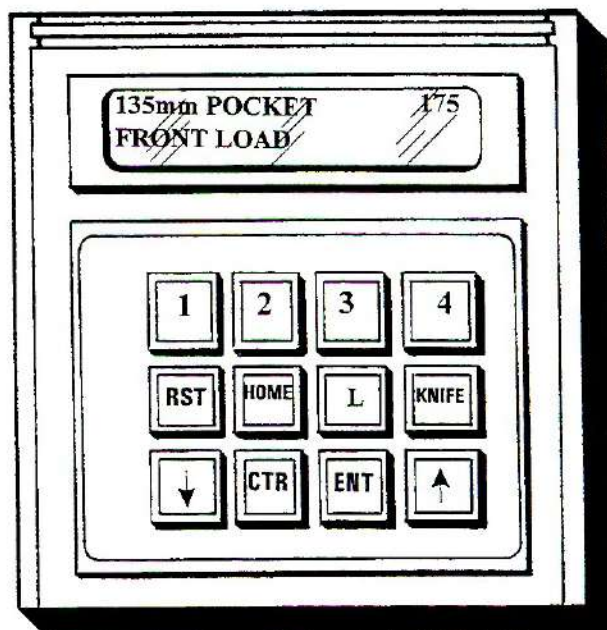
OPERATOR KEYPAD AND DISPLAY SCREEN

Operator Keypad and Display Screen

To enter either the Front or Back Loading Programs:

Press the [SEW INTERRUPT] switch.

Press [L].



FRONT LOADING

Press the TREADLE half way down

Release the TREADLE

Press the TREADLE all the way down

Release the TREADLE

Press the KNEE SWITCH

Clamps will go down

Clamps will come up

Clamps will go down, and the table will go back

Brushes will close

To continue sewing

or

Press the SEW INTERRUPT SWITCH

To cancel, and the brushes will open and clamps will come up

BACK LOADING

Press the TREADLE all the way down

Release the TREADLE half way up

Press the TREADLE all the way down

Release the TREADLE

Press the TREADLE half way down

Release the TREADLE

Press the KNEE SWITCH

Table will go back

Clamps will go down

Clamps will come up

Clamps will go down and the brushes will close

Brushes will open

Brush will close

To continue sewing

or

Press the SEW INTERRUPT SWITCH

To cancel, and the brushes will open and clamps will come up

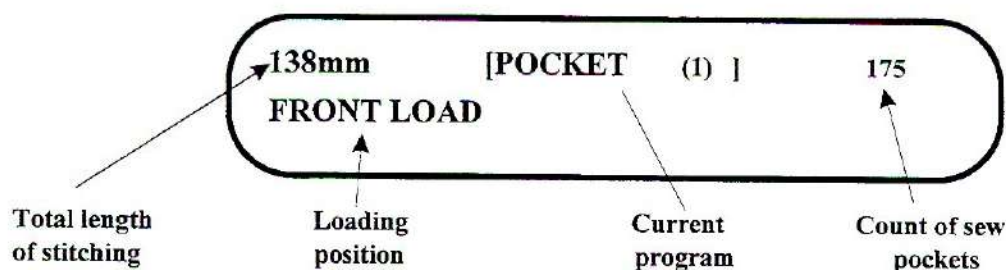
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PROGRAMMING THE KEYPAD

1. Turn the machine on by turning the POWER and MOTOR toggle switches to the ON position.
2. Turn on the air valve.
3. Push the ON switch.
4. The screen will display a message similar to the one below.



This screen (pocket program) briefly describes the active program in the machine. It is possible to have 12 different programs. The program being run is locked in memory when the machine is turned off. It will be active when it is turned on again. To sew a pocket welt, follow the "OPERATOR INSTRUCTIONS".

THINGS TO REMEMBER

SEW INTERRUPT: This switch is used to access the program by activating the keypad for about 30 seconds. This safety feature prevents accidental changes made through the keypad. This switch can also be used as a "RETURN" to the pocket program screen.

To keep the keypad active, press any one of the following keys:

- [RST]
- [L]
- [KNIFE]
- [↑]
- [↓]
- [CTR]

To de-activate the keypad, press any of the following per screen instructions:

- [ENT]
- [HOME]
- [CTR]

SEW INTERRUPT switch

PROGRAMMING THE KEYPAD

TO SET THE SEWING PROGRAMS:

Press the [SEW INTERRUPT] switch.

Press the [CTR] key.

Press [2] to program.

To program sewing, press [1].

To program PATCH LOADER, press [2].

To turn PATCH LOADER on, press [2].

SEMAUTOMATIC - the operator starts sewing after loading and folding.

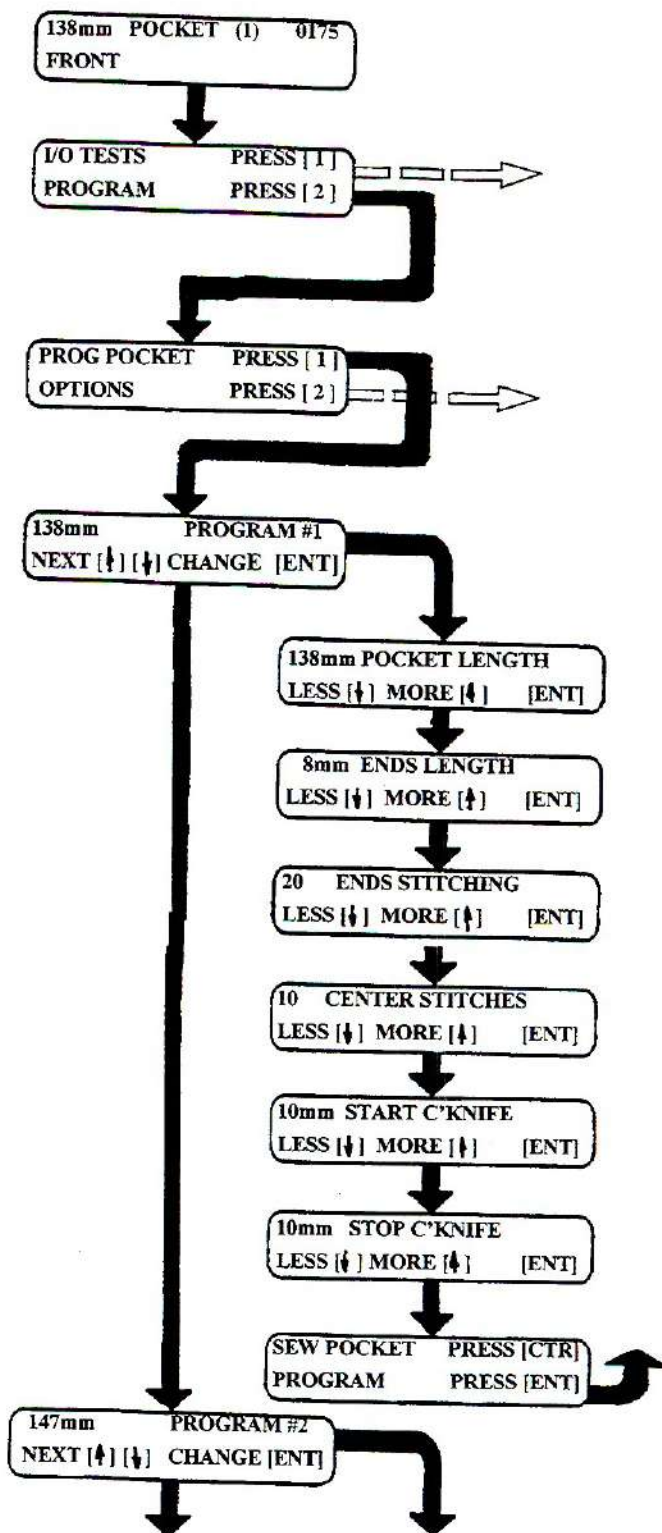
AUTOMATIC - the foot treadle only is used.

The NEXT [↕] key will advance to and display the next program. The NEXT [↕] key will display the previous program. The CHANGE [ENT] key allows changes to be made to the current program, and advances to the next screen within the program.

Once in the program, the LESS [↕] key will decrease the number; the MORE [↕] key will increase the number. The [ENT] key will confirm any changes made and advance the program to the next screen.

**For programming instructions for options, see the Options section, page 1-44.

To enter the sewing mode, press the [CTR] key; to continue in the programming mode, press the [ENT] key.



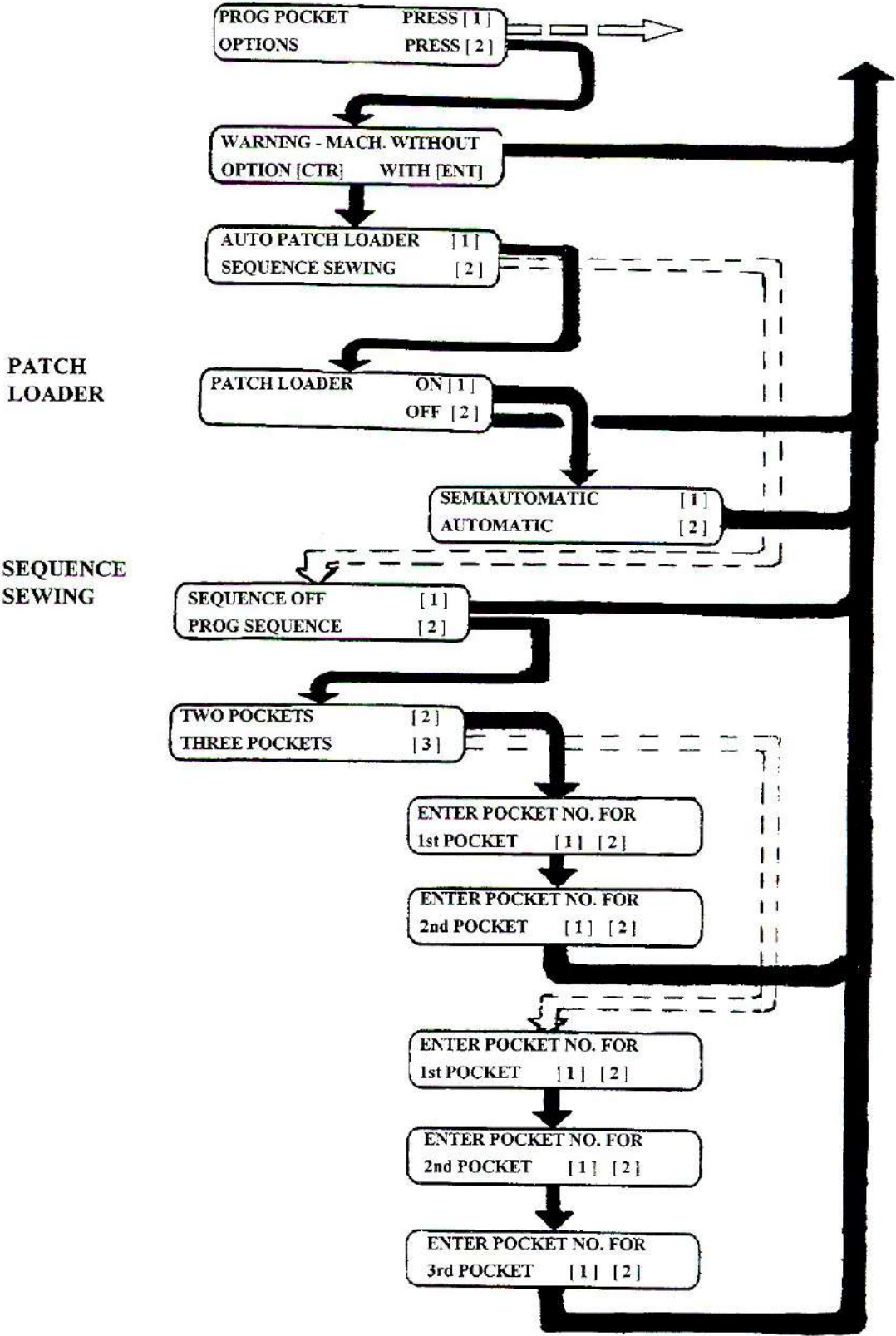
TYPICAL - PROGRAMS 2 THROUGH 8

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PROGRAMMING THE KEYPAD



PROGRAMMING THE KEYPAD

TO CHANGE A POCKET PROGRAM:

Press [SEW INTERRUPT] switch

Press [↑] or [↓] to select

156mm POCKET #2 175
FRONT Press [ENT]

DOES TABKNIFE NEED
CHANGING? Press [ENT]

TO CHANGE THE LOADING POSITION:

Press [SEW INTERRUPT] switch

Press [L] key

CANCEL [SEW INTERRUPT]
BACKLOAD [ENT]

TO CHANGE THE TABKNIFE (CUT-NO CUT):

Press [SEW INTERRUPT] switch

Press [KNIFE] key

*(1) Automatic tab knife center cut

(2) No cut center or tab knives

(3) Tab cut w/knee switch

TAB,K-CUT [1] NO CUT [2]
CUT/KNEE SWITCH [3]

CANCEL SEW INTERRUPT
CENTER KNIFE OFF [ENT]

ERROR MESSAGE

Indicates table is not in the Home position

Press [HOME]

ERROR-TABLE NOT HOME
Press [HOME]

TO RESET THE COUNT OF SEWN POCKETS:

Press [SEW INTERRUPT] switch

Press [RST]

CANCEL [SEW INTERRUPT]
Reset Count [ENT]

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PROGRAMMING THE KEYPAD

TO THREAD THE MACHINE:

Press the [THREAD SAFETY] switch. Thread the machine. Press the [THREAD SAFETY] switch to return to the sewing mode.

When a thread breaks, the machine will automatically go into the [SEW INTERRUPT] mode.

Press the [THREAD SAFETY] switch to return to the sewing mode.

When the material jams:

Remove the material after turning the air valve OFF.

Press [SEW INTERRUPT] to return to the sewing mode.

FINISHED THREADING?
Press [THREAD SAFETY] switch

THREAD BREAK
Press [HOME]

REMOVE PATCH/STITCH
Press/Hold TREADLE

RELOAD PATCH
Release TREADLE

ERROR CORRECTED: To
Continue, Press [ENT]

RETHREAD MACHINE
Press [THREAD SAFETY] switch

JAM-TURN AIR OFF
Press [SEW INTERRUPT]

TURN AIR ON
Press [HOME]

Press [SEW INTERRUPT]

ADJUSTING ROCKER RODS

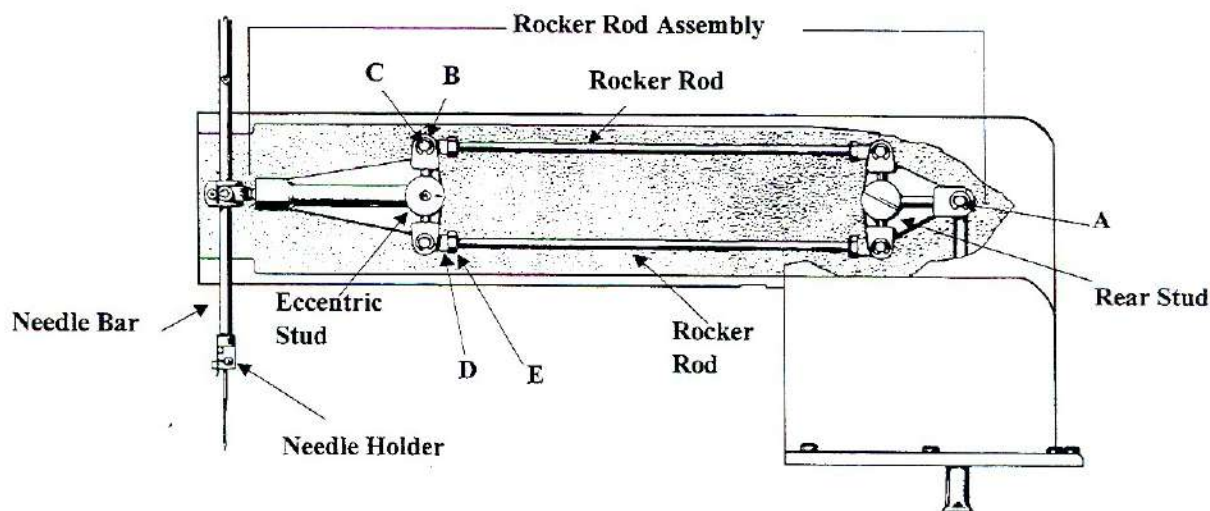
ROCKER ROD REPLACEMENT

In most cases, only one of the rocker rods will actually required replacement. However, replace both of the rocker rods. To replace, perform the following steps:

1. Turn the arrow located on eccentric stud towards the rear of the machine.
2. Remove needle bar, eccentric stud, rear stud, and pin A. Be careful not to lose the small key in the eccentric stud. Remove the rocker rod assembly.
3. Remove the four E-rings B from the pins located on the rocker assembly. Remove the pins C. Disassemble the broken rod by loosening locknuts E, removing clevis D and removing locknuts E. Place clevis and locknuts on new rod. Re-install eccentric and rear studs onto the head. Insert rod on the head through the opening located on the left hand side of the machine. Clevis on the new rod should slide over the eccentric and rear studs. The length of the rod and the clevis should match the distance between the two studs. Repeat for the other rod.
4. Install the new rods onto the front and rear rocker levers using the pins to secure them in place. Re-install E-rings B over the pins C. Remove eccentric and rear studs. Re-install the rocker rod assembly using the studs and pin A.

ROCKER ROD TENSION

1. The tension is adjusted on the rocker rods by rotating the eccentric stud. This is done by removing the needle holder and pin A.
2. Loosen eccentric stud. Rotating the stud so the arrow faces the front of the machine *increases* the tension on the rocker rods; rotating the stud so the arrow faces the rear of the machine *decreases* the tension. Decrease the tension enough so the needle bar can move up and down freely. Slowly increase the tension until there is a slight drag when the needle bar is moved manually up and down. The arrow will be about at the 1 or 2 o'clock position. Re-tighten stud.



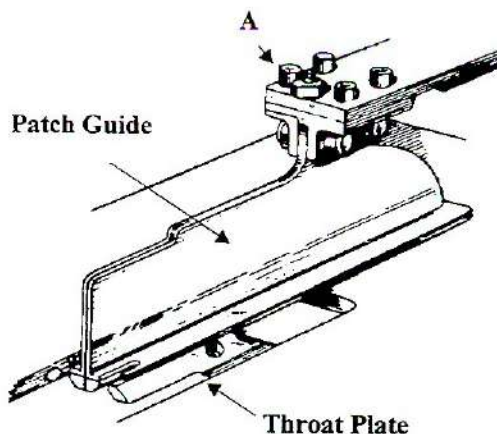
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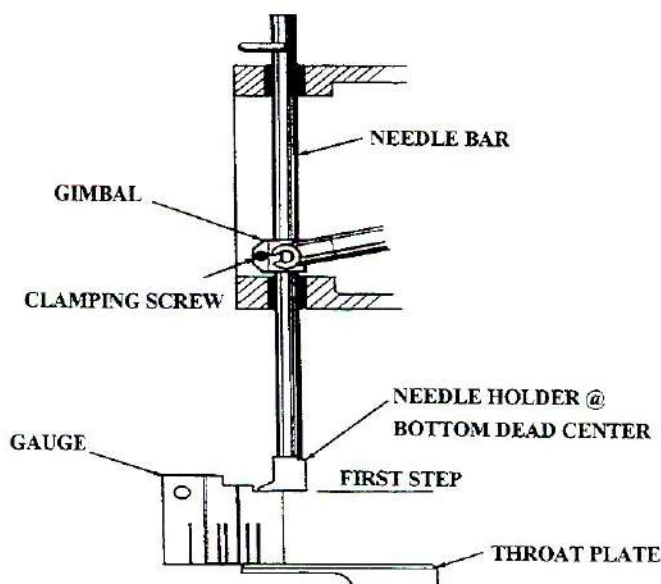
ADJUSTING NEEDLE BAR HEIGHT

1. Move the clamping table to the back load position.
2. Remove the patch guide assembly by loosening and removing screws A.



3. Move the clamping table to the front load position.
4. Set the gauge squarely on the throat plate. The bottom of the needle holder should sit on the first step of the gauge with the needle bar at the bottom, dead center. Adjust the needle bar to this height by loosening the clamping screw in the gimbal and sliding the needle bar into the proper position. Lock the needle bar firmly into the gimbal by re-tightening the clamping screw.

NOTE: Ensure needles are still in alignment with the throat plate (see page 1-15).



NOTE: LOOPERS AT MAXIMUM REARMOST POSITION

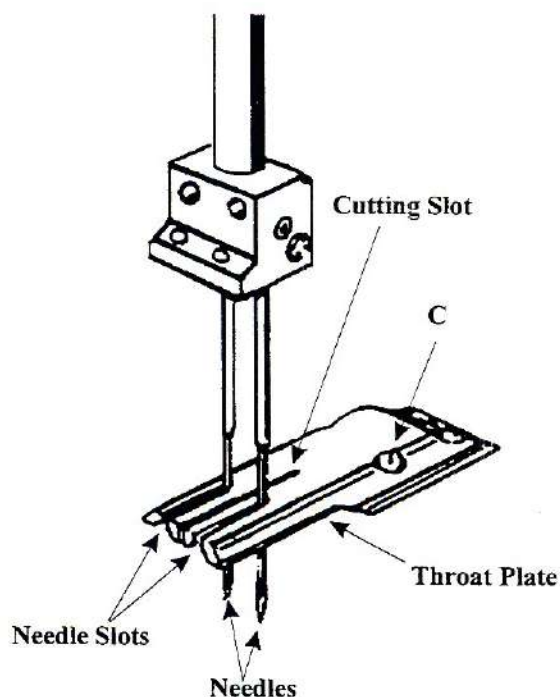
SEWING

ADJUSTING THE NEEDLES TO THROAT PLATE

Before starting this adjustment, ensure the clamping table is in the back load position.

1. Select OUTPUT TEST (see page 2-4) from the keypad. Bring the clamps down and remove the patch guide.
2. Lift the machine. Manually operate the needle bar by rotating the knob, located on the centerknife shaft, clockwise. Check for a slight clearance between the needles and the throat plate openings. If a slight clearance does not exist, loosen screws C and tap the throat plate to the right or left as necessary. Once the clearance has been obtained, re-tighten screws C and re-install the patch guide.

NOTE: Ensure the needles are straight.



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PATCH GUIDES

The patch guide is factory set.

Elimination of Side Play

If play exists between the patch guide arm and hinge brackets, loosen only one hinge bracket. This is done by loosening screws **A**. While pressing brackets together, retighten screws **A**. As long as one hinge bracket remains fixed, the patch guide arm will remain centralized.

Leveling of Patch Guide

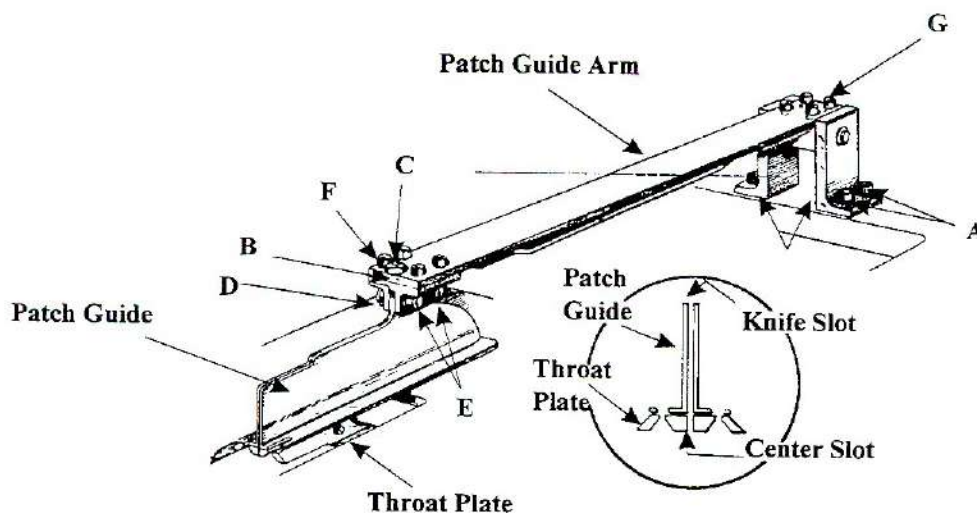
The bottom surface of the patch guide should rest flatly on the top surface of the throat plate. If an adjustment is required, loosen locknut **B** and move allen screw **C** up or down as necessary. Once the adjustment has been made, re-tighten locknut **B**.

Setting the Tension on the Patch Guide

The patch guide should have a slight drag when it is manually moved up and down. If adjustment is required, loosen locknuts **D** and move screws **E** in or out (in *tightens* the drag; out *loosens* the drag) as necessary. Once a slight drag is obtained, re-tighten locknuts **D**. Re-check patch guide for slight drag.

Alignment of Patch Guide and Throat Plate

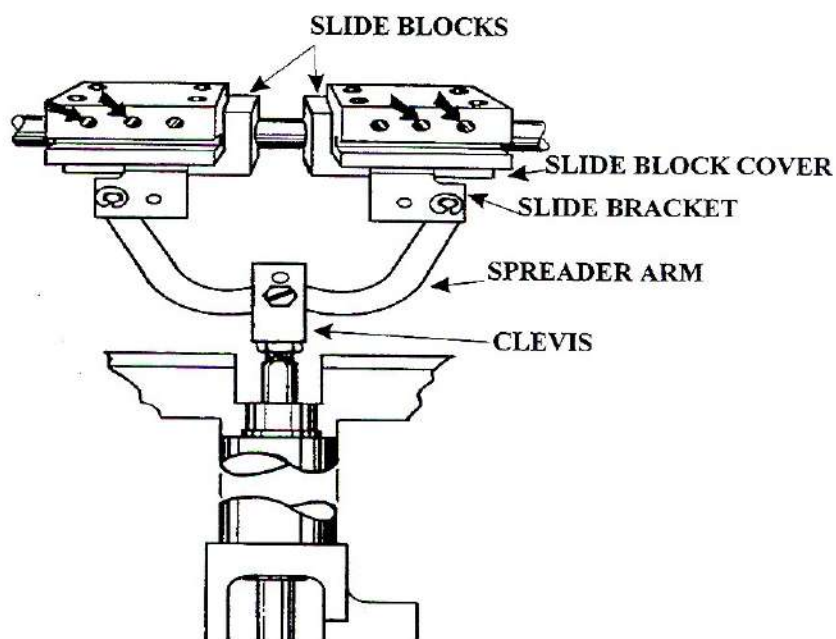
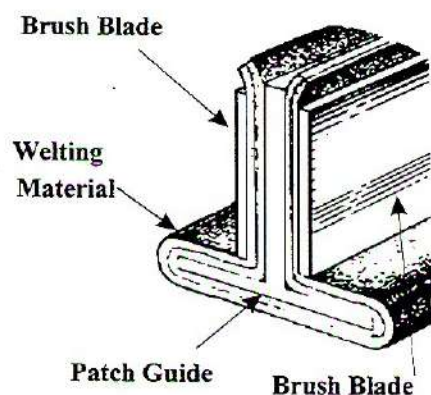
1. The knife slot of the patch guide must be aligned with the center slot of the throat plate. To adjust, loosen screws **F**, and move the patch guide to the right or left as necessary. Once the alignment has been obtained, re-tighten screws **F**.
2. If the alignment can not be obtained by performing step 1 above, loosen screws **G**. Move the patch guide arm to the right or left as necessary. Re-tighten screws **G**. Repeat step 1 above.



PATCH FOLDING

Horizontal Adjustments

The brush blades must close parallel to the patch guide, with a clearance on each side of the patch guide equal to the thickness of welting and backing material. To assure accurate performance, it is essential that the correct adjustments exist between the patch folding arms, slide block, slide bracket and clevis. Refer to pages 1-13 through 1-16 to ensure the proper machine settings are in place before performing the following patch folding adjustments.



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PATCH FOLDING

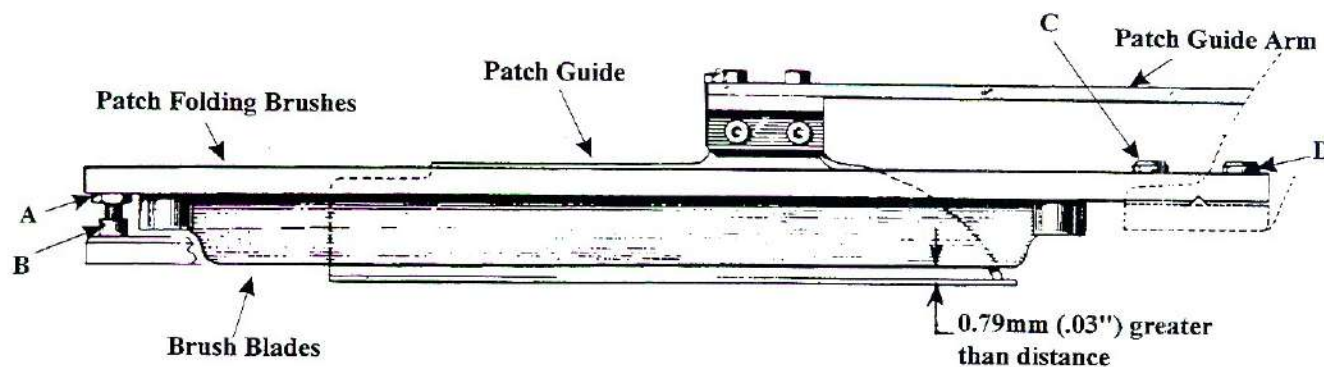
Adjusting the Height of the Front End Brush Blades to the Patch Guide

Loosen nut **A**, and turn screw **B** in or out (in will *lower* the height; out will *raise* the height) as necessary. Once the proper height has been obtained, re-tighten nut **A**.

Adjusting the Height of the Rear End Brush Blades to the Patch Guide

To *raise* the height of the brush blade, tighten screw **C**, and loosen screw **D**. To *lower* the height of the brush blade, loosen screw **C**, and tighten screw **D**.

NOTE: The height of the rear end brush blades must be 0.79mm (.03") higher than the front end brush blades.

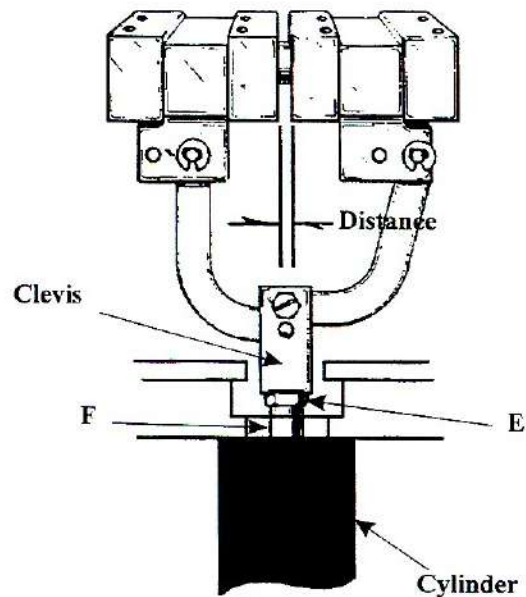
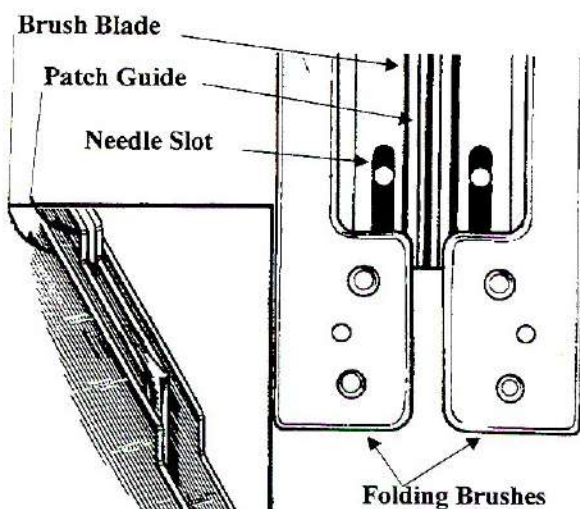


PATCH FOLDING

Setting the Distance between the Patch Guide and Brush Blades

The following adjustment may vary slightly depending on the thickness of the material being used. Heavier material requires more distance between the patch guide and the brush blades; lighter material requires less distance. If, after performing the following steps, the correct distance has not been obtained, perform the adjustment at the bottom of this page.

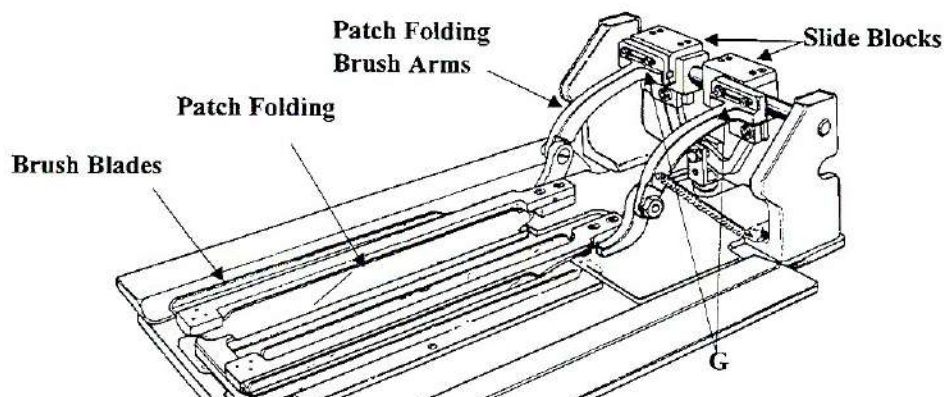
To adjust, loosen nut **E**, and screw piston rod **F** in or out (in will *decrease* the distance; out will *increase* the distance) as necessary. Once the proper distance is obtained, re-tighten nut **E**.



NOTE: Patch folding brushes must not deflect patch guide when welting and backing material is being folded. If this occurs, uneven welting or needle breakage may result.

For heavier material, perform the following steps:

Loosen screws **G**, and slide brush arm in or out as necessary. Once the proper distance has been obtained, re-tighten screws **G**.



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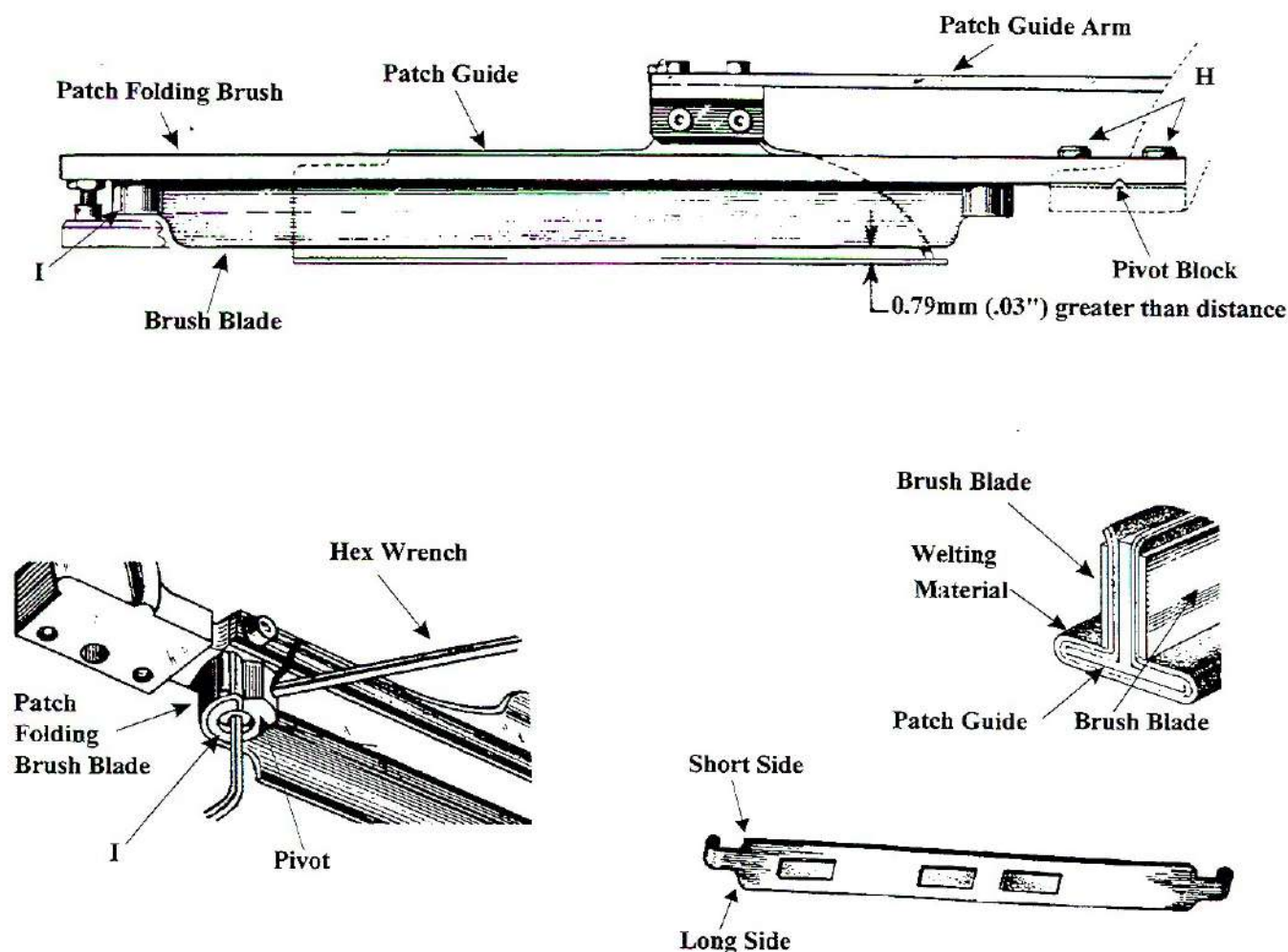
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PATCH FOLDING

Installation of Brush Blades

The brush arm should be removed in order to replace the brush blades. This is done by removing screws **H** and the pivot block. Lift the brush arm up and out. Loosen screws **I**, located on both ends of the patch folding brush arm, and remove old brush blade. Install the new brush blade to the full depth of the slot in the pivot. Re-tighten screw **I** at *one* end of the arm. Place hex wrench in pivot at the opposite end of the brush arm. Turn the pivot until the brush blade is taut. Once the brush blade is taut, re-tighten screw **I**. Re-install the brush arm and the pivot block. Re-install screws **H** and re-tighten. See page 1-18 for the proper adjustment of the brush arm.

NOTE: The brush blades have a long and short side. The long side down is used for sewing light to medium weight materials. The short side down is used for sewing medium to heavy materials. When installing new brush blades, ensure that both blades are inserted in the same way, either with both blades with the long side down or with both blades having the short side down. There are also several different size blades available for the different weight fabrics.

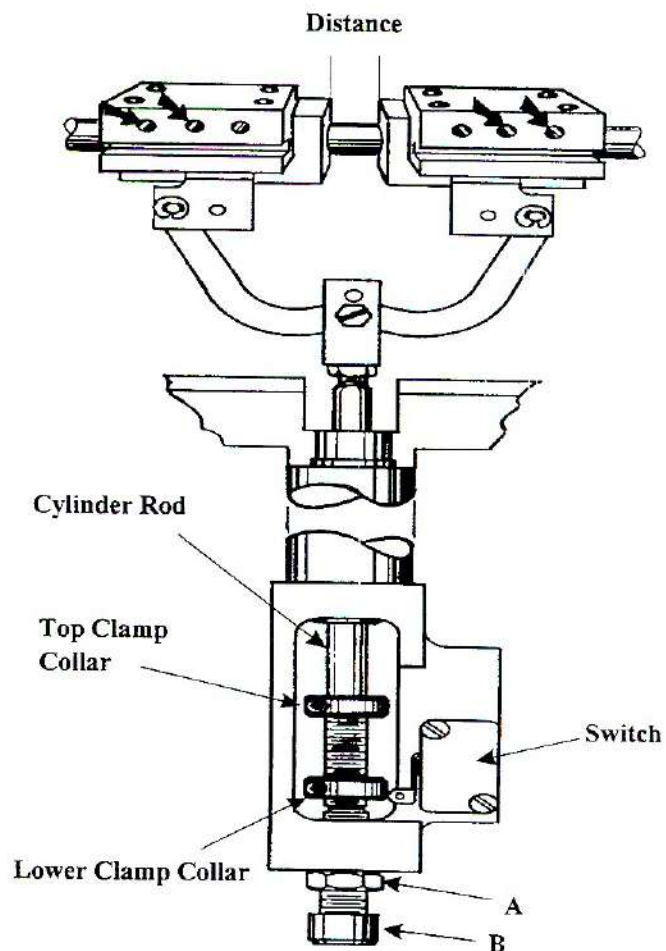


PATCH FOLDING

Positioning of the Patch Folding Brushes

The Speedwelt 1000 is available in several models. As a result, the adjustments of the patch folding brushes will vary with each model. The initial steps are as follows:

1. Loosen nut **A** and move adjusting screw **B** up or down until the desired dimension is obtained between the slide blocks. Once the desired dimension has been obtained, re-tighten nut.
2. Loosen lower clamp collar by loosening set screw, located in the lower clamp collar. Move the collar up to within 7.94mm (.312") to the top clamp collar.
3. Pull cylinder rod down until it touches the adjusting screw.
4. Move the lower clamp collar down by turning it until it activates the switch.
5. Turn the clamp collar one more turn. Re-tighten the set screw.
6. Check the brushes for proper operation, and adjust accordingly.



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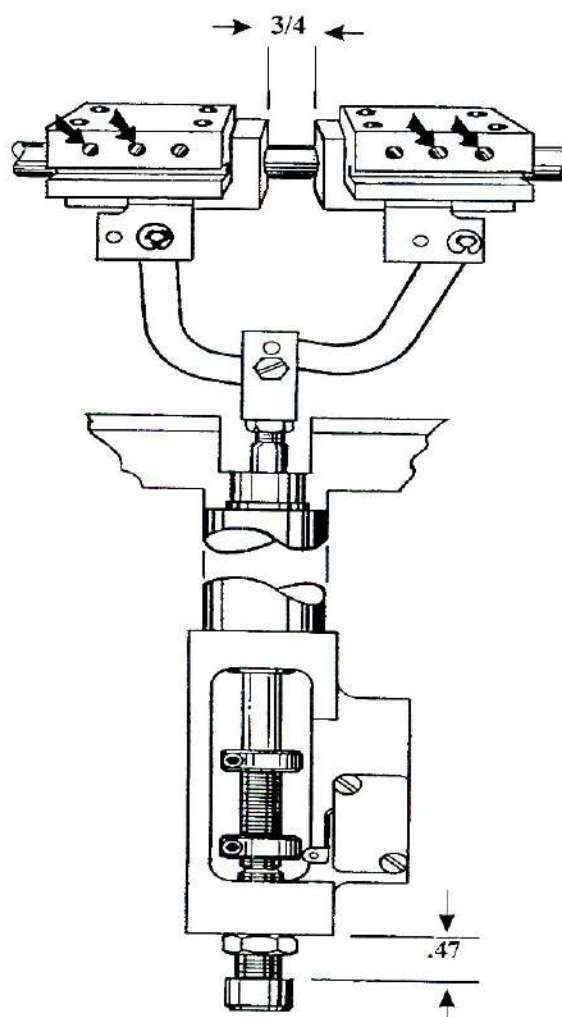
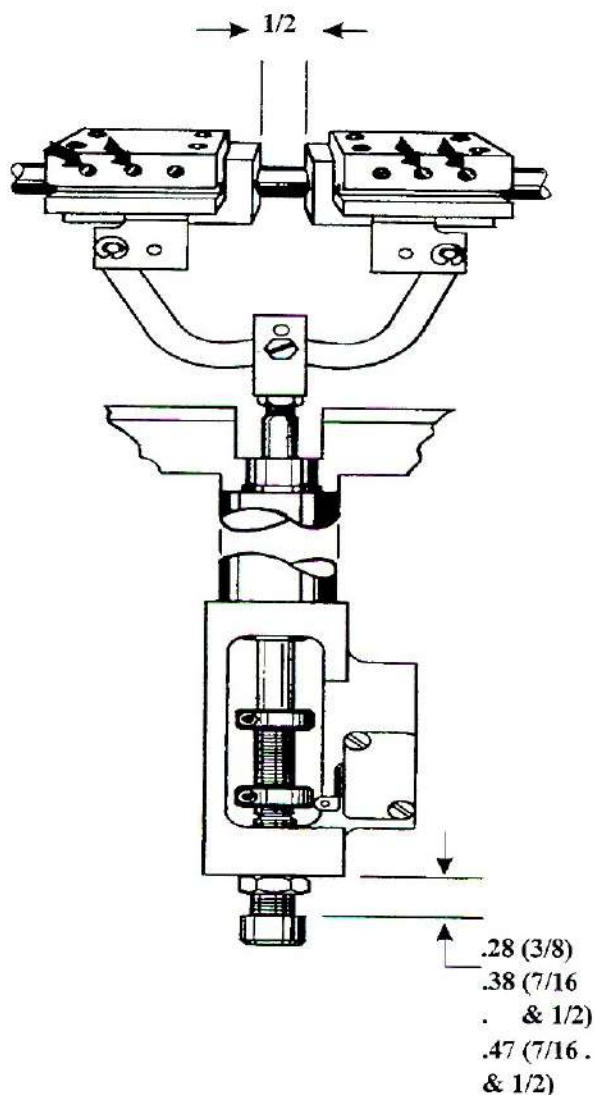
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POSITIONING OF PATCH FOLDING BRUSHES

MODELS

MODELS

3/8" D.W. (.725)	7/16" S.W.O. (.759)	1/2" S.W. (.945)
3/8" D.W. (.661)	1/2" D.W. (.786)	
3/8" S.W. (.661)	1/2" D.W. (.856)	
7/16" D.W. (.690)	1/2" S.W. (.801)	
7/16" S.W. (.730)		



NOTE: The above clearances may vary depending upon the thickness of the material being sewn.

