

CATALOG NO.

PL1368

Supplement to  
catalog No. 103 QA

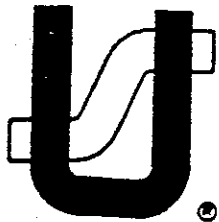
# Adjusting instructions and illustrated parts list

## STYLES

39500 CRFZ-909R

CLASS 39500 -

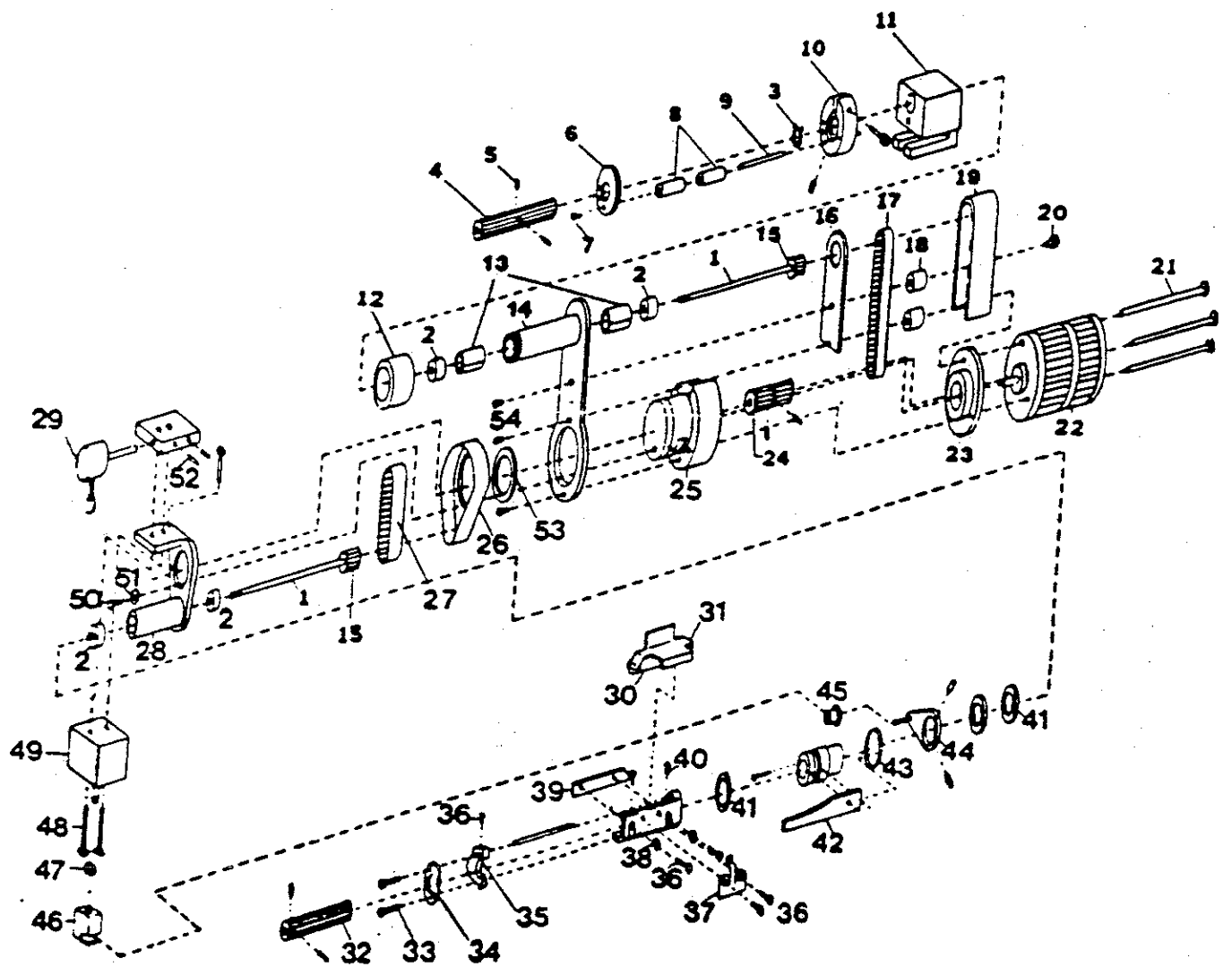
SINGLE NEEDLE THREE THREAD OVEREDGE  
MACHINE FOR METERED ELASTIC INSERTION



Finest Quality

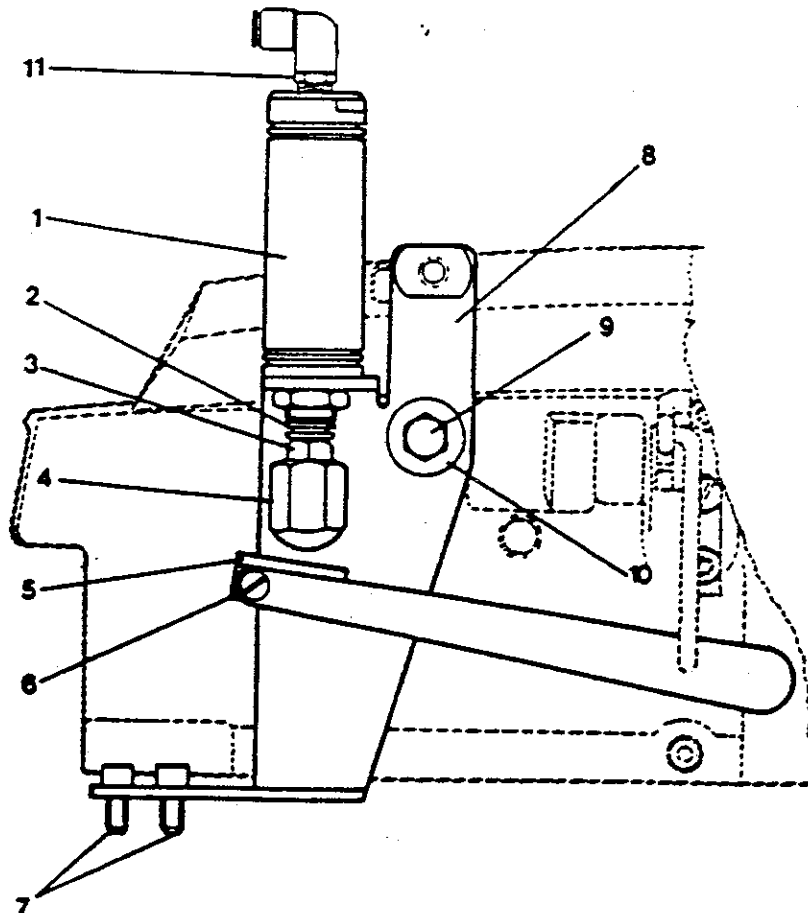
*Union Special*  
Industrial Sewing Equipment