POSITIONING OF PATCH FOLDING BRUSHES

MODELS		MODELS
5/8" D.W. (1.100)	3/4" D.W. (1.350)	5/8" S.W. (1.230)
5/8" D.W. (1.148)		

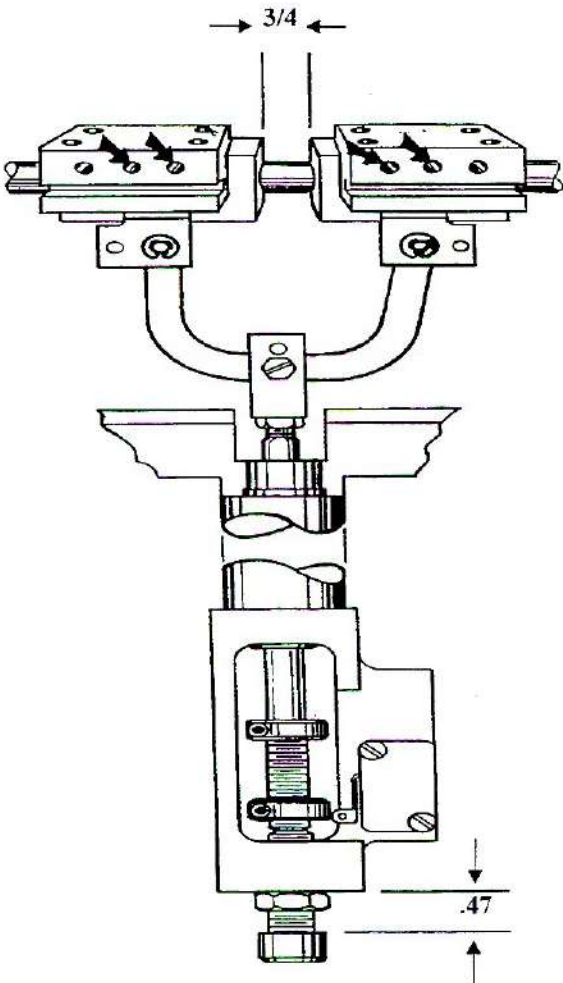


Diagram showing the positioning of patch folding brushes for models 5/8" D.W. (1.100) and 5/8" D.W. (1.148). The brush width is indicated as 3/4". The clearance between the brush and the material is .47".

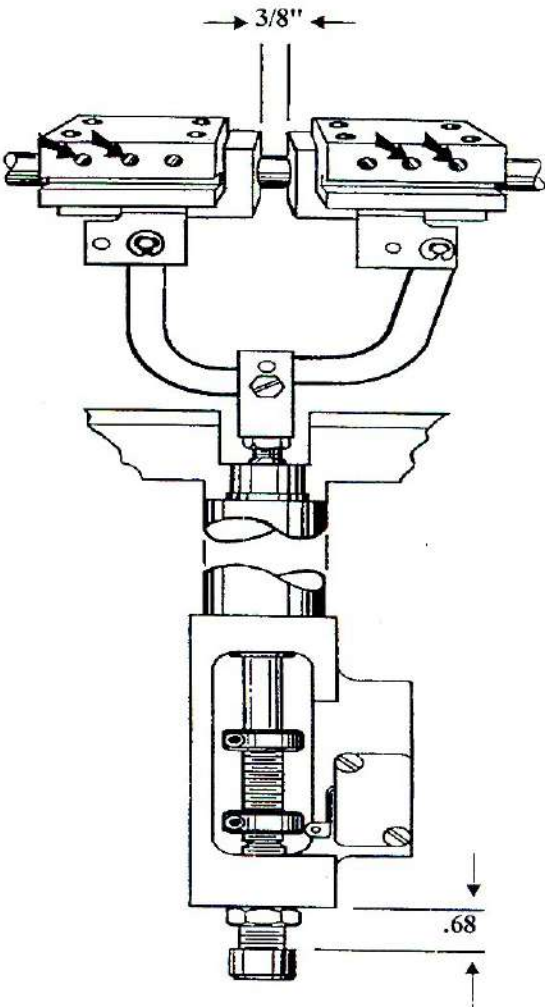


Diagram showing the positioning of patch folding brushes for models 3/4" D.W. (1.350) and 5/8" S.W. (1.230). The brush width is indicated as 3/8". The clearance between the brush and the material is .68".

NOTE: The above clearances may vary depending upon the thickness of the material being sewn.

POSITIONING OF PATCH FOLDING BRUSHES

MODELS

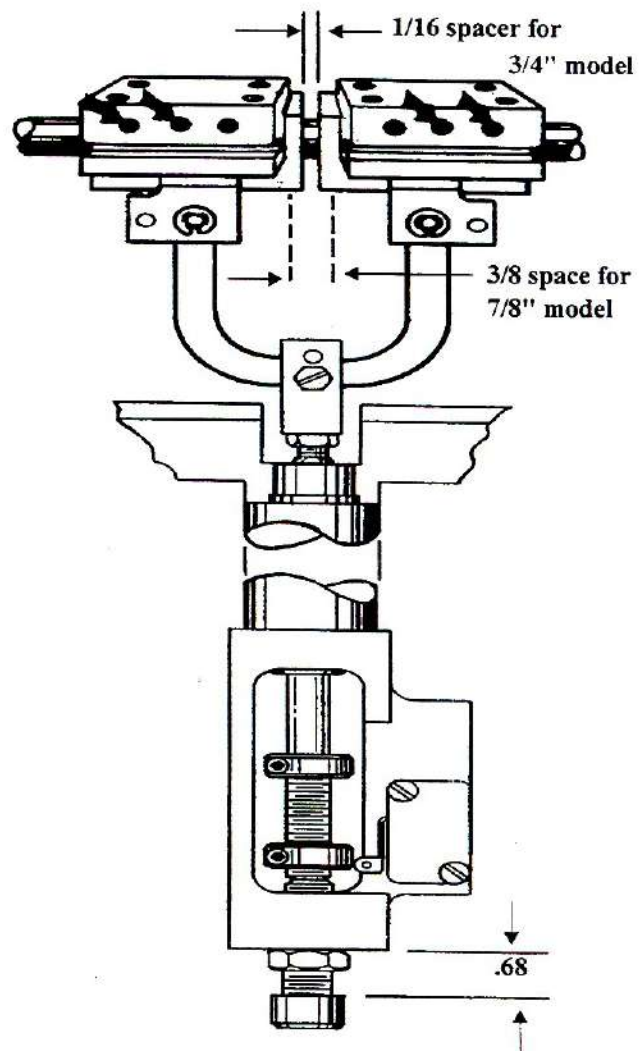
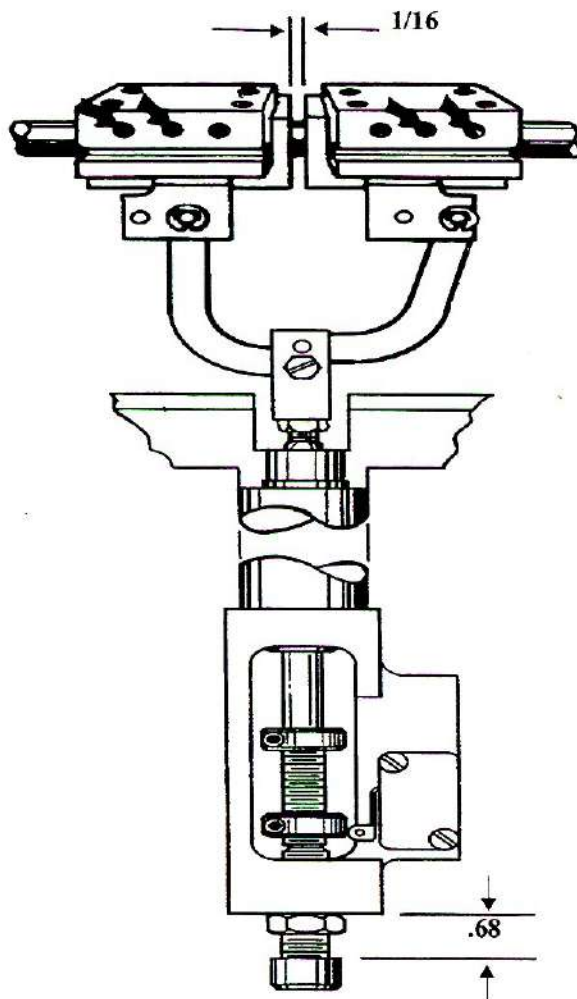
3/4" S.W. (1.470)

7/8" D.W. (1.669)

MODELS

3/4" S.W.O. (2.100)

7/8" D.W. (1.655)

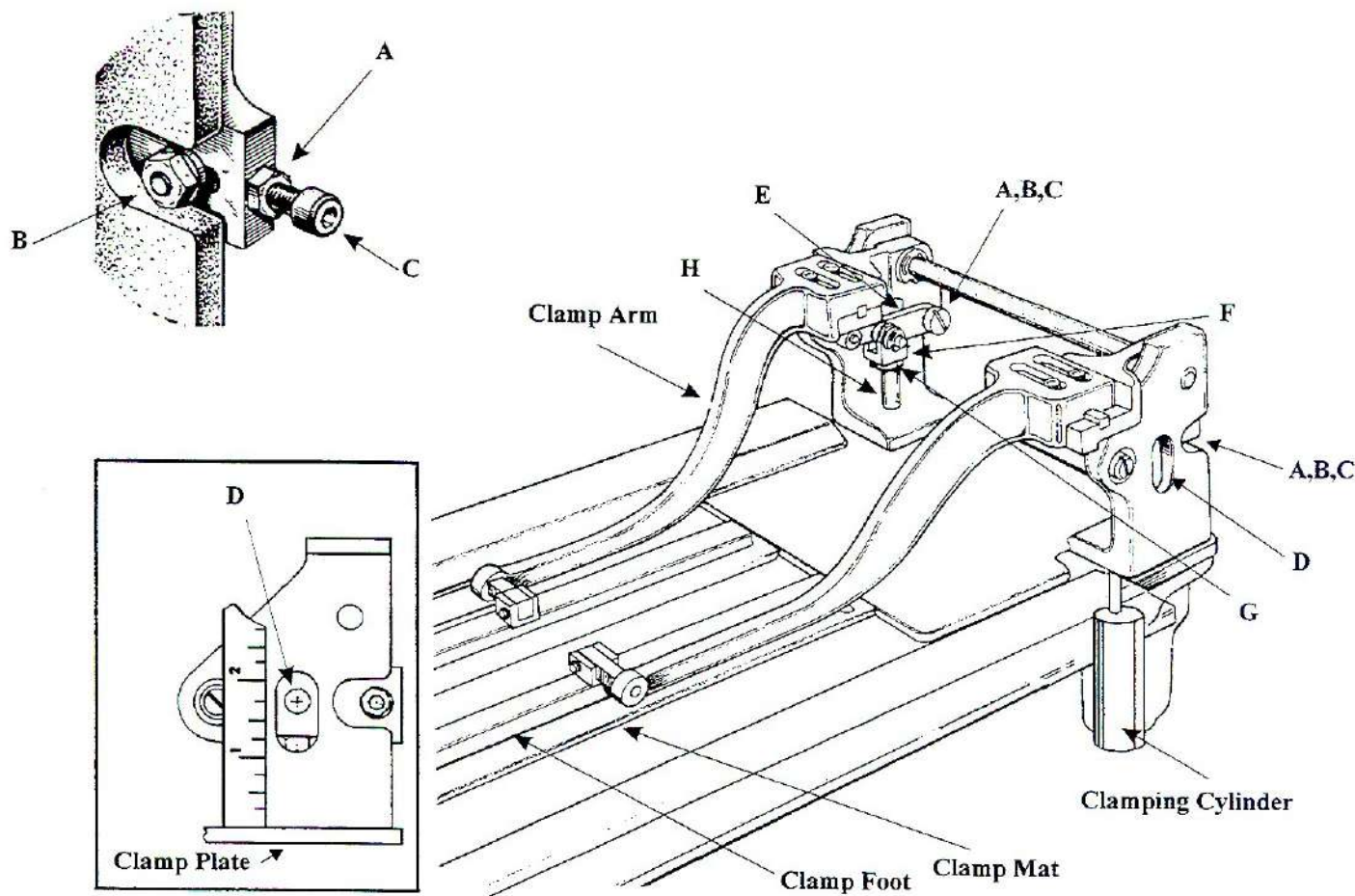


NOTE: The above clearances may vary depending upon the thickness of the material being sewn.

CLAMPING

Adjustments should be made with no material under the clamp foot. Both clamp arms must be adjusted at the same time.

1. Release all clamping pressure by loosening nuts **A** and **B**, and then backing off screw **C**. Ensure the clamp foot is in the down position, and turn the air pressure on. Re-tighten nut **B**.
2. Check to ensure that levers **E** are level and the center pin **D** is 1 3/4" above clamp plate. If the levers are not level and/or the center of the pin is not 1 3/4" above the clamp plate, adjust by loosening nut **G**. Using a pair of small pliers, turn piston rod **H** in or out of clevis **F** until this levers are level and/or pin is correctly centered. Once the adjustments have been made, re-tighten nut **G**.
3. Apply clamping pressure by turning screw **C** inward until it bottoms. Continue to turn 1/2 of a turn further. Re-tighten nut **A**.
4. Ensure that clamp foot holds the material firmly at all points. If slippage occurs under either side of the clamp foot, increase pressure to that side. This is done by turning screw **C** slightly inward. Be careful not to turn the screw too tight as to cause the front of the clamp foot to be raised.



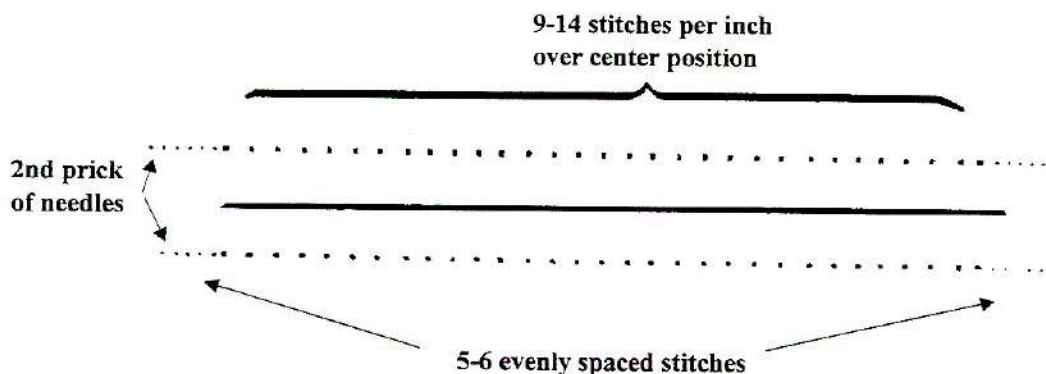
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PRICK-IN

Stitch density is controlled by the speed at which the clamp travels forward. At the beginning and end of each sewing cycle, the clamp table slows briefly to provide closer stitch density which is required at each end of the pocket. Beginning and end stitch density is 18 to 22 stitches per inch and should consist of 5 or 6 evenly spaced stitches at the beginning and end of each welt. The clamp table speeds up to provide a center stitch density of 9 to 14 stitches per inch (see diagram).



To verify that the stitch pattern conforms to the diagram, perform the following test:

1. Install "pricking" needles prepared from #950 class needles shortened to 1 9/16" overall and sharpened to a point.
2. Place a sheet of sturdy paper under the clamp foot and operate the machine through a sewing cycle.
3. Compare that stitching pattern with the diagram above.
4. If the newly created stitching pattern does not match the diagram above, adjustments must be made to end length, end stitching, and center stitches (see Re-programming Instructions on page 1-9).

CENTER CUTTING

REPLACEMENT OF THE CENTER KNIFE

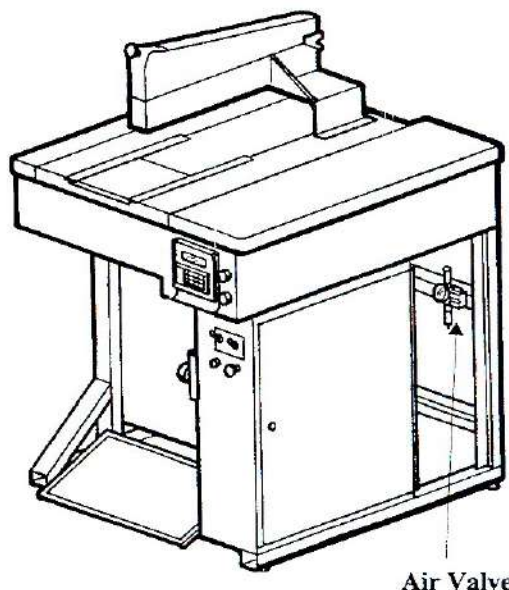
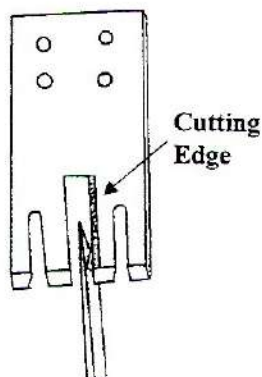
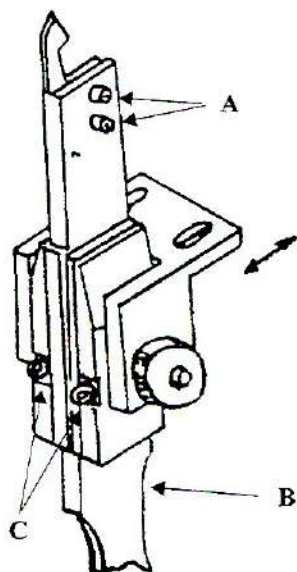
As the knife begins to dull, a ragged center cut will be made. The knife may be sharpened with an oil stone. However, if sharpening the knife does not correct the ragged cut, the knife will need to be replaced. A supply of sharpened and/or new knives should be kept on hand for ready replacement. To replace a knife, perform the following steps:

Lift the machine. Turn the air pressure OFF by turning the air valve knob a half turn. Loosen screws **A**, and raise the knife up and slide it out. Insert the new knife into the knife holder. The bottom of the new knife must touch the stop screw, located at the bottom of the knife holder. Re-tighten screws **A**. Turn the air pressure ON.

CENTER KNIFE TO THROAT PLATE ADJUSTMENT

Place the clamp table in the rear position. Open the brush blades. Turn the air pressure OFF. Manually lift the patch guide, and keep it up using a small screwdriver. Manually push the knife holder **B** up so that the center of the knife passes up through the throat plate. It must pass flush with the cutting edge of the throat plate (which is the right side of the center slot when facing the machine) and not deflect more than .051mm (.002"). To adjust, perform the following steps:

Manually push the center knife up through throat plate. Loosen screws **C** located on the bearing blocks. Move the center knife from side to side as necessary until the knife is able to pass through the throat plate with no gap on the right side of the knife and the throat plate. Re-tighten screws **C**. At this point, the center knife should be able to cut a single strand of thread. If the knife does not cut, re-check the adjustment, and/or replace the knife. Turn the air pressure ON.

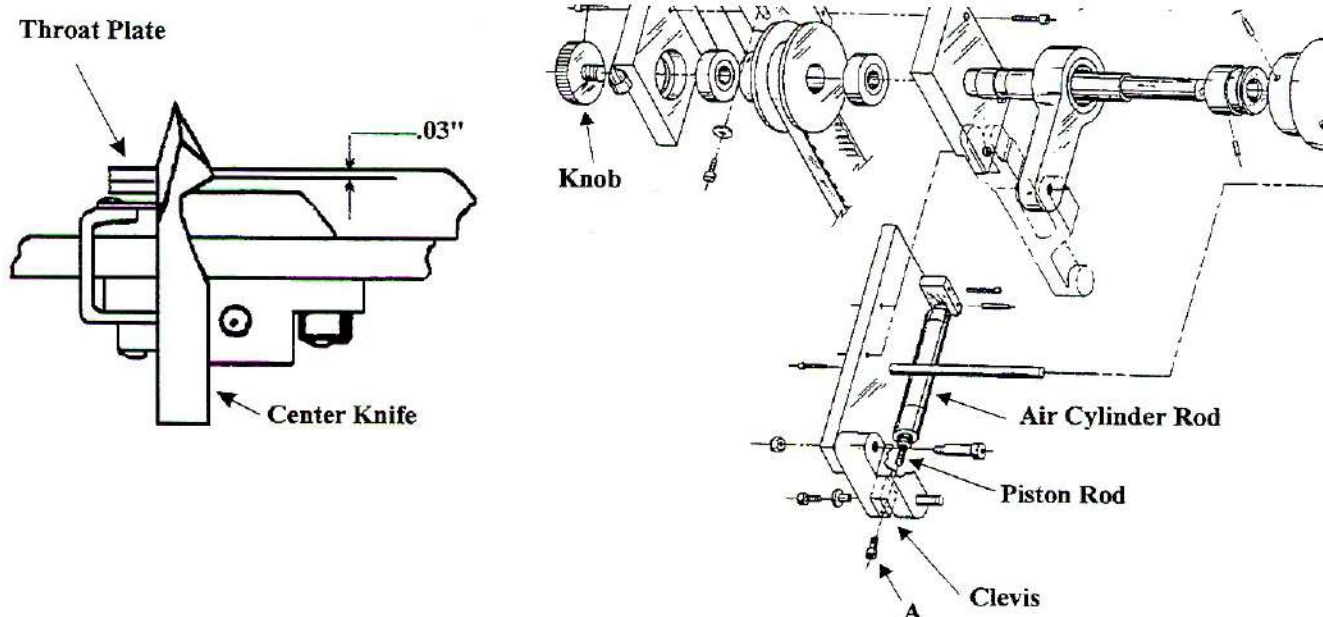


CENTER CUTTING

SETTING THE HEIGHT OF THE CENTER KNIFE

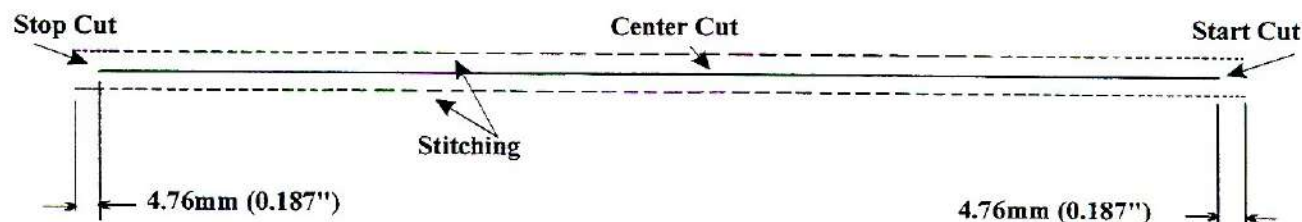
Place the center knife in the cutting position, at the bottom of its stroke. The leading edge of the knife point should have a clearance of 0.79mm (.031") below the top surface of the throat plate. To adjust, perform the following steps:

Place the clamp table to the rear position. Turn the air pressure OFF. Manually push the center knife holder up into the cutting position. Rotate the knob located on the knife shaft until the center knife is at the bottom of its stroke. Loosen the jam screw **A** located on the clevis. Turn the piston rod clockwise or counterclockwise (turning the rod clockwise will *raise* the knife; turning the rod counterclockwise will *lower* the knife) as necessary. Once the proper clearance has been obtained, re-tighten jam screw **A**.



ADJUSTING THE CENTER KNIFE CUT LENGTH

The center cut starts approximately 4.76mm (.187") after the stitching begins, and ends 4.76mm (.187") before the stitching stops. Both stitching and the center knife operations are controlled by the microprocessor and can be changed. To change the settings, see page 1-9).

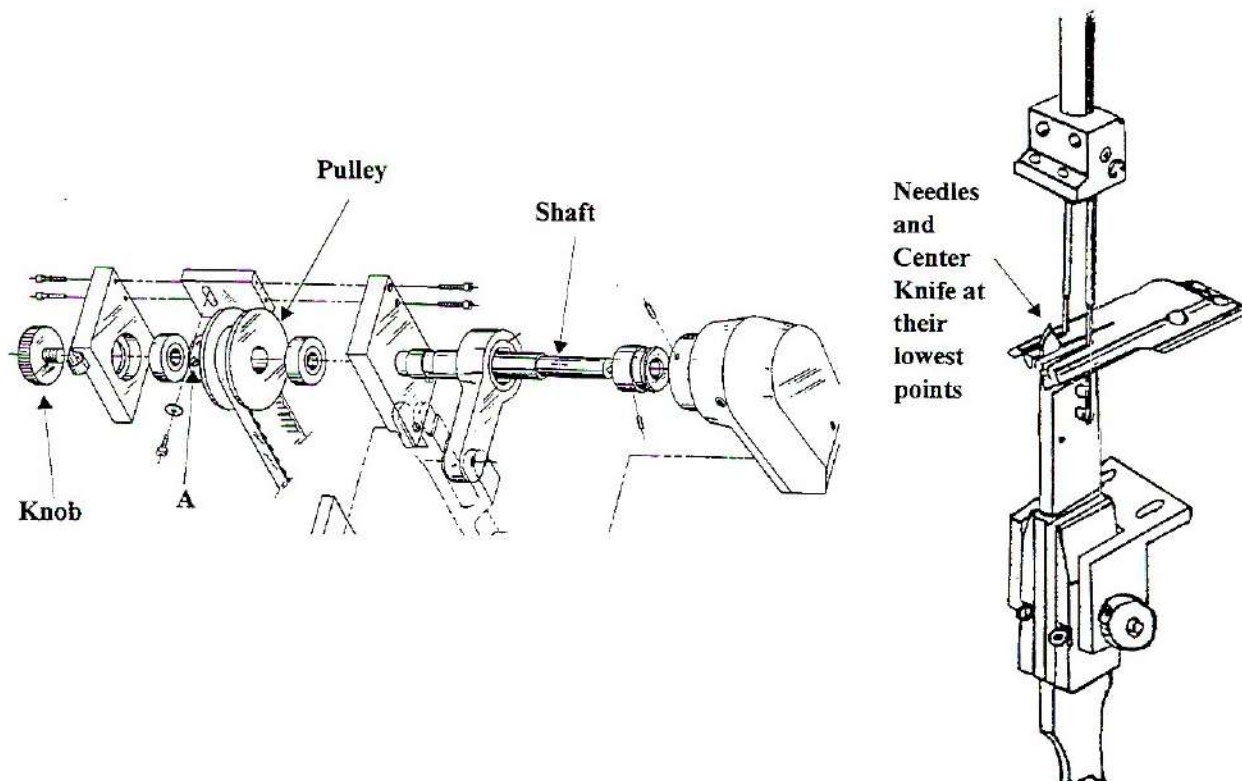


CENTER CUTTING

SETTING THE TIMING OF THE CENTER KNIFE

The needles support the material as the center knife cuts. The cutting occurs as the needles and the center knife descend. The center knife and the needles should be at their lowest points once the cutting has been completed. If the center knife is not at its lowest point after the cutting has occurred, the timing of the center knife is not correct. To re-set the timing, perform the following steps:

Loosen set screw A. Holding the pulley, rotate the shaft clockwise or counterclockwise (rotating the shaft clockwise will allow the knife to cut *sooner*; rotating the shaft counterclockwise will allow the knife to cut *later*) as necessary. Once the proper timing has been obtained, re-tighten set screw A.

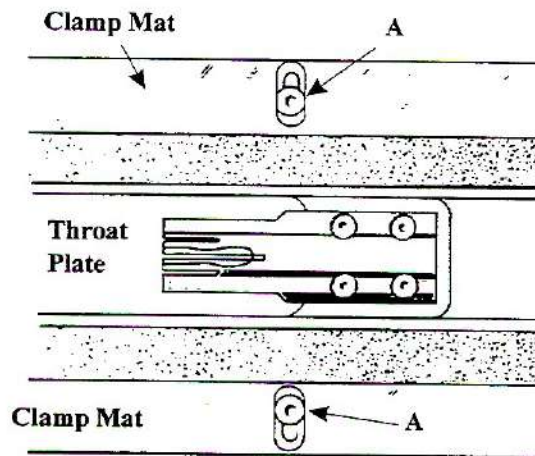


TAB CUTTING

ADJUSTING THE CLAMPING MATS

The inner edges of the clamping mats must be parallel and equal distance from the sides of the throat plate. The mats should just clear the sides of the throat plate. To adjust, perform the following steps:

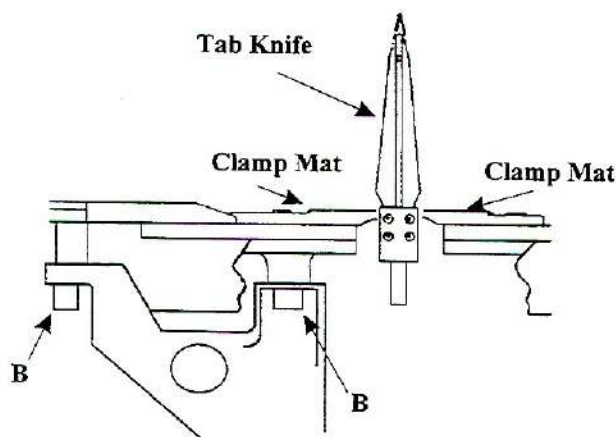
Loosen screws **A**. Slide the clamping mats to the right or left as necessary. Once the proper distance has been obtained, re-tighten screws **A**.



CENTERING THE TAB KNIFE ASSEMBLY

The lower ends of the tab knives should be centrally located between the clamping mats when the tab knives are at the top of their stroke. To adjust, perform the following steps:

Loosen screws **B**. Slide the tab knife bracket to the right or left as necessary. Once the tab knife bracket has been centered, re-tighten screws **B**.

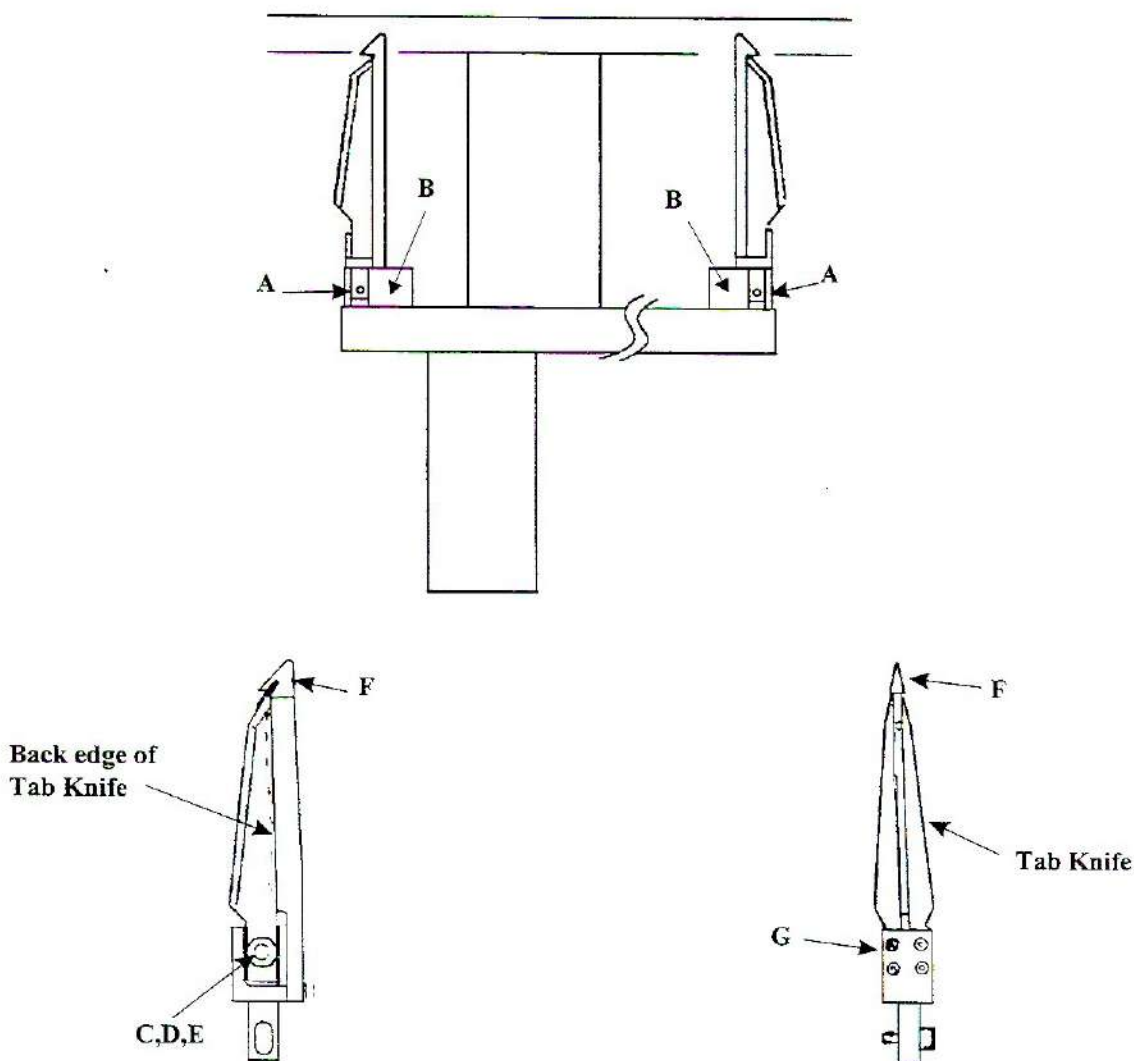


TAB CUTTING

REPLACING THE TAB KNIVES

To replace the tab knives, remove knife holder by removing screw **A** and removing the tab knife from finger shoe **B**. Remove nut **C** and washer **D**. Remove the old tab knife by sliding it off threading screw **E**, and then pulling it down and out. Insert the new knife by tilting the knife up and into knife pointer **F** and down over threaded screw **E**. Re-install washer **D** and nut **C**. Re-install the tab knife into the finger shoe, and re-tighten screw **A**. Repeat for the other tab knife.

Sew a pocket on a scrap piece of paper to ensure the tab knives are central to the two rows of stitches. If the tab knives are not central, loosen nut **C** and turn set screws **G** in or out (in will produce a *larger* cut; out will produce a *smaller* cut) as necessary. Once the tab knives have been centralized, re-tighten nut **C**.



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TAB CUTTING

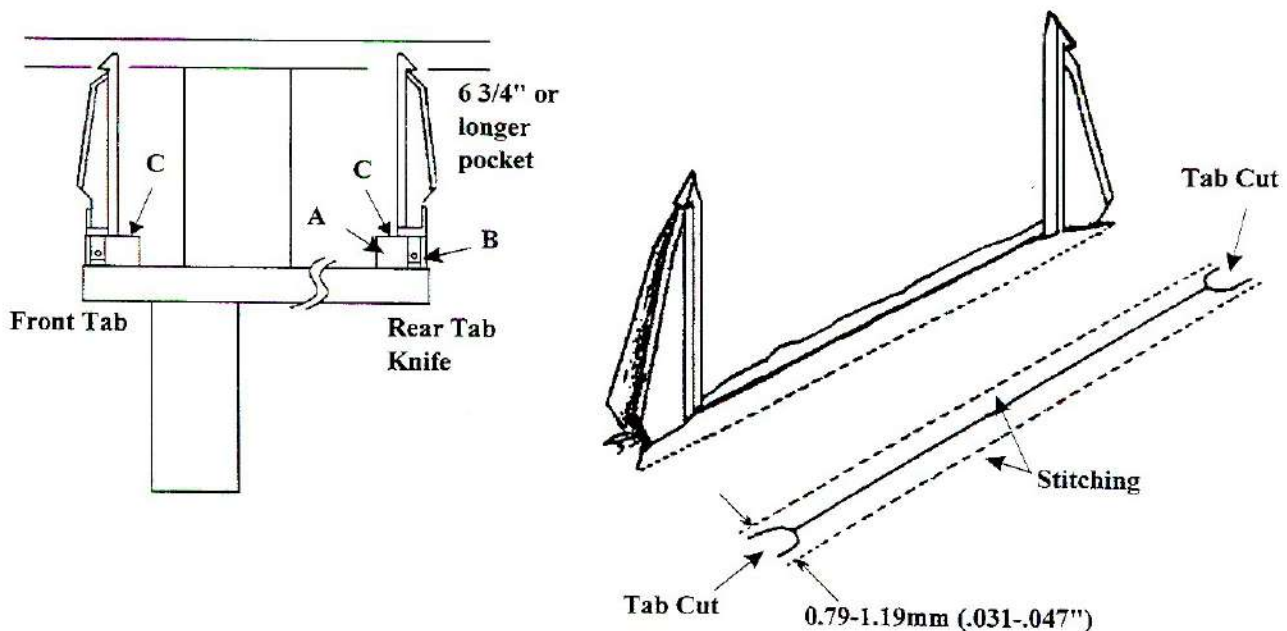
ADJUSTING THE FRONT AND REAR TAB KNIVES

The front and rear tab knives should be positioned so that the tab cuts are exactly even with the ends of stitching and also equal in distance from the sides of the stitches. The side clearance between the tab knives and the stitching may be between 0.79 and 1.19mm (.031" and .047"). Sew a test pattern on a piece of paper to show the location of the knife cuts. The end of the stitching and the tab knives should be equal. If they are not equal, adjust by performing the following steps (in most cases, the front tab knife will not have to be adjusted; therefore, the adjustment below is for the rear tab knife):

Loosen screw **C** and slide the rear tab knife holder towards the front or rear of the machine (sliding the holder towards the front of the machine will *shorten* the cut; sliding it to the rear will *extend* the cut) as necessary. Once the correct adjustment has been made, re-tighten screw **C**.

To sew a pocket 6 3/4" or longer, remove the rear tab knife from finger shoe **A** by loosening and removing screw **B**. Loosen screw **C** and remove finger shoe. Flip the finger shoe over and re-install. Re-tighten screw **C**. Re-insert the rear tab knife, and re-tighten screw **B**. Adjust the tab knife holder accordingly.

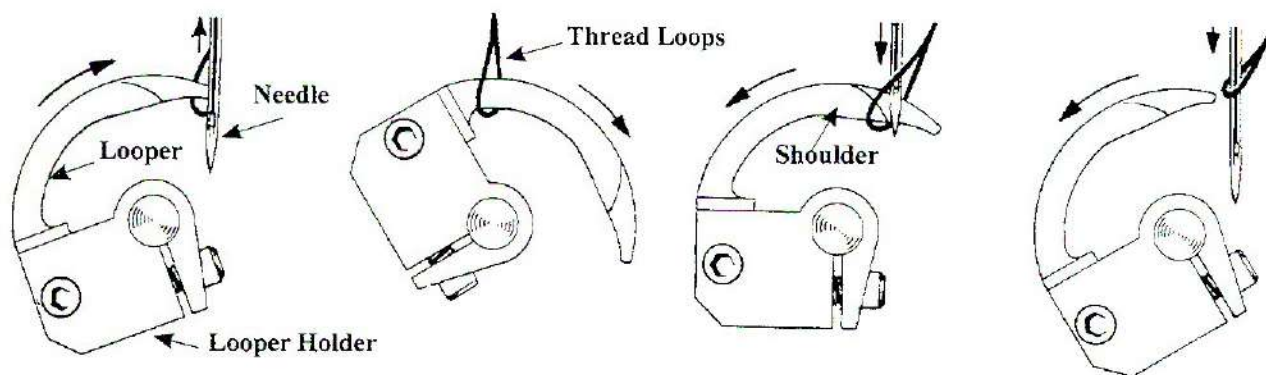
NOTE: If the front tab knife does require an adjustment perform the steps above; however, sliding the holder towards the front of the machine will *extend* the cut; sliding it to the rear will *shorten* the cut.



The above adjustments are standard for most fabrics and materials. However, if the material or fabric is thin, slippery or stretchy, compensating adjustments may be needed. For example, if the material is of a silky nature, the tab cut to end of stitch may need to be further adjusted.

LOOPERS

The following diagrams illustrate the sequence of looper and needle action for each stitch.



When the needles rise 2.38mm (.094") from the bottom of their stroke, the looper points should enter thread loops --

As action continues, the loops should slide to the heel of the looper --

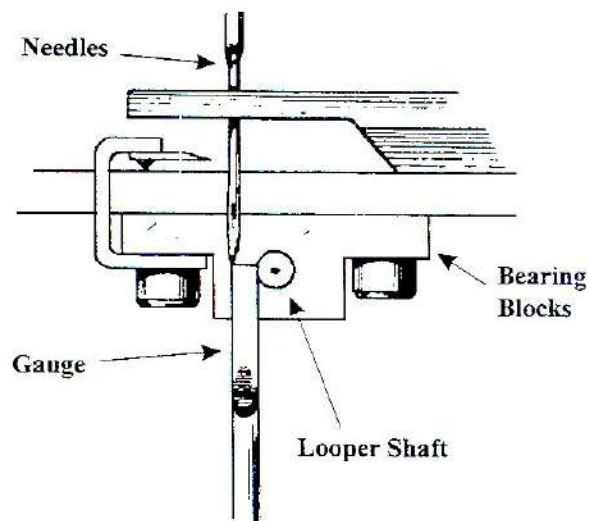
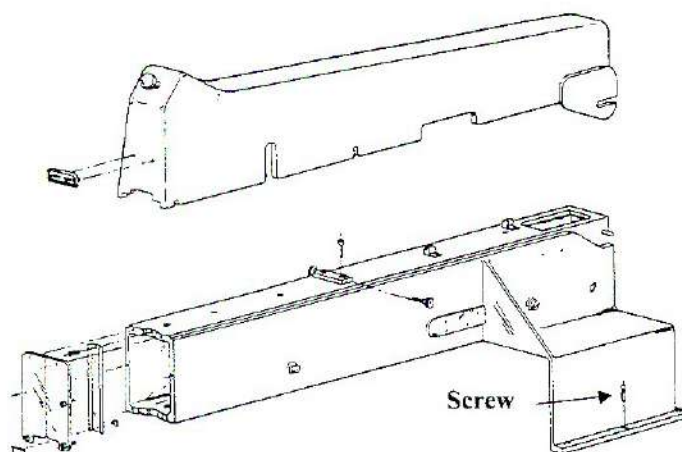
On the down stroke, needle should enter the thread loops --

Just before being cast on to the needles.

LOOPER SHAFT ASSEMBLY

The front edge of the looper shaft to the back of the needle points should measure 2.38mm (.094"). This is a factory setting and **must not** be changed. The looper shaft is fixed in position when the bearing blocks are installed. To check this distance, move the looper holders to one side and measure using the 03.0145.0.000 gauge. If the measurement is not 2.38mm (.094"), adjust by the following steps:

Loosen the machine head by loosening the 9 screws, located in the back and on both sides of the head. Slide the machine head forward or backward as necessary. Once the proper measurement has been obtained, retighten the 9 screws.



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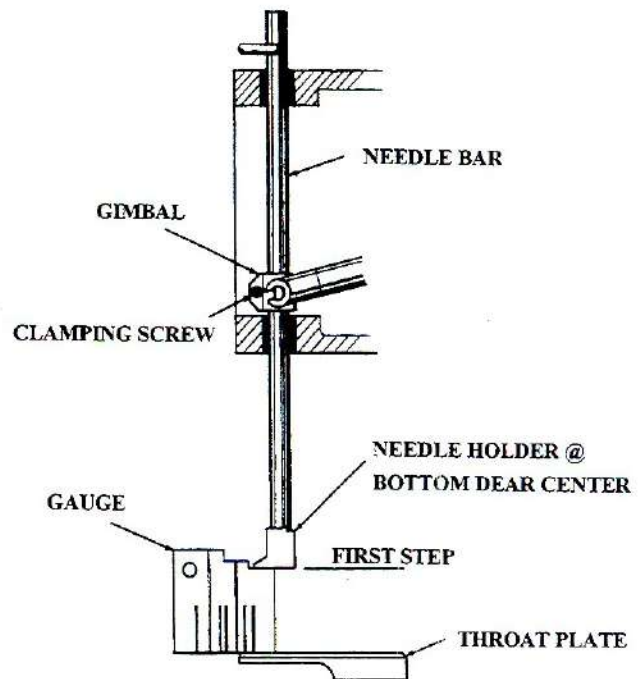
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LOOPERS

ADJUSTING THE TIMING OF THE LOOPERS TO THE NEEDLE BAR

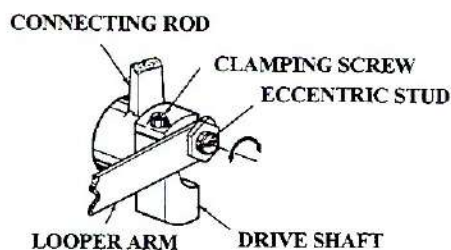
1. Remove patch guide assembly (see page 1-13).
2. Ensure needles are straight.
3. Set the gauge squarely on the throat plate. Position the needle bar at bottom dead center by lifting the machine and rotating the knob clockwise or counterclockwise until the needle bar is at bottom dead center. At this point, the needle holder should rest squarely on the first step of the gauge. To adjust, loosen the clamping screw, and move the needle bar up or down as necessary. Once the needle holder is resting squarely on the first step of the gauge, re-tighten the clamping screw.

NOTE: When making this adjustment, ensure the needles are square with the throat plate at all times.



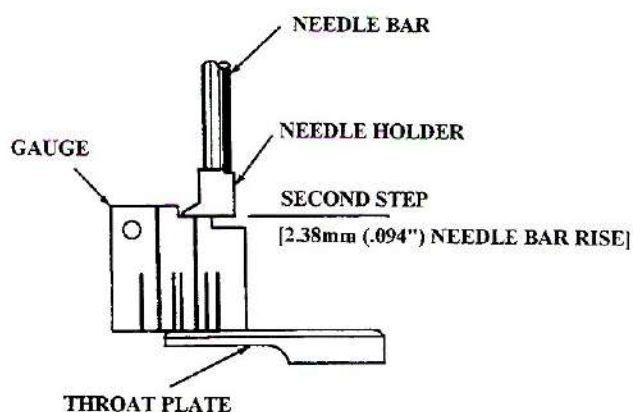
NOTE: LOOPERS AT MAXIMUM REARMOST POSITION

4. When the needles are at bottom dead center, the loopers should be at their maximum rear most position. To adjust, loosen the clamping screw, located on the drive shaft assembly. Center the eccentric stud with as much movement forward as backward. Once the eccentric stud has been centered, re-tighten the clamping screw.



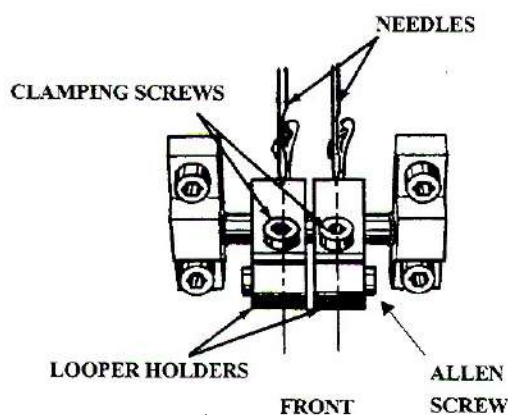
LOOPERS

5. Continue turning the knob clockwise until the needle bar rises 2.38mm (.094") and the bottom of the needle holder sits on the second step of the gauge.

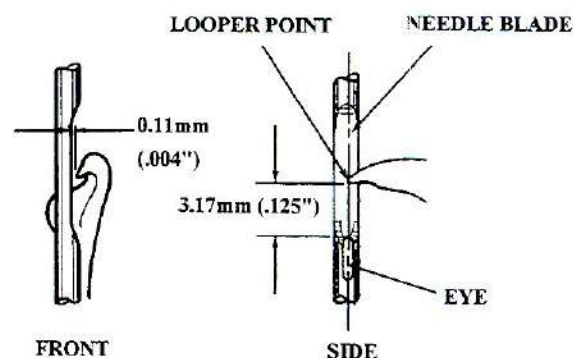


6. The centerline of the needle should be in alignment with the center of the clamping screw. The point of the looper should be on the centerline of the needle, approximately 3.17mm (.125") above the needle eye. To adjust, loosen the clamping screws and move the looper holder to the right or left as necessary. Once the looper holder is in the proper position, re-tighten the clamping screws.

7. The looper should be as close to the needle as possible without deflecting, with a maximum clearance of 0.11mm (.004"). To adjust, loosen the allen screw and slide the looper to the right or left as necessary. Once the proper clearance has been obtained, re-tighten the allen screw.



LATERAL ADJUSTMENT



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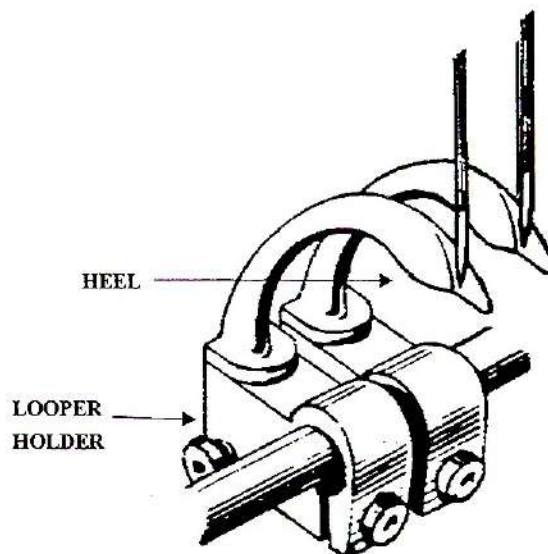
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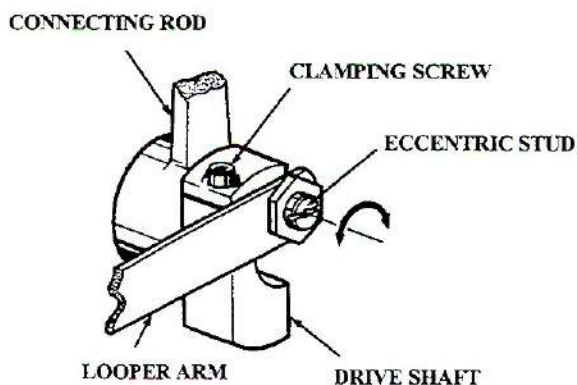
LOOPERS

ADJUSTING THE LOOPER HEEL TO NEEDLE SETTING

As the needle passes by the heel of the looper on both the upward and downward strokes, it should pass as closely as possible to the heel without deflecting. To adjust, perform the following steps:



Loosen the clamping screw, located on the drive shaft assembly. Rotate the eccentric stud clockwise or counterclockwise (rotating the stud clockwise will move the heel of the looper *away* from the needle; counterclockwise will move the heel *closer* to the needle) as necessary. Once the heel of the looper is in the proper position, re-tighten the clamping screw.



SEWING

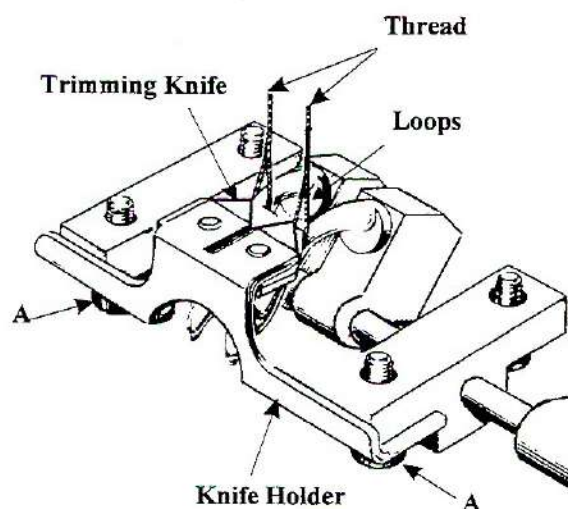
THREAD TRIMMING

At the end of the sewing cycle, the clamp table moves forward. During this movement, the inside legs of the thread loops come in contact with the trimming knife, cutting the thread.

NOTE: Never sew with a dull knife. This will cause the thread to break close to the last stitch, which could cause a raveling back of the stitching.

SHARPENING THE TRIMMING KNIFE

Lift the machine. Loosen screws A, and remove the knife holder from the looper blocks (it is not necessary to remove the knives from the holder). Stone the trimming knife to a sharp edge. It is **imperative** that the bevel be maintained on the underside of the knife. Once the knife has been sharpened, re-install the knife holder into the looper blocks, ensuring that the knife points are centered to the loopers. Once they are centered, re-tighten screws A.



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THREADING

THREADING THE MACHINE

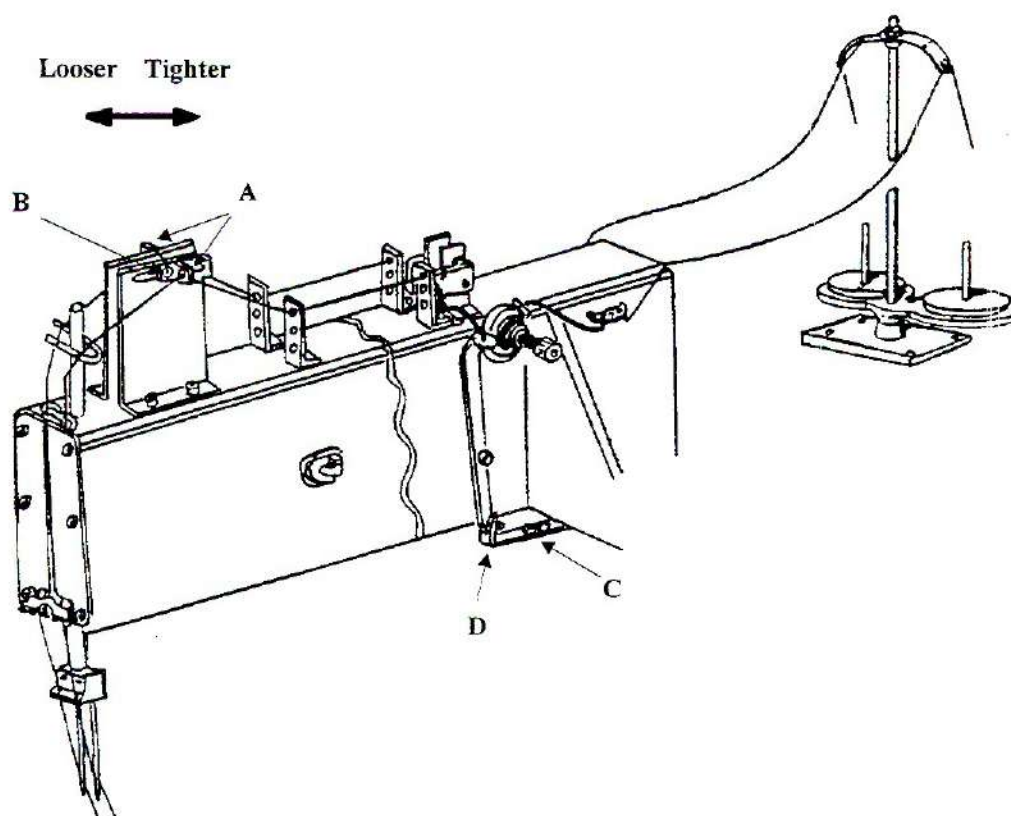
The thread color should be a basic shade of the garment being sewn. Thread both of the needles from left to right.

ADJUSTING THE THREAD TAKE-UP EYELETS

The function of the eyelets **A** is to provide a looser or tighter stitch, which would be dependent upon the material being sewn. To adjust, loosen nut **B** and move the eyelet forward or backward (moving the eyelet forward would cause the stitch to be *looser*, moving it backward would cause the stitch to be *tighter*) as necessary. Once the proper stitch has been obtained, re-tighten nut **B**.

ADJUSTING THE STARTING THREAD

Loosen screw **C** and move actuator **D** forward or backward (moving the actuator forward will *increase* the amount of starting thread; moving the actuator backward will *decrease* the amount of starting thread) as necessary. Once the correct amount of starting thread has been obtained, re-tighten screw **C**.

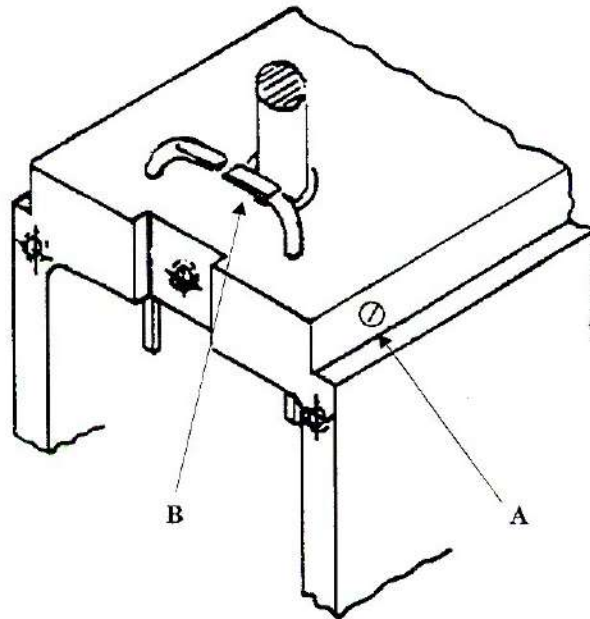


SEW-OFF

ADJUSTING THE THREAD LOOP SIZE

The proper size of the thread loop for the average sewing conditions is just large enough for the looper to fit into. If the loop is too large, the loop may turn over towards the front, causing the looper to miss it. This is what causes skipping. To adjust, perform the following steps:

Loosen set screw **A**. Raise or lower looper wire **B** (raising the looper wire will *increase* the loop size; lowering the loop wire will *decrease* the loop size) as necessary. Once the proper loop size has been obtained, re-tighten set screw **A**.



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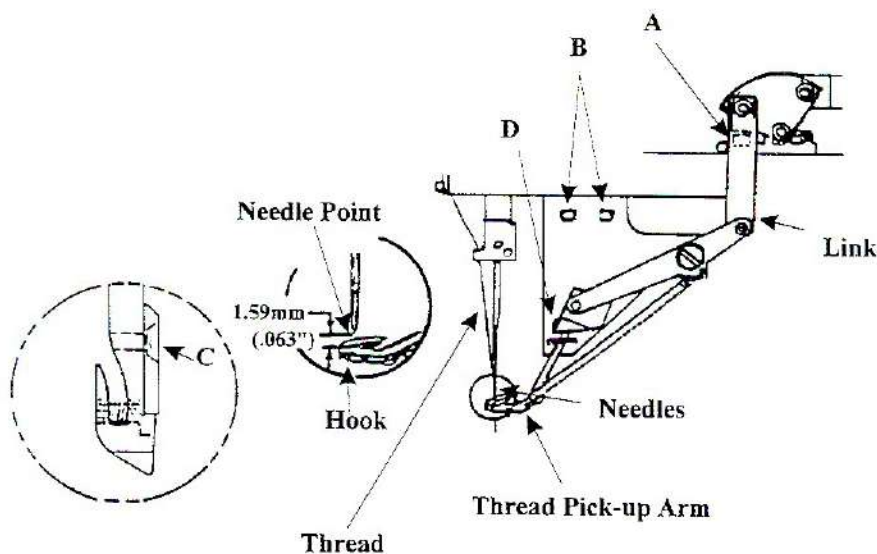
SEW-OFF

THREAD PICKUP ARMS

The thread pickup arms are designed to pass just below and beyond the needles, grasping the thread taut before trimming. Select the OUTPUT Test from the keyboard menu (see pages 2-4 through 2-6). Select the thread holder option by pressing the up arrow. Press the [ENTER] key. The thread pickup arms will extend and hold that position. A minimum clearance of 1.59mm (.063") is required between each needle point and its pickup arm. To adjust, perform the following steps:

1. Loosen screw **A**, and move the pickup arms front or back as necessary. Once the proper position has been obtained, re-tighten screws **A**.
2. Loosen screws **B**, and move the pickup arms to the right or left as necessary in order to align with needle thread. Once the proper alignment has been obtained, re-tighten screws **B**.
3. To obtain distance between the needle and pick-up hook, loosen screws **D**, and move the pickup arms up or down as necessary. Once the proper position has been obtained, re-tighten screws **D**.

To replace the spring located inside the pickup arm, loosen screw **C**. Turn the retaining plate carefully to ensure the spring does not pop out. Remove the old spring, and install the new spring. While holding the spring down, turn the retaining plate until it locks into position, and re-tighten screw **C**.



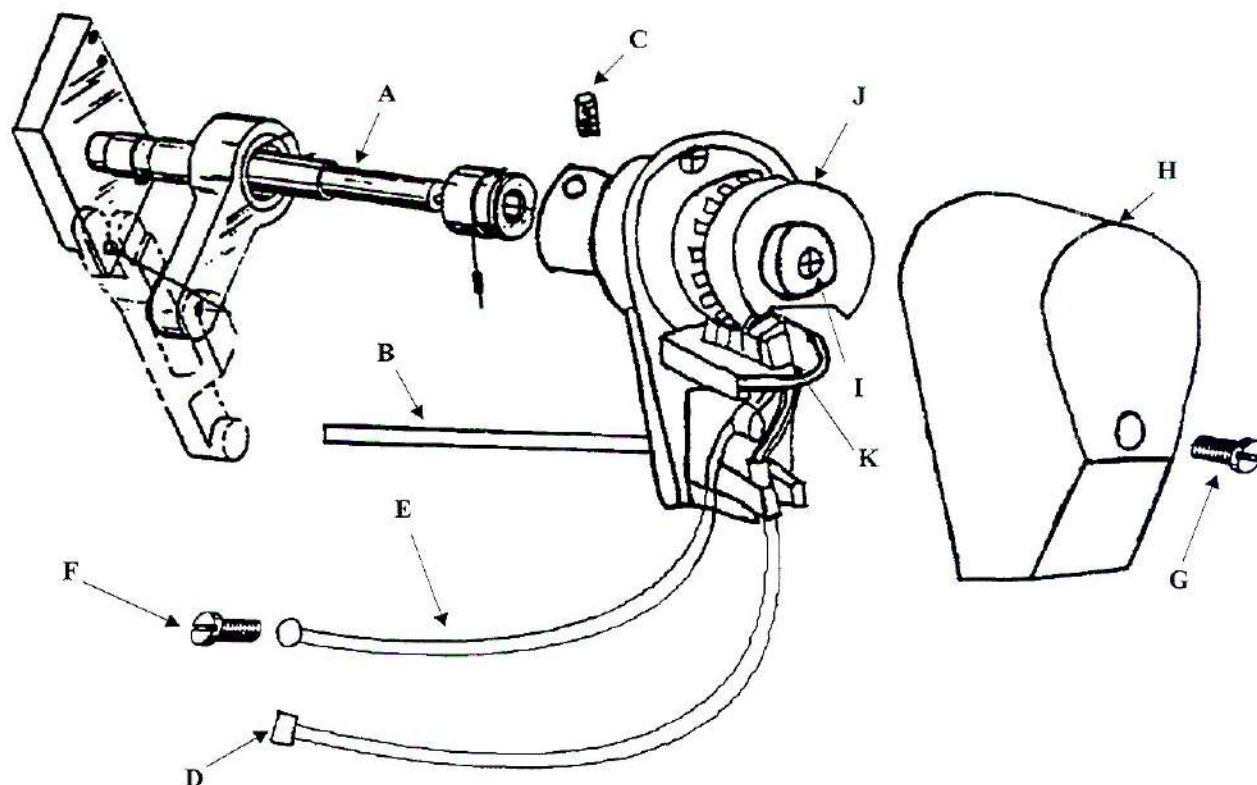
INSTALLATION AND ADJUSTMENT OF THE SYNCHRONIZER

The synchronizer positions the needle bar up when the sewing is finished. To install a synchronizer, perform the following steps:

1. Place the synchronizer onto shaft **A**. Slide the synchronizer onto retaining bar **B**. Tighten allen screw **C**.
2. Plug synchronizer cable **D** into the control box located under the motor.
3. Attach grounding terminal **E** to the sewing machine using screw **F**.

To adjust the synchronizer, perform the followig steps:

1. Loosen and remove screw **G**. Remove cover **H**. Loosen screw **I**. Holding the needle bar top dead center, rotate disks **J** so their openings are in alignment with photo eye **K**. Once they are in alignment with the photoeye, re-tighten screw **I**, re-install cover, and re-tighten screw **G**.
2. Release the needle bar; it should stay at top dead center. Sew a pocket welt to ensure the needle bar is in the up position once the sewing has stopped. If it is not, repeat step 1.



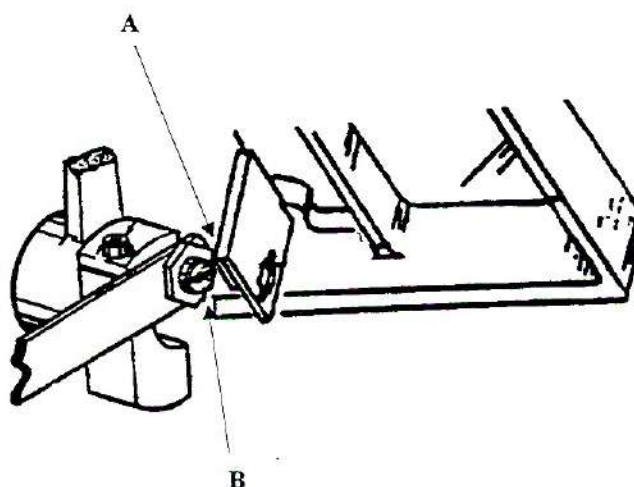
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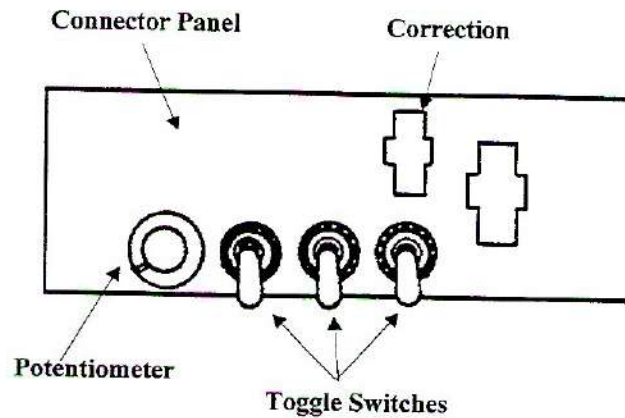
PROXIMITY SENSOR SWITCH

The proximity sensor switch **A**, located under the bedplate near the main shaft, tells the machine whether or not the needle is up at the end of sewing. If the machine does not know the needle is up, it will display an error message on the keypad. The sensor is activated when the eccentric stud **B** passes in front of it. When the needle bar is at top dead center, the eccentric stud should be in front of the sensor which would activate it. If the eccentric stud is not in front of the sensor, adjust the synchronizer as described on page 1-40.



CONTROL BOX

The control box consists of a potentiometer, and three toggle switches, which normally set the functions of the machine (i.e. needle bar position up or down, machine slow start). However, in this case, they have been factory set and can not be changed.



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OPTIONS

Press [2] to enter the Option section.

Press [ENT].

Press [1] to turn on the patch loader.

Press [2] to return to the sewing screen.

Note: The patch loader can be set for either semi-automatic or automatic sewing.

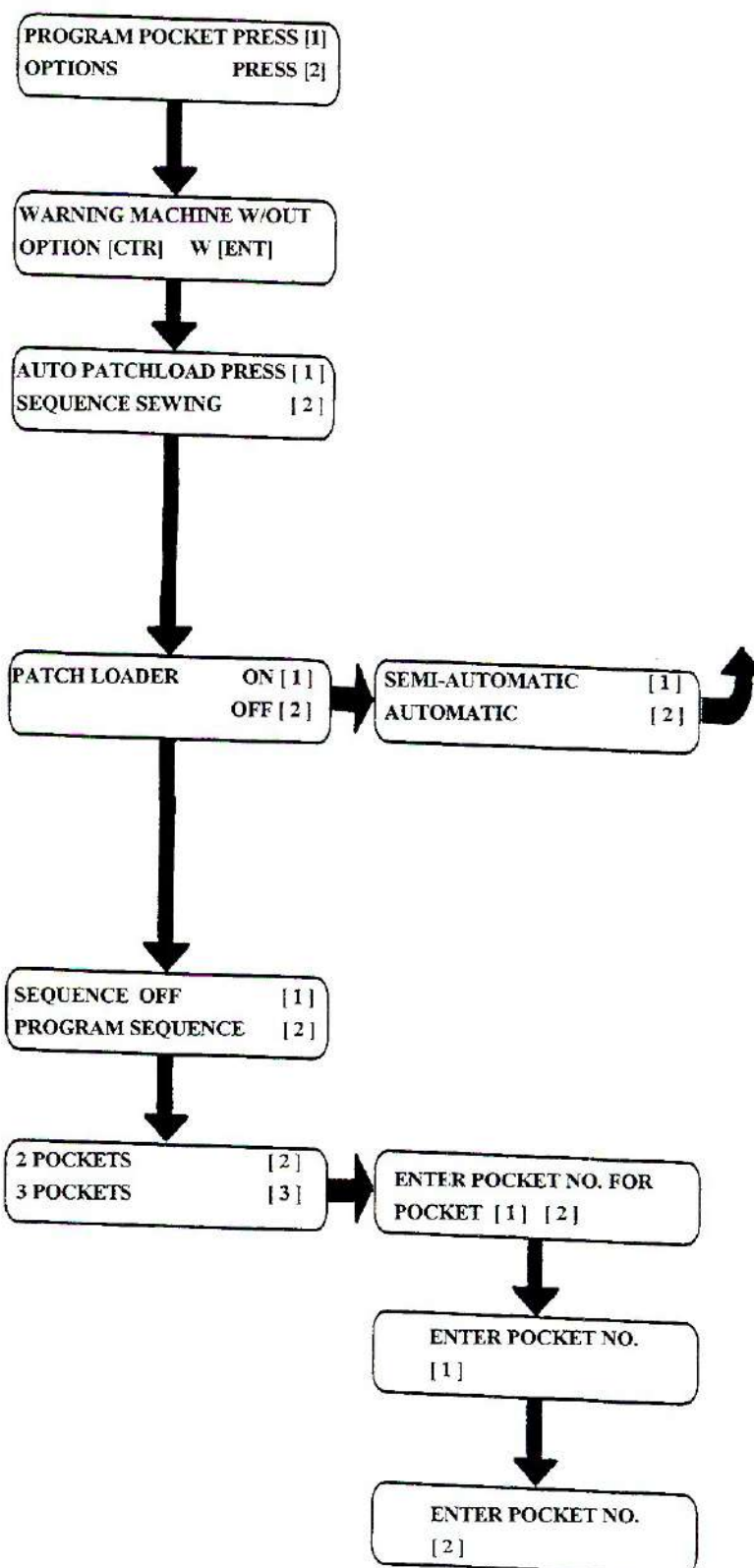
Press [1] to return to the sewing program.

Press [2] to access sequential programming.

When [1] is pressed, it will blink out and then come back on. Now *press* [2]. When the program has been set, the screen will return to the sewing program.

Note: 1 will be the long pocket; 2 *must be* the short pocket.

Program 1 can be programmed from 52mm to 123mm. Program 2 can be any size inbetween.



OPTIONS

Installing the Short Travel Kit

1. Turn off the power to the machine.
2. Change out the parts shown in Illustration A with those included in the kit.
3. Then exchange the positions of the drive link (P/N 32.7145.0.000) and the link (P/N 32.7146.0.000), as shown in Illustration B.

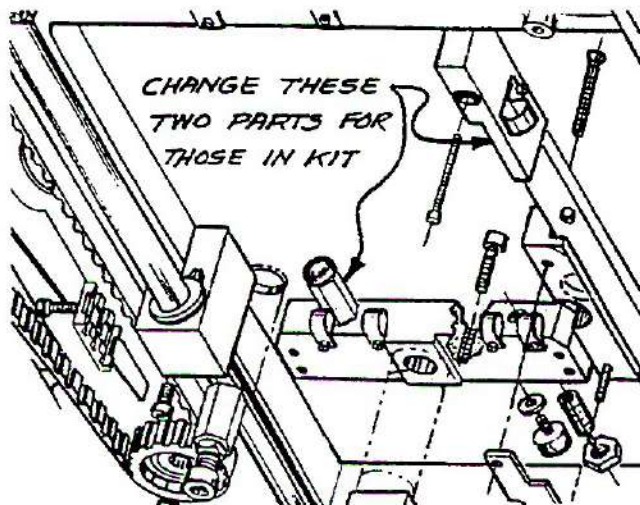


ILLUSTRATION A

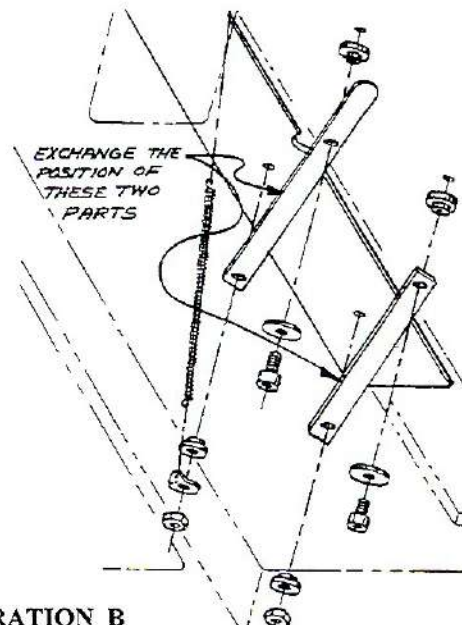


ILLUSTRATION B

OPTIONS

4. *Remove* the existing program chip and *replace* it with the E-Prom chip from the kit, *making sure the notch in the chip faces to the right*.
5. *Turn on* the power, and then *push* the Sew Interrupt button.
6. *Press* the [CTR] key.
7. *Press* the [1] key, then *press* the [2] key.
8. *Press* the [↑] key until the "Encoder Count" message appears.
9. *Press* the [ENT] key (encoder count).
10. *Press* the [HOME] key (encoder count), then *press* the [ENT] key again.
11. *Press* the [1] key to save the count, and then *push* the Sew Interrupt button.

WORK LOCATING AND DRILL HOLE LIGHTS

Lights designed specifically to facilitate work location and increase positioning accuracy are available with the SpeedWelt 1000. These lights project light slots on the garment which accurately fix the location for positioning work-locating marks such as drilled holes, which can be applied to garment on the cutting table. Other types of locating marks can also be utilized such as darts, seams, slits and chalk marks.

In the production of double-welt sack coat pockets utilizing drilled holes for locating marks, the forward lantern should be positioned so that when the forward hole is located in the hairline cross-point, it will accurately establish the starting point on every garment. The rear hole will provide accurate pocket alignment as long as it falls anywhere along the vertical light slots of the rear lantern. The same hole drilling pattern may be used on double welt work for all sizes since the pocket length is controlled by the SpeedWelt 1000 machine.

CAUTION: Avoid drilling holes in the tab areas of the welt. The drilling may shred or reduce a tab area so that an effective tab can not be formed.

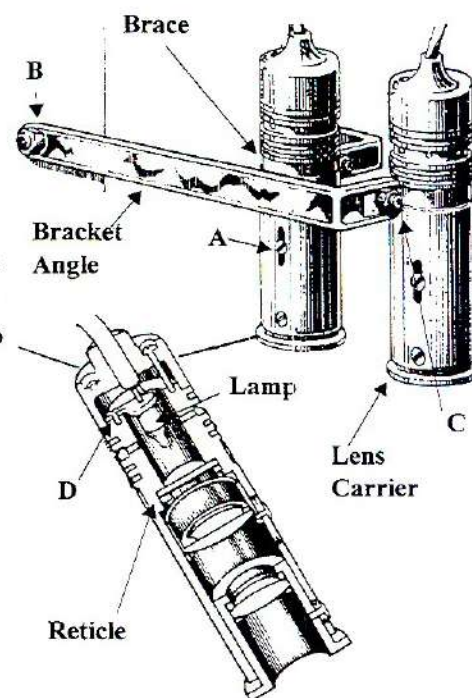
In single-welt work, the rear hole should also be accurately located because it is the starting point on alternate pocket operations.

To focus the light slots, perform the following steps:

1. Loosen screws **A**, and move the lens carriers up or down as necessary. Once the light slots are focused, re-tighten screws **A**.
2. The bracket angle may need to be changed if the folding brushes obstruct light projection when the clamp foot is raised. This is done by loosening nut **B** and moving the bracket up or down as necessary. The bracket may need to be bent slightly. Once the bracket is in the proper position, re-tighten nut **B**.

To square light slots with sewing work, perform the following steps:

1. Loosen bracket by loosening screws **C** and rotating the lights as necessary. Once the lights are square with the sewing work, re-tighten screws **C**.
2. The lamp should be centered over the lens in order to centralize lens projection, and to obtain maximum intensity. To adjust, loosen screw **D** and move the lamp as necessary. Once the lamp is centralized over the lens, re-tighten screw **D**.



NOTE: In some materials, the light slots are clearer as the garment is being moved into position than when the garment rests in position. Therefore, while setting the lights, use material where the light slots are clearly visible when in the resting position.

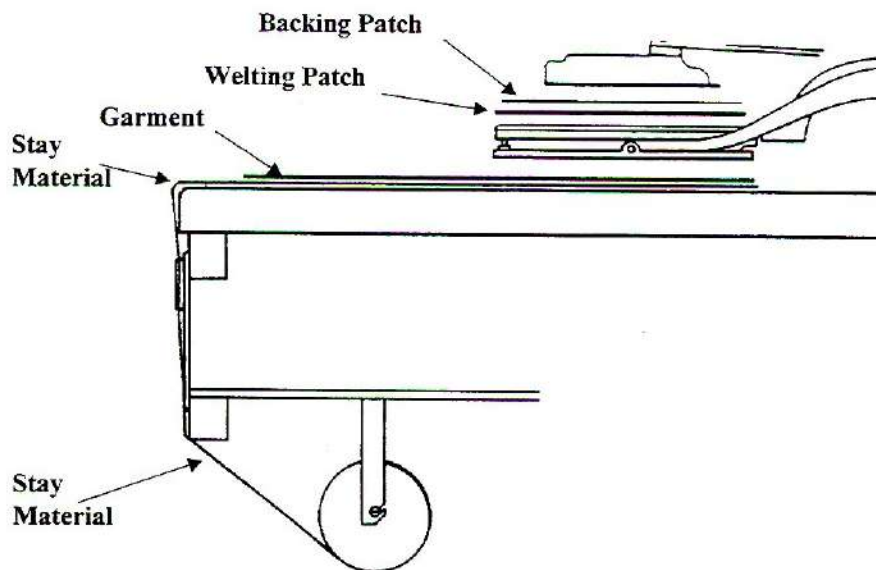
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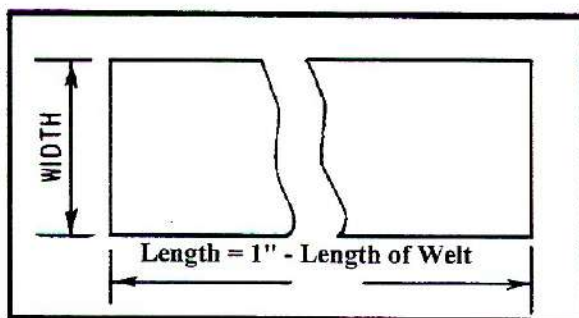
WELTING MATERIAL

Welting material consists of welting patch (garment material), backing patch (pellon L-35), and stay material (cotton silesia).



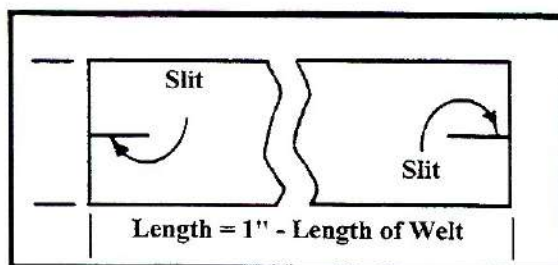
Welting Patch (Garment Material)

Welting patch length is 1" longer than the actual welt. For the best results, patches for horizontal welts should be cut crosswise to salvage, except where stripes in the material are over 1/4" in width; vertical or diagonal welt patches should be cut parallel to the salvage.



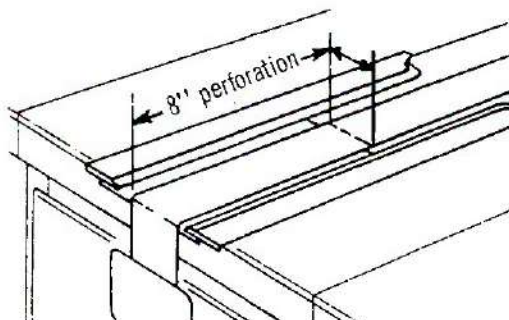
Backing Patch (Pellon)

Backing patch length is the same as Welting Patch, 1" longer than the welt. For double welting, use patches with 1/4" end slits. For single welting and knits, use patches without end slits. Pellon L-35 is recommended.



WELTING MATERIAL

Stay material is used for pockets on coats and coat linings. The pocket bag is used in place of the stay material in making trouser pockets. Stay material should be cotton silesia with sizing. This material is available in rolls of various widths, with perforations every 8". The perforations aid in allowing the operator to separate the stay material while the machine is sewing.



Below is a chart which displays the various widths of welting material.

Welting Material Widths

Size	Welting Patch	Backing Patch	Stay Material
7/16"	2 1/2" to 2 3/4"	2 1/2" 2" for Trouser Application	2"
1/2"	2 3/4" to 3"	2 1/2" 2" for Trouser Application	2"
5/8"	3 1/4" to 3 1/2"	3 1/4"	3"
3/4" Overlapping Welt	4" to 4 1/4" 5 1/4" to 5 1/2"	3 1/2" 5"	2" to 3" 2" to 3 1/2"
7/8" Single Welt	4 1/4" to 4 1/2"	3 3/4" 4"	3" 3 1/2"

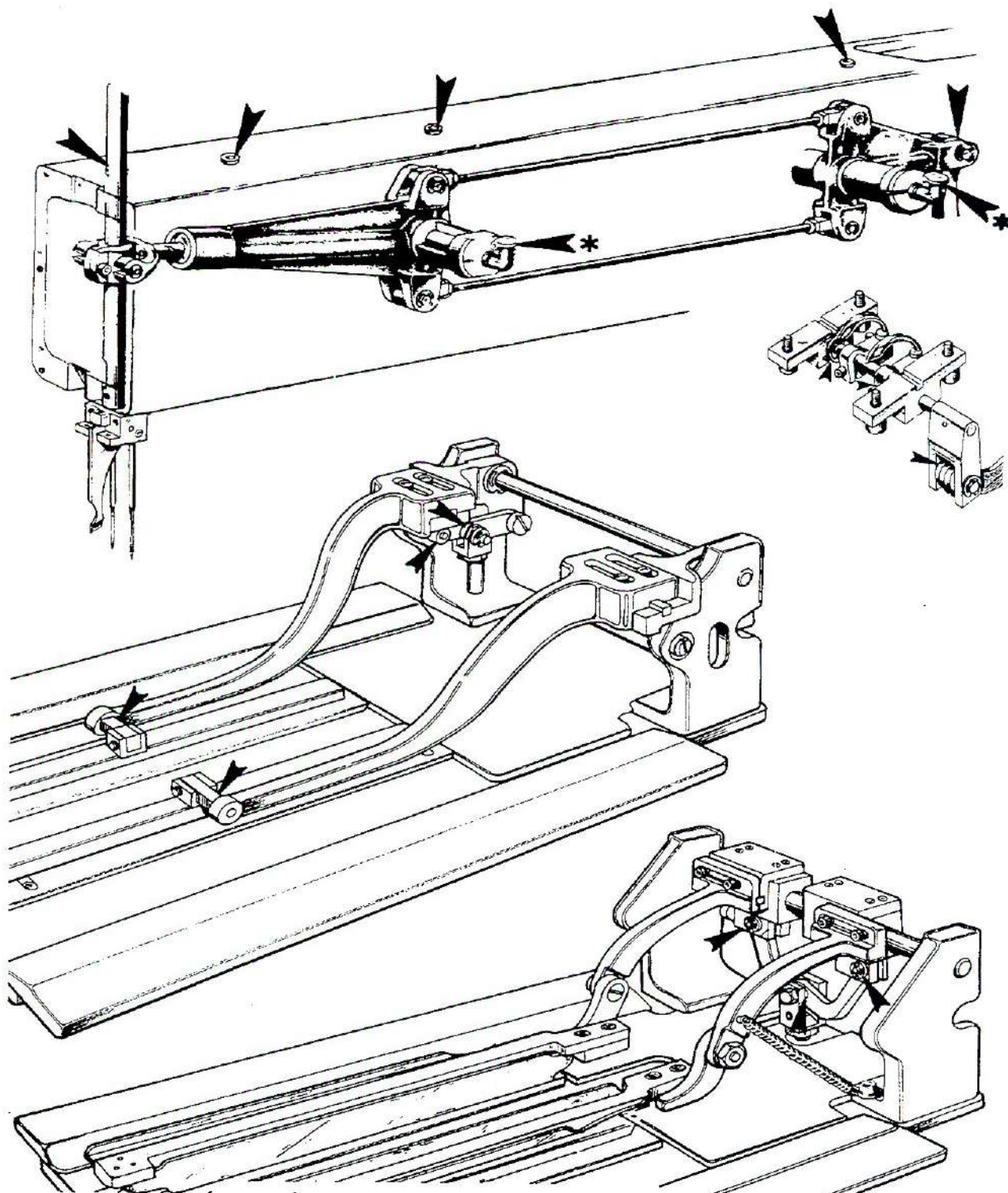
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LUBRICATION

It is important to oil the machine daily. The table must be in the front loading position in order to reach all oil points. The locations of the oil points are indicated with arrows displayed in the diagram below.



RECOMMENDED PREVENTIVE MAINTENANCE

Daily:

- Remove all lint from the looper area at least *twice* daily.
- Remove lint and dust from the tabletop.
- Lubricate all pivot points with 2-3 drops of sewing machine oil.
- Check the two oil cups (located on the right hand side of the head on the ends of the front and rear shafts), fill as required.

Weekly:

- Check for excessive play in the needle bar, levers, looper shaft, and center knife pivot points. Adjust as required.

Monthly:

- Check to ensure all hardware is tight and secure.
- Visually check for damage to patches caused by scratches or burrs on the patch guides. Repair or replace guides as necessary.

OPTIONAL ATTACHMENTS ADJUSTMENTS

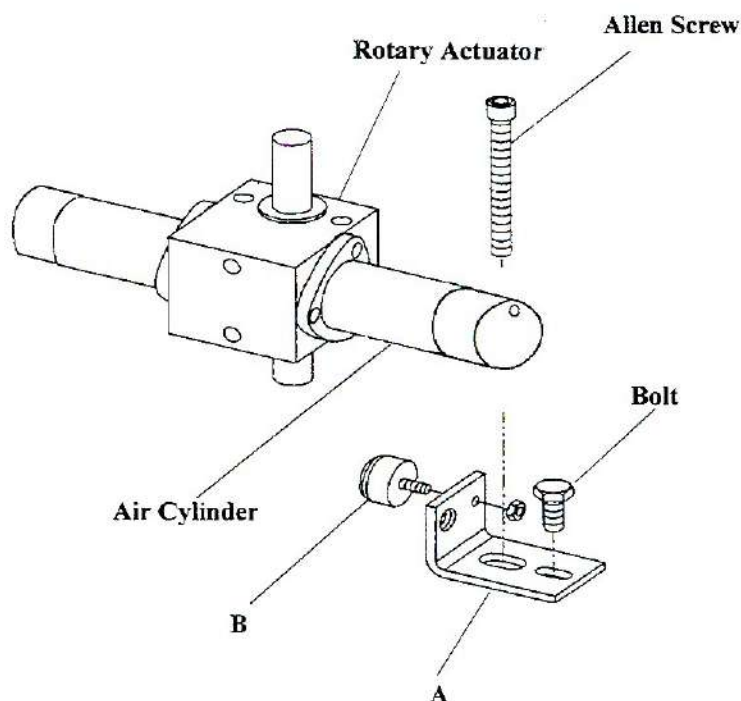
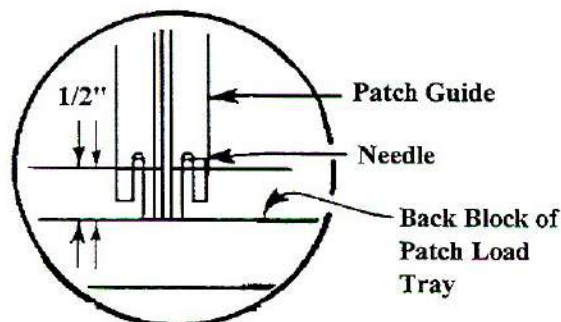
A variety of optional attachments are available to make the Speedwelt 1000 even more productive and user-friendly. These options include an automatic patch loader, two-position cycle sewing and a work eject system.

Automatic Patch Loader Adjustments

Setting Needle Clearance

When the patch load tray moves into the load position, there should be 1/2" (12.7mm) clearance from the point of the needle to the inside of the patch load tray. To adjust:

1. *Loosen* the bolt and the allen screw on bumper bracket A.
2. *Move* bumper B backward or forward, as necessary.
3. *Re-tighten* the allen screw and the bolt.

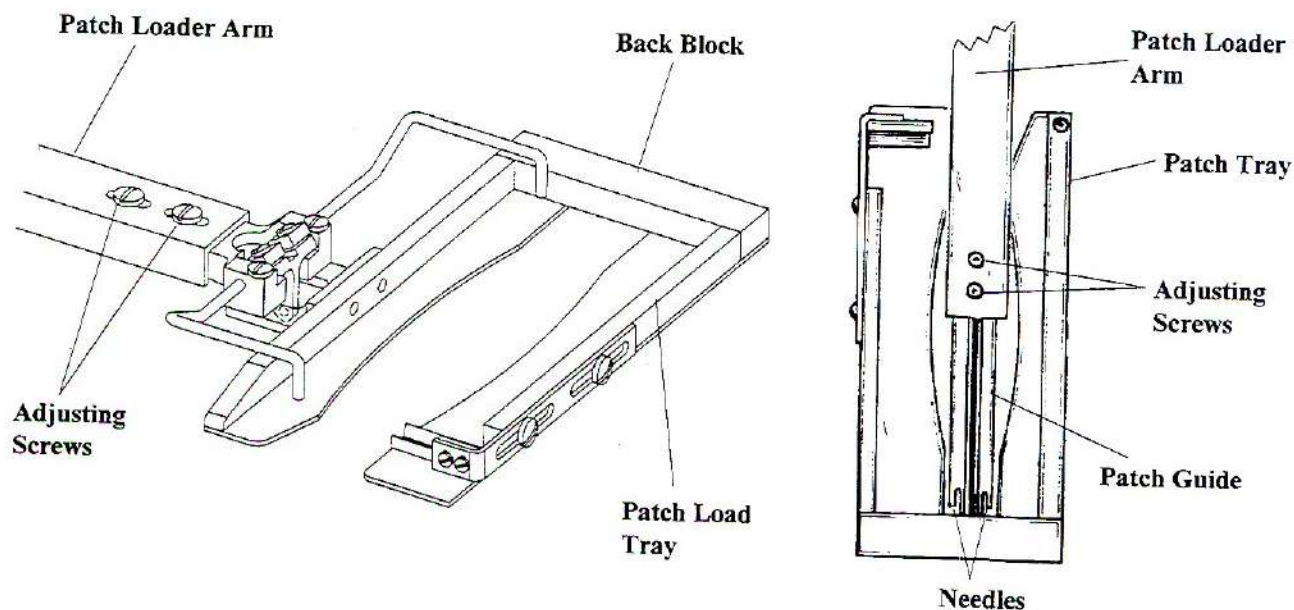


OPTIONAL ATTACHMENTS ADJUSTMENTS

Centering the Patch Load Tray

When the machine is in the load position, the needles should be centered with the patch load tray. To adjust:

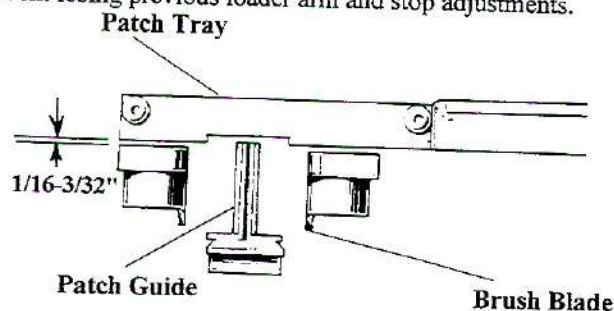
1. Loosen the two adjusting screws on the patch loader arm.
2. Move the arm in or out, as necessary, until the patch load tray is centered.
3. Re-tighten the adjusting screws.