<u>DETAIL NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	35086 D	Shaft	
2	999-81 D	ball Bearing	2
3	96253	Retaining Ring	2
4	35086 EB	Roller	1
5			1
6	35086 U	Washer	
7	99316	Screw	1
8	35086 GB	Roller	5
9	35086 A-1	Pin	6
10	35086 V	Stop	3
11	35086 W	Support Bracket	1
12	99617 S	Bushing	1
13	999-230 L	Bushing	1
14	35086 T	Lever	2
15	35086 Q	Gear	1
16	35086 RB-1	Plate	2
17	999-233 C	Timing Belt	1
18	99309 B	Nut	1
19	35086 RB	Belt Guard	2
20	99275	Screw	1
21	95167 DV	Screw	1
22	V90233 WC	Motor Assembly	3
23	35086 N	Flange	1
24	35086 PA	Gear	1
25	35086 M	Flange	1
26	35086 R	Belt Guard	1
27	999-233 B	Toothed Belt	1
28	35086 BA	Bushing	1
29	90233 SC	Flip Switch	1
30	35086 G	Roller	1
31	35086 F	Shaft	2
32	35086 E	Roller	1
33	99316	Screw	1
34	35086 K	Cover	5
35	35086 B	Tape Guide	1
36	22738 B	Screw	1
37	99697 F	Leaf Spring	7
38	95959	Washer	1
39	99669 ML	Lower Knife	2
40	22738 C	Screw	1
41	35086 BC	Washer	2
42	99670 ML	Upper Knife	3
43	35086 BD	Retainign Ring	1
44	35086 BG	Lever	1
45	35086 BJ	Roller	1
46	35086 BK	Connection	1
47	95294	Nut	1
48	95167 CV	Screw	1
49	999-191 H	Cylinder	2
50	95166 D	Screw	1
51	96904	Washer	1
52	22894 Y	Screw	1
53	999-81 S	Spring Shim	5
54	95303	Screw	1
			3