Setting Patch Load Tray Height

Clearance between the underside of the patch load tray and the top of the brushes should be approximately 1/16" (1.5mm) to 3/32" (2.3mm). To adjust:

1. Loosen screw C to raise or lower the loader arm.
2. Adjust carefully to prevent losing previous loader arm and stop adjustments.



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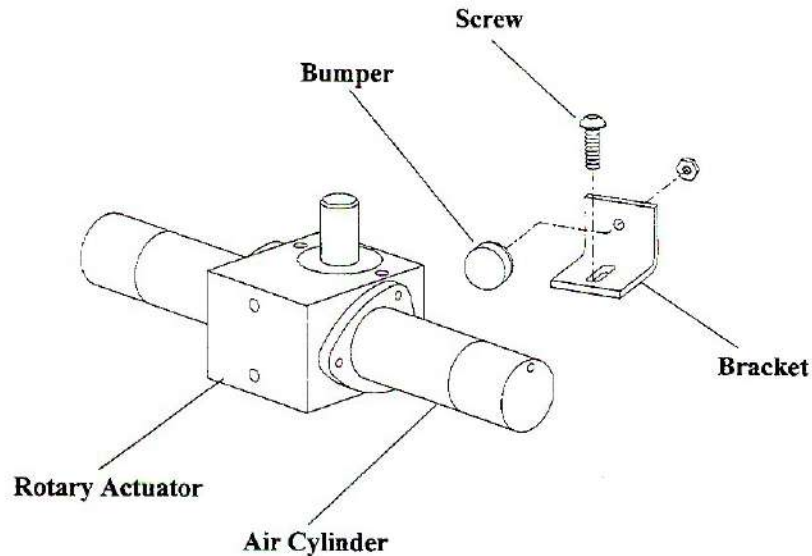
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OPTIONAL ATTACHMENTS ADJUSTMENTS

Setting the Patch Load Tray for Home Position

In the Home position, the patch guide tray should be set so that it is comfortable for the operator to reach. To adjust:

1. *Loosen* the button head allen screw on bumper bracket C.
2. *Move* bumper D backward or forward, as necessary.
3. *Re-tighten* the button head allen screw.

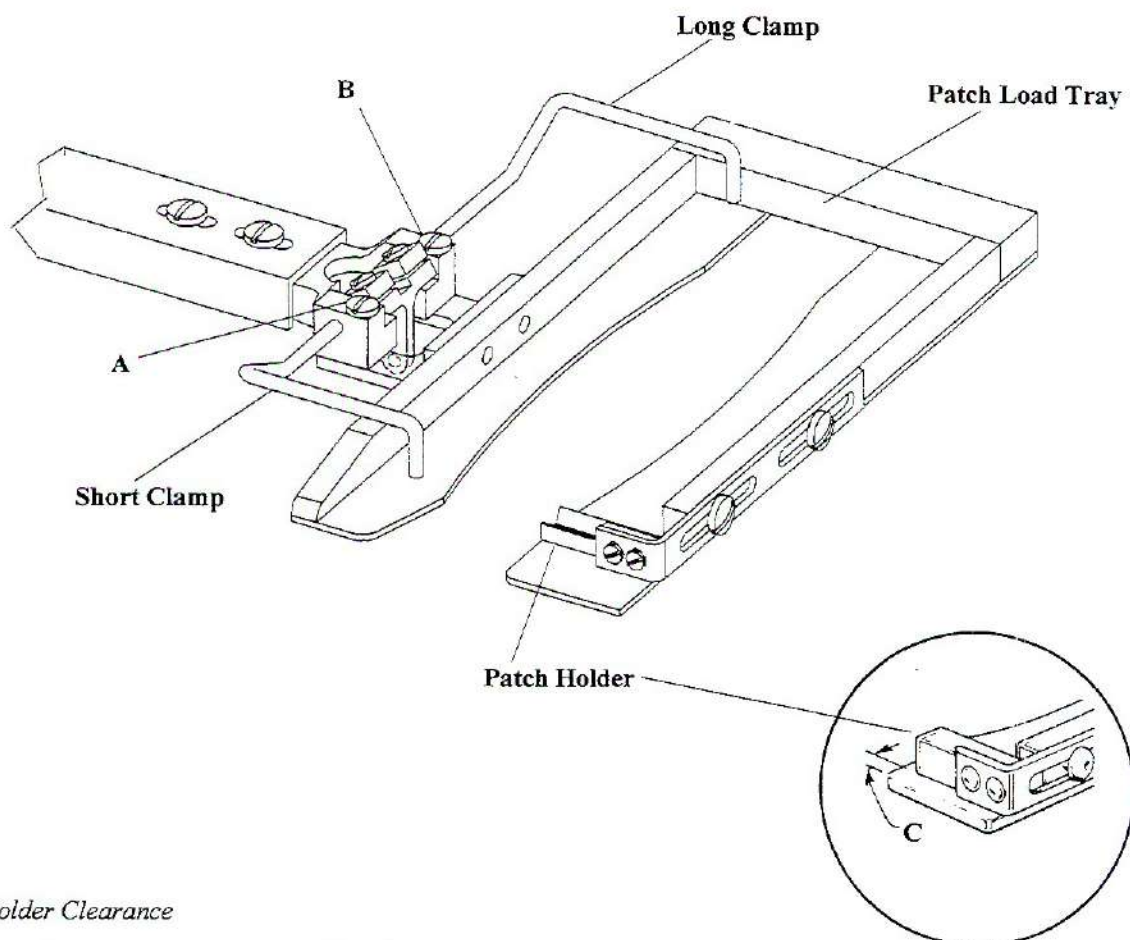


OPTIONAL ATTACHMENTS ADJUSTMENTS

Adjusting Long and Short Patch Tray Clamps

These clamps hold the welt material in place during the loading process. The patch tray clamps may need to be adjusted to maintain the correct amount of holding pressure. To adjust:

1. Loosen screw **A** and move the short clamp up or down, as necessary.
2. Re-tighten screw **A**.
3. Loosen screw **B** and move the long clamp up or down, as necessary.
4. Re-tighten screw **B**.



Patch Holder Clearance

The patch holder keeps the welting and backing patches in place as they are being moved into the loading position. For easy inserting of material patches, and to prevent interference with patch folding, *the distance (C) from the patch holder and the front left edge of the tray plate should be slightly more than the thickness of the material patches.*

OPTIONAL ATTACHMENTS ADJUSTMENTS

Adjusting Patch Tray Speed

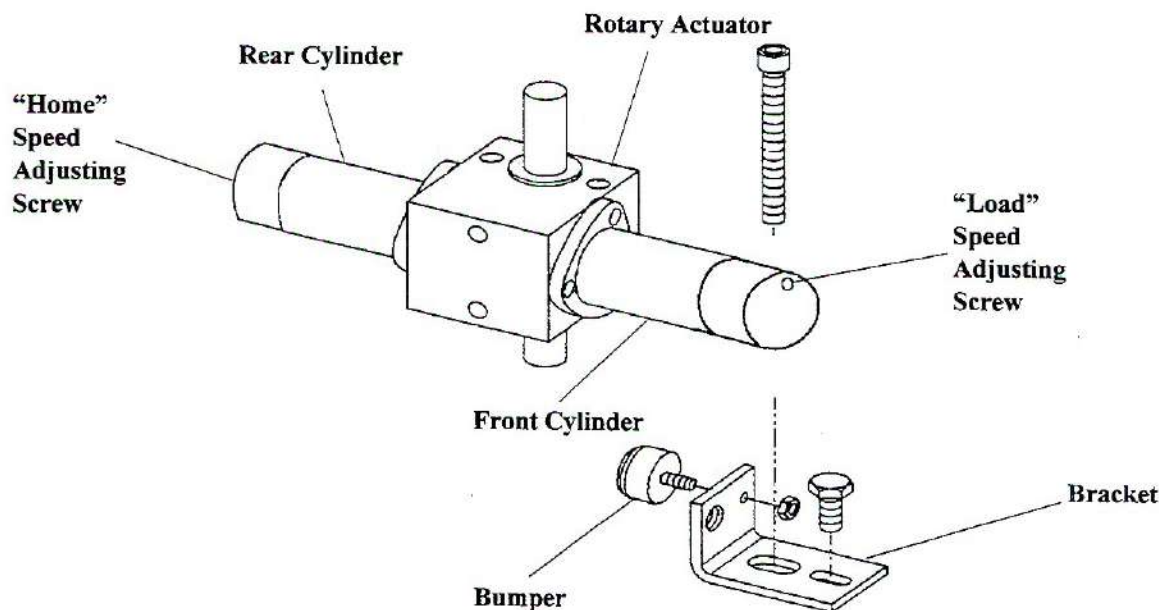
The speed at which the patch load tray travels into the load position and back to its Home position can be adjusted.

To adjust the speed going into the load position:

Use a small screwdriver and *turn* the recessed speed adjusting screw in the air cylinder (located at the *front* of the rotary actuator) in for less speed, or out for more speed.

To adjust the speed for moving the patch load tray into its Home position:

Use a small screwdriver and *turn* the recessed speed adjusting screw in the air cylinder (located at the *back* of the rotary actuator) in for less speed, or out for more speed.

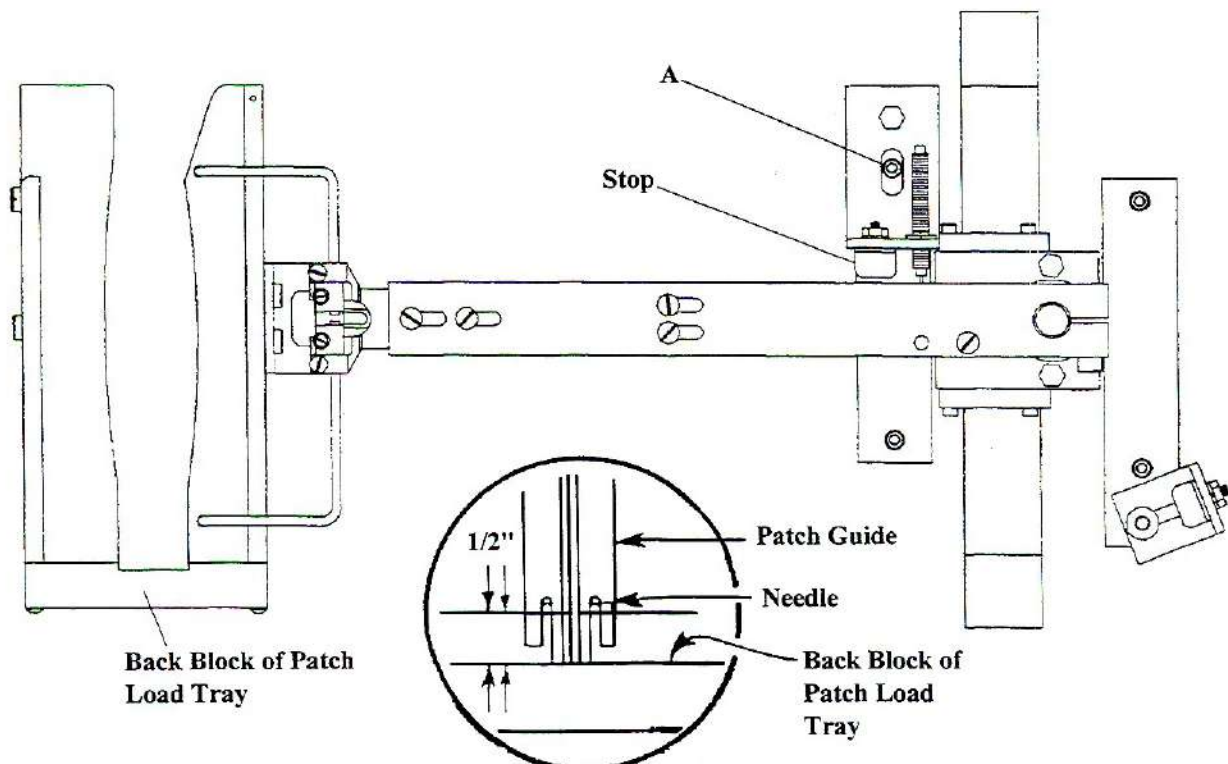


OPTIONAL ATTACHMENTS ADJUSTMENTS

Setting the Inside Edge of the Patch Load Tray Back Block

While making the adjustments below, *be sure* to maintain the parallel relationship between the patch guide and the side of the patch load tray. Once adjustments are complete, *run* the patch loader several times and *make sure* there is ***no binding***.

1. *Return* the clamp table to the back position.
2. *Loosen* screw **A** to loosen the stop.
3. *Push* the knee control and *determine* the extreme forward movement of the patch load arm. (It is not unusual to have to push the knee control several times to make this determination.)
4. With the patch loader at its ***most forward point***, *set* the patch load arm so that the sides of the patch tray are parallel with the side of the patch guide.
5. *Set* the stop so that it lightly touches the patch load arm while it is in the load position. Then *make sure* no bounce or binding exists when the loader makes contact with the step by manually operating the patch loader several times at this setting.
6. *Hold* the load arm against the stop and *position* the inside edge of the patch tray back block 1/2" (2.7mm) from the needles.



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OPTIONAL ATTACHMENTS ADJUSTMENTS

Turning the Automatic Patch Loader On and Off

To activate (or deactivate) the automatic patch loading option:

1. Press the sew interrupt switch.
2. Press [CTR] on the control pad.
3. Press #2.
4. Press #2 again.

The LCD screen message should now read:

Without Options Press [CTR] With Options Press [ENT]

5. If the machine is equipped for this option, press [ENT].

The LCD message should now read:

Automatic Patch Press [1]

Sequence Sew Press [2]

6. Press #1.

The LCD message should now read:

Patch Loader On [1]

Patch Loader Off [2]

7. To activate the patch loader, press #1. (To deactivate the patch loader, press #2 and then press [ENT]).

If the On button is pressed, the LCD message will now give you *the option of selecting automatic [2] or semi-automatic [1] sewing*. If the automatic option is selected, the patch tray will load the welt and start the machine sewing automatically. If the semi-automatic option is selected, the patch tray loads the welt, and the operator starts the machine sewing using the knee switch.

8. Press #1 for semi-automatic or press #2 for automatic sewing.
9. Press [ENT].

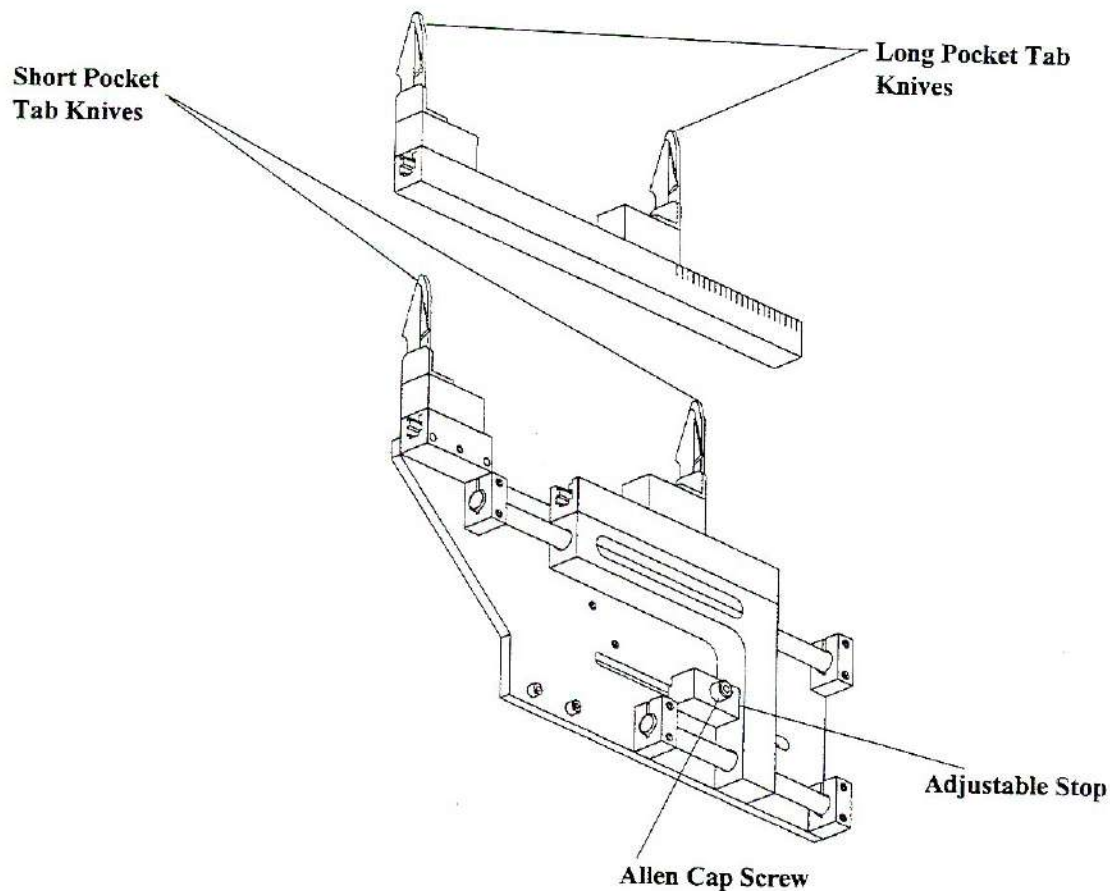
The steps for turning the automatic patch loading option on and off are also explained in the Options Section (see page 1-44).

OPTIONAL ATTACHMENTS ADJUSTMENTS

Setting the Tab Knives for Two-Stage (Sequential) Sewing

When setting the tab knives for two-stage sewing, the *longest pocket length must be set first.*

1. To set the long pocket, use the finger screw adjustment on page 1-44.
2. Now use the stop with the allen cap screw to set the short pocket length.



a. Loosen the allen cap screw and move the slide block backward or forward, along the scale, as necessary, to reach the desired length.

b. Re-tighten the allen screw.

Note: To turn on (and off) the two-stage sewing option, follow the first four steps outlined in Turning On The Automatic Patch Loader. At step number 5, press #2 to enter the sequence sewing set up. Step number 6 allows you to turn the sequence sew On [2] or Off [1]. See the Options section (page 1-44) for further explanation.

OPTIONAL ATTACHMENTS ADJUSTMENTS

Adjusting the Work (Air) Eject Option

The length of the air blast for this option is controlled by a timer which has been factory set. Should your sewing needs require a shorter or longer air blast, the timer may be adjusted from a minimum of 5 to a maximum of 50 milliseconds. To adjust:

1. *Press* the sew interrupt switch.
2. *Press* [CTR].
3. *Press* Input/Output Test.
4. *Advance* to the Work Eject option on the LCD screen. The message should say:
Work Eject On [1]
Work Eject Off [2]
5. *Push* #1.
6. *Push* the *down arrow* for a *shorter* air blast, the *up arrow* for a *longer* air blast.
7. *Press* [ENT].

TROUBLESHOOTING

<u>POSSIBLE PROBLEM</u>	<u>POSSIBLE CAUSE AND SOLUTION</u>
Clamp fails to hold the work	Check the pads of the clamping mats, and replace if they are worn. Check the rubber soles of the clamp foot, and replace if they are worn. Check and re-adjust the clamping pressure if necessary.
Clamp fails to respond to treadle	Select INPUT TEST on the keypad. Advance to the FOOTSWITCH #1 and #2 program screens, and verify that the switches operate. Replace inoperative switches.
Welting and backing patches are not properly folded	Check the patch guide and patch folding brushes adjustments.
Patch folding brushes fail to respond to treadle control	Check the Brushes switch operation. Select INPUT TEST on the keypad. Advance to the BRUSHES screen (by pressing the UP arrow) and verify that the switch is functioning. Replace switch if necessary. Check for binding or interference in the patch guide or patch folding brushes mechanism. Remove binding or interference. Re-check patch guide and patch folding brushes adjustment.
Welting patch does not travel along patch guide properly	Check patch guide adjustments. Check condition of patch guide. There should be no nicks or scratches. This would prevent the welting patch from sliding off the patch guide. The tail end of the patch guide must be sufficient radius to allow the forming of the welt to travel smoothly on to the patch guide. Remove scratches. When using material that is slippery and difficult to hold (i.e., lining material), small pads of adhesive-backed urethane foam should be placed on the brush blades. Check that the pads do not extend beyond the length of the patch guide.
Tab knives fail to operate	Check the operation of the Tab Knife Switches. Select INPUT TEST on the keypad and advance (using the UP arrow) to the TAB KNIFE UP and TAB KNIFE DOWN screens. Verify that both switches are functioning. Replace any inoperable switch.

TROUBLESHOOTING

POSSIBLE PROBLEM

POSSIBLE CAUSE AND SOLUTION

Ends of welts not square

Tab knives are dull or unequally positioned. Replace knives, setting back edges flush with back surfaces of knives.

Rows of stitching uneven at ends. Check that needles are straight and that there is no skipping of stitches when the sewing starts. Replace needles.

Knives are bent or not properly centered. Re-adjust as required.

Corners of welts open

Tab knives cutting too far. Adjust knives.

Clamp mats set too close, causing material to clog and tear in the corners. Re-adjust as required.

Short tabs

Tab knives cutting too short. Replace knives if dull; otherwise, adjust knives' positions.

Center cut too long. Adjust center knife.

Stitches showing on front of welt

One stitch will be slightly exposed at each corner of the pocket welt, but side stitching should be well concealed. If not, tensions are too loose or clamp mats are set too close together. The thread should be approximately the same color as the garment material.

Incorrect stitching

Incorrect needle being used. Check needle and change if necessary.

Needles are not correctly adjusted to the loopers. Adjust if necessary.

Needle tips are blunt. Replace needles.

Needles are not straight. Replace the needles.

TROUBLESHOOTING

POSSIBLE PROBLEM

POSSIBLE CAUSE AND SOLUTION

Thread breakage

Incorrect threading and/or tension is incorrect. Re-thread and/or adjust the thread tension.

Needles are not straight. Replace needles.

Looper has not been correctly installed. Re-install the looper.

Looper is sharp at the point or is worn. Replace the looper.

Needle bar is not aligned properly. Re-align the needle bar.

The needle and looper are not adjusted properly. Re-adjust.

Incorrect clearance between the needle and needle hole slot. Re-adjust the the clearance.

Thread handling components are worn or contain burrs. Replace or repair those components.

The eye of the needle is sharp. Replace the needle.

TROUBLESHOOTING

TO PERFORM MACHINE DIAGNOSTICS

The purpose of the input test is to determine whether the component being tested is receiving a signal. The components, if working correctly, will cause the keypad display to toggle between ON and OFF. If there is a problem with the component, the keypad display will **not** toggle between ON and OFF.

Press the [SEW INTERRUPT] switch.

Press the [CTR] key.

Press [1] to perform input and/or output tests.

Press [1] to perform input tests.

The NEXT [↑] key will advance and display the next screen of the test. The BACK [↓] key will display the previous screen of the test.

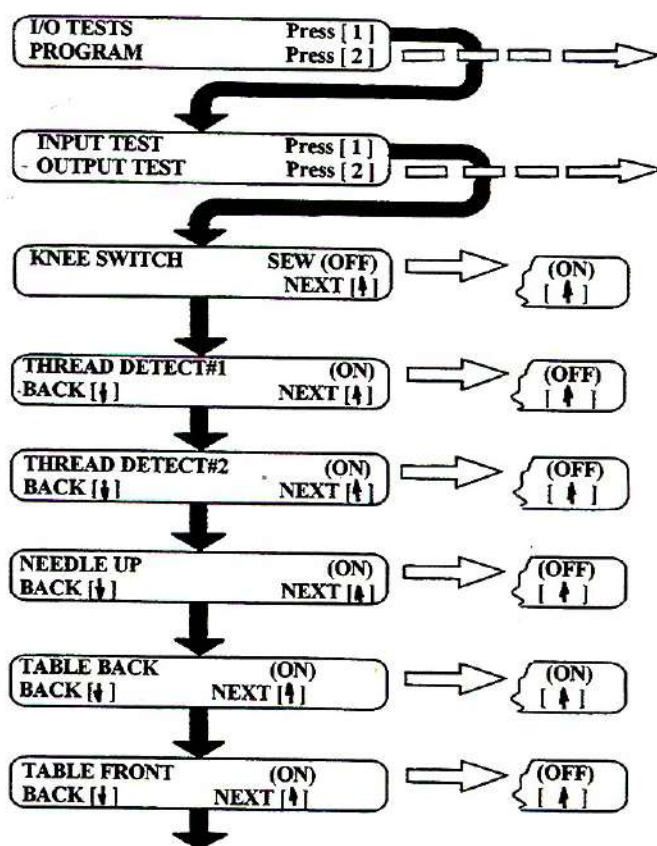
To test the following components, perform the steps below:

Knee Switch - Press the knee switch in and hold, the keypad should display ON; when the switch is released, the keypad should display OFF. If it does not, a problem exists in the switch circuitry.

Thread Detect #1 and Thread Detect #2 - Lift the head cover; located about 3/4 of the way back, micro-switches are located on the right and left hand sides of the head (right side micro-switch tests thread detect #1; left side micro-switch tests thread detect #2). Push the micro-switch in and hold; the keypad should display ON. When the switch is released, the keypad should display OFF. If it does not, a problem exists in the switch circuitry.

Needle Up - Lower the head cover, lift the machine and rotate the belt located in the rear of the machine on the left hand side. The belt is on a pulley, and as the belt is being rotated, an arm (located on the shaft of the pulley) passes in front of the needle sensor and activates it. During this time, the keypad display will toggle between ON and OFF. If it does not, a problem exists with the sensor.

Table Back and Table Front - Manually move the table back by gripping the brush arm and sliding to the rear of the machine. The keypad will display ON; sliding the brush arm forward will move the table forward and the keypad will display OFF. If it does not, a problem exists in the switch circuitry. The opposite procedure is used for Table Front. The brush arm must be slid forward, which will move the table to the front. The keypad will display ON; sliding the brush arm to the rear of the machine will move the table back, and the keypad will display OFF. If it does not, a problem exists in the switch circuitry.



TROUBLESHOOTING

POSSIBLE PROBLEM

POSSIBLE CAUSE AND SOLUTION

Thread breakage

Incorrect threading and/or tension is incorrect. Re-thread and/or adjust the thread tension.

Needles are not straight. Replace needles.

Looper has not been correctly installed. Re-install the looper.

Looper is sharp at the point or is worn. Replace the looper.

Needle bar is not aligned properly. Re-align the needle bar.

The needle and looper are not adjusted properly. Re-adjust.

Incorrect clearance between the needle and needle hole slot. Re-adjust the the clearance.

Thread handling components are worn or contain burrs. Replace or repair those components.

The eye of the needle is sharp. Replace the needle.

TROUBLESHOOTING

TO PERFORM MACHINE DIAGNOSTICS

The purpose of the input test is to determine whether the component being tested is receiving a signal. The components, if working correctly, will cause the keypad display to toggle between ON and OFF. If there is a problem with the component, the keypad display **will not** toggle between ON and OFF.

Press the [SEW INTERRUPT] switch.

Press the [CTR] key.

Press [1] to perform input and/or output tests.

Press [1] to perform input tests.

The NEXT [↗] key will advance and display the next screen of the test. The BACK [↖] key will display the previous screen of the test.

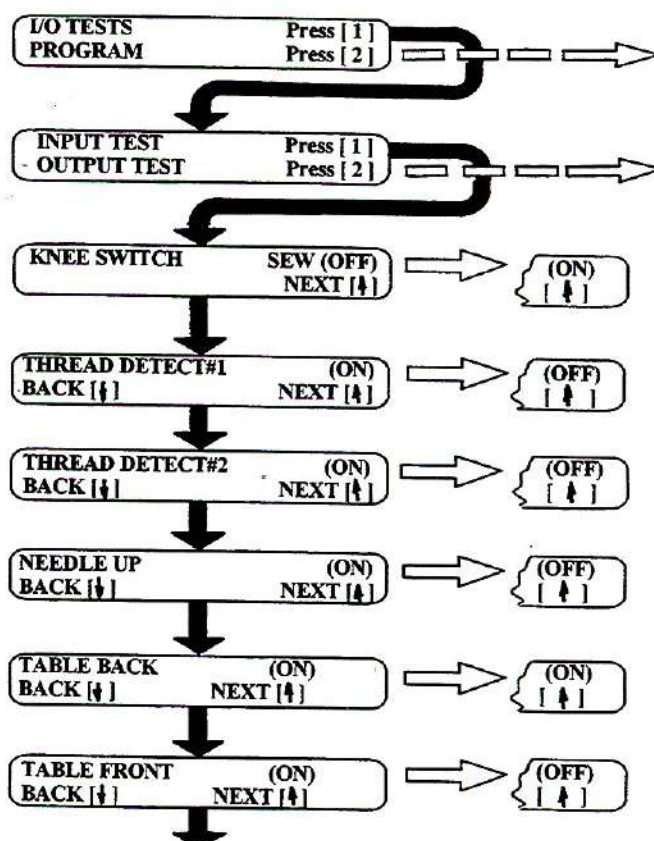
To test the following components, perform the steps below:

Knee Switch - Press the knee switch in and hold, the keypad should display ON; when the switch is released, the keypad should display OFF. If it does not, a problem exists in the switch circuitry.

Thread Detect #1 and Thread Detect #2 - Lift the head cover; located about 3/4 of the way back, micro-switches are located on the right and left hand sides of the head (right side micro-switch tests thread detect #1; left side micro-switch tests thread detect #2). Push the micro-switch in and hold; the keypad should display ON. When the switch is released, the keypad should display OFF. If it does not, a problem exists in the switch circuitry.

Needle Up - Lower the head cover, lift the machine and rotate the belt located in the rear of the machine on the left hand side. The belt is on a pulley, and as the belt is being rotated, an arm (located on the shaft of the pulley) passes in front of the needle sensor and activates it. During this time, the keypad display will toggle between ON and OFF. If it does not, a problem exists with the sensor.

Table Back and Table Front - Manually move the table back by gripping the brush arm and sliding to the rear of the machine. The keypad will display ON; sliding the brush arm forward will move the table forward and the keypad will display OFF. If it does not, a problem exists in the switch circuitry. The opposite procedure is used for Table Front. The brush arm must be slid forward, which will move the table to the front. The keypad will display ON; sliding the brush arm to the rear of the machine will move the table back, and the keypad will display OFF. If it does not, a problem exists in the switch circuitry.



TROUBLESHOOTING

Foot Switch #1 and Foot Switch #2 - Step on the treadle using the appropriate foot switch position. The keypad display will toggle between ON and OFF. If it does not, a problem exists in the switch circuitry.

Tab Knife Up and Tab Knife Down - Lift the machine. Located in the front of the machine are two micro-switches, one on top of the other. To test the Tab Knife Up: push the top micro-switch in and hold. The keypad will display ON, when released, the keypad will display OFF. To test for the Tab Knife Down: push the bottom micro-switch in and hold. The keypad will display ON. When released, the keypad will display OFF. If it does not, a problem exists in the micro-switch circuitry.

Brushes In - With the machine still lifted, push the micro-switch (located on the air cylinder) in and hold. The keypad will display ON; when released, the keypad will display OFF. If it does not, a problem exists in the switch circuitry.

Safety Re-Thread - Push the Safety Re-Thread button in and hold. The keypad will display ON; when released, the keypad will display OFF. If it does not, a problem exists with the button switch circuitry.

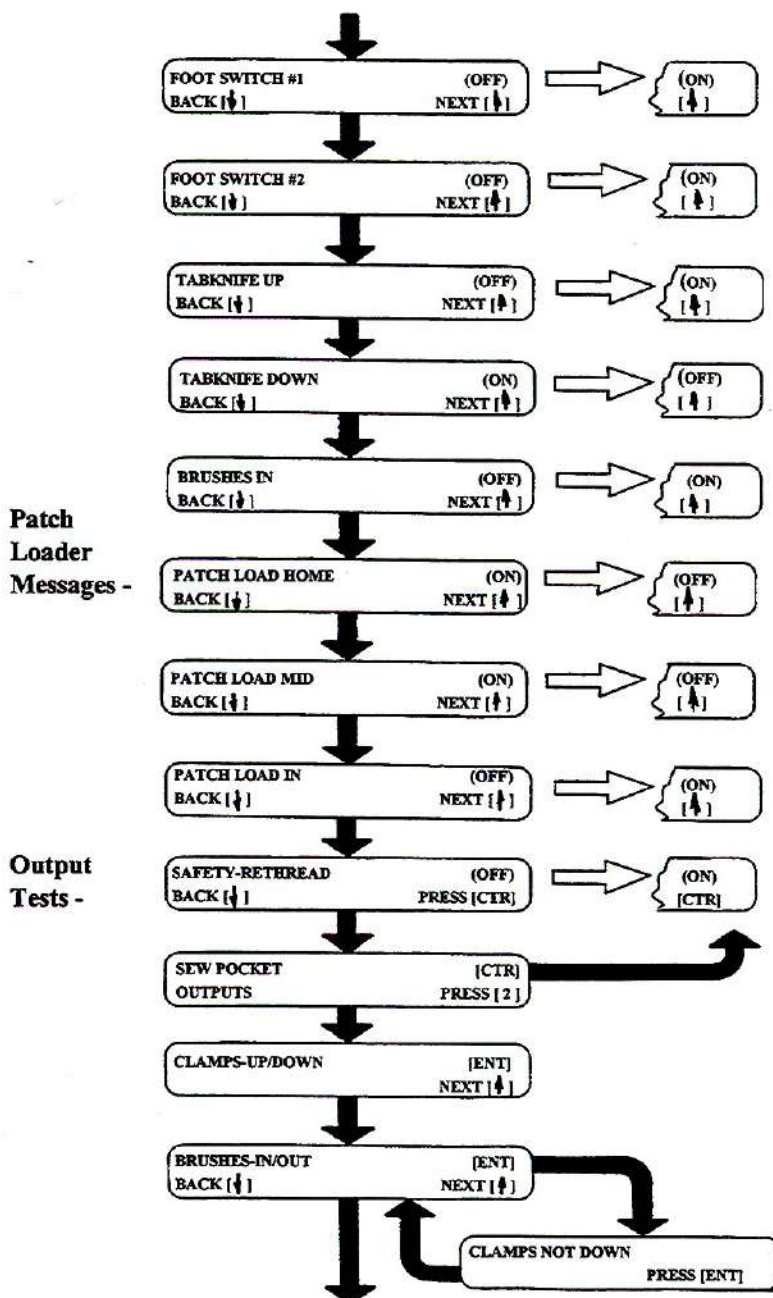
To exit, and return to the sewing mode, press [CTR].
To perform output tests, press [2].

The purpose of the output test is to determine whether the component being tested is functioning properly. The components during this test, if working properly, will actually demonstrate their functions. If there is a problem with the component, they will not demonstrate their function.

The [ENT] key will cause the various pieces of equipment to move, either up or down, in or out.

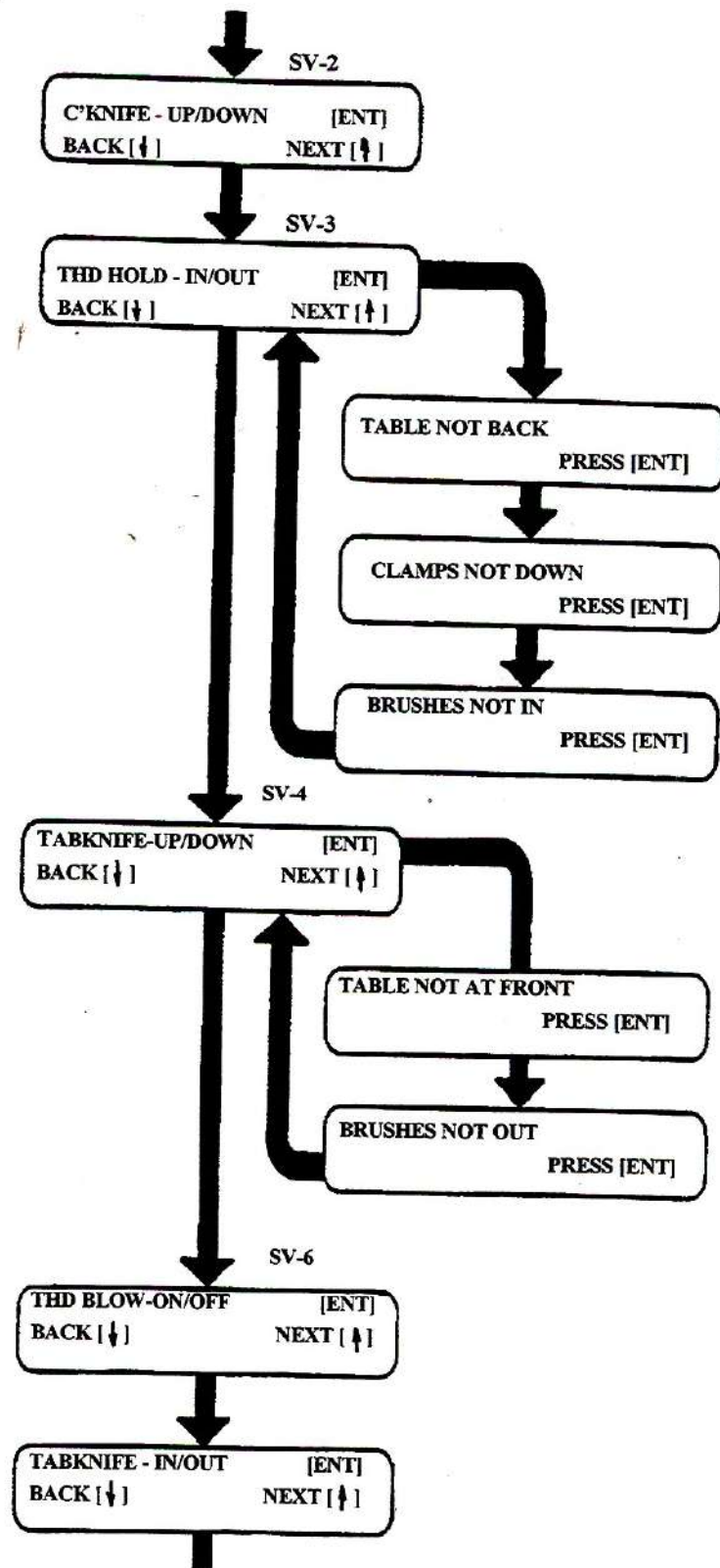
The NEXT [↗] key will advance and display the next screen of the test. The BACK [↖] key will display the previous screen of the test.

If the machine is not in the proper position to perform the test, a message will appear indicating what position it must be in. At the same time, it will allow the machine to be positioned correctly by pressing the [ENT] key.

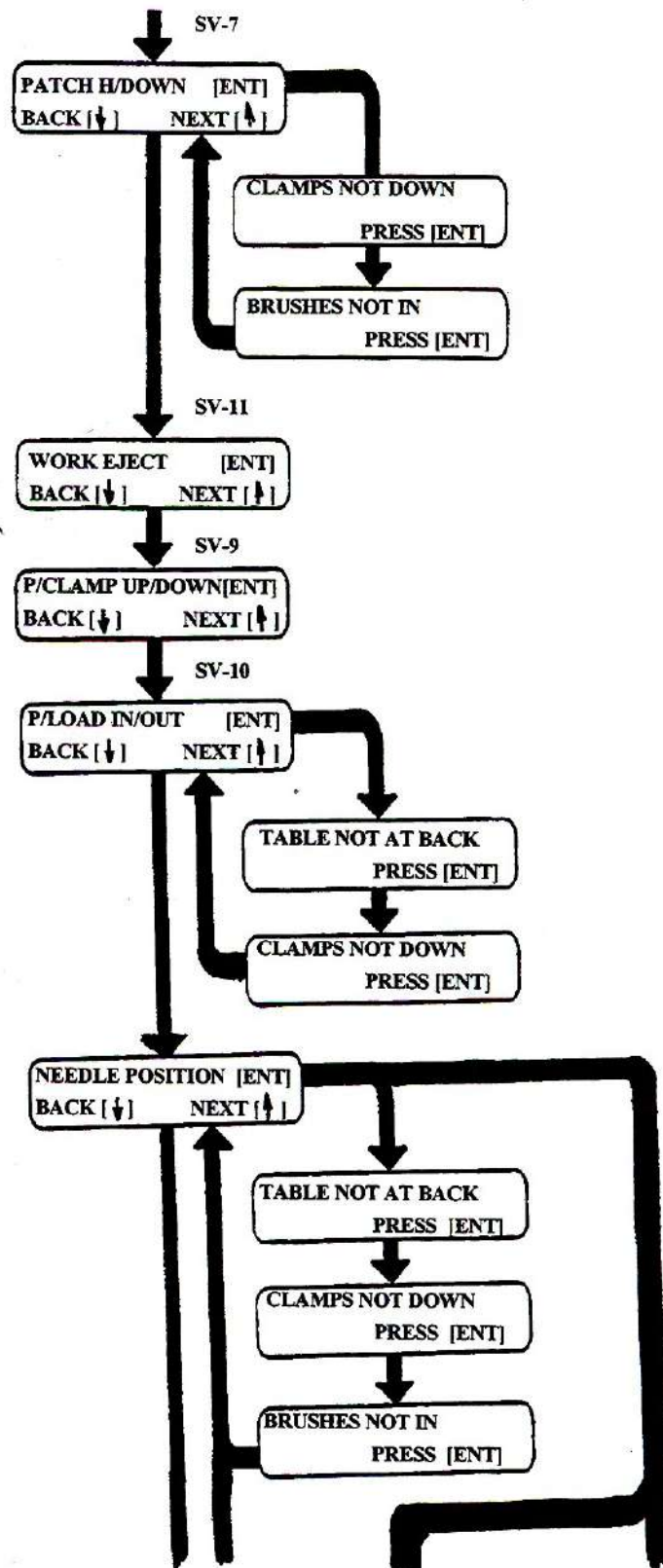


TROUBLESHOOTING

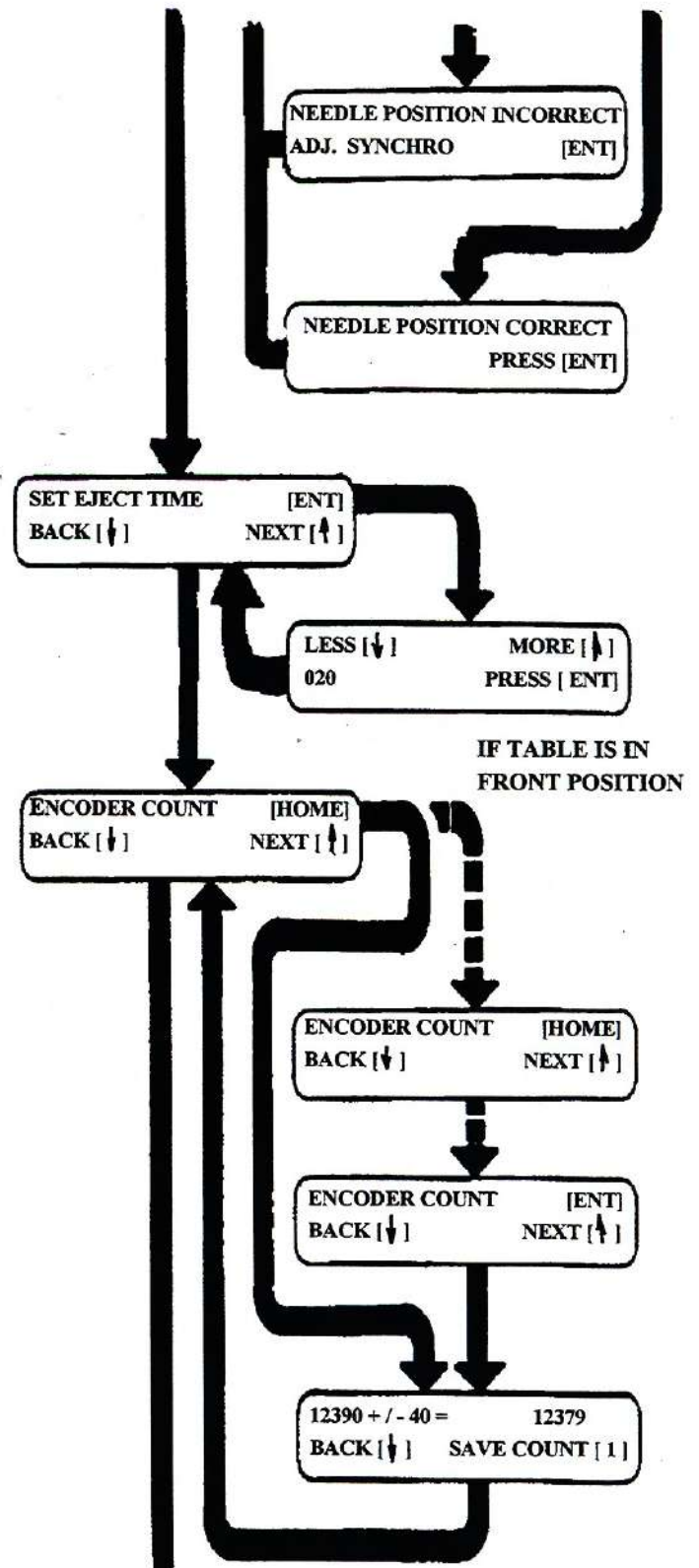
The THD HOLD is the output test for the thread pick-up fingers.



TROUBLESHOOTING



TROUBLESHOOTING



The ENCODER COUNT is the count of pulses.

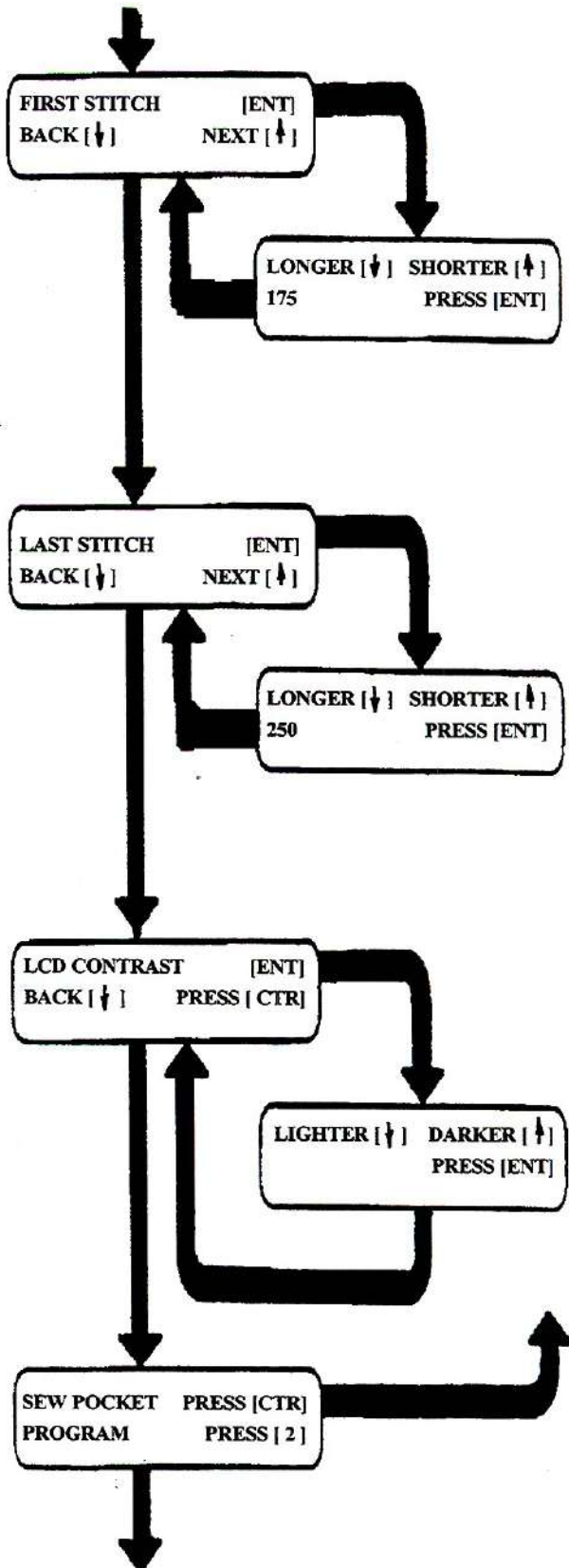
TROUBLESHOOTING

The FIRST STITCH and LAST STITCH numbers control the stitch length.

Example - The higher the number entered [ENT], the shorter the stitch.

The LCD CONTRAST controls the brightness of the screen.

To exit, and return to the sewing mode, press [CTR].
To enter the programming feature, press [2].



TROUBLESHOOTING

Changing the Needle Bite Size on the SpeedWelt 1000

Remove the:

- a) needle holder
- b) brush arms (do not lose leveling wedge)
- c) patch guide
- d) clamp foot
- e) throat plate
- f) trim knife bracket
- g) tab knife holders

Install, in sequence, the new needle holder (page 1-14) and new throat plate (page 1-14).

Now, *center* the throat plate to the needle and *check* the center knife to the knife slot (page 1-26). *Adjust* the clamp mats to the throat plate (page 1-29). *Install* the new patch guide (page 1-15). *Install* the new clamp foot with the right pivot blocks, then *center* the clamp foot over the mats.

Install brush blades to the brush arms, then *install* the arms and *adjust* the patch guide (pages 1-16 to 1-24). *Adjust* the loopers to the needles (pages 1-32 to 1-35). *Install* the new trim knife to the bracket and *re-install* in the machine (page 1-36). *Install* the new tab knives and holders (page 1-19 to 1-31).

Sew pockets on scrap material and *check* for correct stitch density, center knife cut, tab knife cut and for any skipped stitches. *Adjust* the thread pick-up arms (page 1-39)

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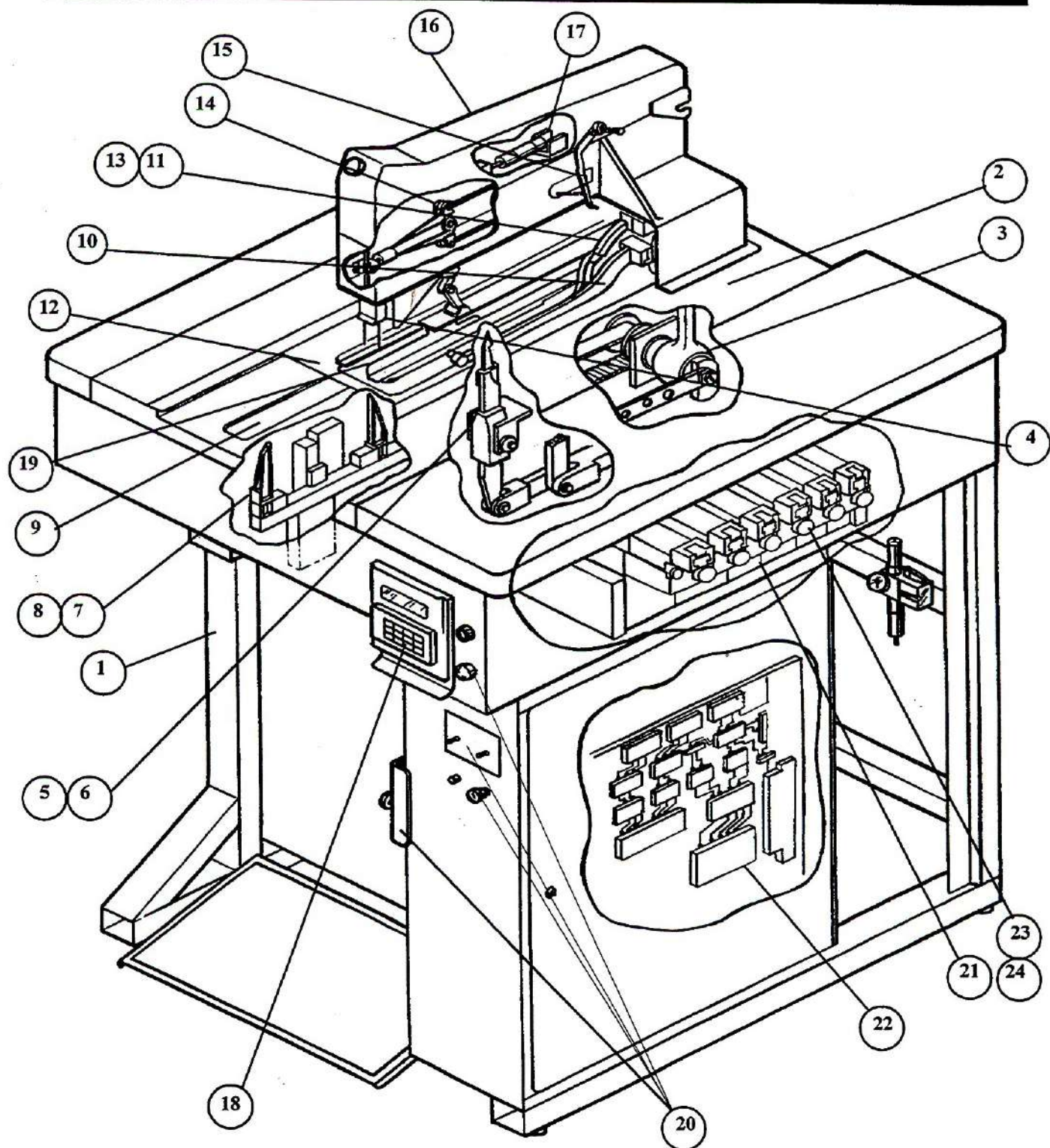
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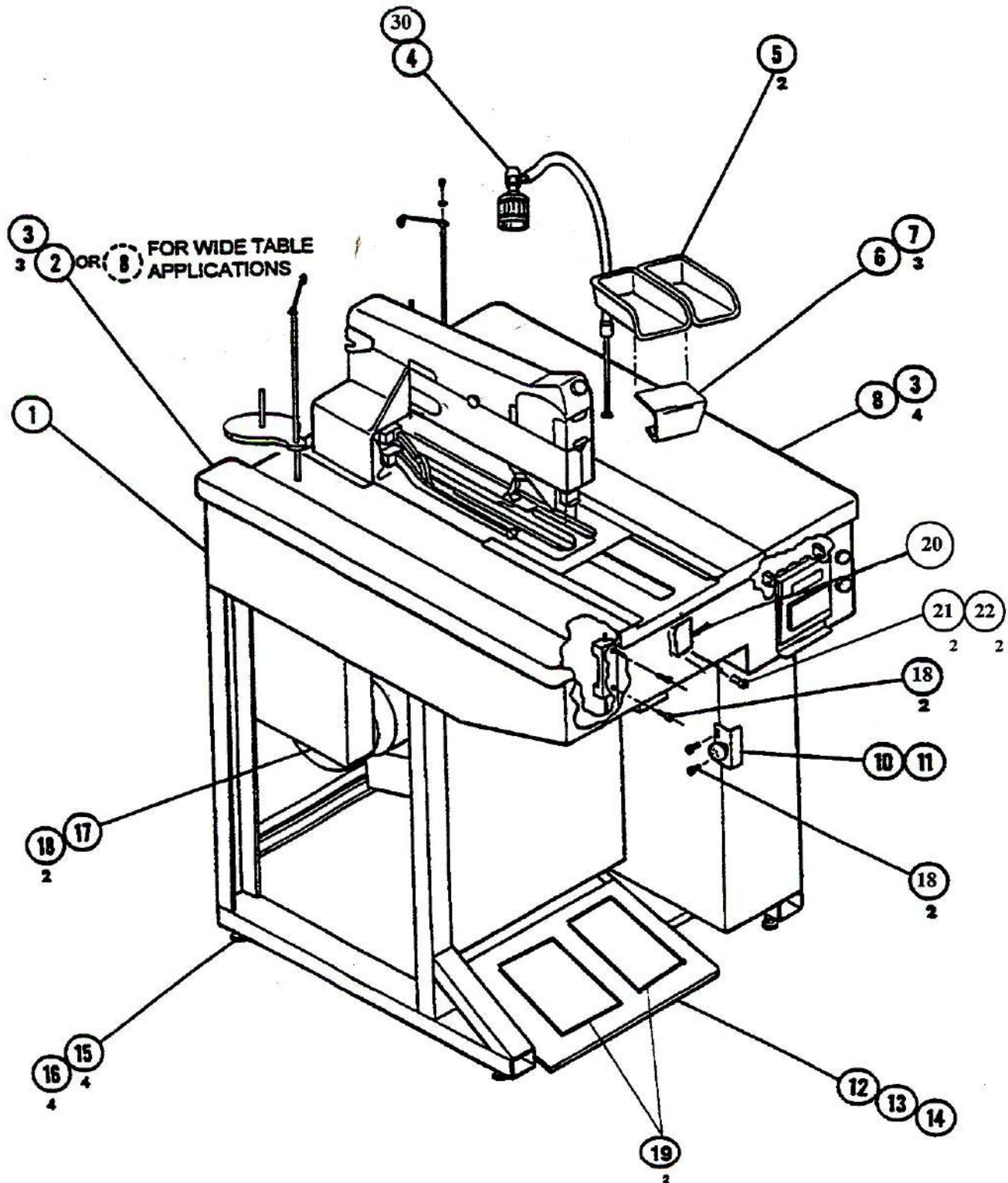
FINAL ASSEMBLY



FINAL ASSEMBLY

ITEM	ASS'Y NO.	DESCRIPTION	PAGE
1	7000	Frame Assembly	3-4
2	7005	Bedplate Assembly	3-8
3	7010	Drive Shaft Assembly	3-12
4	7015	Needle Bar & Looper Assembly	3-14
5	7020	Center Knife Assembly	3-16
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17	7060	Thread Pick-up Assembly	3-40
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19	7045	Patch Guide Assembly	3-32
20	7065	Electrical Assembly	3-42
21	7070	Pneumatic Assembly	3-44
22	7075	Electrical Panel Assembly	3-48
23	7072	Pneumatic Component Location	3-47
24	7071	Pneumatic Spares	3-46

FRAME ASSEMBLY



FRAME ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7102.0.000	Frame Weldment	1
2	32.7113.0.000	Left Hand Table Top	1
3	01.1658.0.001	#5/16-18 x .75 Hex hd. Screw	7
4	07.6004.0.800	12V Table Light (KIT)	OPT.
5	See Chart	Patch Tray	2
6	42.0932.1.850	Base Assembly	1
7	01.2616.0.000	#10 x .75 Pan Hd. Screw	3
8	32.7104.0.000	Right Hand Table Top	1
10	32.7164.0.000	Sit Down Knee Switch Bracket	1
11	32.7165.0.000	Stand Up Knee Switch Bracket	1
12	32.7105.0.000	Treadle	1
13	07.6040.0.001	7/8 Set Collar	1
14	03.6852.9.114	#7/8 Flat Washer	1
15	07.6560.0.000	#1/2-13 Leveling Foot	4
16	01.3546.0.000	#1/2-13 Hex Nut	4
17	32.7108.0.000	Drive Belt Guard	1
18	03.6200.1.108	#1/4-20 x 1/2 Button Hd. Screw	6
19	42.0925.0.000	Safety Pad	2
20	32.7209.0.003	Draw Latch	1
21	01.2413.0.000	#6-32 x 3/8 HSC Screw	2
22	01.3508.0.000	#6-32 Hex Nut	2
30	07.6004.0.003	12V/20W Bulb (Spare Parts)	-

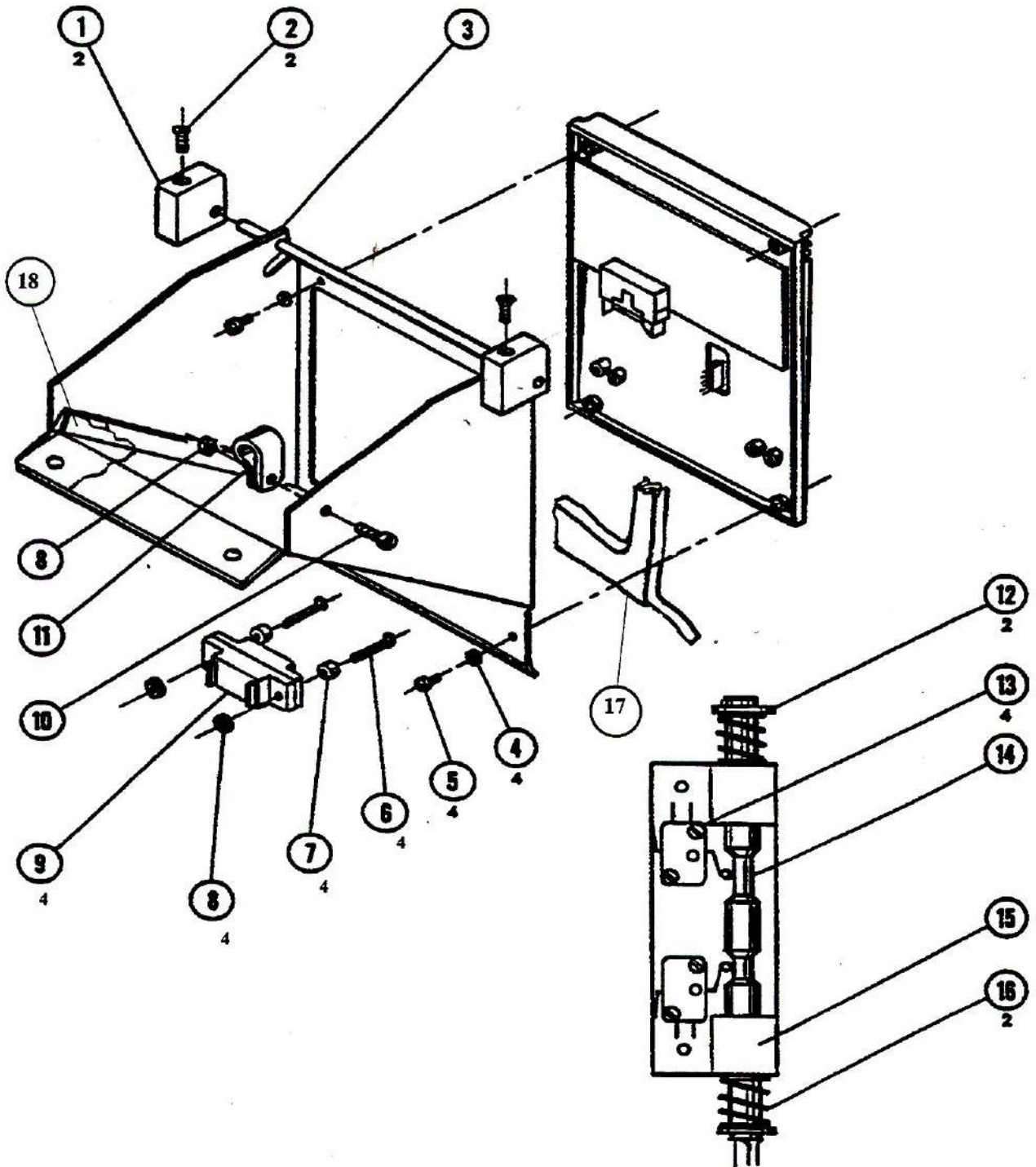
Spacing Charts begin on page 3-50.

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KEYPAD AND SWITCH MOUNT DETAILS



KEYPAD AND SWITCH MOUNT DETAILS

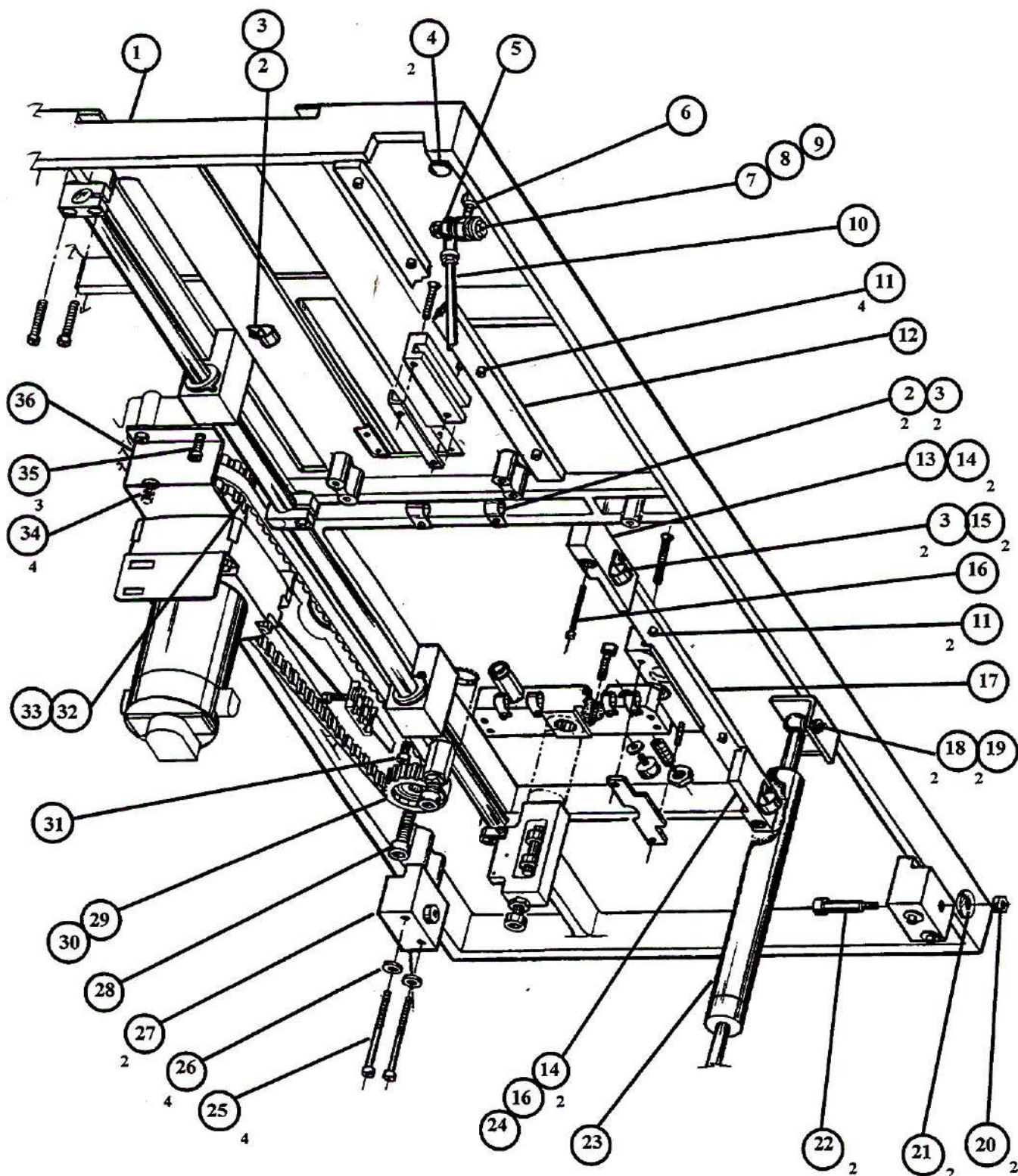
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7161.0.000	Bearing Block	2
2	01.2416.0.000	#8-32 x .50 Flat Hd. Screw	2
3	32.7162.0.000	Keypad Mount	1
4	03.6802.3.000	M3 Lock Washer	4
5	01.1393.0.003	M3 x 10 Screw	4
6	03.6100.6.114	#6-32 x .88 Flat Hd. Screw	4
7	07.6680.0.000	Spacer	4
8	01.3455.0.000	#6-32 Hex Lock Nut	5
9	07.6000.0.000	Cabinet Magnet	4
10	01.2413.0.000	#6-32 x 3/8 Screw	1
11	07.6600.0.008	Cable Clamp	1
12	07.6760.0.000	Retaining Ring	2
13	03.6222.4.108	#4-40 x .50 Bind. Hd. Screw	4
14	32.7107.0.000	Actuator	1
15	32.7106.0.000	Foot Switch Mount	1
16	07.6440.0.014	Spring	2
17	32.7207.0.000	Static Shield	1
18	32.7205.0.000	Keyboard Cover	1

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BEDPLATE ASSEMBLY



BEDPLATE ASSEMBLY

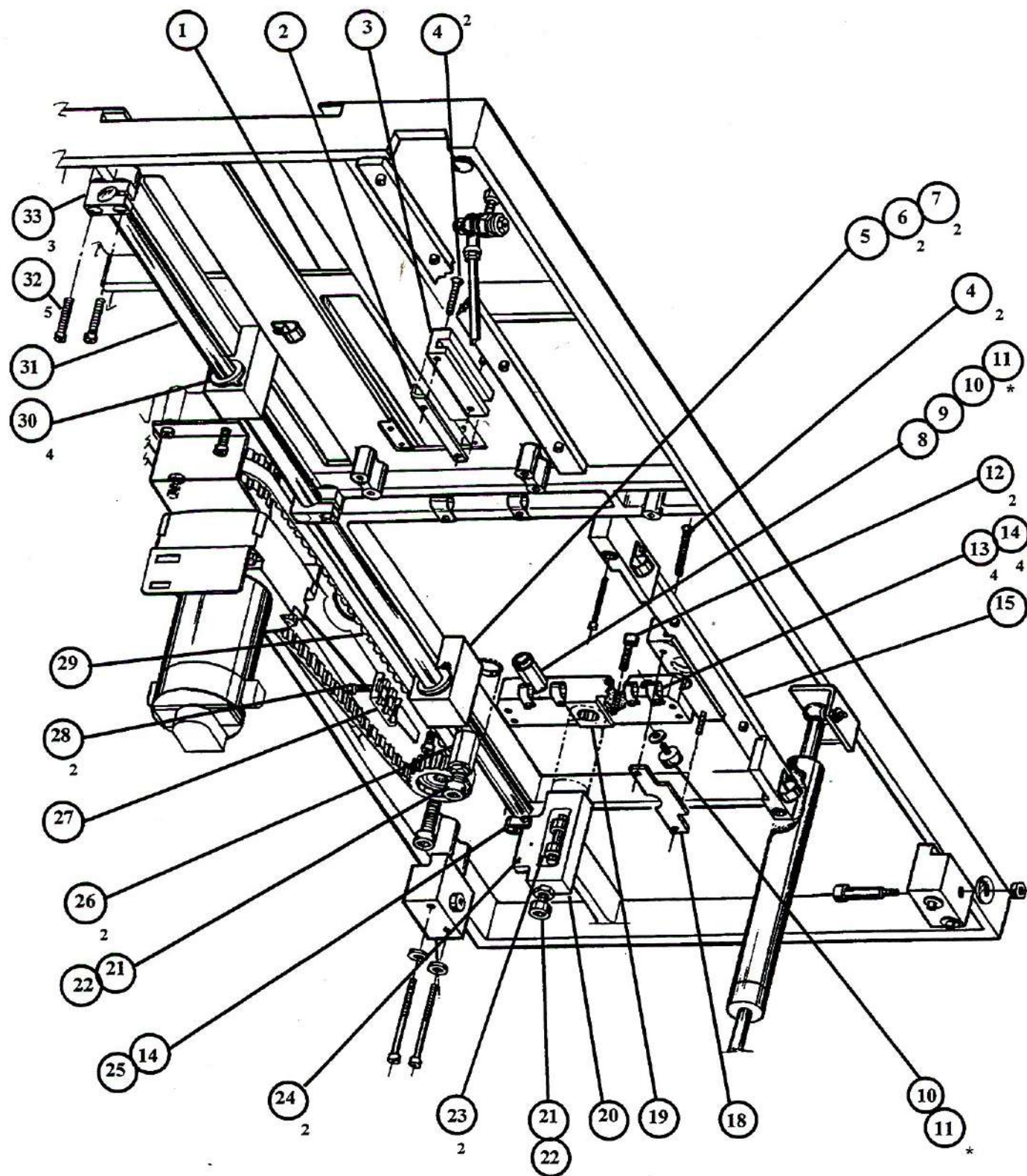
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7100.0.000	Bedplate	1
2	07.6600.0.007	9/16 Cable Clamp	3
3	01.1574.0.001	#8-32 x 3/8 Button Hd. Screw	5
4	07.6481.0.000	Bumper	2
5	07.6481.0.002	Female Rod End Bearing	1
6	07.6481.0.001	Male Rod End Bearing	1
7	03.6301.7.120	#5/16-18 x 1.2 Screw	1
8	01.4581.0.000	#5/16 Lock Washer	2
9	01.3549.0.000	#5/16-18 Hex Nut	1
10	32.7109.0.000	Hold Up Rod	1
11	01.2437.0.000	#10-32 x 5/8 Screw	6
12	32.7129.0.000	Front Slide Rail	1
13	32.7157.0.000	Front Table Switch Mount	1
14	03.6222.4.108	#4-40 x .50 Bind. Hd. Screw	4
15	07.6600.0.010	#3/4 Cable Clamp	2
16	03.6000.0.216	#10-32 x 1 Screw	2
17	32.7130.0.000	Rear Slide Rail	1
18	07.0086.0.001	Ball Stud	2
19	07.0087.0.001	Retainer	2
20	103552.0.000	#3/8-16 Hex Nut	2
21	01.4582.0.000	#3/8 Lock Washer	2
22	03.6500.4.116	1/2 x 1 Shoulder Screw	2
23	07.0302.1.000	Gas Spring	1
24	32.7156.0.000	Rear Table Switch Mount	1
25	01.2757.0.000	#10-32 x 2 Screw	4
26	01.4579.0.004	#10 Flat Washer	4
27	32.7142.0.000	Bedplate Pivot Block	2
28	03.6000.9.116	#3/8-16 x 1 Screw	1
29	07.6723.0.001	Spacer	1
30	32.7203.0.050	Pulley/Bearing	1
31	03.6000.8.108	#8-32 x 5/16 Screw	1
32	03.6000.0.224	#10-32 x 1-1/2 Screw	1
33	32.7148.0.000	Clamp Plate Drive Pulley	1
34	01.2980.0.002	#10-32 x 3/8 Button Hd. Screw	4
35	01.2493.0.000	#10-32 x 1/2 Screw	3
36	32.7201.0.000	Motor Belt Mount	1

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CLAMP PLATE ASSEMBLY

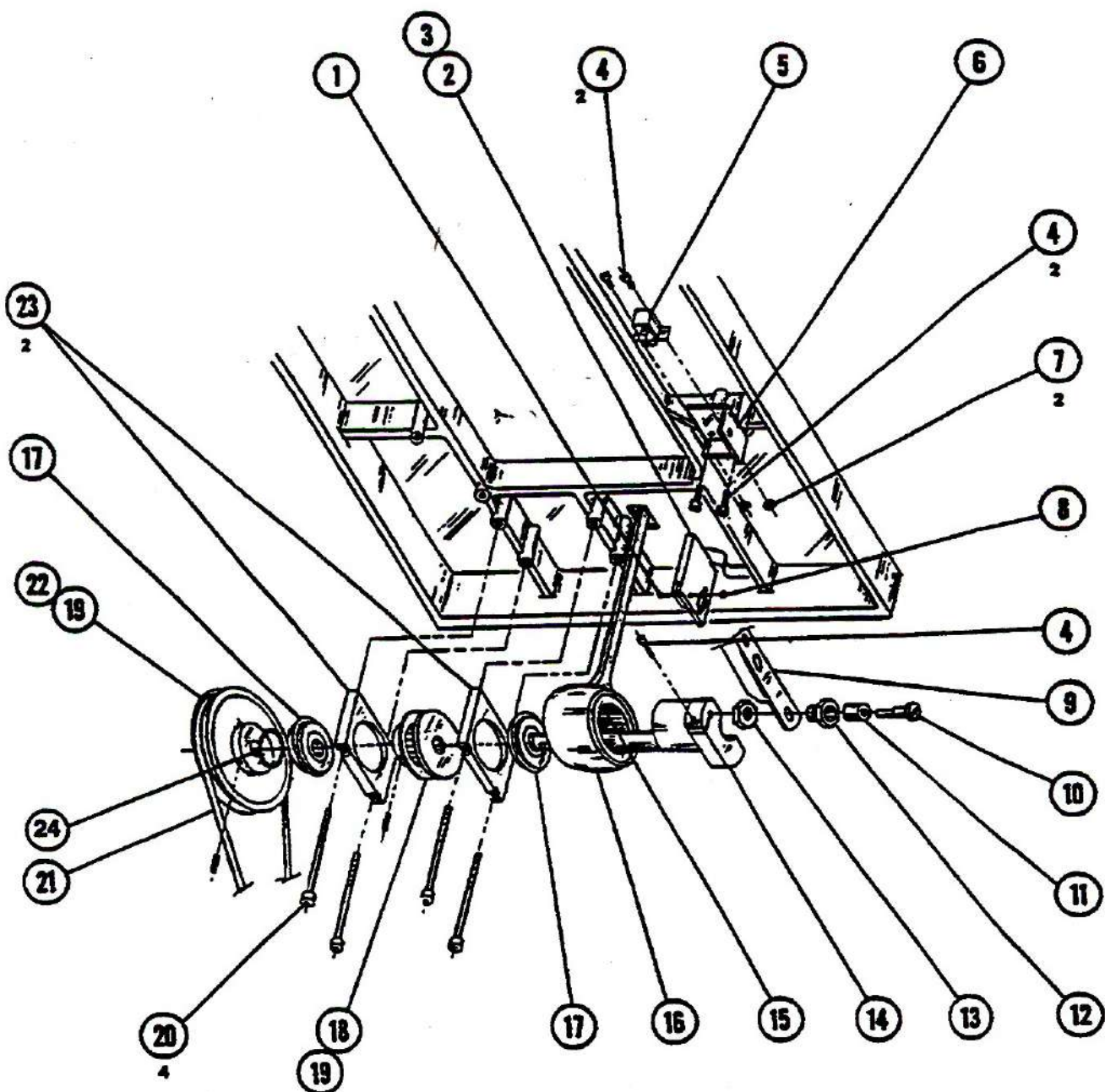


CLAMP PLATE ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7140.0.000	Clamp Plate	1
2	32.7132.0.000	Actuator Guard Plate	1
3	32.7131.0.000	Front Table Slide	1
4	03.6100.0.220	#10-32 x 1-1/4 HS Flat Hd. Screw	4
5	03.6100.0.212	#10-32 x 3/4 HS Flat Hd. Screw	4
6	07.6761.0.000	Bearing	2
7	32.7128.0.000	Bearing Mounting Block	2
8	01.2452.0.000	#8-32 x 1-1/4 Screw	1
9	07.6680.0.002	5/8 Hex x 1.5 Spacer	1
10	07.6481.0.000	Bumper	2
11	03.6862.8.100	#8 Fender Washer	*
12	01.2435.0.000	#10-32 x 3/4 HSC Screw	2
13	07.6600.0.002	1/4 Cable Clamp	4
14	01.1574.0.001	#8-32 x 3/8 Button Hd. Screw	5
15	32.7133.0.000	Rear Table Slide	1
18	32.7155.0.000	Table Switch Actuator	1
19	32.7123.0.000	Brush Cylinder Mounting Bar	1
20	32.7154.0.000	Brush Cylinder Switch Mount	1
21	03.6000.9.120	3/8-16 x 1-1/4 HSC Screw	3
22	03.3072.0.000	3/8-16 Jam Nut	3
23	24117-216	Clamping Collar	2
24	03.6222.4.108	#4-40 x 1/2 Bind. Hd. Screw	2
25	07.6600.0.006	1/2" Cable Clamp	1
26	32.7192.0.000	Clamp-up Stop Mount	2
27	32.7202.0.000	Belt Grip	1
28	01.2448.0.000	#6-32 x 1/2 Screw	2
29	07.6040.0.004	Table Drive Belt	1
30	07.6760.0.001	Retaining Ring	4
31	07.6761.0.001	1/2" Shaft	1
32	03.6000.0.220	#10-32 x 1-1/4 Screw	5
33	32.7127.0.000	Linear Shaft Mounting Block	3

* As Required

DRIVE SHAFT ASSEMBLY



DRIVE SHAFT ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	03.6222.3.108	#3-48 x 1/2 Bind. Hd. Screw	1
2	32.7168.0.000	Needle Positioner Sensor Mount	1
3	01.1624.0.002	#1/4-20 x 1-1/4 Screw	1
4	01.2412.0.000	#8-32 x 1/2 Screw	5
5	07.6000.0.001	Cabinet Latch	1
6	32.7160.0.000	Hold Up Bracket	1
7	03.6702.8.100	#8-32 Hex Nut	2
8	03.6702.3.100	#3-48 Jam Hex Nut	1
9	42.0154.1.000	Looper Arm	1
10	32.7111.0.000	Eccentric Stud	1
11	01.7413.1.000	Bearing	1
12	40.0445.2.800	Bearing Holder	1
13	40.0444.0.000	Retaining Nut	1
14	32.7110.0.000	Drive Shaft	1
15	01.7802.0.000	Needle Bearing	1
16	40.0151.1.000	Connecting Rod	1
17	07.6200.0.000	Bearing	2
18	32.7116.0.000	Pulley	1
19	01.8404.0.900	Key	2
20	03.6000.1.140	#1/4-20 x 2-1/2 Screw	4
21	07.6040.0.003	V-Belt	1
22	07.6040.0.002	Pulley	1
23	32.7113.0.000	Bearing Block	2
24	07.6481.0.006	Thrust Washer	1

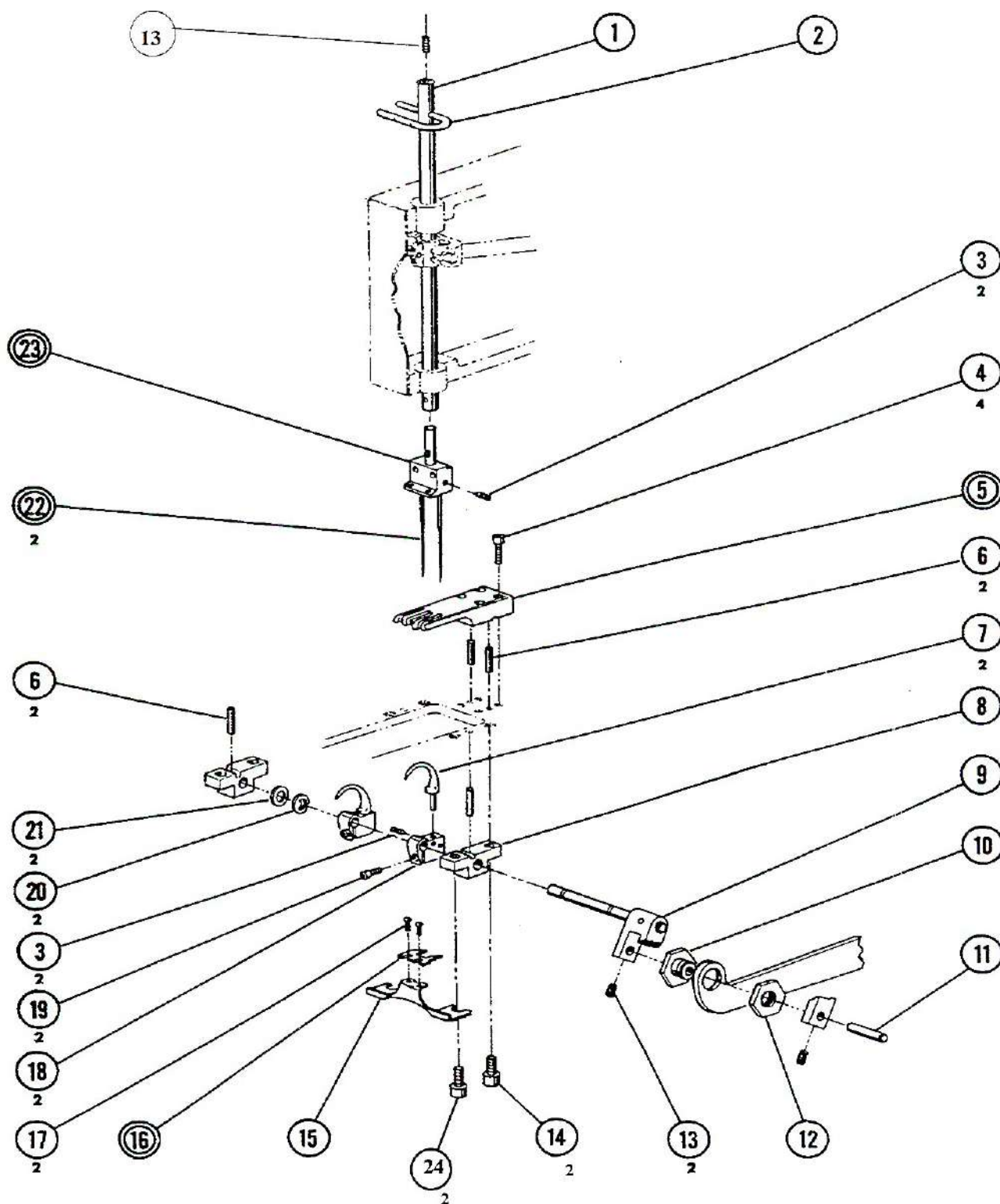
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3-13

NEEDLE BAR & LOOPER ASSEMBLIES



CENTER KNIFE ASSEMBLY

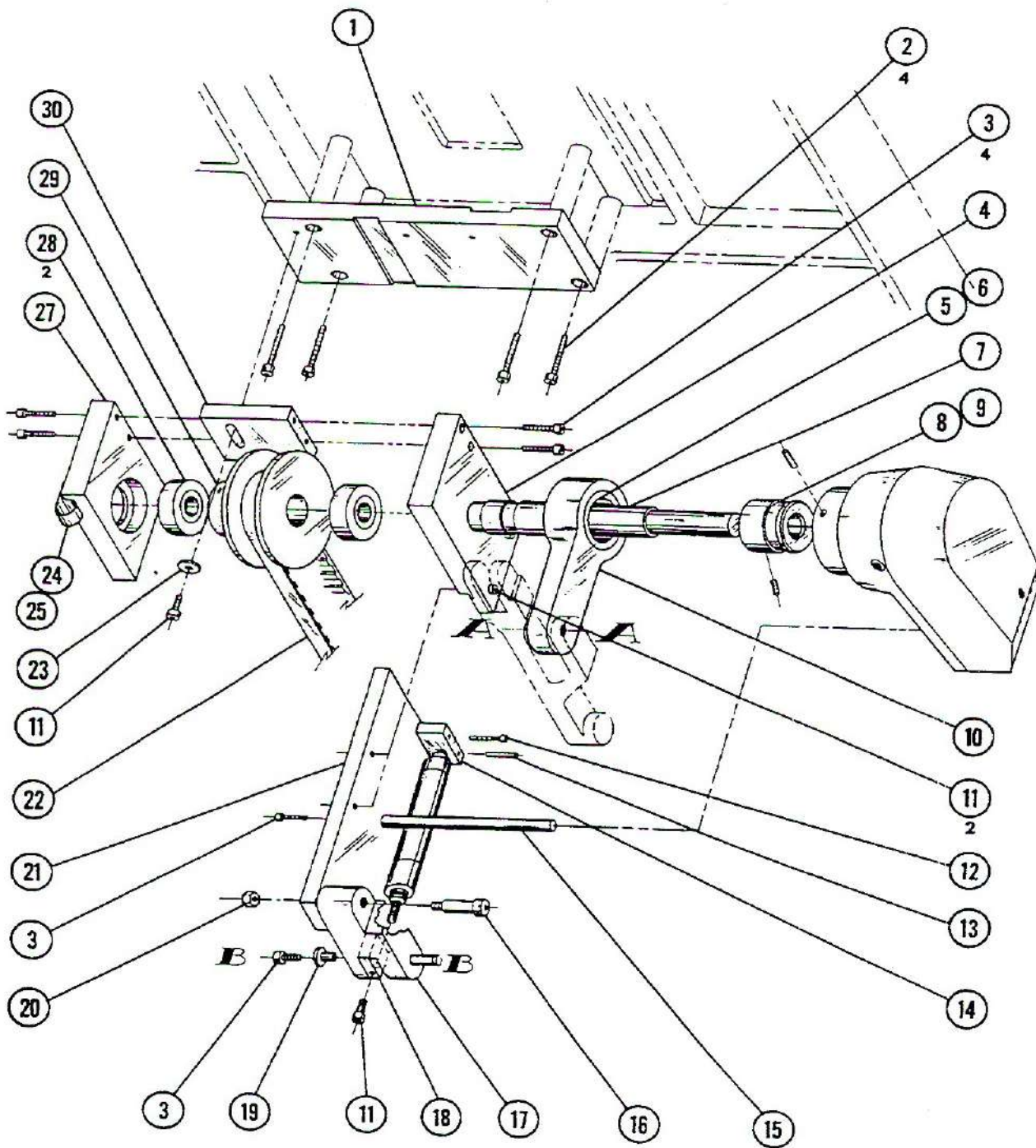
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.2196.0.000	Left Center Knife Guide	1
2	32.2208.0.000	Clamp	1
3	01.2318.0.000	Screw	1
4	32.2019.1.000	Knife Blade	1
5	01.2431.0.000	#4-48 x .19 Screw	2
6	32.2195.0.000	Right Center Knife Guide	1
7	32.7126.0.000	Pivot Block	1
8	01.7705.0.008	Flange Bearing	2
9	01.7314.0.001	Clamp Collar	2
10	01.4579.0.004	#10 Flat Washer	2
11	01.4003.0.000	#10 Lock Washer	2
12	01.2437.0.000	#10-32 x 5/8 Screw	2
13	01.6475.0.000	Retaining Ring	4
14	01.6928.0.002	1/4 x 5/8 Pin	1
15	01.6502.0.000	Retaining Ring	1
16	01.4591.0.000	Flat Washer	1
17	44.0966.2.000	Lever Assembly	1
18	32.2207.0.050	Knife Holder	1
19	01.2783.0.000	#4-40 x .88 Screw	2
20	01.3524.0.000	#4-40 Hex Nut	2
21	01.6950.0.004	#1/4 x 2-1/2 Dowel Pin	1
22	32.2194.0.000	Knife Guide Bearing	2
23	01.2413.0.000	#6-32 x .38 Screw	2
24	01.6928.0.001	Pin	1