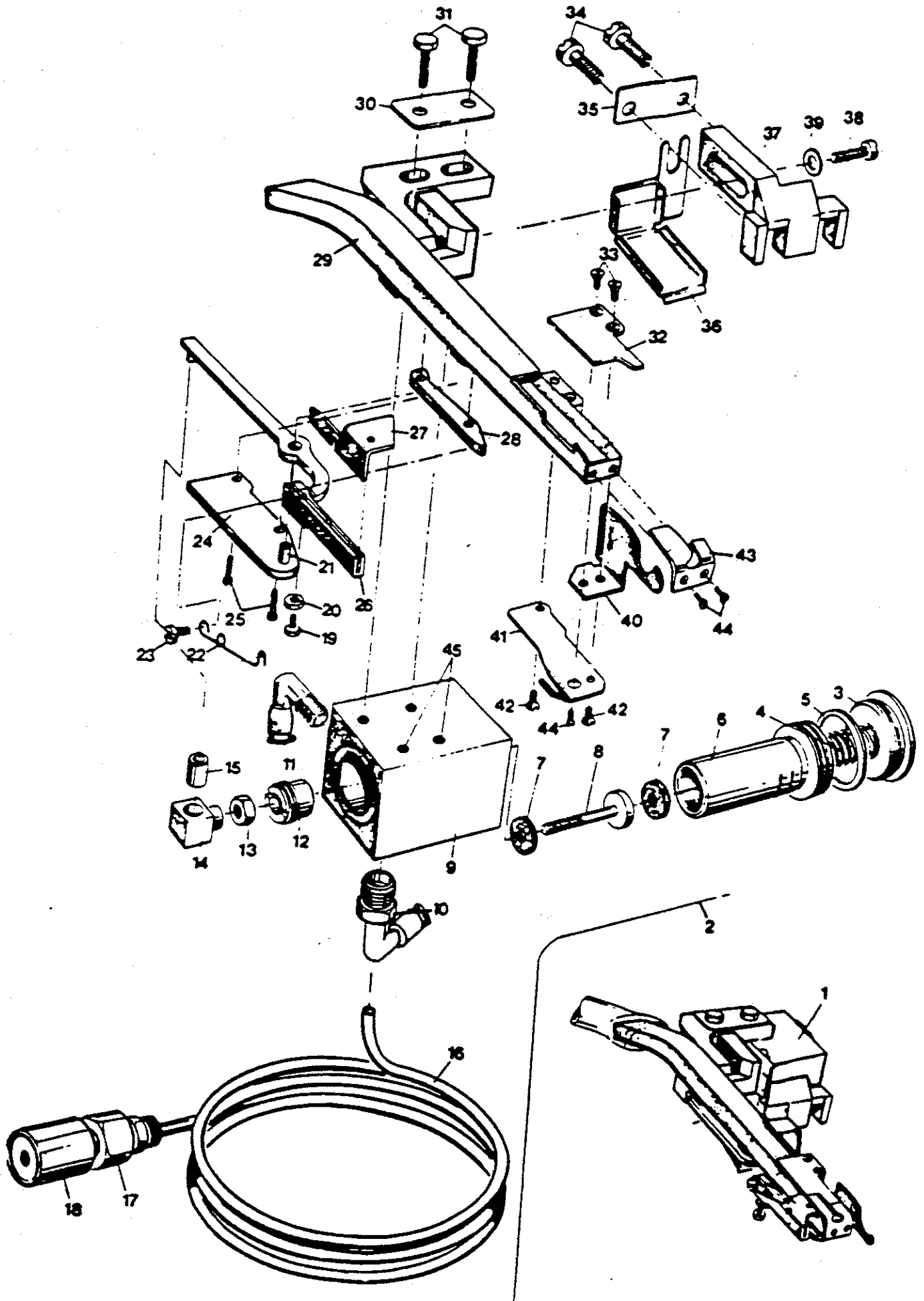


PNEUMATIC PRESSER FOOT LIFTER

<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	671-A-1	AIR CYLINDER
2.	RM-3512-1	GROMMET
3.	RM-3211-2	NUT
4.	RM-3540-A	ROD END
5.	39555-U	THRUST PIECE
6.	22528	SCREW
7.	22653-D-8	SCREW
8.	39555-AB	BRACKET FOR AIR CYLINDER
9.	22644-K-40	SCREW
10.	652-20	WASHER
11.	671-F-81-C	AIR FITTING ELBOW

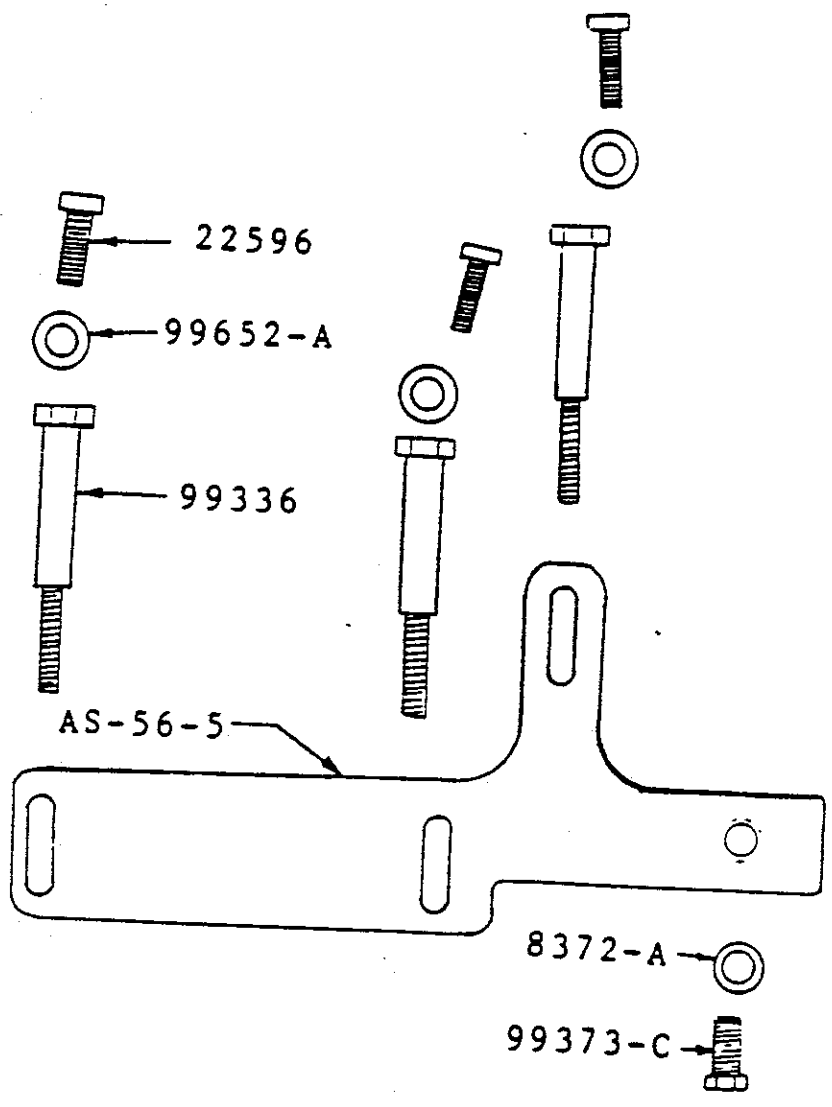


<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	V-29941-AA	POWER AIR_KLIPP ASSEMBLY
2.	671-H-1	AIR MOTOR ASSEMBLY
3.	671-H-1D	PLUG SCREW
4.	660-753	SPRING
5.	671-H-1F	RUMBER BUMPER
6.	671-H-1A	VIBRATOR
7.	671-H-1H	SHOCK WASHER
8.	39536-DC	STUD
9.	671-H-1B	HOUSING
10.	671-F-81-A	AIR FITTING
11.	671-F-82-C	AIR FITTING
12.	671-H-1E	PLUG SCREW
13.	41071-G	NUT
14.	39573-AC	DRIVE LINK
15.	671-H-1G	BUSHING
16.	671-B-37-B	TUBING
17.	999-126-G	UNION PIECE
18.	999-140-C	MUFFLER
19.	22588-K	LOWER KNIFE ADJ. SCREW
20.	60078-Z	NUT
21.	39536-DB	PIN
22.	99697-DB	TORSION SPRING
23.	22825	SCREW
24.	99663-MD	COVER PLATE
25.	22738-A	SCREW
26.	39573-AB	KNIFE LEVER
27.	99669-KH	LOWER KNIFE, marked "GS"
28.	99663-MC	SPACER PLATE
29.	99676-MC	TUBE ASSEMBLY
30.	95910-A	WASHER PLATE
31.	906	SCREW
32.	99670-LH	UPPER KNIFE, marked "GT"
33.	22716	SCREW
34.	99373-C	SCREW
35.	95910-B	WASHER PLATE
36.	39534-RB	OIL SHIELD
37.	99663-KB	BRACKET
38.	22729-D	SCREW
39.	80265	WASHER
40.	99665	FABRIC GUARD
41.	99664-C	LOOPER THREAD GUIDE
42.	22716	SCREW
43.	99677-HD	INLET PART, marked "GV"
44.	22716-A	SCREW
45.	12935-A	SET SCREW