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CENTER KNIFE DRIVE ASSEMBLY



CENTER KNIFE DRIVE ASSEMBLY

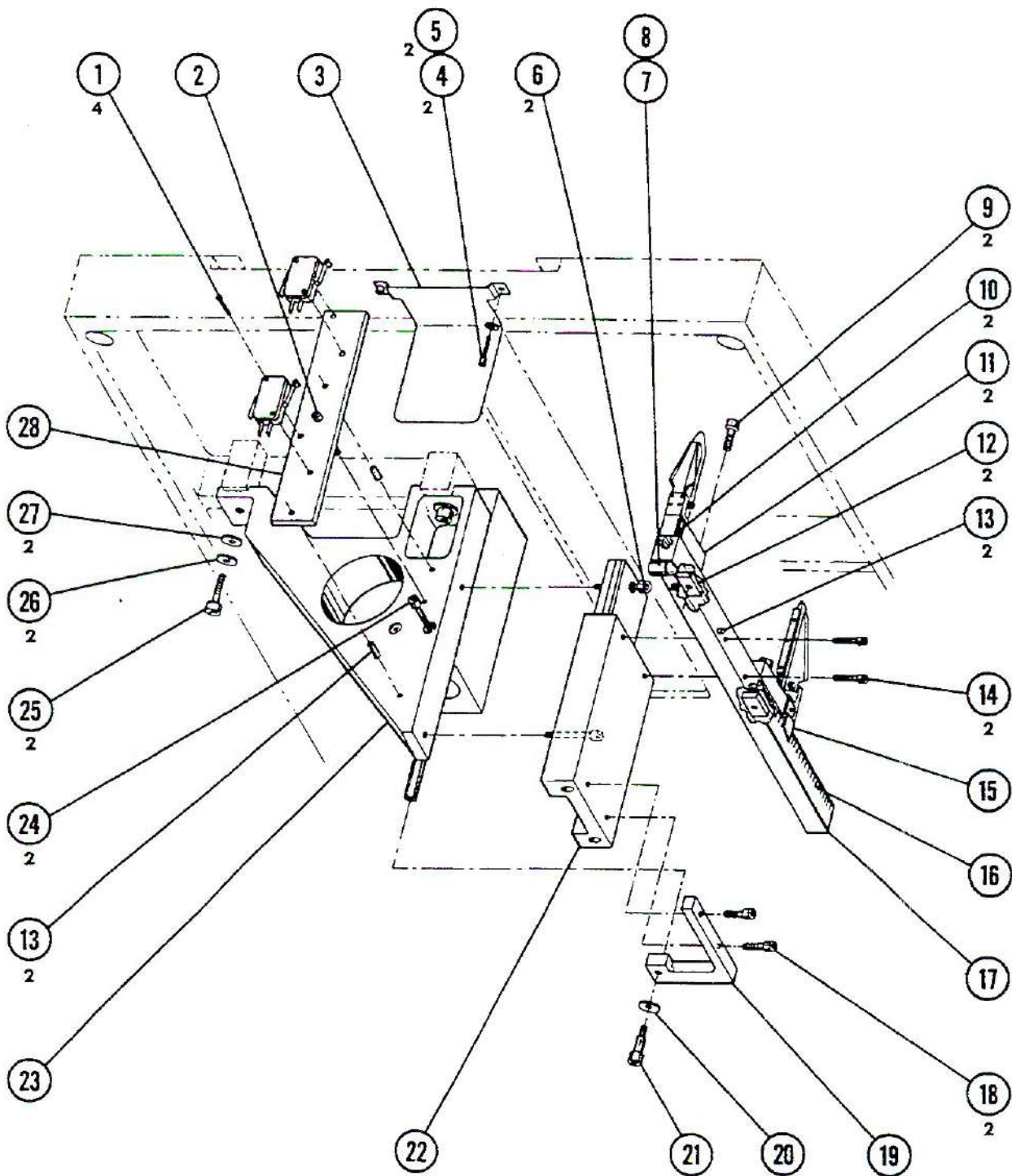
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7122.0.000	Takeup Pulley Plate	1
2	01.2449.0.000	#1/4-20 x 3/4 Screw	4
3	01.2450.0.000	#8-32 x 5/8 Screw	6
4	32.7115.0.000	Right Hand Bearing Block	1
5	44.0970.0.001	Cam Eccentric	1
6	01.6470.0.000	Roll Pin	1
7	32.7112.0.000	Shaft	1
8	32.7153.0.000	Adapter	1
9	01.2408.0.000	#10-32 x 1/4 Set Screw	1
10	32.2022.0.050	Crank Assembly	1
11	01.2437.0.000	#10-32 x 5/8 Screw	4
12	03.6000.0.216	#10-32 x 1 Screw	1
13	03.6900.5.116	5/32 x 1 Dowel Pin	1
14	32.7118.0.000	Clevis	1
15	07.6680.0.001	Spacer	1
16	01.1952.0.000	#5/16 x .62 Shoulder Screw	1
17	32.2030.0.050	Pivot Link Assembly	1
18	32.7119.0.000	Cylinder Rod Adapter	1
19	32.7120.0.000	Shoulder Bushing	1
20	01.3057.0.000	#1/4-20 Hex Nut	1
21	32.7117.0.000	Cylinder Mounting Plate	1
22	05.1182.0.001	Timing Belt	1
23	01.4579.0.004	#10 Flat Washer	1
24	07.6600.0.002	#1/4 Cable Clamp	1
25	01.1574.0.001	#8-32 x 3/8 Button Hd. Screw	1
27	32.7114.0.000	Left Hand Bearing Block	1
28	07.6200.0.001	Bearing	2
29	32.7116.0.000	Pulley	1
30	32.7121.0.000	Knife Bearing Block Plate	1

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TAB KNIFE ASSEMBLY



TAB KNIFE ASSEMBLY

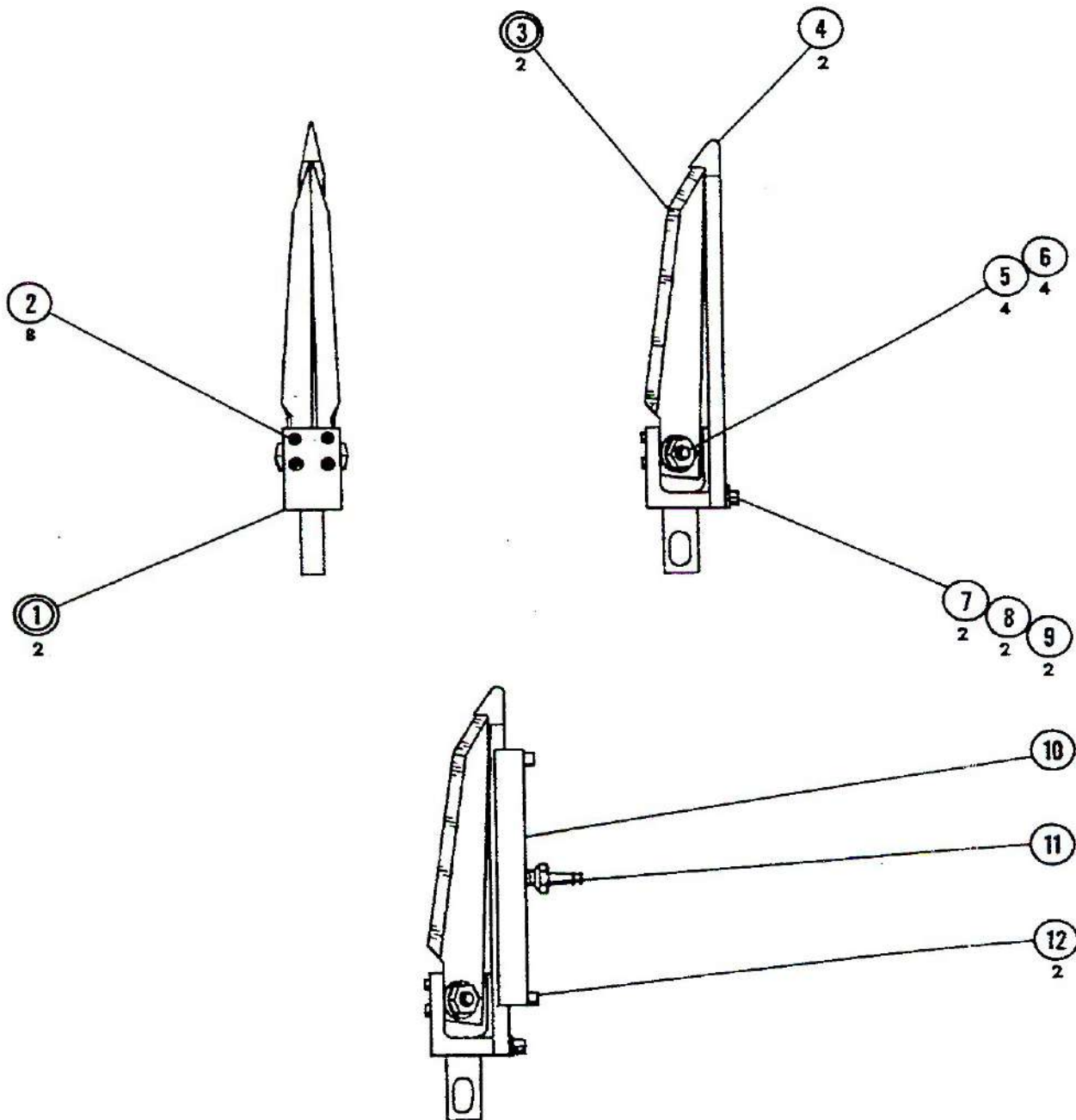
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	03.6222.4.108	#4-40 x 1/2 Bind. Hd. Screw	4
2	01.2412.0.000	#8-32 x 1/2 Screw	1
3	32.7177.0.000	Tab Knife Front Guard	1
4	01.2410.0.000	#8-32 x 1/4 Screw	2
5	01.4407.0.000	#8 Lock Washer	2
6	01.2450.0.000	#8-32 x 5/8 Screw	2
7	07.6600.0.002	#1/4 Cable Clamp	1
8	01.1574.0.001	#8-32 x 3/8 Button Hd. Screw	1
9	01.2435.0.000	#10-32 x 3/4 Screw	2
10	01.2413.0.000	#6-32 x 3/8 Screw	2
11	32.7149.0.000	Finger Shoe	2
12	32.7137.0.000	Tab Knife Adjusting Nut	2
13	03.6900.4.110	1/8 x 5/8 Dowel Pin	4
14	03.6000.6.112	#6-32 x 1/2 Screw	2
15	32.7183.0.000	Pointer	1
16	32.7178.0.000	Scale	1
17	32.7136.0.000	Holder Bar	1
18	01.2448.0.000	#6-32 x 1/2 Screw	2
19	32.7138.0.000	Cylinder Adapter	1
20	01.4579.0.004	#10 Flat Washer	1
21	01.1480.0.000	#1/4 x 3/8 Shoulder Screw	1
22	32.7141.0.000	Slide	1
23	32.7139.0.000	Tab Knife Mount	1
24	03.6000.0.112	#10-24 x 3/4 Screw	2
25	01.2421.0.001	#1/4-20 x 1 Screw	2
26	01.4578.0.000	#1/4 Lock Washer	2
27	01.4579.0.000	#1/4 Flat Washer	2
28	32.7163.0.000	Switch Mounting Plate	1

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TAB KNIFE



NOTE: ITEMS 10, 11, & 12 ON REAR KNIFE SET ONLY.

TAB KNIFE

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	See Chart	Tab Knife Holder	2
2	01.1956.0.000	#4-40 x .12 Cone Pt. Set Screw	8
3	See Chart	Tab Knife Set	2
	See Chart	Double Edge Knife	4
4	32.2045.0.100	Pointer Assembly	2
5	01.3074.0.000	#5-40 Hex Nut	4
6	01.4072.0.000	#4 Narrow Washer	4
7	03.6000.2.105	#2-56 x 5/16 Screw	2
8	01.4528.0.000	#2 Lock Washer	2
9	03.6852.2.100	#2 Flat Washer	2
10	32.7182.0.000	Thread Blow Off	1
11	25521-562	#10-32 x 3/32 Connector	1
12	03.6000.2.104	#2-56 x 1/4 Screw	2

Spacing Charts begin on page 3-50.

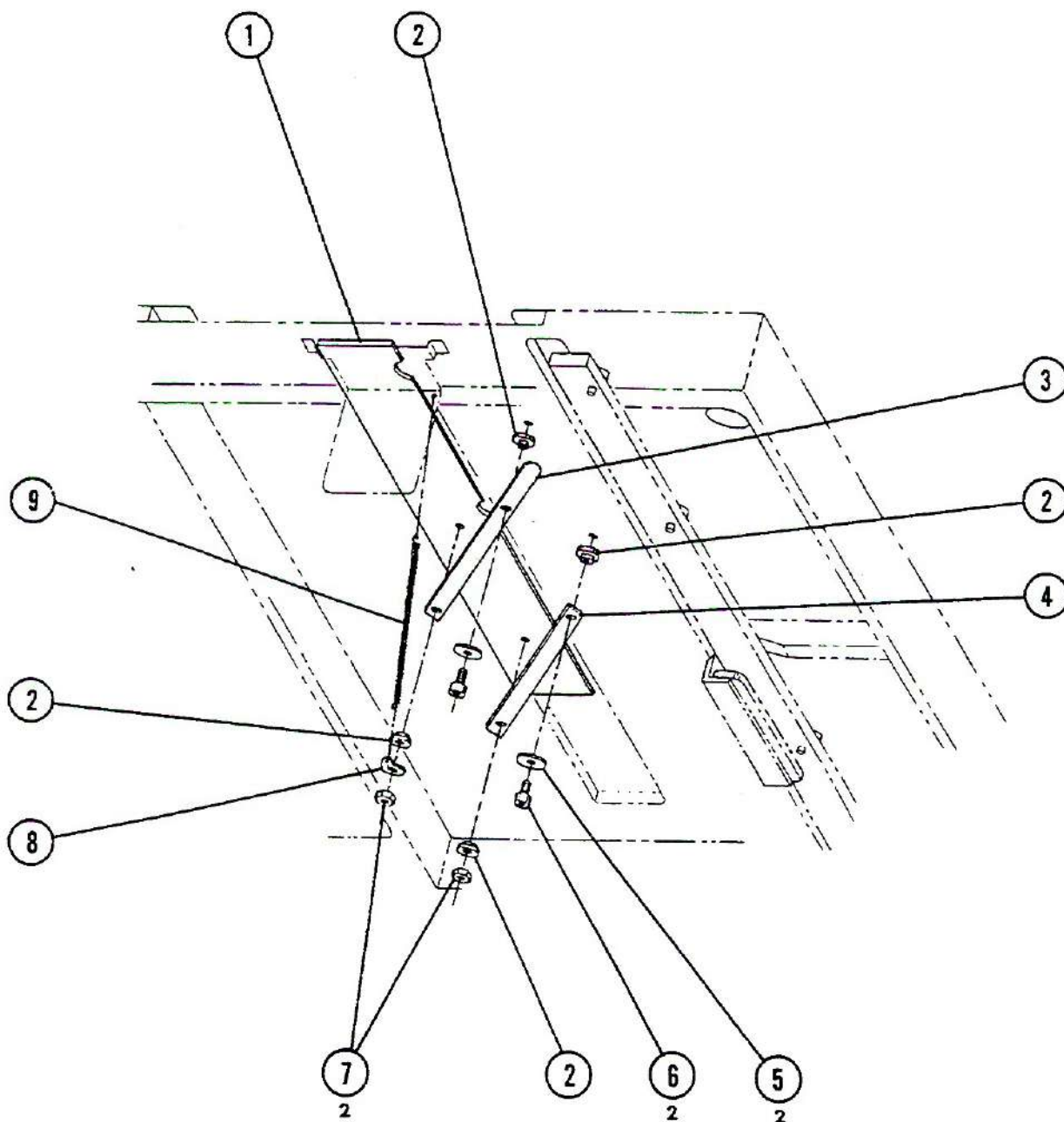
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3-23

TAB KNIFE GUARD ASSEMBLY



TAB KNIFE GUARD ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7143.0.000	Guard Plate	1
2	32.7144.0.000	Bushing	4
3	32.7145.0.000	Driver Link	1
4	32.7146.0.000	Link	1
5	01.4579.0.003	Flat Washer	2
6	01.2412.0.000	#8-32 x .50 Screw	2
7	03.6702.8.100	#8-32 Hex Nut	2
8	40.0434.0.000	Anchor	1
9	07.6440.0.012	Spring	1

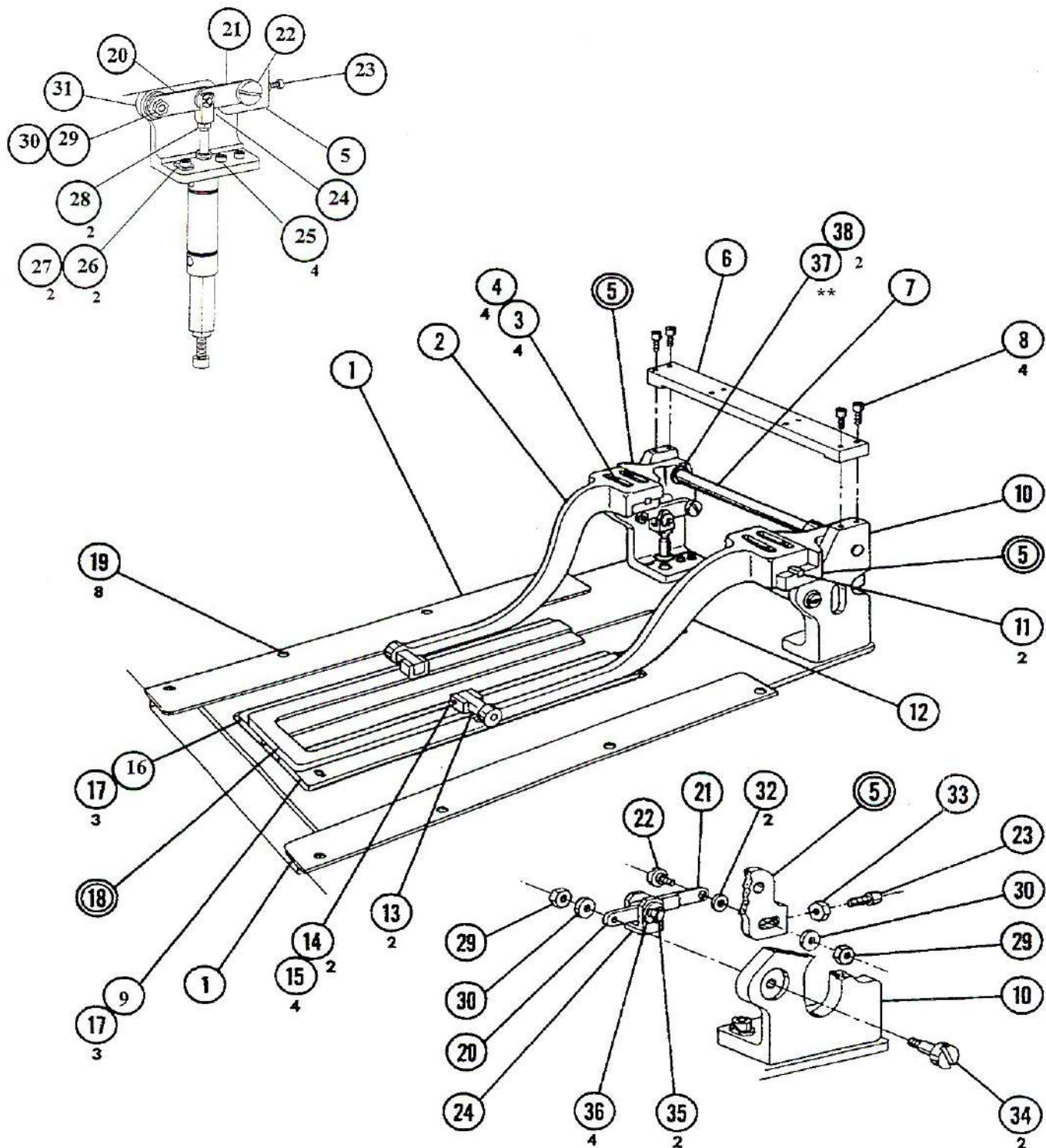
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3-25

CLAMP ASSEMBLY



CLAMP ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7134.0.000	Table Slide Cover	2
2	42.0071.0.004	Left Front Clamp Arm	1
3	01.2447.0.000	#10-24 x .620 Screw	4
4	01.4402.0.000	#10 Flat Washer	4
5	See Chart	Rear Clamp Arm	2
6	32.7185.0.000	Plate	1
7	41.0080.0.000	Slide Bar	1
8	01.2448.0.000	#6-32 x 1/2 Screw	4
9	32.7540.0.002	Right Hand Clamp Plate	1
10	32.7125.0.000	Right Hand Clamp Support	1
11	01.7530.0.000	Key	2
12	42.0071.0.003	Right Front Clamp Arm	1
13	41.0072.0.002	Pivot Block	2
14	01.6477.0.000	Pin	2
15	01.6368.0.000	Retaining Ring	4
16	32.7540.0.001	Left Hand Clamp Plate	1
17	01.2633.0.000	#8-32 x 3/16 Button Hd. Screw	6
18	See Chart	Clamp Foot Assembly	1
19	01.2545.0.000	#8-32 x 1/4 Button Hd. Screw	8
20	40.0085.0.000	Front Lever	2
21	40.0079.0.000	Rear Lever	2
22	01.1419.0.000	#10-32 x .374 x .127L Shoulder Screw	2
23	01.2482.0.000	#8-32 x .75 Screw	2
24	32.7180.0.000	Clevis	2
25	01.2435.0.000	#10-32 x .75 Screw	4
26	01.2493.0.000	#10-32 x .50 Screw	2
27	40.0434.0.000	Spring Anchor	2
28	01.3470.0.000	#1/4-28 Hex Nut	2
29	01.3471.0.000	#10-32 Hex Nut	4
30	01.4441.0.000	#10 Flat Washer	4
31	32.7124.0.000	Left Hand Clamp Support	1
32	01.4035.0.000	Spacer	2
33	03.6702.8.100	#8-32 Hex Nut	2
34	01.1418.0.000	#10-32 x .250 x .5L Shoulder Screw	2
35	01.6489.0.000	Pin	2
36	01.6558.0.000	Retaining Ring	4
37	01.4484.0.000	Spacer	As Req'd
38	01.6561.0.000	Retaining Ring	2

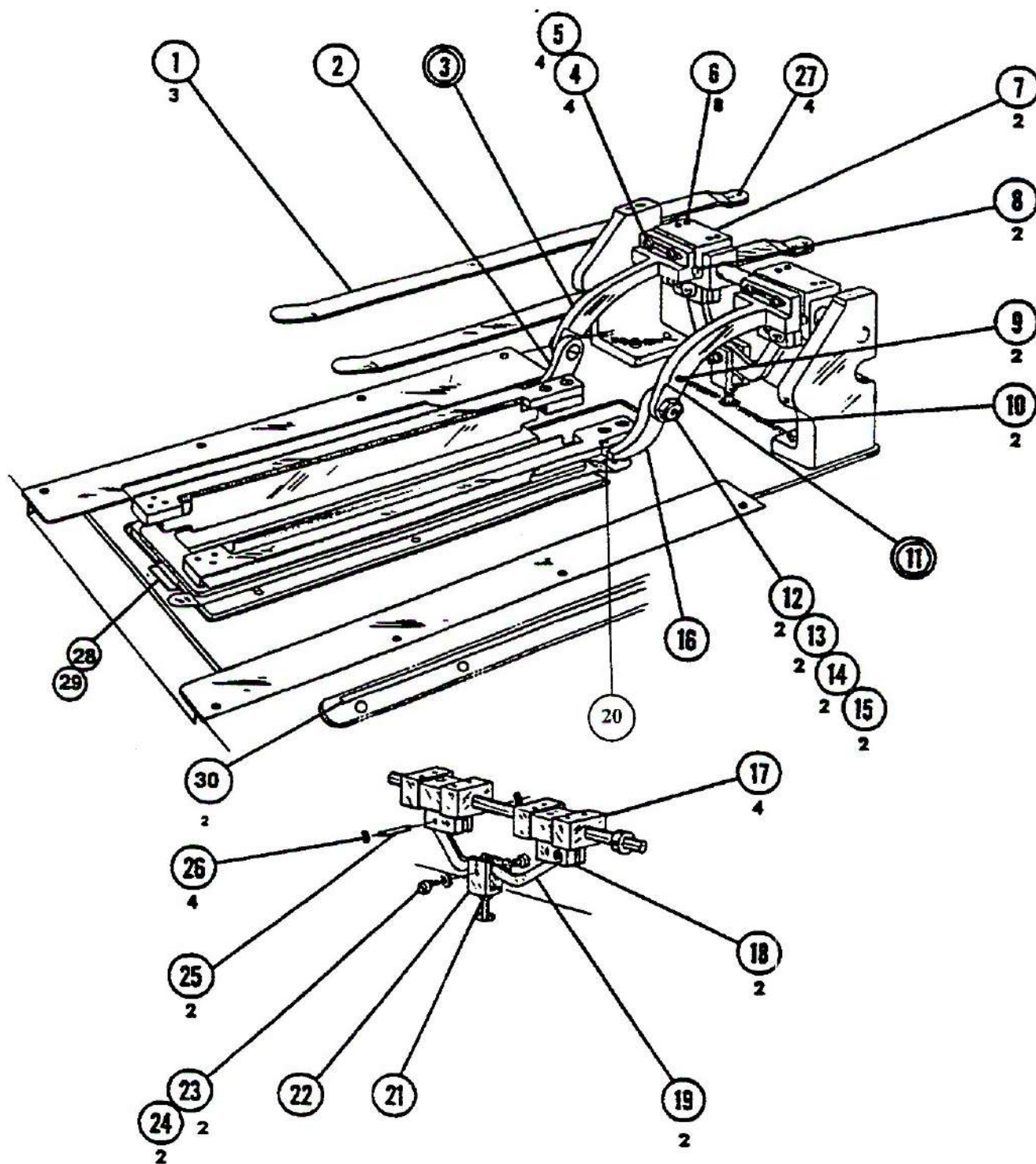
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PATCH FOLDING ASSEMBLY



PATCH FOLDING ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	40.0596.0.000	Trouser Long Hold Down	3
2	42.0073.0.004	Left Hand Lower Brush Arm	1
3	See Chart	Left Hand Upper Brush Arm	1
4	01.2412.0.000	#8-32 x 1/2 Screw	4
5	01.4446.0.000	#8 Washer	4
6	01.2413.0.000	#6-32 x .38 Screw	8
7	42.0846.1.000	Slide Block Cover	2
8	01.7530.0.000	Key	2
9	01.1422.0.000	Special Screw	2
10	01.5419.0.000	Spring	2
11	See Chart	Right Hand Upper Brush Arm	1
12	01.1486.0.000	#1/4-20 x .300 Screw	2
13	01.4044.0.000	1/4 Flat Washer	2
14	01.4578.0.000	1/4 Ext. Washer	2
15	01.3057.0.000	#1/4-20 Hex Nut	2
16	42.0073.0.003	Right Hand Lower Brush Arm	1
17	41.0433.0.000	Slide Block	4
18	41.0081.0.000	Slide Bracket	2
19	41.0086.0.000	Spreader Arm	2
20	03.6200.0.204	#10-32 x 1/4 BH Screw	2
21	01.3400.0.000	#5/16-24 Jam Hex Nut	1
22	32.7173.0.000	Clevis	1
23	01.2580.0.000	#10-32 x .1550 x .163 Screw	2
24	01.4003.0.000	#10 Lock Washer	2
25	01.6483.0.000	Pin	2
26	01.6474.0.000	Retaining Ring	4
27	01.2980.0.002	#10-32 x .38 Button Hd. Screw	4
28	32.7150.0.000	Filler Block Clamp	1
29	01.2461.0.000	#6-32 x .25 F.H. Screw	1
30	32.2203.0.000	Cover Plate, Black	2

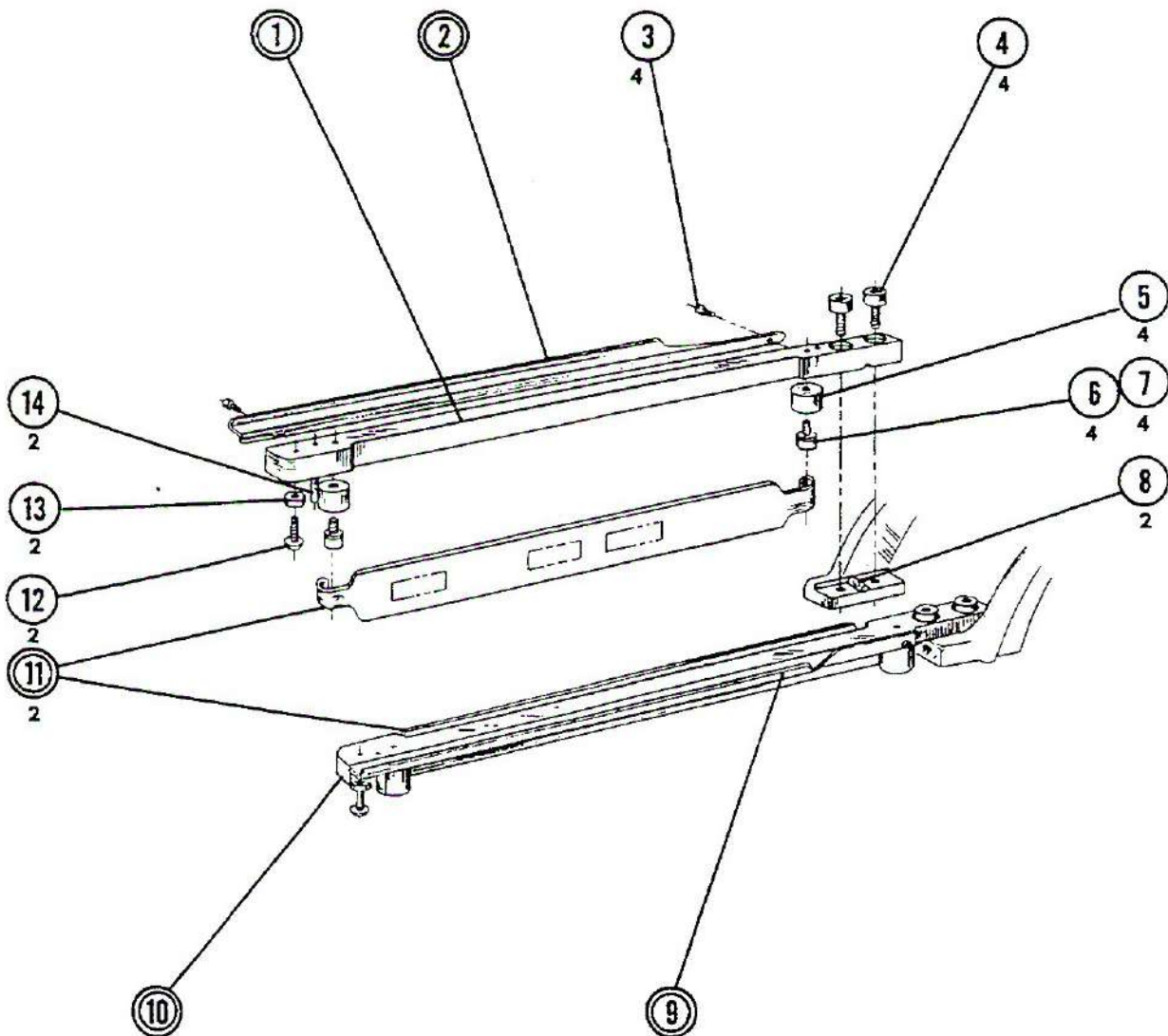
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PATCH FOLDING BRUSHES

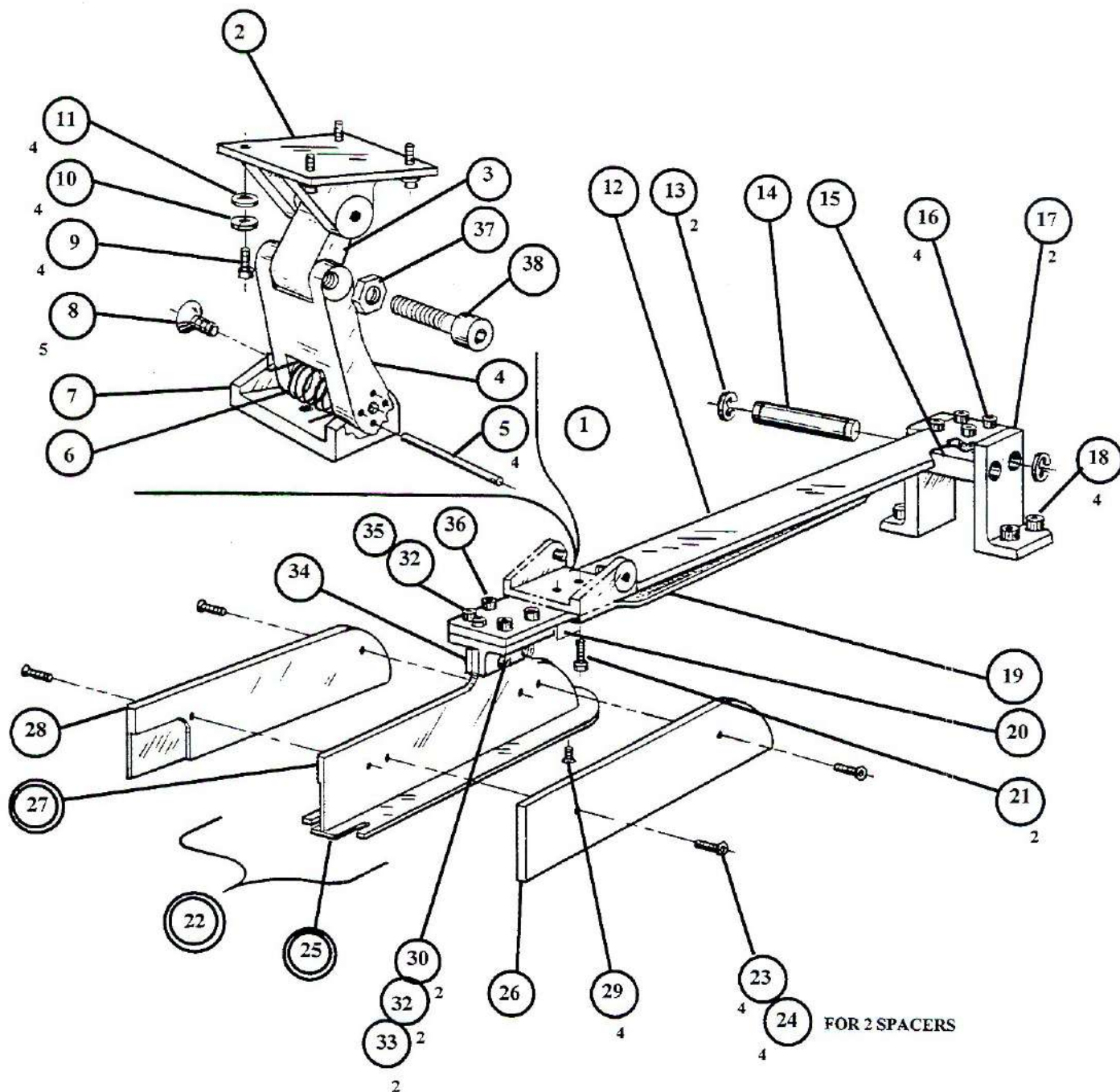


PATCH FOLDING BRUSHES

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	See Chart	Left Hand Brush	1
2	See Chart	Left Hand Patch Locator	1
3	01.2431.0.000	#4-48 x .19 Screw	4
4	01.2407.0.000	#10-24 x .38 Screw	4
5	41.0468.0.000	Pivot	4
6	01.4406.0.000	#6 Lock Washer	4
7	01.2413.0.000	#6-32 x .38 Screw	4
8	40.0476.0.000	Leveling Wedge	2
9	See Chart	Right Hand Patch Locator	1
10	See Chart	Right Hand Brush	1
11	See Chart	Brush Blade	2
12	01.2569.0.000	#6-32 x .50 Button Hd. Screw	2
13	01.3426.0.000	#6-32 Hex Nut	2
14	01.6521.0.000	Roll Pin	2

Spacing Charts begin on page 3-50.

PATCH GUIDE ASSEMBLY



PATCH GUIDE ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.2142.0.050	Stabilizer Assembly	1
2	32.2133.0.000	Front Guide Block	1
3	42.0829.0.000	Lower Link	1
4	42.0828.0.000	Upper Link	1
5	01.6633.0.000	Pin	4
6	01.5490.0.000	Spring	1
7	41.0615.0.000	Bracket	1
8	01.2713.0.000	#10-32 x 3/8 Screw	5
9	01.2419.0.000	#4-40 x 3/8 Screw	4
10	03.6802.4.100	#4 Lock Washer	4
11	01.4072.0.000	#4 Flat Washer	4
12	40.0413.0.000	Patch Guide Arm	1
13	01.6454.0.000	Retaining Ring	2
14	01.6488.0.000	Pin	1
15	32.7174.0.000	Pivot Block	1
16	01.2412.0.000	#8-32 x 1/2 Screw	4
17	32.7175.0.000	Bracket	2
18	01.2493.0.000	#10-32 x 1/2 Screw	4
19	40.0708.0.000	Cam Plate	1
20	40.0414.1.000	Patch Guide Block	1
21	01.2531.0.000	#6-32 x 7/16 Screw	2
22	See Chart	Patch Guide Assembly	1
23	01.2472.0.000	#4-40 x 3/16 Screw	4
24	01.2488.0.000	#4-40 x 1/4 Screw for 2 Spacers	4
25	See Chart	Horizontal Plate	1
26	See Chart	Right Hand Spacer Plate	1
27	See Chart	Vertical Plate	1
28	See Chart	Left Hand Spacer Plate	1
29	01.2638.0.002	#2-56 x 1/4 Screw	4
30	01.2448.0.000	#6-32 x 1/2 Screw	2
32	01.3508.0.000	#6-32 Hex Nut	3
33	01.4470.0.000	Spacer	2
34	40.0648.0.000	Nut Plate	1
35	01.2409.0.000	#6-32 x 3/8 Set Screw	1
36	01.2411.0.000	#6-32 x 1/4 Screw	4
37	32.2217.0.000	Support Nut	1
38	01.2757.0.002	#10-32 x 1.50 Screw	1

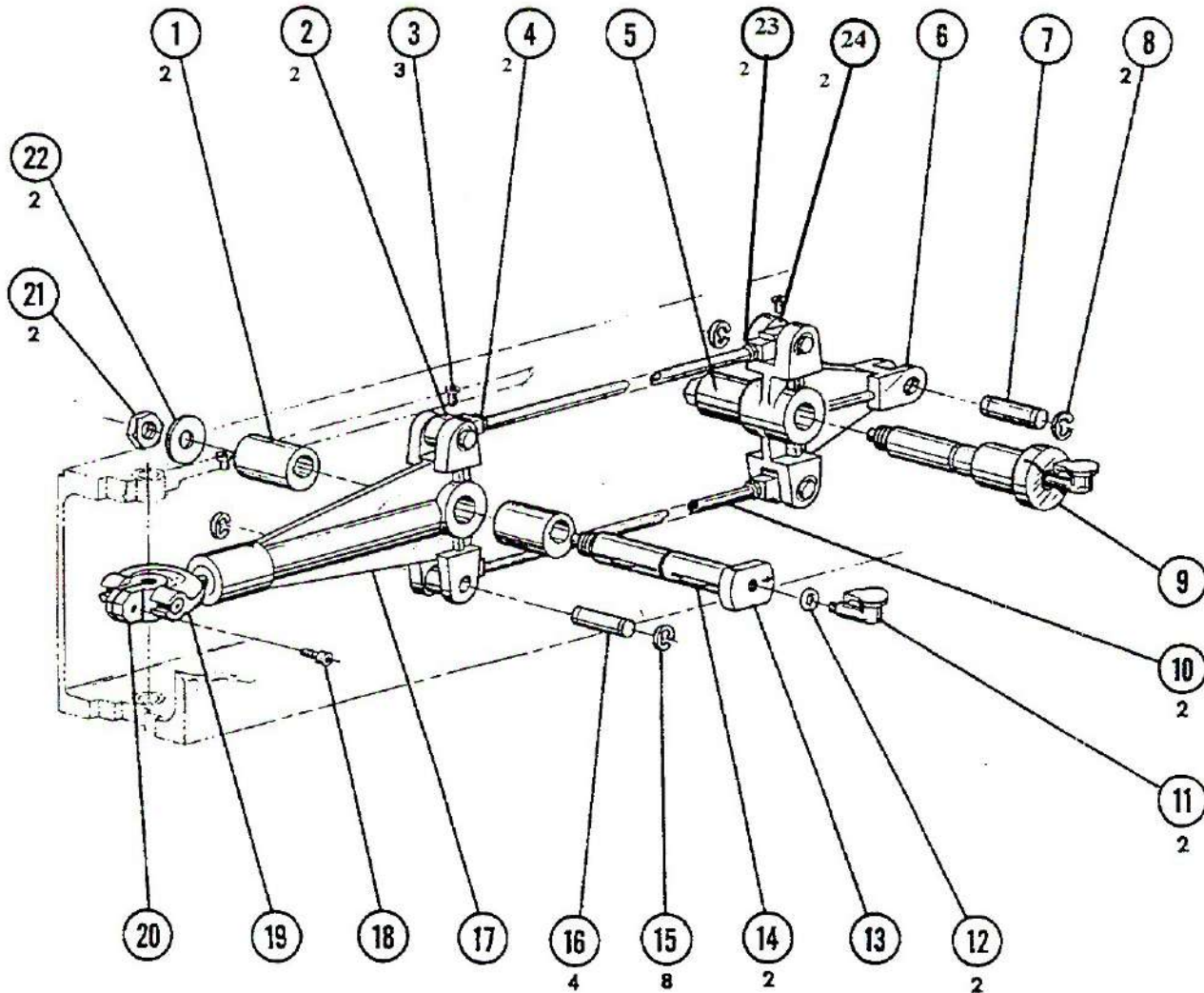
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NEEDLE BAR DRIVE ASSEMBLY



NEEDLE BAR DRIVE ASSEMBLY

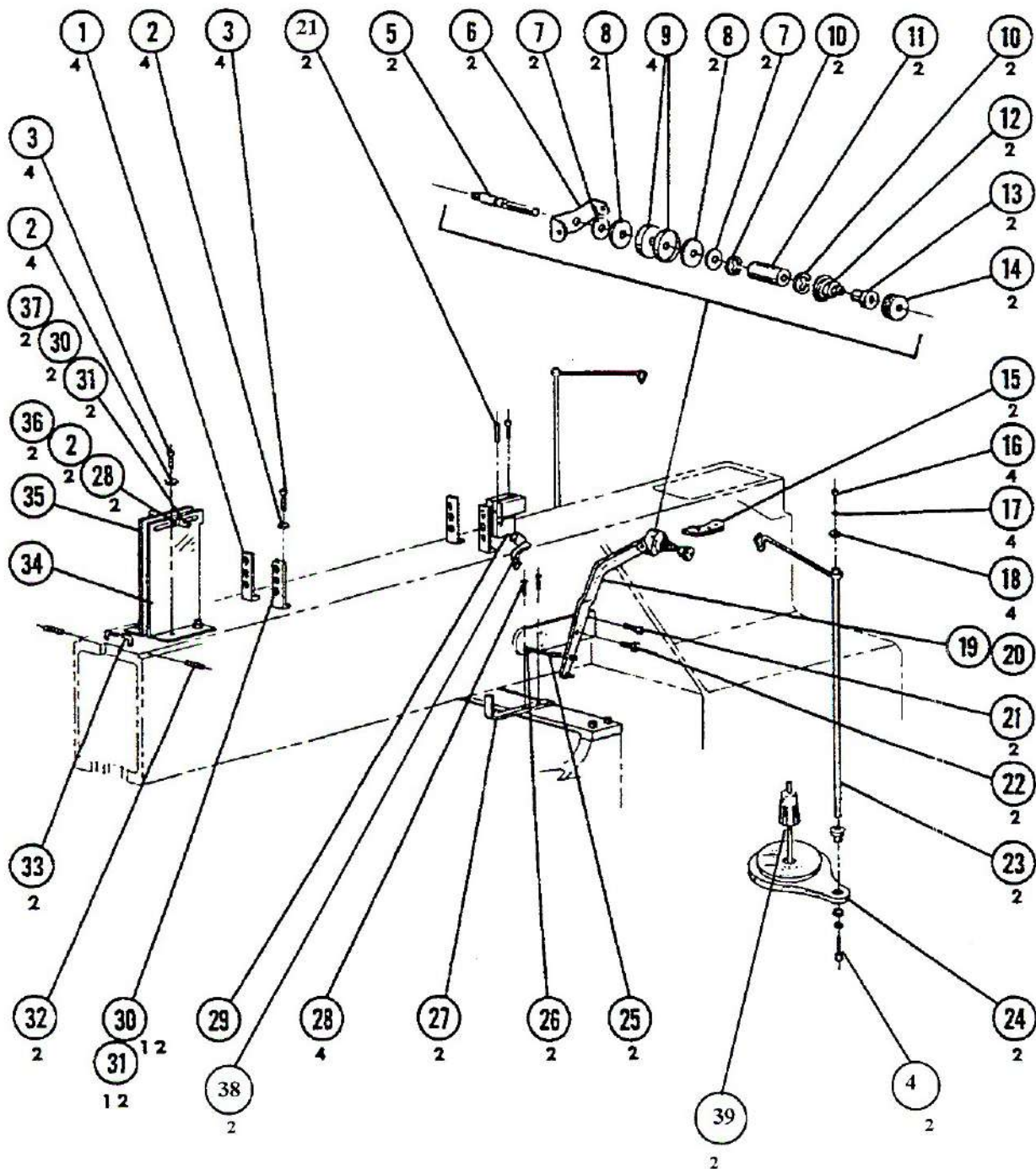
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	40.0567.0.000	Eccentric Bushing	2
2	32.7198.0.001	Rod Connector	2
3	40.0593.0.000	Oil Inlet	3
4	03.6702.6.200	#6-40 Hex Nut	2
5	30.0007.0.000	Bushing	1
6	40.0465.0.000	Rear Lever	1
7	01.6504.0.000	Pin	1
8	01.6475.0.000	Retaining Ring	2
9	40.0010.0.000	Rear Shaft	1
10	32.7199.0.000	Rod	2
11	30.0011.0.000	Oil Cup	2
12	01.6551.0.000	Retaining Ring	2
13	40.0566.0.000	Front Shaft	1
14	01.8401.0.000	Key	2
15	01.6454.0.000	Retaining Ring	8
16	01.6407.0.000	Pin	4
17	40.0050.0.050	Front Lever	1
18	01.2402.0.000	#4-48 x .25 Screw	1
19	30.0009.0.000	Yoke	1
20	30.0008.0.000	Gimbal	1
21	03.6702.7.200	#5/16-24 Hex Nut	2
22	01.4439.0.000	#5/16 Flat Washer	2
23	03.6710.6.200	#6-40 L.H. Hex Nut	2
24	32.7198.0.002	Rod Connector	2

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THREAD TENSION AND CONTROL ASSEMBLY