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1.	39580-BA	THROAT PLATE SUPPORT BRACKET
2.	39580-E	SHIM FOR 39580-BA
3.	GA-39524-C-5/32	THROAT PLATE
4.	39550-T	LOWER KNIFE HOLDER
5.	88-B	SCREW FOR 39550-T
6.	39582-BS	OIL SHIELD
7.	22585-G	SCREW FOR 39552-BS
8.	39525D	FRONT NEEDLE GUARD
9.	AS-56-17	REAR NEEDLE GUARD
10.	90	SCREW FOR NEEDLE GUARDS
11.	39505-P	MAIN FEED DOG
12.	AS-56-16	DIFFERENTIAL FEED DOG
13.	AS-56-14	CHAINING FEED DOG
14.	39540-B-7	FEED DRIVE ECCENTRIC
15.	39582-BE	SIDE COVER
16.	605-A	SCREW FOR 39556-H
17.	39556-H	PRESSER FOOT HOLD DOWN
18.	39556-T	PRESSER ARM
19.	39530-AH	PRESSER FOOT SHANK
20.	AS-56-19	UPPER KNIFE CLAMP STUD
21.	AS-56-15	EYELET (HEAD COVER)
22.	AS-22-6	SYNCHRONIZER MOUNTING WIRE
23.	141	SCREW FOR AS-22-6
24.	39521-H	HANDWEEL
25.	39503-A	EDGE GUIDE
26.	99677-HA	OPTIONAL AIR-KLIPP INLET
27.	AS-56-9	PRESSER FOOT ASSEMBLY
28.	39578-AH	CHIP GUARD

# ELECTRIC METERING DEVICE MOUNTING BRACKET





CATALOG NO.

# Adjusting instructions and illustrated parts list

## STYLES

WS-42800-VE-2A

WS-42800-VE-2C1

WS-42800-VE-2K

WS-42800-VE-2G1

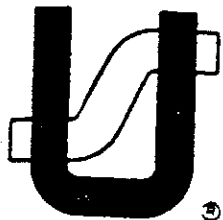
WS-42800-VE-2G2

WS-42800-VE-2H1

WS-42800-VE-2P2

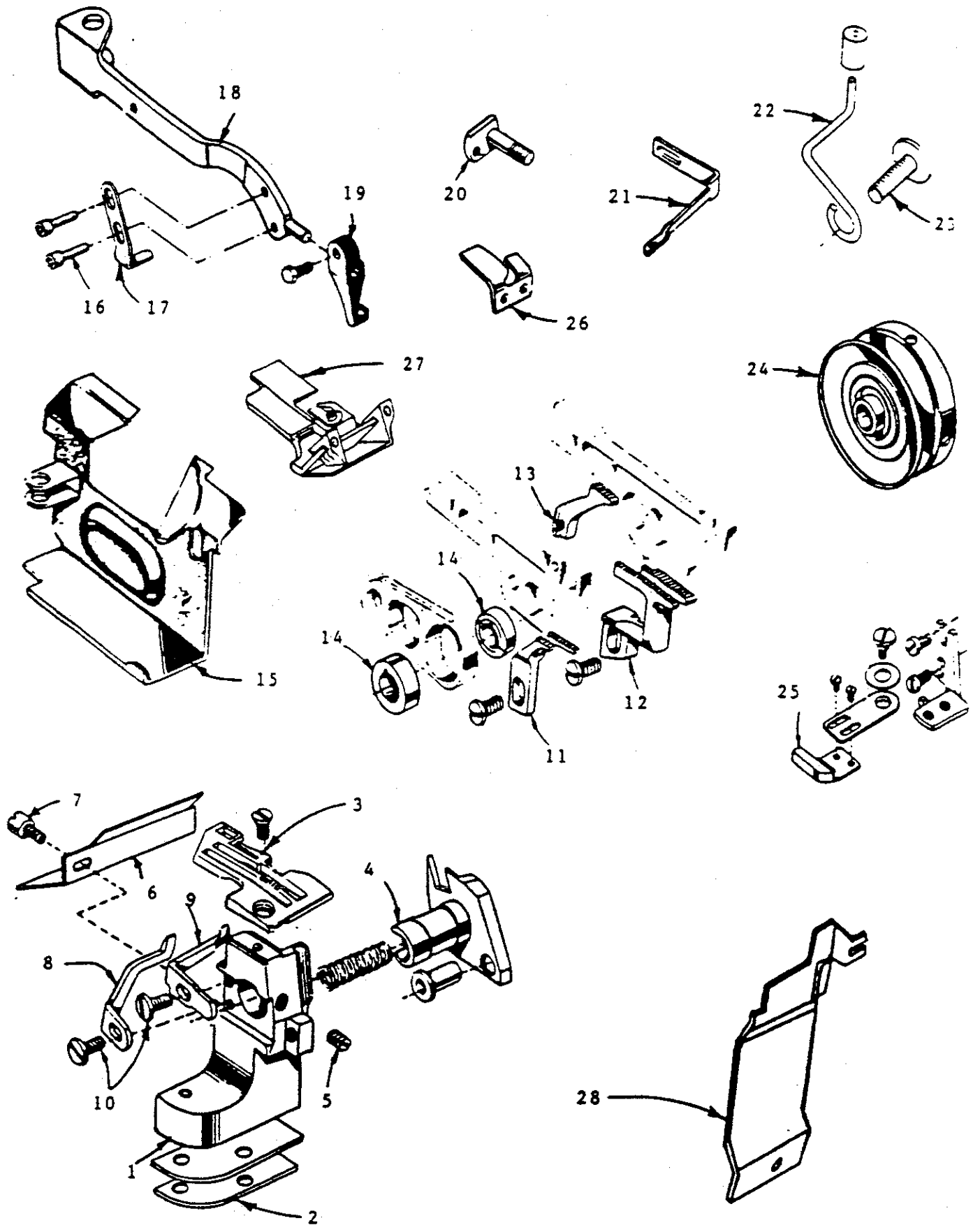
### CLASS 39500 -

SINGLE NEEDLE THREE THREAD OVEREDGE  
MACHINE FOR METERED ELASTIC INSERTION



Finest Quality

*Union Special*  
Industrial Sewing Equipment



## IDENTIFICATION OF MACHINES

Each UNION SPECIAL machine is identified by a Style number which on this Class machine is stamped into the Style plate affixed to the right rear of the machine. Serial number is stamped in the extension of bed casting at the right rear base of machine.

## STYLES OF MACHINES

39500 CRFZ-909R - Single needle, 3-thread overedge machine with electric metering device and integral knife for elastic cut-off.

## APPLICATION OF CATALOG

This catalog is a supplement to Catalog No. 103 QA and should be used in conjunction therewith. It contains the different parts used on Style 39500 CRFZ-909R.

## SETTINGS

Lubrication, needles and settings see catalog No. 103 QA.

TABLE OF CONTENTS

SECTION 1 ..... GENERAL DESCRIPTION

SECTION 2 ..... INSTALLATION (UNPACKING,  
ELECTRICAL, AIR, SEW HEAD, ELASTIC)

SECTION 3 ..... PART LIST, ASSY. DRAWINGS

SECTION 4 ..... PNEUMATIC DIAGRAMS

SECTION 1

GENERAL DESCRIPTION

DESCRIPTION

WS42800-VE-2 Automatic continuous elastic insertion workstation primarily used on swimwear garments. Workstation includes electric elastic pull-off device, electronic program box, needle positioner motor, tabling, and a 39500 CRFZ-909R head, which comes equipped with a electronic metering device. The metering device has 3 different pre-tension selections controlled by switches on the electronic box. Pre-tension selections can be called upon by a knee press switch. Trimming is actuated by the operator by means of a small toggle switch within easy reach. After completion of the sewing cycle, the power Air-Klipp trims the chain. Healing the treadle raises the presser foot and at the same time inserts a preselected amount of elastic under the presser foot for the next garment.

1. SPECIFICATIONS

Sewing Machine - - - - -	39500CRFZ-909R
Stitch Type and Seam Spec. - - - - -	504 SSa-1
Stitch Range - - - - -	7-15 S.P.I.
Standard Setting - - - - -	7 S.P.I.
Standard Needle - - - - -	154-GAS-70/027
Standard Width of Bite - - - - -	5/32"
Standard Max. Width of Elastic - - - - -	
Standard Factory Pulley Size - - -	90 MM. (6,000 R.P.M.)

2. ELECTRICAL DATA

WS-42800-VE-A	= 220V 1 Phase, 50 Hz, 3/4 HP Motor
WS-42800-VE-C1	= 220V 1 Phase, 60 Hz, 3/4 HP Motor
WS-42800-VE-K	= 240V 1 Phase, 50 Hz, 3/4 HP Motor
WS-42800-VE-2H1	= 220V 3 Phase, 60 Hz, 3/4 HP Motor
WS-42800-VE-2G1	= 220V 3 Phase, 50 Hz, 3/4 HP Motor
WS-42800-VE-2G2	= 380V 3 Phase, 50 Hz, 3/4 HP Motor
WS-42800-VE-2P2	= 440V 3 Phase, 50 Hz, 3/4 HP Motor

3. PNEUMATIC

Working Pressure -	60 P.S.I.
Air Consumption -	C.F.M.

4. OPTIONS

Part #2899-D-9-D - Waste Disposal Kit. (Kit includes all Pneumatic hardware for easy installation)

Part #AS-56-28 - 1" Max. width presser foot

## SECTION 2

### INSTALLATION

#### UNPACKING AND INSTALLATION:

1. Remove the strapping. Pull out all nails holding carton to pallet and remove carton from pallet.
2. Make a visual inspection to check for any obvious damage on sewing machine and tabling.
3. Remove strapping holding sewing head to table.
4. Take out thread stand and assemble per assembly drawing. (See parts list, Section 3.) Install stand on right rear corner of table.
5. Install electronic box and platform to control box support (support mounting location is right front corner of tabletop). Plug in cables. (See electronic box diagram).
6. Install tape pull-off device into support flange mounted on rear middle portion of table and secure with socket head cap screw. Slide rod for holding elastic rolls into hole in upper bracket of stand and secure with socket head cap screw.

#### ELECTRICAL HOOK-UP

1. Hook up electric. NOTE: See Electrical Data, Section 1, for proper workstation ordered for electrical requirements.
2. Connect synchronizer cable to back of electronic box if not already done.
3. Remove any remaining packing cartons, tape, etc., from sewing head.
4. Toe on treadle SLOWLY and check for proper rotation of crankshaft.

#### AIR PRESSURE HOOK-UP

1. Connect workstation to air supply at the filter regulator.
2. Set main regulator at 60 P.S.I.
3. With electric off, adjust Air-Klipp regulator to 22 P.S.I. and Venturi regulator to 25 P.S.I. while holding treadle valve toed to run position.
4. Treadle adjustment should be made with electric power on. Treadle valve is to open simultaneously or before motor is turning the pulley.