THREAD TENSION AND CONTROL ASSEMBLY

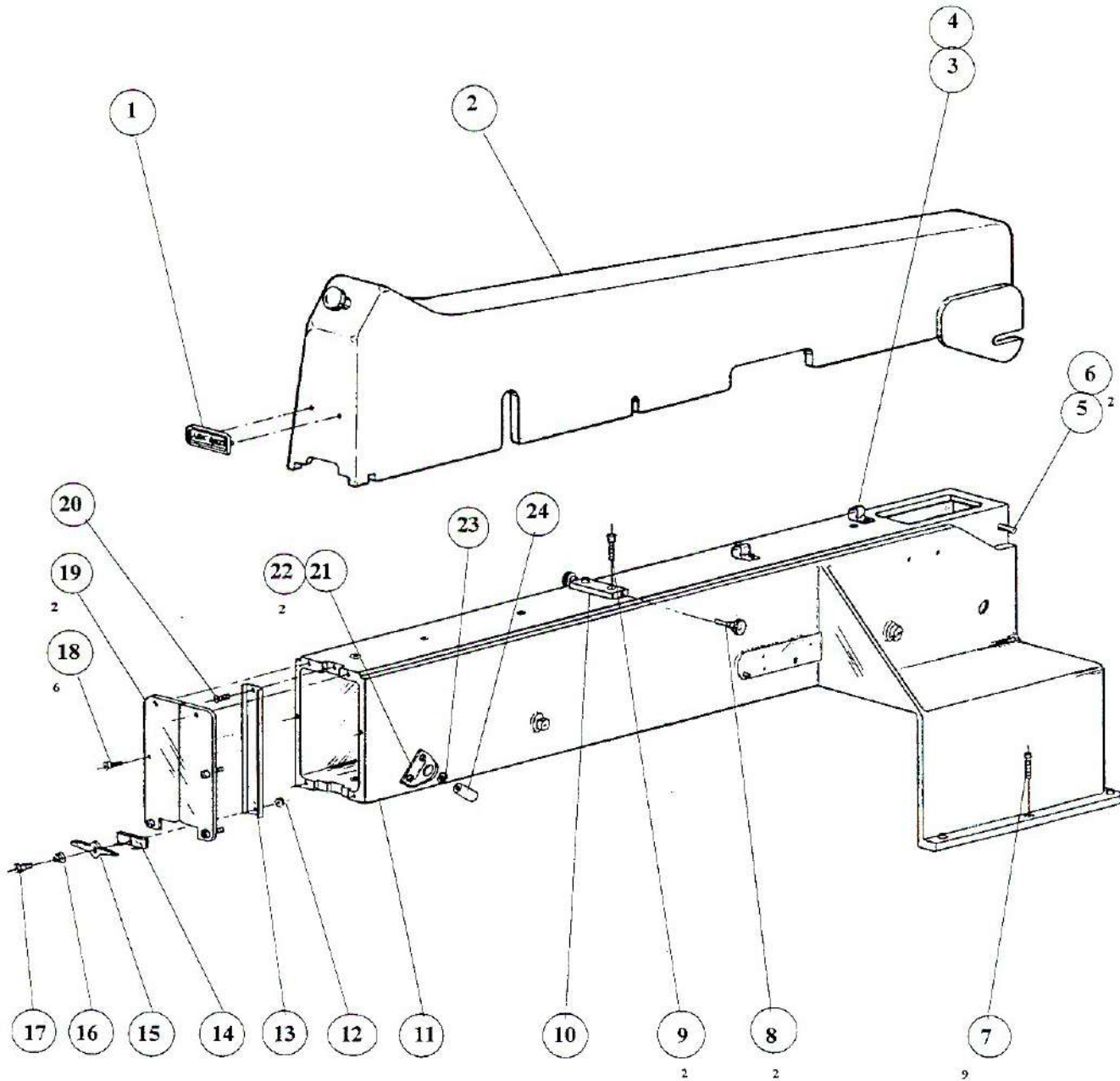
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	42.0039.0.000	Thread Guide Bracket	4
2	01.4411.0.000	#6 Flat Washer	2
3	01.2411.0.000	#6-32 x 1/4 Screw	8
4	03.6302.0.136	1/4-20 x 2-1/4 Screw	2
5	01.1433.0.000	Stud	2
6	32.1009.0.000	Thread Guide	2
7	01.4005.0.000	Washer	4
8	01.4424.0.000	Felt Washer	4
9	40.0475.0.000	Tension Disc	4
10	01.6474.0.000	Retaining Ring	4
11	01.7448.0.000	Bushing	2
12	01.5001.0.000	Spring	2
13	20.0603.0.000	Collar	2
14	01.3036.0.000	Knurled Nut	2
15	05.1302.0.000	Thread Smoother	2
16	01.2430.0.000	#1/4-20 x 5/8 Screw	2
17	01.4578.0.000	#1/4 Lock Washer	4
18	01.4579.0.000	#1/4 Flat Washer	6
19	32.1035.0.050	Right Hand Thread Drawoff Lever	1
20	32.1034.0.050	Left Hand Thread Drawoff Lever	1
21	01.2448.0.000	#6-32 x 1/2 Screw	4
22	01.1410.0.000	#10-24 x .125 Shoulder Screw	2
23	32.7176.0.000	Thread Stand Post	2
24	07.6721.0.000	Thread Stand	2
25	07.6440.0.015	Spring	2
26	01.6452.0.000	Pin	2
27	32.7186.0.000	Thread Adj. Actuator	2
28	01.1661.0.001	Button Hd. Screw	6
29	32.7170.0.000	Thread Brake Mtg. Block Switch	1
30	01.7447.1.000	Rover Guide	14
31	01.6551.0.000	Retaining Ring	14
32	03.6410.6.106	#6-32 x .375 Set Screw	2
33	32.1006.0.000	Adjustable Bar	2
34	32.1010.0.000	Right Bracket	1
35	32.1019.0.000	Left Bracket	1
36	01.3508.0.000	#6-32 Hex Nut	2
37	32.1007.0.000	Eyelet	2
38	32.7196.0.000	Actuator Switch Alt.	2
39	07.6721.0.001	Pin Cap	2

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HEAD AND TOP COVER



HEAD AND TOP COVER

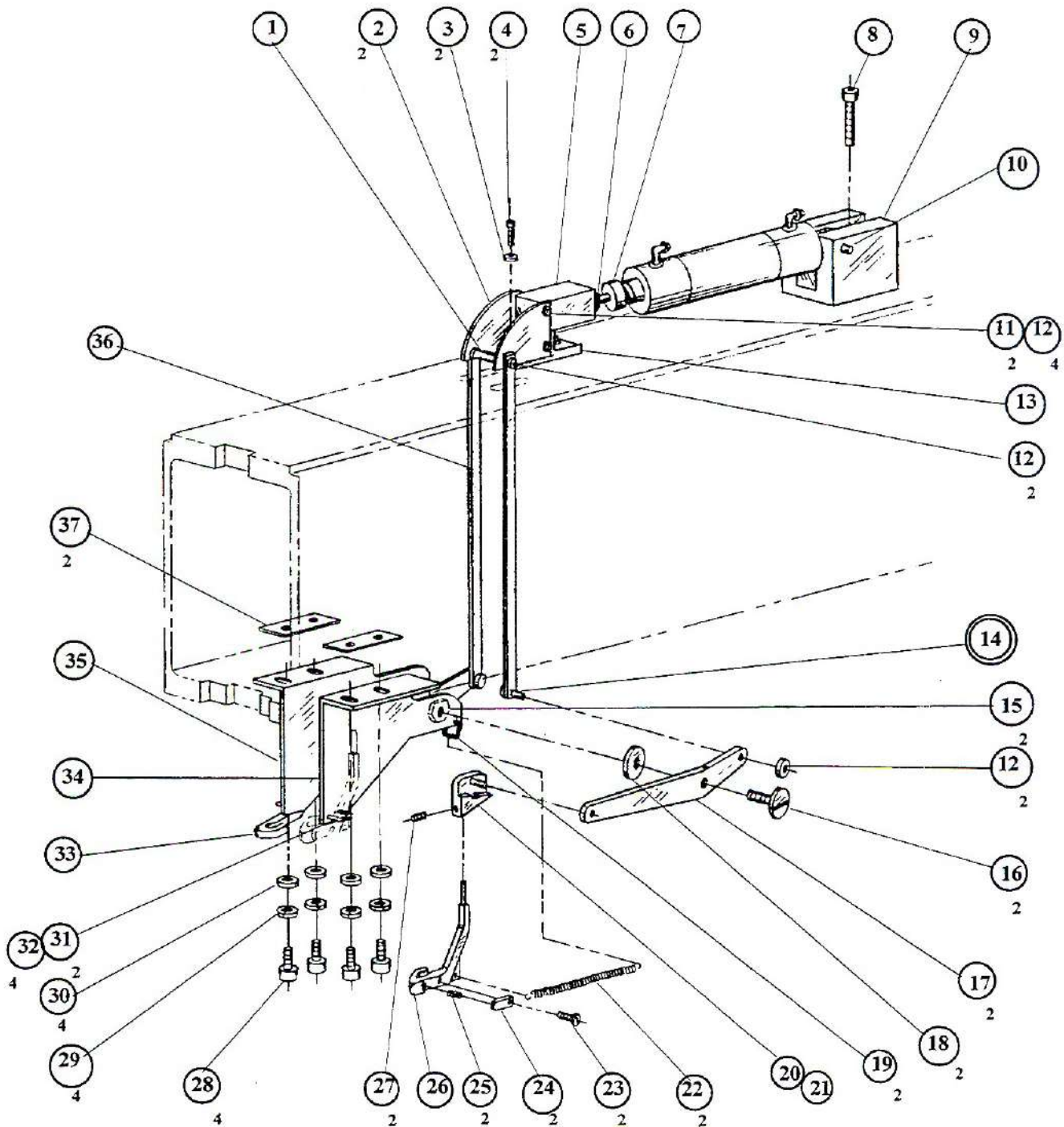
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	05.1379.0.000	Nameplate	1
2	32.7172.0.000	Top Cover	1
3	07.6600.0.004	#3/8 Cable Clamp	2
4	01.1574.0.001	#8-32 x 3/8 Button Hd. Screw	2
5	01.6657.0.001	Hinge Pin	1
6	01.6662.0.000	Retaining Ring	2
7	01.2430.0.000	#1/4-20 x 5/8 Screw	9
8	07.6681.0.001	Knob	2
9	01.2448.0.000	#6-32 x .50 Screw	2
10	32.7187.0.000	Cover Clamp Block	1
11	32.7169.0.000	Head	1
12	01.3016.0.000	#6-52 Hex Nut	1
13	32.1014.0.000	Guide	1
14	32.1015.1.000	Guide	1
15	32.1030.0.000	Plate	1
16	01.1144.0.000	Spring	1
17	01.1475.0.000	#6-52 x .203 Shoulder Screw	1
18	01.2401.0.000	#4-40 x .25 Screw	6
19	32.7188.0.000	Thread Cover	2
20	01.2406.0.000	#2-56 x .19 Flat Hd. Screw	1
21	07.0692.0.000	Cylinder Mounting Bracket	1
22	01.2980.0.002	#10-32 x .38 Btn. Hd. Screw	2
23	01.3471.0.000	#10-32 Hex Nut	1
24	32.2216.0.000	Nylon Plunger	1

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THREAD PICKUP ASSEMBLY



THREAD PICKUP ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	01.6658.0.000	Shaft	1
2	42.0899.0.000	Lever	2
3	01.4407.0.000	#8 Lock Washer	2
4	01.2506.0.000	#8-32 x .44 Screw	2
5	32.7158.0.000	Cylinder Rod Link	1
6	01.3471.0.000	#10-32 Hex Nut	1
7	07.6680.0.006	Spacer	1
8	01.2493.0.000	#10-32 x 1/2 Screw	1
9	32.7159.0.000	Cylinder Mounting Block	1
10	03.6900.5.112	Pin	1
11	01.6659.0.000	Shaft	2
12	01.6552.0.000	Retaining Ring	8
13	42.0901.0.000	Mounting Block	1
14	See Chart	Pin	-
15	01.3508.0.000	#6-32 Hex Nut	2
16	01.1440.0.000	#6-32 x .102 Shoulder Screw	2
17	40.0618.2.000	Thread Pickup Lever	2
18	01.4487.0.000	Spacer	2
19	40.0759.0.000	Hook	2
20	40.0428.1.001	Right Hand Pickup Holder	1
21	40.0428.1.002	Left Hand Pickup Holder	1
22	01.5455.0.000	Spring	2
23	01.1589.0.000	Screw	2
24	32.5027.0.000	Retainer	2
25	32.7197.0.000	Spring	2
26	32.5024.0.000	Right Hand Pickup Arm	1
27	01.2515.0.000	#4-48 x .12 Set Screw	2
28	03.6000.4.108	#4-40 x 1/2 Screw	4
29	03.6802.4.100	#4 Lock Washer	4
30	01.4072.0.000	#4 Flat Washer	4
31	40.0760.1.000	Retainer	2
32	01.6569.0.000	Spring Pin	4
33	32.5025.0.000	Left Hand Pickup Arm	1
34	40.0418.2.001	Right Hand Bracket	1
35	40.0418.2.002	Left Hand Bracket	1
36	42.0619.0.000	Link	2
37	32.7193.0.000	Thread Pick-up Spacer	2

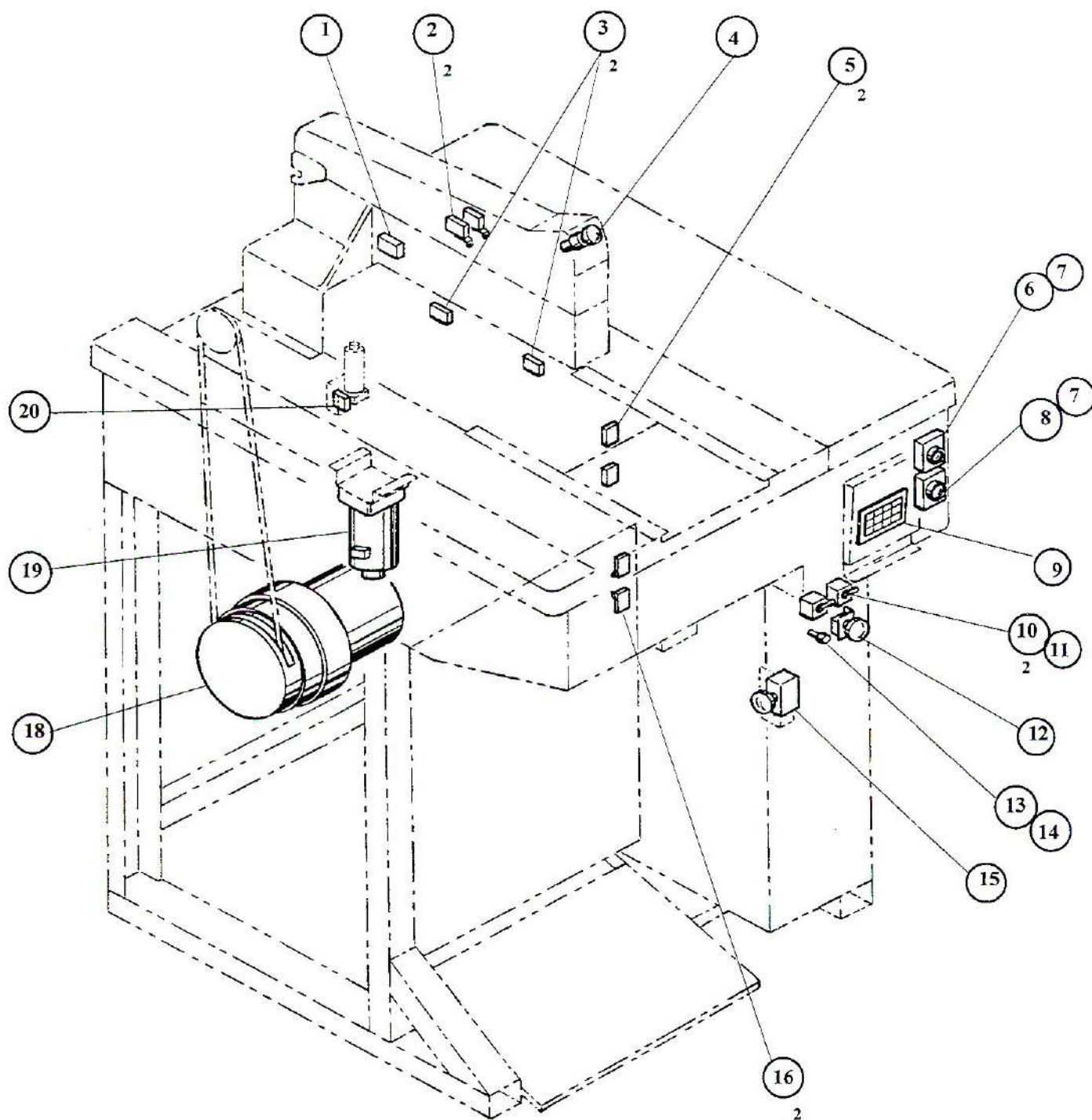
Spacing Charts begin on page 3-50.

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ELECTRICAL ASSEMBLY



ELECTRICAL ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7954.0.050	Needle Up Proximity Switch	1
2	04.1358.1.000	Thread Break Switch	2
3	06.0120.0.000	Clamp Table Switch	2
4	07.6320.0.000	Sew Interrupt Switch	1
5	06.0120.0.000	Tab Knife Switch	2
6	07.6720.0.003	On Switch	1
7	07.6720.0.007	24V Bulb	2
8	07.6720.0.002	Threading Safety Switch	1
9	07.6483.0.001	Keypad	1
10	07.6081.0.000	Power & Motor On Switch	2
11	30065-403	Power & Motor "On-Off" Decals	1
12	07.6720.0.001	Emergency Power Off Switch	1
13	07.6043.0.000	Fuse Holder	1
14	07.6043.0.001	Fuse	1
15	07.6720.0.000	Knee Switch	1
16	06.0120.0.000	Treadle Switch	2
18	32.7952.0.050	Motor, 3 Phase, 220/380 Volt	1
	32.7957.0.050	Motor, 1 Phase, 110/220 Volt	1
	32.7956.0.050	Modified Controller	
	07.6280.0.003	Motor, 3 Phase, 220/380 Volt	
	07.6280.0.006	Motor, 1 Phase, 110/220 Volt	
	07.6280.0.005	Synchronizer	
19	32.7953.0.050	Clamp Table Motor	1
20	06.0120.0.000	Brushes Switch	1

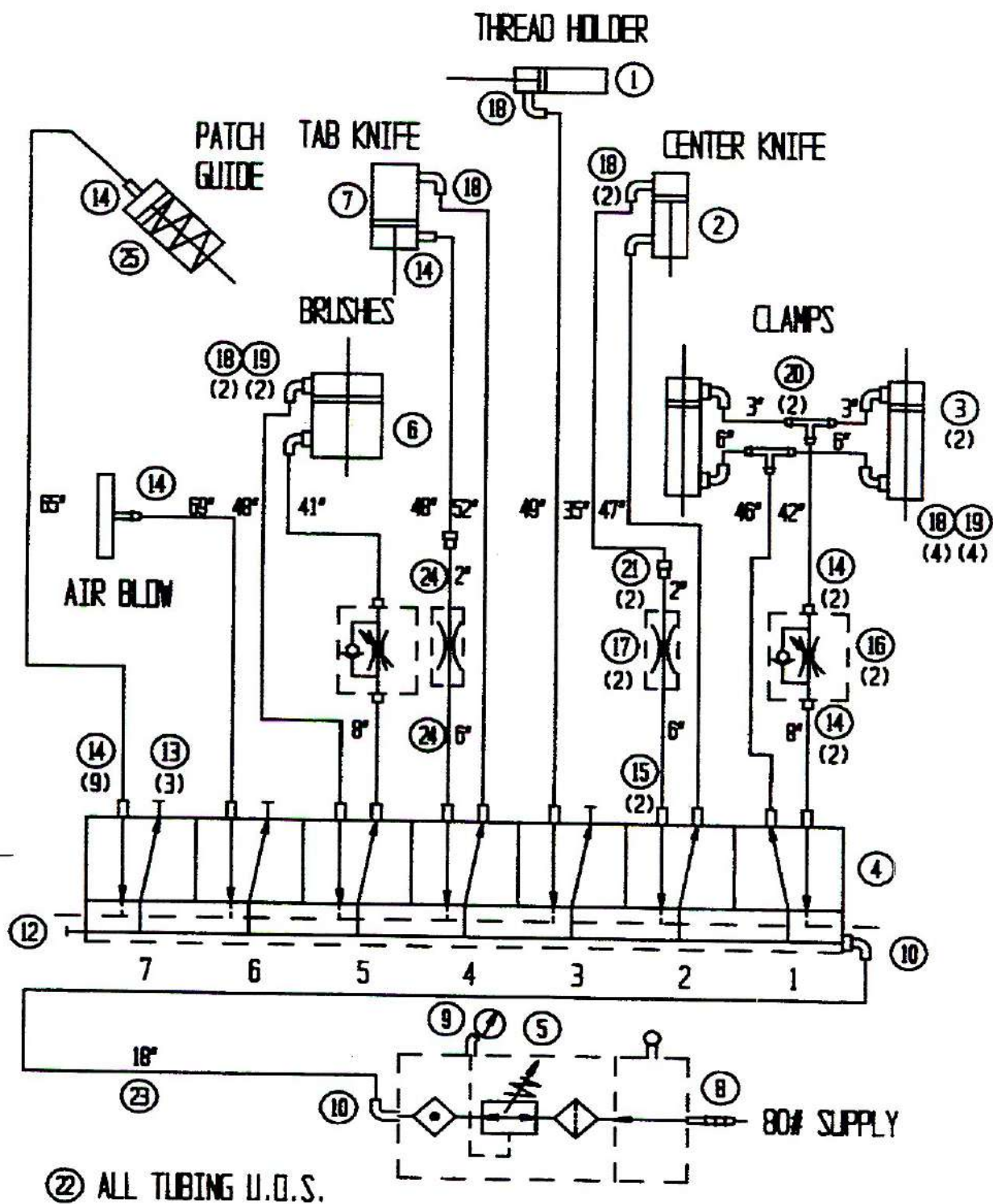
* Some machines have a 3 phase, 220 volt, 60 cycle motor. For replacement motor, use P/N 07.6280.0.003

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PNEUMATIC ASSEMBLY



PNEUMATIC ASSEMBLY

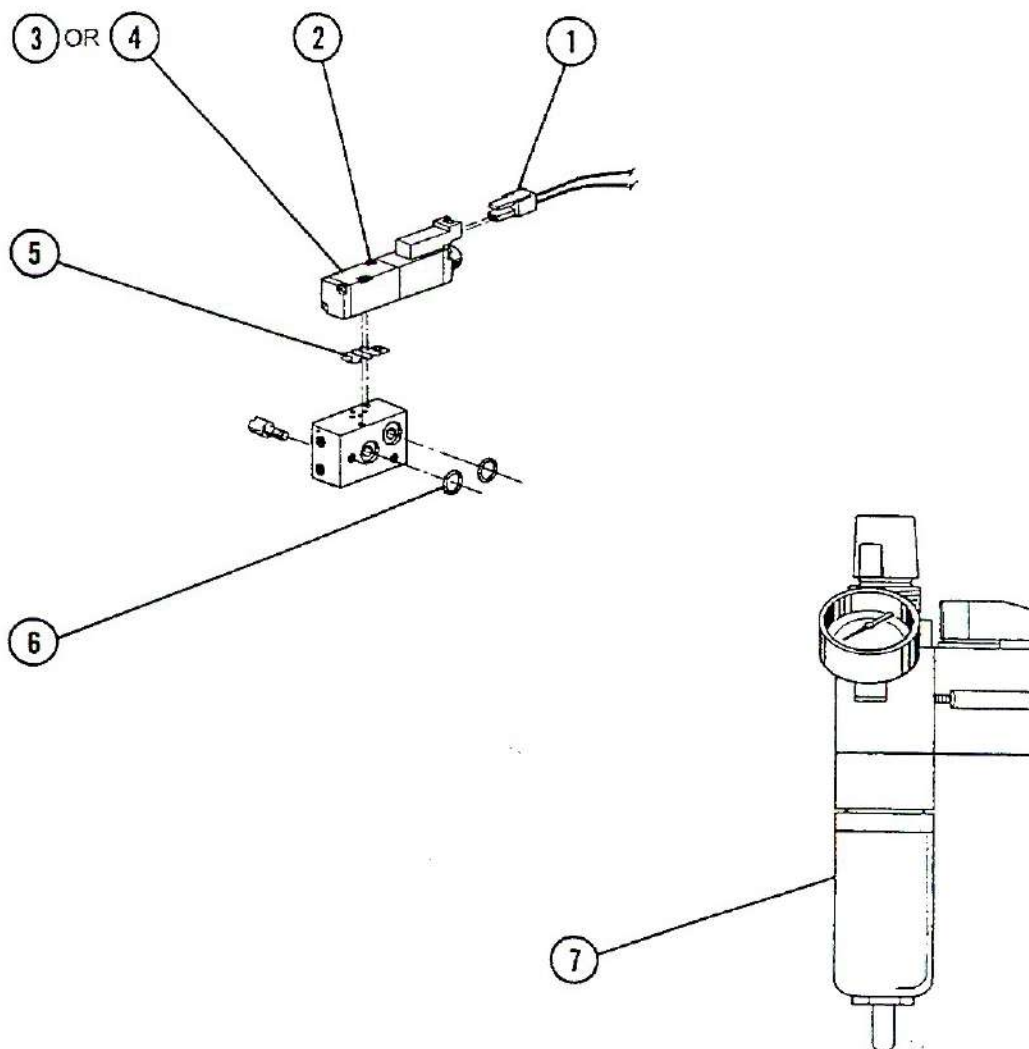
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	07.6001.0.003	Thread Holder Cylinder	1
2	07.6001.0.002	Center Knife Cylinder	1
3	07.6001.0.005	Clamp Cylinder	2
4	07.6520.0.000	Valve Bank	1
5	07.6520.0.002	Filter Regulator Gauge Assembly	1
6	07.6001.0.001	Brush Cylinder	1
7	07.6080.0.000	Tab Knife Cylinder	1
8	07.6602.0.000	1/8 P x 3/16 T Connector	1
9	25521-353	1/8 M x 1/8 F 45 Deg. Elbow	1
10	25521-593	1/8 P x 1/8 T Elbow	2
12	25521-590	1/8 NPT Plug	1
13	25521-560	#10-32 Plug	3
14	25521-562	#10-32 x 3/32 Connector	17
15	25521-561	#10-32 x 1/16 Connector	2
16	26112-012	Flow Control	2
17	25521-598	Restrictor	2
18	25521-569	#10-32 x 3/32 Elbow	10
19	25521-591	1/8 NPT x 10-32 Reducer	6
20	25521-585	3/32 Equal Tee	2
21	25521-577	Straight Reducer	2
22	07.6086.0.000	3/32 ID Tubing	48'
23	07.6086.0.001	1/8 ID Tubing	2'
24	07.6086.0.002	1/16 ID Tubing	2'
25	20.6326.0.000	Patch Guide Cylinder	1

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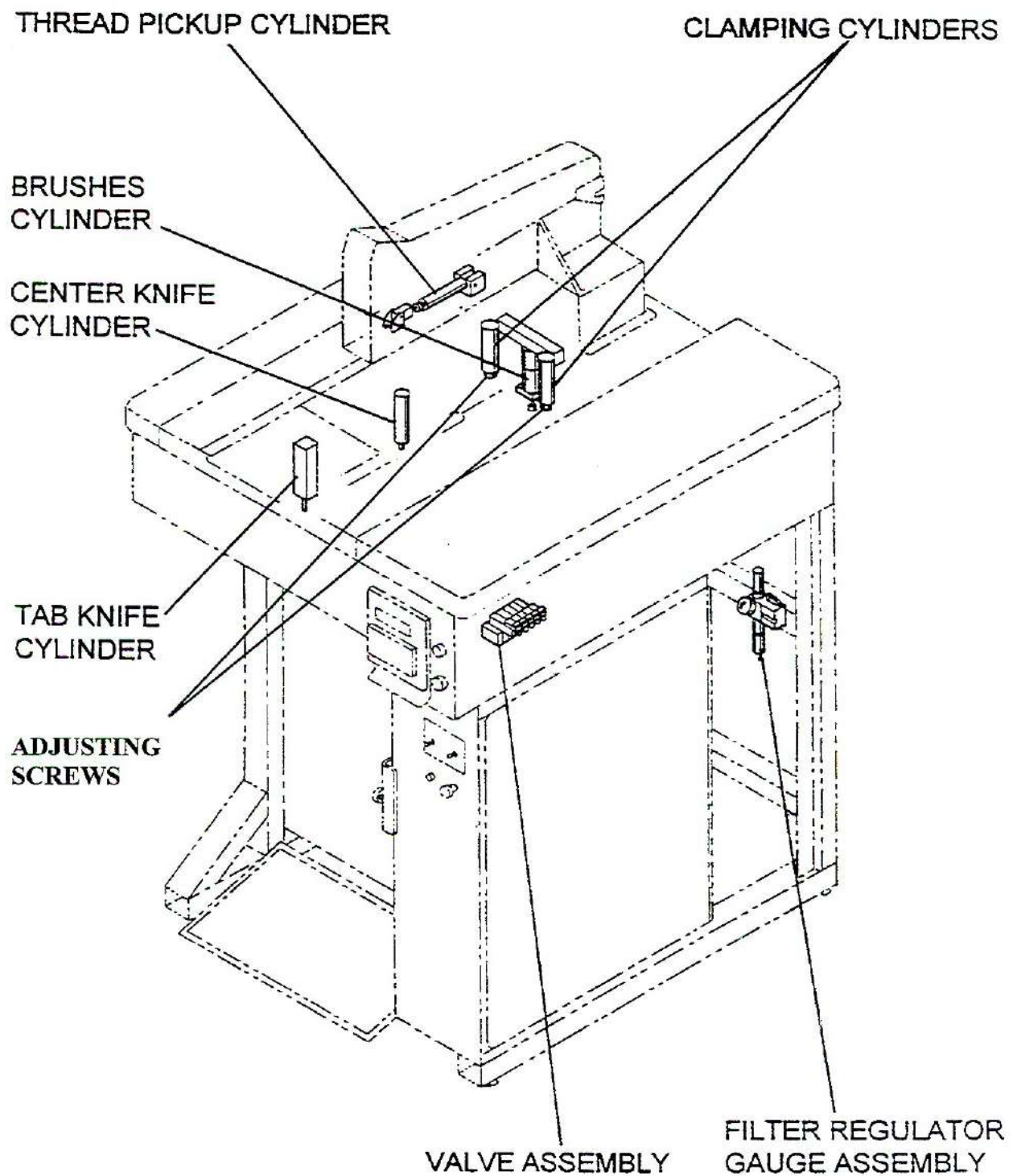
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PNEUMATIC SPARES



ITEM	PART NUMBER	DESCRIPTION
1	07.6520.0.001	Plug Assembly
2	07.6520.0.006	Mounting Screw
3	07.6520.0.005	Single Solenoid Valve
4	07.6520.0.003	Double Solenoid Valve
5	07.6520.0.007	Gasket
6	07.6520.0.008	Seal
7	07.6520.0.009	Filter Element

PNEUMATIC COMPONENTS LOCATION

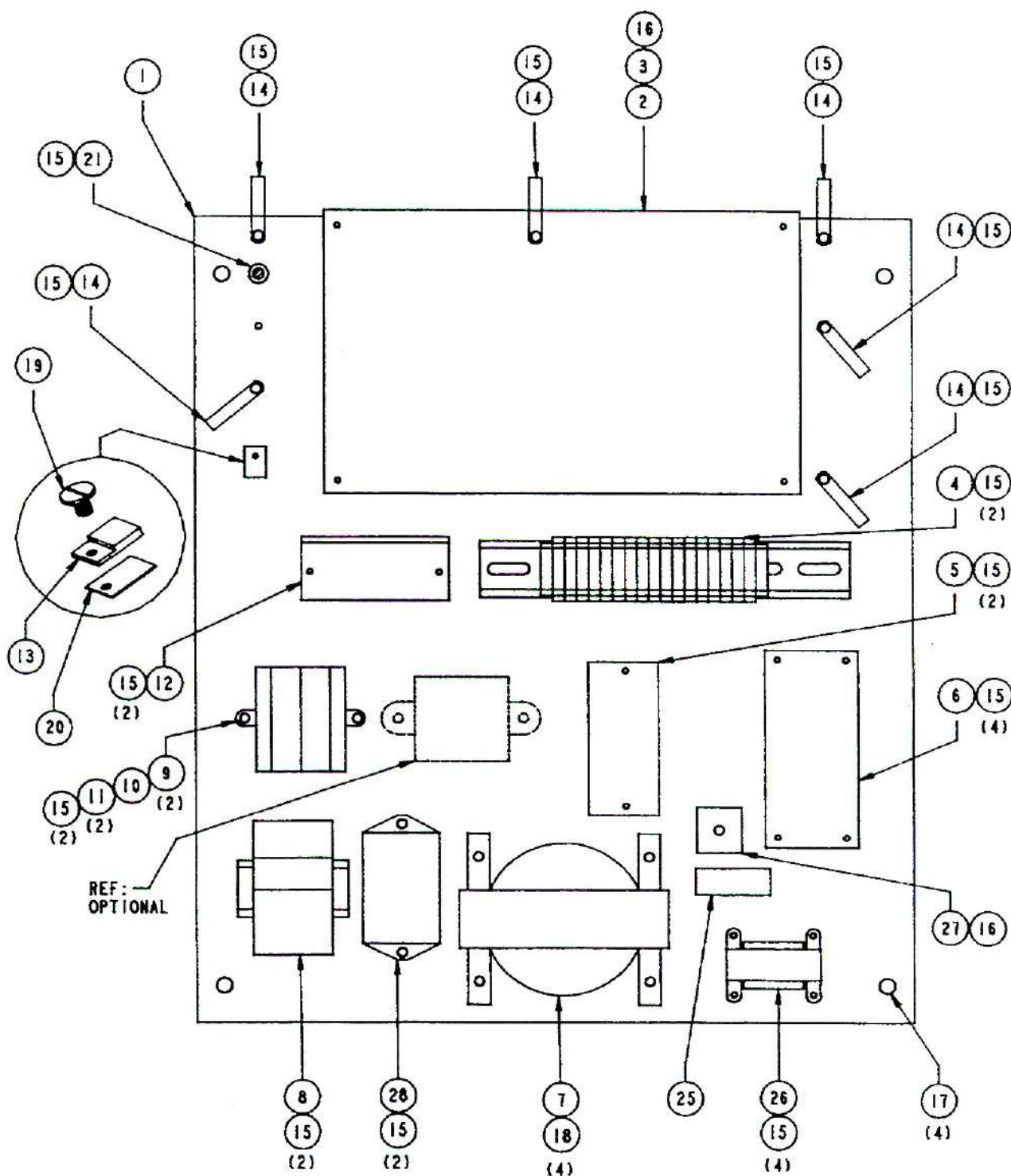


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ELECTRICAL PANEL ASSEMBLY



ELECTRICAL PANEL ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	32.7101.0.000	Electrical Panel	1
2	27861-601	PC Board	1
3	32.7990.0.000	Std. "E" Prom	1
4	07.6720.0.005	Terminal Block Assembly	1
5	07.6082.0.001	5V Power Supply	1
6	27378-690	24V Power Supply	1
7	**07.6482.0.000	Transformer	1
8	07.6720.0.004	Starter (220V/380V)	1
	07.6720.0.012	Starter (110V)	1
9	07.6044.0.000	Fuse Holder	2
10	07.6044.0.001	Fuse Holder End	1
11	07.6043.0.002	Fuse	2
12	07.6483.1.002	Servo Driver Board	1
13	07.6483.0.003	Voltage Regulator	1
14	07.6600.0.010	3/4 Cable Clamp	9
15	01.2816.0.000	#8-32 x 3/8 Bind. Hd. Screw	30
16	03.6222.8.116	#8-32 x 1 Bind. Hd. Screw	5
17	01.3549.0.000	#5/16-18 Hex Nut	4
18	03.6222.0.206	#10-32 x 3/8 Bind. Hd. Screw	4
19	03.6225.6.104	#6-32 x 1/4 Plastic Screw	1
20	07.6521.0.002	Mylar Isolator	1
21	01.4579.0.003	#8 Flat Washer	1
22	32.7181.0.000	High Voltage Cover	1
23	01.2811.0.000	#6-32 x 1/2 Bind. Hd. Screw	1
24	07.6600.0.011	7/8 Cable Clamp	1
25	07.6521.0.006	Capacitor, 2200	1
26	07.6521.0.005	Transformer	1
27	27122-566	Rectifier	1
28	07.6087.0.001	Power Line Filter	1

**Transformer (Item #7) not required with 110V service.

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3/8 NEEDLE SPACING CHART

PAGE	ITEM	DESCRIPTION	PART NUMBER	D.W. (.725)	D.W. (.661)	S.W. (.661)
3-5	5	Patch Tray	32.2170.0.001	2	2	2
3-14	5	Throat Plate	32.2070.1.051	1	1	1
3-14	15	Trim Knife Bracket	32.2215.0.000	1	1	1
3-14	16	Trim Knife	32.2040.0.000	1	1	1
3-14	23	Needle Holder	32.2200.0.001	1	1	1
3-22	1	Tab Knife Holder	32.2044.0.050	2	2	2
3-22	3	Tab Knife Set	32.2047.1.050	2	2	2
3-22	3	Double Edge Knife	32.2047.1.000	4	4	4
3-26	5	Rear Clamp Arm	42.0071.0.007	2	2	2
3-26	18	Clamp Foot Assembly	40.0069.0.050	1	1	1
3-28	3	Upper L.H. Brush Arm	42.0073.0.002	1	1	1
3-28	11	Upper R.H. Brush Arm	42.0073.0.001	1	1	1
3-30	1	L.H. Brush	40.0070.0.072	1	1	1
3-30	2	L.H. Patch Locator	40.0470.0.072	1	1	1
3-30	9	R.H. Patch Locator	40.0470.0.071	1	1	1
3-30	10	R.H. Brush	40.0070.0.071	1	1	1
3-30	11	Brush Blade-Heavy	41.0089.0.570	2 Req.	per	mach.
3-30	11	Brush Blade-Medium	41.0089.0.670	2 Req.	per	mach.
3-30	11	Brush Blade-Medium/Light	41.0089.0.770	2 Req.	per	mach.
3-30	11	Brush Blade-Light	41.0089.0.870	2 Req.	per	mach.
3-32	22	Patch Guide Assembly	32.2080.0.051	1	-	-
3-32	22	Patch Guide Assembly	32.2080.0.052	-	1	-
3-32	22	Patch Guide Assembly	32.2080.0.053	-	-	1
3-32	25	Horizontal Plate	32.2078.0.001	1(SP)	-	-
3-32	25	Horizontal Plate	32.2078.0.002	-	1(SP)	-
3-32	25	Horizontal Plate	32.2144.0.000	-	-	1(SP)
3-32	27	Vertical Plate	32.2089.0.000	1	1	1
3-40	14	Thread Pick-up Pin	01.6567.0.000	2	2	2

SP = Spare Parts Only

7/16 NEEDLE SPACING CHART

PAGE	ITEM	DESCRIPTION	PART NUMBER	D.W. (.690)	S.W. (.730)	S.W.O. (.759)
3-5	5	Patch Tray	32.2170.0.001	2	2	2
3-14	5	Throat Plate	32.2070.1.052	1	1	1
3-14	15	Trim Knife Bracket	32.2062.0.000	1	1	1
3-14	16	Trim Knife	32.2067.0.000	1	1	1
3-14	23	Needle Holder	32.2200.0.002	1	1	1
3-22	1	Tab Knife Holder	32.2046.0.050	2	2	2
3-22	3	Tab Knife Set	32.2047.1.050	2	2	2
3-22	3	Double Edge Knife	32.2047.1.000	4	4	4
3-26	5	Rear Clamp Arm	42.0071.0.007	2	2	2
3-26	18	Clamp Foot Assembly	41.0069.0.053	1	1	1
3-28	3	Upper L.H. Brush Arm	42.0073.0.002	1	1	1
3-28	11	Upper R.H. Brush Arm	42.0073.0.001	1	1	1
3-30	1	L.H. Brush	40.0070.0.072	1	1	1
3-30	2	L.H. Patch Locator	40.0470.0.072	1	1	1
3-30	9	R.H. Patch Locator	40.0470.0.071	1	1	1
3-30	10	R.H. Brush	40.0070.0.071	1	1	1
3-30	11	Brush Blade-Heavy	41.0089.0.570	2 Req.	per	mach.
3-30	11	Brush Blade-Medium	41.0089.0.670	2 Req.	per	mach.
3-30	11	Brush Blade-Medium/Light	41.0089.0.770	2 Req.	per	mach.
3-30	11	Brush Blade-Light	41.0089.0.870	2 Req.	per	mach.
3-32	22	Patch Guide Assembly	32.2084.0.051	1	-	-
3-32	22	Patch Guide Assembly	32.2084.0.050	-	1	-
3-32	22	Patch Guide Assembly	32.2114.0.050	-	-	1
3-32	25	Horizontal Plate	32.2091.0.002	1	-	-
3-32	25	Horizontal Plate	32.2091.0.001	-	1	-
3-32	25	Horizontal Plate	32.2095.0.000	-	-	1
3-32	27	Vertical Plate	32.2089.0.000	1	1	1
3-40	14	Thread Pick-up Pin	01.6567.0.000	2	2	2

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1/2 NEEDLE SPACING CHART

PAGE	ITEM	DESCRIPTION	PART NUMBER	D.W. (.786)	D.W. (.850)	S.W. (.801)	S.W. (.945)
3-5	5	Patch Tray	32.2170.0.001	1	1	1	1
3-14	5	Throat Plate	32.2070.1.053	1	1	1	1
3-14	15	Trim Knife Bracket	32.2062.0.000	1	1	1	1
3-14	16	Trim Knife	32.2061.0.000	1	1	1	1
3-14	23	Needle Holder	32.2200.0.003	1	1	1	1
3-22	1	Tab Knife Holder	32.2046.0.050	2	2	2	2
3-22	3	Tab Knife Set	32.2047.1.050	2	2	2	2
3-22	3	Double Edge Knife	32.2047.1.000	4	4	4	4
3-26	5	Rear Clamp Arm	42.0071.0.007	2	2	2	2
3-26	18	Clamp Foot Assembly	41.0069.0.053	1	1	1	1
3-28	3	Upper L.H. Brush Arm	42.0073.0.002	1	1	1	1
3-28	11	Upper R.H. Brush Arm	42.0073.0.001	1	1	1	1
3-30	1	L.H. Brush	40.0070.0.072	1	1	1	1
3-30	2	L.H. Patch Locator	40.0470.0.072	1	1	1	1
3-30	9	R.H. Patch Locator	40.0470.0.071	1	1	1	1
3-30	10	R.H. Brush	40.0070.0.071	1	1	1	1
3-30	11	Brush Blade-Heavy	41.0089.0.570	2	Req.	per	mach.
3-30	11	Brush Blade-Medium	41.0089.0.670	2	Req.	per	mach.
3-30	11	Brush Blade-Medium/Light	41.0089.0.770	2	Req.	per	mach.
3-30	11	Brush Blade-Light	41.0089.0.870	2	Req.	per	mach.
3-32	22	Patch Guide Assembly	32.2088.0.051	1	-	-	-
3-32	22	Patch Guide Assembly	32.2088.0.050	-	1	-	-
3-32	22	Patch Guide Assembly	32.2115.0.050	-	-	1	-
3-32	22	Patch Guide Assembly	32.2115.0.051	-	-	-	1
3-32	25	Horizontal Plate	32.2090.0.002	1	-	-	-
3-32	25	Horizontal Plate	32.2090.0.001	-	1	-	-
3-32	25	Horizontal Plate	32.2096.0.001	-	-	1	-
3-32	25	Horizontal Plate	32.2096.0.002	-	-	-	1
3-32	27	Vertical Plate	32.2089.0.000	1	1	1	1
3-40	14	Thread Pick-up Pin	01.6567.0.000	2	2	2	2

5/8 NEEDLE SPACING CHART

PAGE	ITEM	DESCRIPTION	PART NUMBER	D.W. (1.100)	D.W. (1.148)	S.W. (1.230)
3-5	5	Patch Tray	32.2175.0.001	2	2	2
3-14	5	Throat Plate	32.2070.1.054	1	1	1
3-14	15	Trim Knife Bracket	32.2062.0.000	1	1	1
3-14	16	Trim Knife	32.2125.0.000	1	1	1
3-14	23	Needle Holder	32.2200.0.004	1	1	1
3-22	1	Tab Knife Holder	32.2049.0.051	2	2	2
3-22	3	Tab Knife Set	32.2048.1.050	2	2	2
3-26	5	Rear Clamp Arm	42.0071.0.007	2	2	-
3-26	5	Rear Clamp Arm	42.0071.0.010	-	-	2
3-26	18	Clamp Foot Assembly	41.0069.0.050	1	1	1
3-28	3	Upper L.H. Brush Arm	42.0073.0.002	1	1	1
3-28	11	Upper R.H. Brush Arm	42.0073.0.001	1	1	1
3-30	1	L.H. Brush	41.0070.0.072	1	1	1
3-30	2	L.H. Patch Locator	40.0470.0.074	1	1	-
3-30	2	L.H. Patch Locator	40.0470.0.072	-	-	1
3-30	9	R.H. Patch Locator	40.0470.0.073	1	1	1
3-30	10	R.H. Brush	41.0070.0.071	1	1	1
3-30	11	Brush Blade-Heavy	41.0089.0.570	2 Req.	per	mach.
3-30	11	Brush Blade-Medium	41.0089.0.670	2 Req.	per	mach.
3-30	11	Brush Blade-Medium/Light	41.0089.0.770	2 Req.	per	mach.
3-30	11	Brush Blade-Light	41.0089.0.870	2 Req.	per	mach.
3-32	22	Patch Guide Assembly	32.2111.0.050	1	-	-
3-32	22	Patch Guide Assembly	32.2111.0.051	-	1	-
3-32	22	Patch Guide Assembly	32.2116.0.050	-	-	1
3-32	25	Horizontal Plate	32.2092.0.001	1	-	-
3-32	25	Horizontal Plate	32.2092.0.002	-	1	-
3-32	25	Horizontal Plate	32.2097.0.000	-	-	1
3-32	27	Vertical Plate	32.2103.0.000	1	1	1
3-32	28	L.H. Spacer Plate	32.2083.0.000	-	-	1
3-40	14	Thread Pick-up Pin	01.6973.0.003	1	1	1