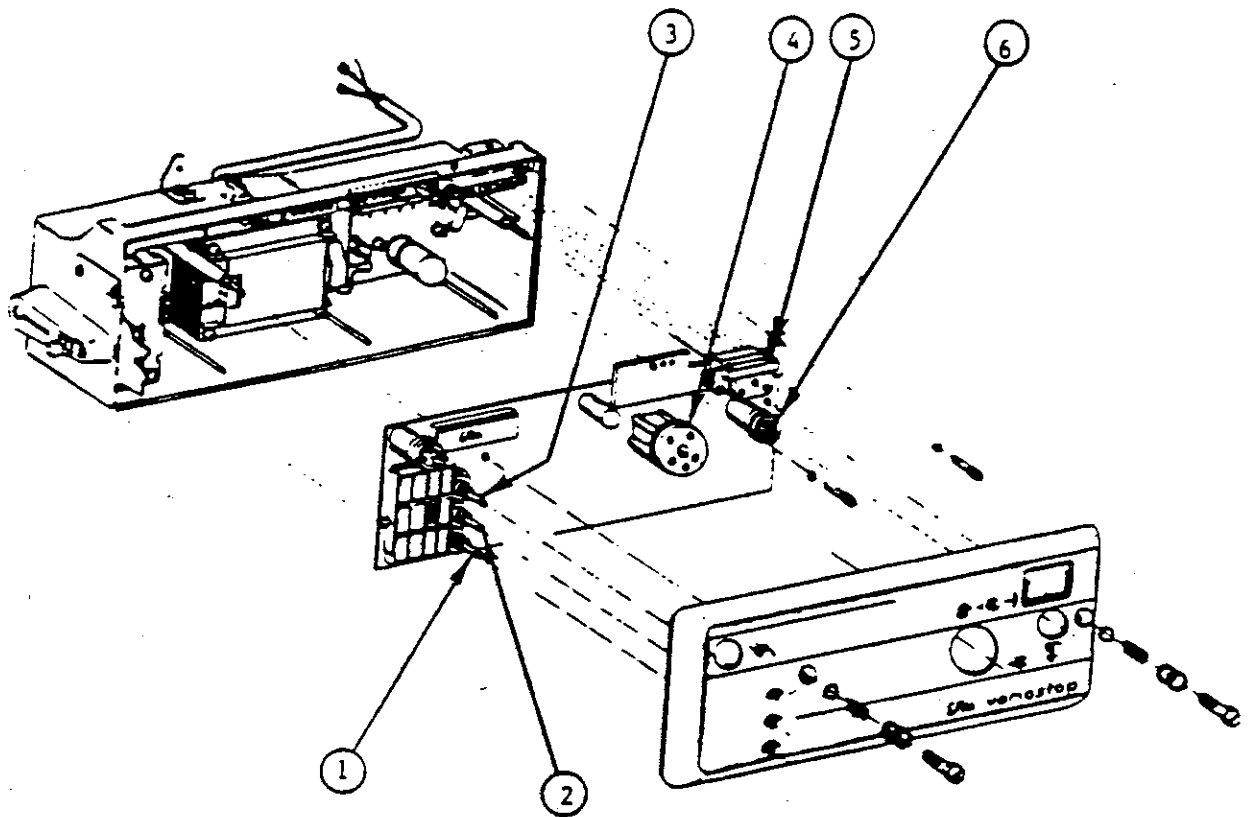
### SEWING HEAD

1. Check oil level (see Catalog 103 QA).
2. Thread all eyelets of machine (see )
3. Check for proper stitches per inch.
4. Check for proper stitch formation (see Catalog 103 QA).
5. Air-Klipp adjustments (see supplement).
6. Presser foot height (see supplement).

### ELASTIC

1. Pull-off device guides should center elastic left to right on rollers.
2. Insert elastic through rollers and into metering device (see Diagram )
3. Presser foot guides (left, right) adjust right guide for desired width between edge of elastic and edge of seam. Adjust left guide for proper width of elastic. NOTE: Do not let elastic pinch between guides.

# MOTOR CONTROL BOX



1. POSITIONING SPEED ADJUSTMENT (180 R.P.M. MAX.)
2. RAMP SPEED ADJUSTMENT (FACTORY SET)
3. MAX MOTOR R.P.M. ADJUSTMENT (3400 R.P.M.)  
NOTE: PEAK MOTOR TO PREVENT EXCESSIVE WEAR ON CLUTCH.
4. FOOTLIFT CABLE PLUG-IN
5. MOTOR CABLE PLUG-IN
6. SYNCHRONIZER PLUG-IN



RM-5341 CONTROL BOX ASSEMBLY  
WS-42800-VE SWIMWEAR WORKSTATIONS

PROGRAMMING

1. Push "F", then program #. (1-9).
2. Push "A", "B", and/or "C" for sequence of tensions.  
If only one or two tensions is required then push "O". When finished Push "E".
3. Enter count for "A". All 3 digits must be entered.  
For Example: 5 is entered as 005. Push "E" when done (Do not enter all "O").
4. Repeat above for "B" and "C".
5. Enter count for initial insert (2 digits to 99). Push "E" when done.
6. Enter pull back compensation at start (2 digits to 99). Push "E" when done.
7. Display will blank for 3-4 seconds. Program is ready to run.

NOTE: To review a program, Push "F", then the #. Continue to Push "E" until display goes blank.

PROGRAM "O"

Program "O" contains common information shared by all programs. To change.

1. Push "F", then program # "O".
2. Enter the number of stitches (00-99) for the air miser at the start to shut off after start of sew. Push "E" when done.
3. Enter the Motor Speed for inserting the elastic. (3 digits 000 to 999) This number is the time in milliseconds between steps of the motor). Push "E" when done.
4. Enter the number of stitches (00-99) for the air miser at the end to turn on after the cut switch. Push "E" when done.
5. Enter the # of stitches at start before metering device feeds. (0-9).
6. Display will blank for 3-4 seconds and return to previous PGM that was selected.