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3/4 NEEDLE SPACING CHART

PAGE	ITEM	DESCRIPTION	PART NUMBER	D.W. (1.350)	S.W. (1.470)	S.W.O. (2.100)
3-5	5	Patch Tray	32.2175.0.001	2	2	2
3-14	5	Throat Plate	32.2070.1.055	1	1	1
3-14	15	Trim Knife Bracket	32.2062.0.000	1	1	1
3-14	16	Trim Knife	32.2126.0.000	1	1	1
3-14	23	Needle Holder	32.2200.0.005	1	1	1
3-22	1	Tab Knife Holder	32.2049.0.052	2	2	2
3-22	3	Tab Knife Set	32.2048.1.050	2	2	2
3-26	5	Rear Clamp Arm	42.0071.0.007	2	-	2
3-26	5	Rear Clamp Arm	42.0071.0.010	-	2	-
3-26	18	Clamp Foot Assembly	41.0069.0.051	1	1	1
3-28	3	Upper L.H. Brush Arm	42.0073.0.002	1	-	-
3-28	3	Upper L.H. Brush Arm	42.0073.0.020	-	1	1
3-28	11	Upper R.H. Brush Arm	42.0073.0.001	1	1	-
3-28	11	Upper R.H. Brush Arm	42.0073.0.010	-	-	1
3-30	1	L.H. Brush	41.0070.0.072	1	1	1
3-30	2	L.H. Patch Locator	40.0470.0.072	-	1	-
3-30	2	L.H. Patch Locator	40.0470.0.074	1	-	1
3-30	9	R.H. Patch Locator	40.0470.0.073	1	1	1
3-30	10	R.H. Brush	41.0070.0.071	1	1	1
3-30	11	Brush Blade-Heavy	41.0089.0.570	2 Req.	per	mach.
3-30	11	Brush Blade-Medium	41.0089.0.670	2 Req.	per	mach.
3-30	11	Brush Blade-Medium/Light	41.0089.0.770	2 Req.	per	mach.
3-30	11	Brush Blade-Light	41.0089.0.870	2 Req.	per	mach.
3-32	22	Patch Guide Assembly	32.2112.0.050	1	-	-
3-32	22	Patch Guide Assembly	32.2117.0.050	-	1	-
3-32	22	Patch Guide Assembly	32.2128.0.050	-	-	1
3-32	25	Horizontal Plate	32.2093.0.000	1	-	-
3-32	25	Horizontal Plate	32.2098.0.000	-	1	-
3-32	25	Horizontal Plate	32.2127.0.000	-	-	1
3-32	26	R.H. Spacer Plate	32.2204.0.000	1	-	1
3-32	27	Vertical Plate	32.2103.0.000	1	1	1
3-32	28	L.H. Spacer Plate	32.2083.0.000	1	1	1
3-40	14	Thread Pick-up Pin	01.6973.0.001	1	1	1

7/8 NEEDLE SPACING CHART

PAGE	ITEM	DESCRIPTION	PART NUMBER	D.W. (1.655)	S.W. (1.669)
3-5	5	Patch Tray	32.2175.0.001	2	2
3-14	5	Throat Plate	32.2070.1.056	1	1
3-14	15	Trim Knife Bracket	32.2062.0.000	1	1
3-14	16	Trim Knife	32.2119.0.000	1	1
3-14	23	Needle Holder	32.2200.0.006	1	1
3-22	1	Tab Knife Holder	32.2049.0.053	2	2
3-22	3	Tab Knife Set	32.2048.1.050	2	2
3-26	5	Rear Clamp Arm	42.0071.0.007	2	-
3-26	5	Rear Clamp Arm	42.0071.0.010	-	2
3-26	18	Clamp Foot Assembly	41.0069.0.052	1	1
3-28	3	Upper L.H. Brush Arm	42.0073.0.002	1	-
3-28	3	Upper L.H. Brush Arm	42.0073.0.020	-	1
3-28	11	Upper R.H. Brush Arm	42.0073.0.001	1	-
3-28	11	Upper R.H. Brush Arm	42.0073.0.010	-	1
3-30	1	L.H. Brush	41.0070.0.072	1	1
3-30	2	L.H. Patch Locator	41.0470.0.072	1	1
3-30	9	R.H. Patch Locator	41.0470.0.071	1	1
3-30	10	R.H. Brush	41.0070.0.071	1	1
3-30	11	Brush Blade-Heavy	41.0089.0.570	2 per	mach.
3-30	11	Brush Blade-Medium	41.0089.0.670	2 per	mach.
3-30	11	Brush Blade-Medium/Light	41.0089.0.770	2 per	mach.
3-30	11	Brush Blade-Light	41.0089.0.870	2 per	mach.
3-32	22	Patch Guide Assembly	32.2113.0.050	1	-
3-32	22	Patch Guide Assembly	32.2118.0.050	-	1
3-32	25	Horizontal Plate	32.2094.0.001	1(SP)	-
3-32	25	Horizontal Plate	32.2099.0.002	-	1(SP)
3-32	26	R.H. Spacer Plate	32.2204.0.000	1	-
3-32	27	Vertical Plate	32.2103.0.000	1	1
3-32	28	L.H. Spacer Plate	32.2083.0.000	1	1
3-40	14	Thread Pick-up Pin	01.6973.0.003	1	1

SP = Spare Parts Only

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NEEDLES CHART

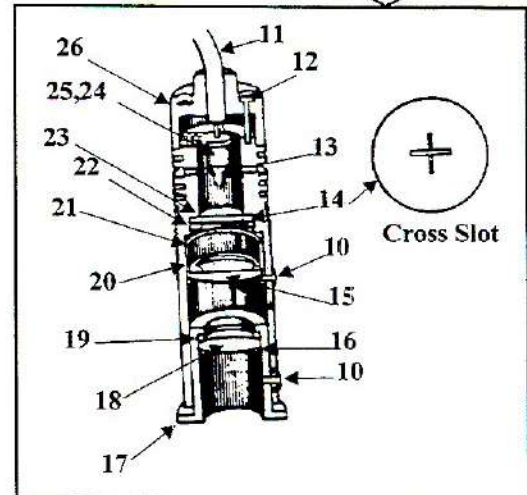
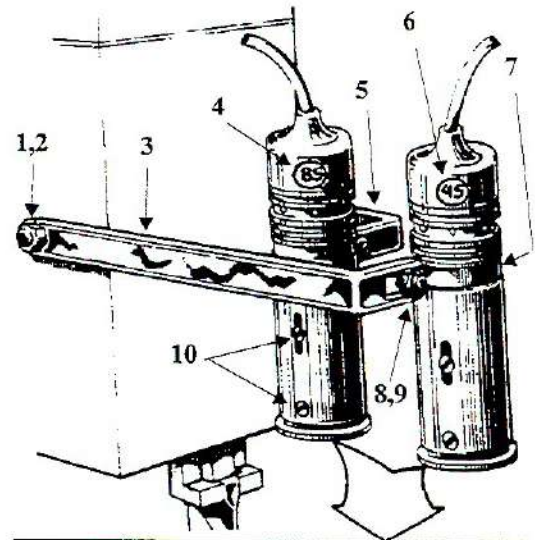
PART NUMBER	SIZE	CHARACTERISTICS	APPLICATIONS
02.0950.3.100 02.0950.3.110 02.0950.3.111 02.0950.3.112	Very fine (00) Fine (0) Medium (1) Heavy (2)	Sharp point Sharp point (spotted) Sharp point (spotted) Sharp point (spotted)	Standard for the majority of fibers and materials of average weight and texture, including knit goods.
02.0952.0.100 02.0952.3.110 02.0952.0.111	Very fine (00) Fine (0) Medium (1)	Ball point Ball point (spotted) Ball point (spotted)	Use on synthetic fabrics, particularly if tightly woven or tightly knited where the the fibers of the material are subject to damage by the conventional sharp pointed needle.
02.0956.0.111	Medium (1)	Wedge point, ball eye, double groove (spotted)	Applicable to leather and similar materials where conventional sharp pointed needles tend to leave excessive punctures. The slit made by the wedge point tends to close after penetration. Double groove is desirable on thick leather and similar materials that tend to close on blade and trap needle thread as it descends into work. NOTE Use double groove needles only when conditions warrant, as loop case is smaller and may introduce skipping. Set looper points extremely close to needle blade.
02.0958.0.111	Medium (1)	Spear point, ball eye, double groove (spotted)	Applicable to closely woven or heavily starched fabrics, leather, and similar materials that offer considerable resistance to needle penetration. The ball eye tends to reduce needle heating. Double groove minimizes tendency of material to trap the needle thread during descent into work, but the loopers must be set extremely close to needles to avoid skipping.

Needles for the AMF Reece Welting Machines are packaged in boxes of 100, in the sizes and types listed. These needles are of superior struck groove construction and chromium plated. When ordering, specify quantity and needle part number. The last group in the part number indicates needle size.

WORK LOCATING & DRILL HOLE LAMPS (OPTIONAL)

KIT COMPLETE - ORDER P/N 32.7804.0.050

ITEM	PART NUMBER	DESCRIPTION
1	42.1005.0.000	Lamp Arm Stud
2	01.3417.0.000	10-24 Lock Washer
3	42.1002.0.002	LH Lamp Arm
4	05.1085.0.002	Decal (8S)
5	42.1002.0.001	RH Lamp Arm
6	05.1085.0.001	Decal (4S)
7	40.0791.0.000	Brace
8	01.2531.0.000	6-32 Screw
9	01.3401.0.000	6-32 Nut
10	01.2481.0.000	4-40 Screw
11	40.0478.0.008	VF Sleeving (18")
12	01.2653.0.000	2-56 Screw
13	40.0788.0.000	Lamp
14	40.0834.0.004	Cross Slot Reticle (4S)
	40.0834.0.008	Cross Slot Reticle (8S)
15	40.0786.1.000	Lens
16	01.6628.0.000	Retaining Ring
17	40.0787.0.000	Carrier
18	40.0803.1.000	Lens
19	01.4507.0.000	O-Ring
20	01.6629.0.000	Retaining Ring
21	40.0785.0.000	Carrier
22	01.6621.0.000	Retaining Ring
23	40.0782.1.000	Flat Lantern Lens
24	40.0789.0.050	Lamp Holder Assembly
25	01.2518.0.000	2-56 Screw
26	40.0781.0.000	End Cap

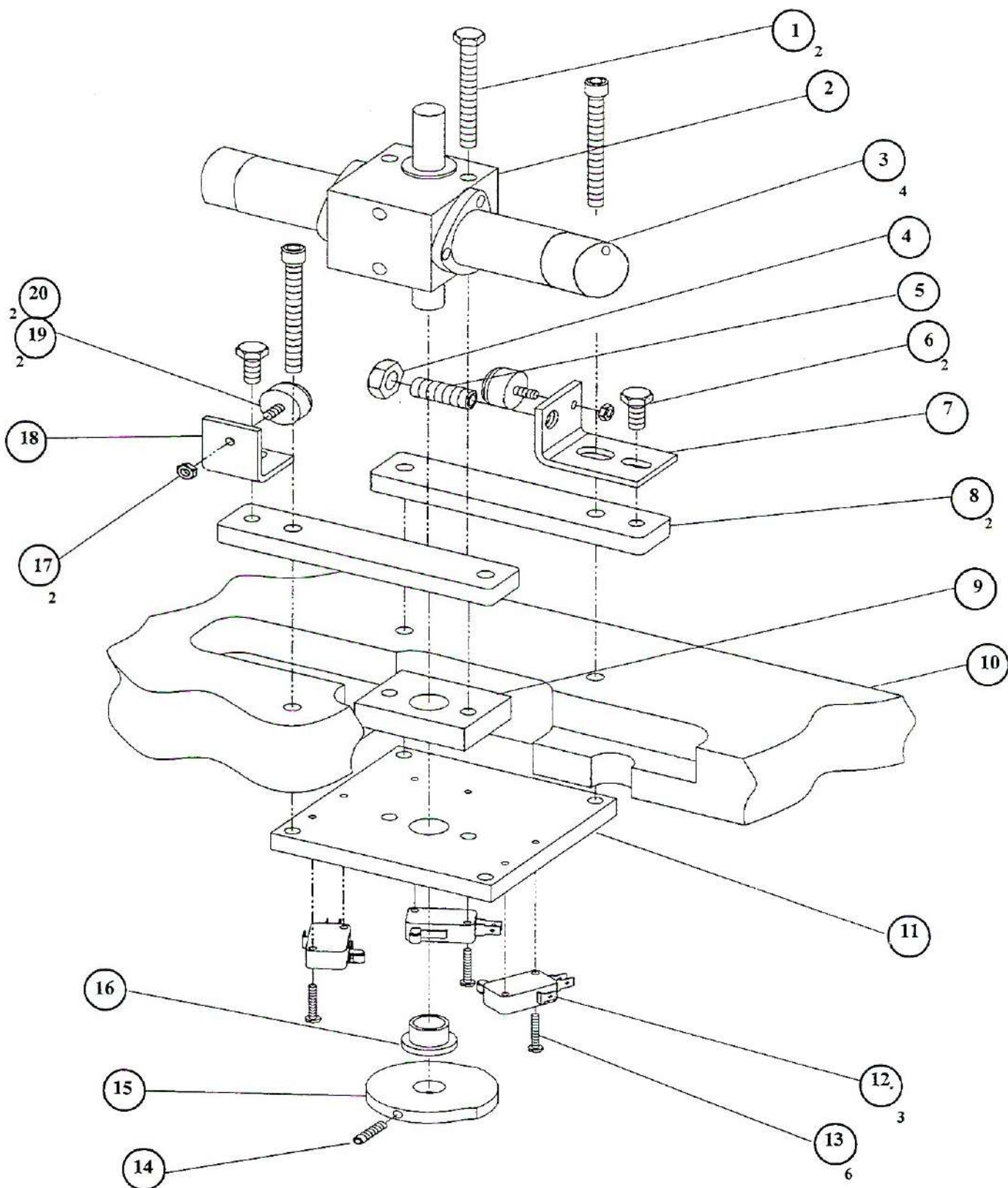


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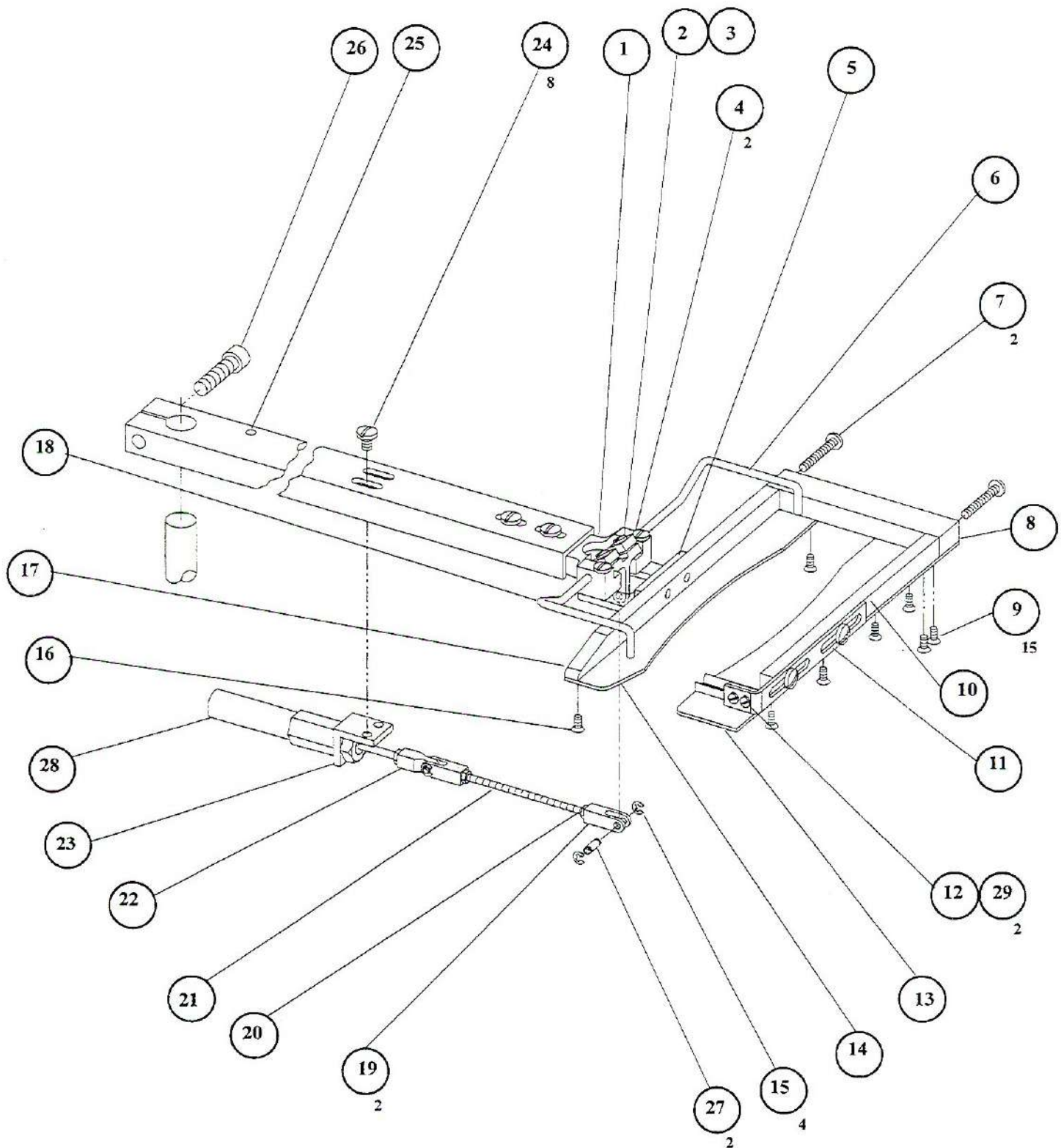
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OPTIONS - AUTOMATIC PATCH LOADING



OPTIONS - AUTOMATIC PATCH LOADING



OPTIONS - AUTOMATIC PATCH LOADING

ITEM	PART NUMBER	DESCRIPTION
1	44.2075.0.000	Patch Tray Neck
2	44.2076.0.000	Patch Holder Yoke
3	04100072	#4-40 x 5/16 Bnd.Hd. Screw
4	04100048	#6-32 x 3/4 Bnd.Hd. Screw
5	32.2151.0.000	Patch Tray Bracket
6	32.2152.0.000	Long Clamp
7	01.2712.0.000	#6-32 x 1" Btn.Hd. Screw
8	See Chart	Back Block
9	01.2488.0.000	#4-40 x 1/4 HSFH Screw
10	40.0832.0.002	Left Tray Rail
11	40.0514.1.000	Tray Ear
12	40.0841.0.000	Patch Holder
13	See Chart	Left Tray Plate
14	See Chart	Right Tray Plate
15	01.6368.0.000	E-Ring
16	01.2472.0.000	#4-40 x 3/16 HSFH Screw
17	40.0832.0.001	Right Tray Rail
18	32.2153.0.000	Short Clamp
19	44.2079.0.000	Clevis
20	01.3414.0.000	#4-40 Hex Nut
21	44.2082.0.000	Tie Rod
22	44.2078.0.000	Cylinder End
23	44.2077.0.000	Cylinder Mounting Bracket
24	04100053	#8-32 x 5/16 Bnd.Hd. Screw
25	44.2102.1.000	Patch Loader Arm
26	01000037	#1/4-20 x 1" HSHC Screw
27	01.6943.0.000	Clevis Pin
28	07.0388.0.000	Cylinder
29	01.2597.0.000	#2-56 x 3/16 Bnd.Hd. Screw

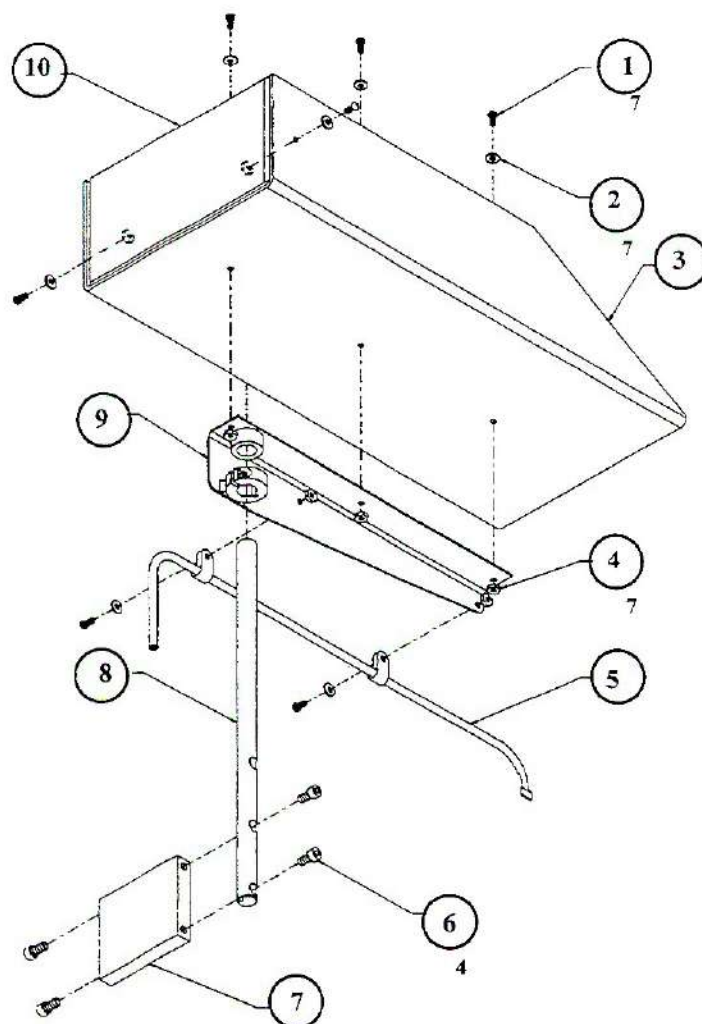
Part	32.7808.0.050(.690;.730)	32.7808.0.051 (.759;.786;.850;.81)	32.7808.0.052 (.801;.945)	32.7808.0.053 (.940)
Back Block	40.0515.1.275	40.0515.1.275	40.0515.1.300	40.0515.1.300
Tray Plate, Left	40.0830.0.187	40.0830.0.187	40.0830.0.438	40.0830.0.187
Tray Plate, Right	40.0831.0.187	40.0831.0.062	40.0831.0.938	40.0831.0.187

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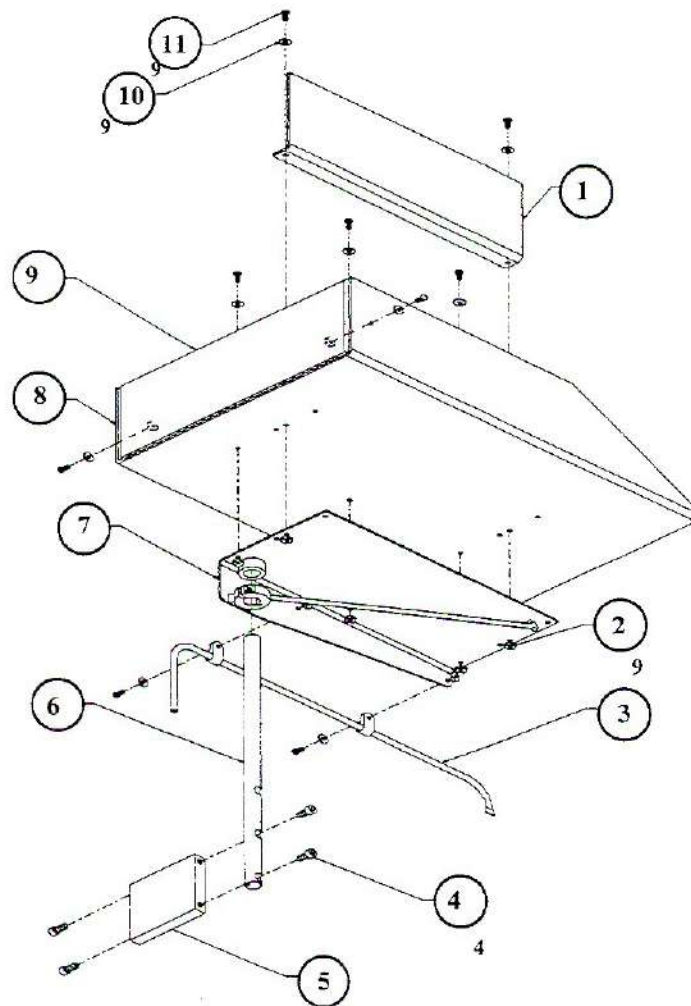
OPTIONS - AIR EJECT/SINGLE BAG TRAY KIT



KIT COMPLETE - ORDER P/N 32.7811.0.050

ITEM	PART NUMBER	DESCRIPTION
1	01200005	#8-32 x 3/8 Hex Screw
2	07012005	#8 Std. Flat Washer
3	32.7525.0.000	Tray
4	06000018	#8-32 Hex Nut
5	32.7530.0.000	Blow Down Tube
6	01200005	#8-32 x 3/8 Hex.Hd. Screw
7	32.7524.0.000	Tray Mount Block
8	32.7520.0.000	Tray Mount Post
9	32.7523.0.000	Angle Tray Mounting
10	32.7526.0.000	Tray Back

OPTION - AIR EJECT/DOUBLE BAG KIT



KIT COMPLETE - ORDER P/N 32.7811.0.051

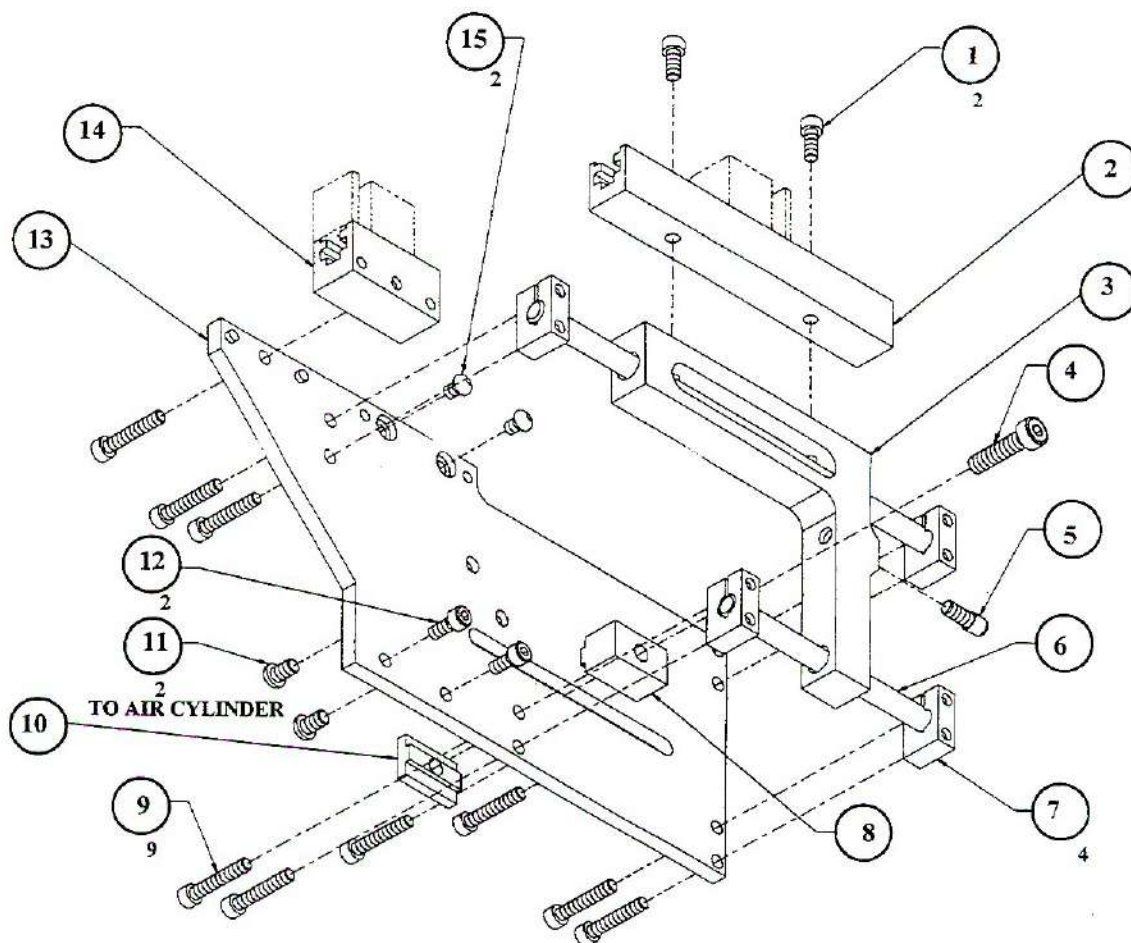
ITEM	PART NUMBER	DESCRIPTION
1	32.7531.0.000	Double Tray Separator
2	06000003	#8-32 Hex Nut
3	32.7530.0.000	Blow Down Tube
4	01200005	#8-32 x 3/8 HexHd. Screw
5	32.7524.0.000	Tray Mount Block
6	32.7520.0.000	Tray Mount Post
7	32.7523.0.001	Angie Tray Mounting
8	32.7525.0.001	Double Tray
9	32.7526.0.001	Tray Back
10	07012005	Std. Flat Washer
11	01000014	#1/4-20 x 1/2 Hex Hd. Screw

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OPTION - 2-POSITION AUTO TABKNIFE KIT



KIT COMPLETE - ORDER P/N 32.7810.0.050

ITEM	PART NUMBER	DESCRIPTION
1	01000023	#6-32 x 5/16 Soc.Hex Btn.Screw
2	32.7512.0.000	Adj. Knife Holder
3	32.7511.0.000	Carriage
4	01000019	#10-32 x 3/4 Soc. Hex Screw
5	03100004	#10-32 x 5/16 Soc. St. Screw
6	32.7515.0.000	Short Shaft
7	32.7514.0.000	Shaft Support
8	32.7516.0.000	Adjustable Stop
9	01000080	#6-32 x 3/4 Soc.Hex Screw
10	32.7517.0.002	Stop Nut
11	01200011	#8-32 x 1/4 Soc. Hex Screw
12	01000023	#6-32 x 5/16 Soc. Hex Screw
13	32.7510.0.000	Mounting Plate
14	32.7513.0.000	Knife End-Holder
15	01200013	#6-32 X 3/16 Hex Soc.Btn.Screw

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01000014	11	3-63	01.1422.0.000	9	3-29	01.2437.0.000	11	3-9
01000019	4	3-64	01.1433.0.000	5	3-37	01.2437.0.000	12	3-17
01000023	1	3-64	01.1440.0.000	16	3-41	01.2437.0.000	11	3-19
01000023	12	3-64	01.1475.0.000	17	3-39	01.2442.0.000	13	3-15
01000037	26	3-61	01.1480.0.000	21	3-21	01.2447.0.000	3	3-27
01000080	9	3-64	01.1486.0.000	12	3-29	01.2448.0.000	28	3-11
01000095	3	3-59	01.1574.0.001	3	3-9	01.2448.0.000	18	3-21
01200005	1	3-62	01.1574.0.001	14	3-11	01.2448.0.000	8	3-27
01200005	6	3-62	01.1574.0.001	25	3-19	01.2448.0.000	30	3-33
01200005	4	3-63	01.1574.0.001	8	3-21	01.2448.0.000	21	3-37
01200011	11	3-64	01.1574.0.001	4	3-39	01.2448.0.000	9	3-39
01200013	15	3-64	01.1589.0.000	23	3-41	01.2449.0.000	2	3-19
03100004	5	3-64	01.1624.0.002	3	3-13	01.2450.0.000	3	3-19
03100054	14	3-59	01.1658.0.001	3	3-5	01.2450.0.000	6	3-21
04100037	13	3-59	01.1661.0.001	28	3-37	01.2452.0.000	8	3-11
04100048	4	3-61	01.1952.0.000	16	3-19	01.2461.0.000	29	3-29
04100053	24	3-61	01.1956.0.000	2	3-23	01.2472.0.000	23	3-33
04100072	3	3-61	01.2401.0.000	18	3-39	01.2472.0.000	16	3-61
04200012	6	3-59	01.2402.0.000	19	3-15	01.2481.0.000	10	3-57
04200061	1	3-59	01.2402.0.000	18	3-35	01.2482.0.000	23	3-27
06000003	17	3-59	01.2406.0.000	20	3-39	01.2484.0.000	4	3-15
06000003	2	3-63	01.2407.0.000	4	3-31	01.2488.0.000	24	3-33
06000018	4	3-62	01.2408.0.000	9	3-19	01.2488.0.000	9	3-61
07012005	10	3-63	01.2409.0.000	35	3-33	01.2493.0.000	35	3-9
07012005	2	3-62				01.2493.0.000	26	3-27
23161057	16	3-59	01.2410.0.000			01.2793.0.000	18	3-33
25521-353	9	3-45	01.2410.0.000	4	3-21	01.2493.0.000	8	3-41
25521-560	13	3-45	01.2411.0.000	36	3-33			
25521-561	15	3-45	01.2411.0.000	3	3-37	01.2506.0.000		
25521-562	11	3-23	01.2412.0.000	4	3-13	01.2506.0.000	4	3-41
25521-562	14	3-45	01.2412.0.000	2	3-21	01.2515.0.000	27	3-41
25521-569	18	3-45	01.2412.0.000	6	3-25	01.2518.0.000	25	3-57
25521-577	21	3-45	01.2412.0.000	4	3-29	01.2531.0.000	21	3-33
25521-585	20	3-45	01.2412.0.000	16	3-33	01.2531.0.000	8	3-57
25521-590	12	3-45	01.2413.0.000	21	3-5	01.2545.0.000	19	3-27
25521-591	19	3-45	01.2413.0.000	10	3-7	01.2561.0.000	3	3-15
25521-593	10	3-45	01.2413.0.000	23	3-17	01.2569.0.000	12	3-31
25521-598	17	3-45	01.2413.0.000	10	3-21	01.2580.0.000	23	3-29
26112-012	16	3-45	01.2413.0.000	6	3-29	01.2597.0.000	29	3-61
27122-566	27	3-49	01.2413.0.000	7	3-31	01.2633.0.000	17	3-27
27378-690	6	3-49	01.2419.0.000	9	3-33	01.2638.0.002	29	3-33
27861-601	2	3-49	01.2421.0.001	25	3-21	01.2653.0.000	12	3-57
30065-403	11	3-43	01.2423.0.000	18	3-15	01.2713.0.000	8	3-33
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01.1393.0.003	5	3-7	01.2431.0.000	5	3-17	01.2712.0.000	7	3-61
01.1410.0.000	22	3-37	01.2431.0.000	3	3-31	01.2783.0.000	19	3-17
01.1418.0.000	34	3-27	01.2435.0.000	12	3-11	01.2811.0.000	23	3-49
01.1419.0.000	22	3-27	01.2435.0.000	9	3-21	01.2816.0.000	15	3-49
			01.2435.0.000	25	3-27	01.2980.0.000	27	3-29

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01.2980.0.002	22	3-39	01.4528.0.000	8	3-23	01.6567.0.000	14	3-51
01.3016.0.000	12	3-39	01.4578.0.000	26	3-21	01.6567.0.000	14	3-52
01.3036.0.000	14	3-37	01.4578.0.000	14	3-29	01.6569.0.000	32	3-41
01.3057.0.000	20	3-19	01.4578.0.000	17	3-37	01.6621.0.000	22	3-57
01.3057.0.000	15	3-29	01.4579.0.000	27	3-21	01.6628.0.000	16	3-57
01.3074.0.000	4	3-23	01.4579.0.000	13	3-29	01.6629.0.000	20	3-57
01.3400.0.000	21	3-29	01.4579.0.000	18	3-37	01.6633.0.000	5	3-33
01.3401.0.000	9	3-57	01.4579.0.003	5	3-25	01.6657.0.001	5	3-39
01.3404.0.000	2	3-58	01.4579.0.003	21	3-49	01.6658.0.000	1	3-41
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01.3417.0.000	2	3-57	01.4579.0.004	10	3-17	01.6662.0.000	6	3-39
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01.3455.0.000	8	3-7	01.4579.0.004	20	3-21	01.6862.8.100	19	3-59
01.3470.0.000	28	3-27	01.4581.0.000	8	3-9	01.6928.0.001	24	3-17
01.3471.0.000	29	3-27	01.4582.0.000	21	3-9	01.6928.0.002	14	3-17
01.3471.0.000	23	3-39	01.4591.0.000	16	3-17	01.6943.0.000	27	3-61
01.3471.0.000	6	3-41	01.5001.0.000	12	3-37	01.6950.0.004	21	3-17
01.3508.0.000	22	3-5	01.5419.0.000	10	3-29	01.6973.0.001	14	3-54
01.3508.0.000	32	3-33	01.5455.0.000	22	3-41	01.6973.0.003	14	3-53
01.3508.0.000	36	3-37	01.5490.0.000	6	3-33	01.6973.0.003	14	3-55
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			01.6452.0.000	26	3-37	01.7530.0.000	8	3-29
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01.4003.0.000	24	3-29	01.6454.0.000	15	3-35	01.8401.0.000	14	3-35
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01.4044.0.000	13	3-29	01.6474.0.000	10	3-37	03.3072.0.000		
01.4072.0.000	6	3-23	01.6475.0.000	13	3-17	03.3072.0.000	22	3-11
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01.4406.0.000	6	3-31	01.6489.0.000	35	3-27	03.6000.0.224	25	3-9
01.4407.0.000	5	3-21	01.6502.0.000	15	3-17	03.6000.1.140	20	3-13
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40.0788.0.000	13	3-57	41.0433.0.000	17	3-29	42.0901.0.000	13	3-41
40.0789.0.050	24	3-57	41.0468.0.000	5	3-31	42.0925.0.000	19	3-5
40.0791.0.000	7	3-57	41.0470.0.071	9	3-55	42.0932.0.850	6	3-5
40.0803.1.000	18	3-57	41.0470.0.072	2	3-55	42.1002.0.001	5	3-57
40.0832.0.001	17	3-61	41.0615.0.000	7	3-33	42.1002.0.002	3	3-57
40.0832.0.002	10	3-61	41.0708.0.000	19	3-50	42.1005.0.000	1	3-57
40.0834.0.004	14	3-57	41.0708.0.000	19	3-51	42.1040.0.000	10	3-15
40.0834.0.008	14	3-57	41.0708.0.000	19	3-52	42.1041.0.000	12	3-15
40.0841.0.000	12	3-61	41.0708.0.000	19	3-53			
			41.0708.0.000	19	3-54	44.0966.2.000		
			41.0708.0.000	19	3-55	44.0966.2.000	17	3-17
41.0069.0.050			42.0039.0.000			44.0970.0.001	5	3-19
41.0069.0.050	18	3-53	42.0039.0.000	1	3-37	44.2075.0.000	1	3-61
41.0069.0.051	18	3-54	42.0063.1.050	9	3-15	44.2076.0.000	2	3-61
41.0069.0.052	18	3-55	42.0071.0.003	12	3-27	44.2077.0.000	23	3-61
41.0069.0.053	18	3-51	42.0071.0.004	2	3-27	44.2078.0.000	22	3-61
41.0069.0.053	18	3-52	42.0071.0.007	5	3-50	44.2079.0.000	19	3-61
41.0070.0.071	10	3-53	42.0071.0.007	5	3-51	44.2082.0.000	21	3-61
41.0070.0.071	10	3-54	42.0071.0.007	5	3-52	44.2102.1.000	25	3-61
41.0070.0.071	10	3-55	42.0071.0.007	5	3-53			
41.0070.0.072	1	3-53	42.0071.0.007	5	3-54			
41.0070.0.072	1	3-54	42.0071.0.007	5	3-55			
41.0070.0.072	1	3-55						
41.0072.0.002	13	3-27						

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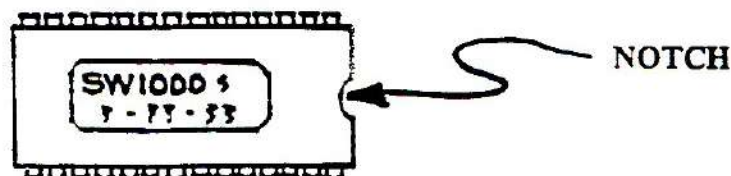
Program enhancements have caused us to utilize the second PROM socket (lower) on the P.C. board. Listed below are the enhancements.

1. Improved thread break detector stops machine within three (3) stitches of break.
2. Combined program - Added optional features ie., "Automatic Patch Loader" and "Sequenced Sewing".
3. Number of programmed pockets increased to twelve (12). Note:-Pocket Program #2 will always be 5mm or more shorter than Pocket #1.
4. In "TEST OUTPUTS" mode, a needle position test has been added. This was added to more easily adjust the synchronizer and check the motor rotation. (Motor runs clockwise from pulley side.)
5. Tab knives may now be put in a semi-automatic mode. At conclusion of cycle, kneeswitch activates knives.
6. Programmable length of first and last stitch, independent of programmed stitches.
7. Keypad control of the "WORK EJECT" feature.

As always follow the procedure on the opposite side when installing PROM chips.

WHEN REPLACING PROM CHIPS, DO THE FOLLOWING:

1. TURN POWER OFF
2. INSTALL CHIPS (MAKE SURE NOTCHS ARE TO RIGHT)
3. TURN POWER ON
4. PRESS "SEW INTERRUPT" SWITCH
5. PRESS [CTR] KEY
6. PRESS [1] KEY
7. PRESS [2] KEY
8. PRESS [] KEY UNTIL "ENCODER COUNT" APPEARS
9. PRESS [ENT] KEY (ENCODER COUNT)
10. PRESS [HOME] KEY (ENCODER COUNT)
11. PRESS [ENT] KEY (ENCODER COUNT)
12. PRESS [1] KEY (SAVE COUNT)
13. PRESS "SEW INTERRUPT" SWITCH



Note: Installing a Prom chip backwards (with the notch facing left) will destroy the chip.

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Por el aumento de programas en el micro-chip (E-Prom) hemos anadido un segundo micro-chip (E-Prom) para su tarjeta electronica.

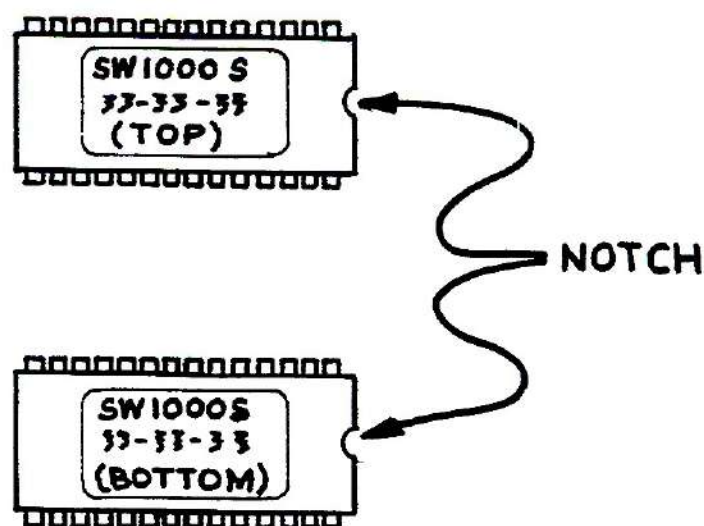
Lista de los programas:

1. Mejor deteccion de ruptura de hilo, detiene 3 puntadas despues de cortado el hilo.
2. Caracteristicas opcionales (nuevos modelos) incluidas en el programa: Carga Automatica y Secuencias de Costura.
3. Incremento en el numero de bolsillos programados a (12).
Nota: El programa de bolsillos #2 siempre sera de 5mm o mas corto que el programa de bolsillo #1.
4. El programa de diagnostico ahora incluye una prueba para la posicion de la aguja. Este nuevo programa facilita el ajuste del sincronizador y la rotacion del motor.
(El movimiento del motor debe ser como registra la aguja del reloj desde la polea)
5. Las cuchillas de las esquinas "Tab Knives" ahora se pueden programar para operacion semi-automatica. A la conclusion del ciclo de costura, el opturador de rodilla los activa.
6. Programable la distancia de la primera y ultima puntada, independiente de las puntadas programadas.

(OVER)

PARA CAMBIAR EL MICROCHIP O E-PROM, FAVOR DE PROCEDER DE LA SIGUENTE MANERA:

1. Desconectar la electricidad
2. Ubique la posicion del E-prom original y cambielo por el nuevo, asegurandose de que la marca "Notch" este a la derecha como en el dibujo
3. Conectar la electricidad y encender la maquina
4. Oprima el interruptor rojo "Sew Interrupt" en el cabezote
5. Oprima la tecla [CTR] en el teclado de comando
6. Oprima la tecla [1]
7. Oprima la tecla [2]
8. Oprima la tecla [▲] hasta encontrar (encoder count)
9. Oprima la tecla [ENT] (encoder count)
10. Oprima la tecla [HOME] (encoder count)
11. Oprima la tecla [ENT] (encoder count)
12. Oprima le tecla [1] (save count)
13. Oprima el interruptor "Sew Interrupt"



ADVERTENCIA:

INSTALE EL E-PROM CORRECTAMENTE SEGUN EL DIBUJO (CON LA MARCA A LA DERECHA) O QUEMARA EL E-PROM DESTRUYENDO TODOS LOS PROGRAMAS.