DIRECT RUNNING OF PROGRAM

1. Push "D".
2. Enter program #.
3. Display will blank and go directly to program selected.


RM-5341 CONTROL BOX ASSEMBLY  
WS-42800-VE SWIMWEAR WORKSTATIONS

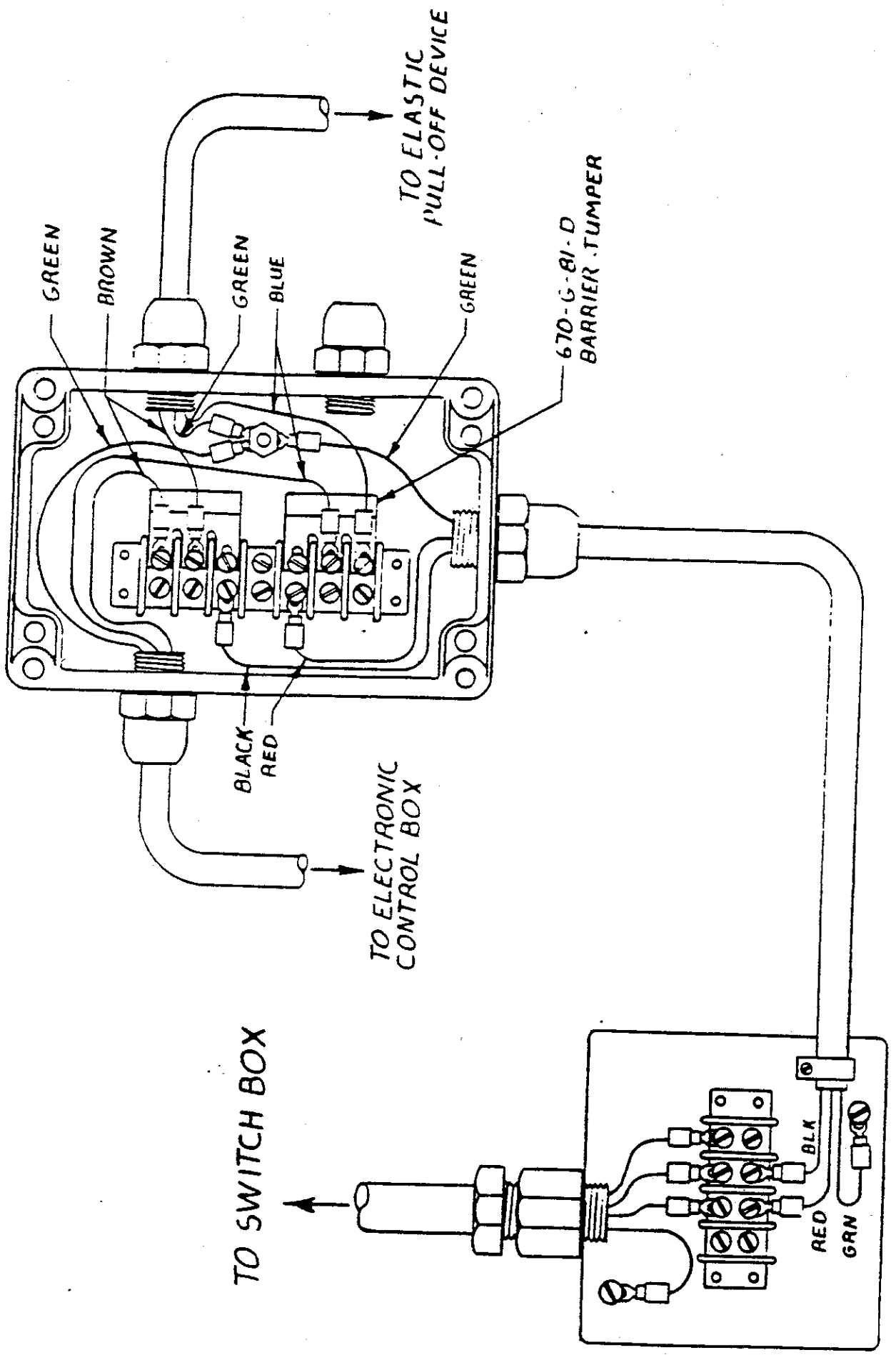
SERVICE/RUN

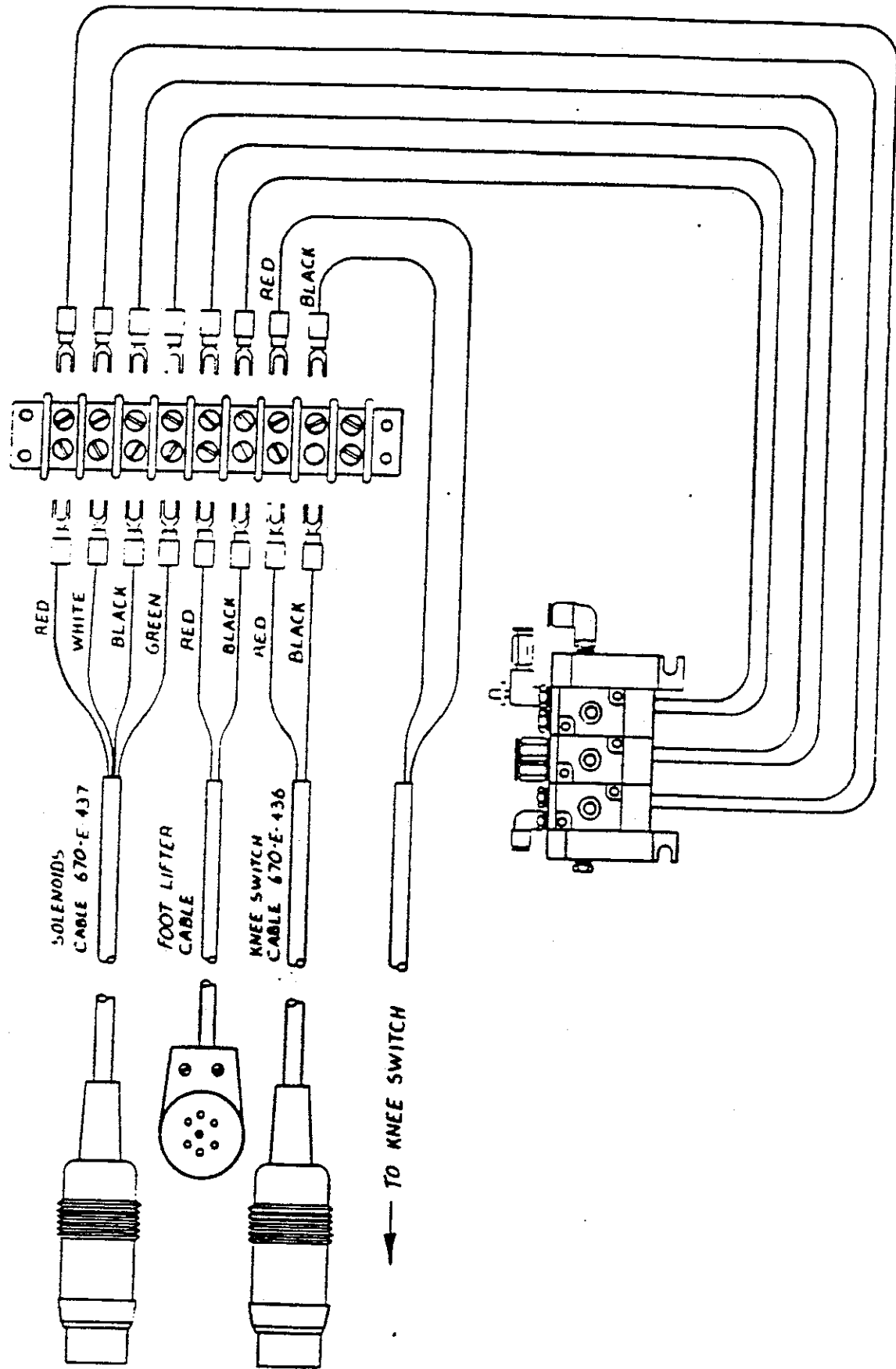
Service mode disables all input switches (PF, Thumb, and Knee) for working on sewing head (Threading, etc). To disable stepping motor turn unit off in back of box with black switch near power cord. Run mode will reload previous program # selected.

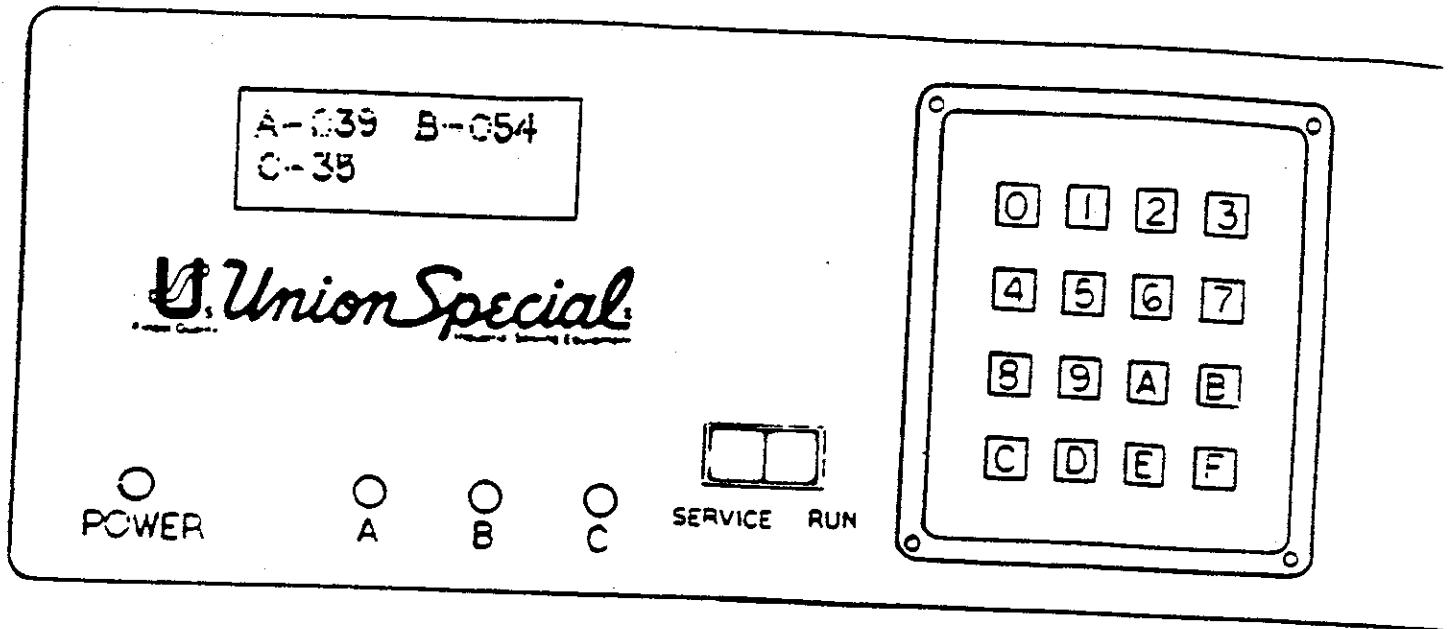
TYPICAL SETTINGS

Air miser start = 30  
Motor Speed = 050  
Air miser final = 00  
Feed count = 1  
Sequence = AB  
    A = 015 for raw rubber flat  
    B = 100 for 2 to 1  
    = 150 for 3 to 1  
Initial insert = 40-45  
Pull back = 2-5

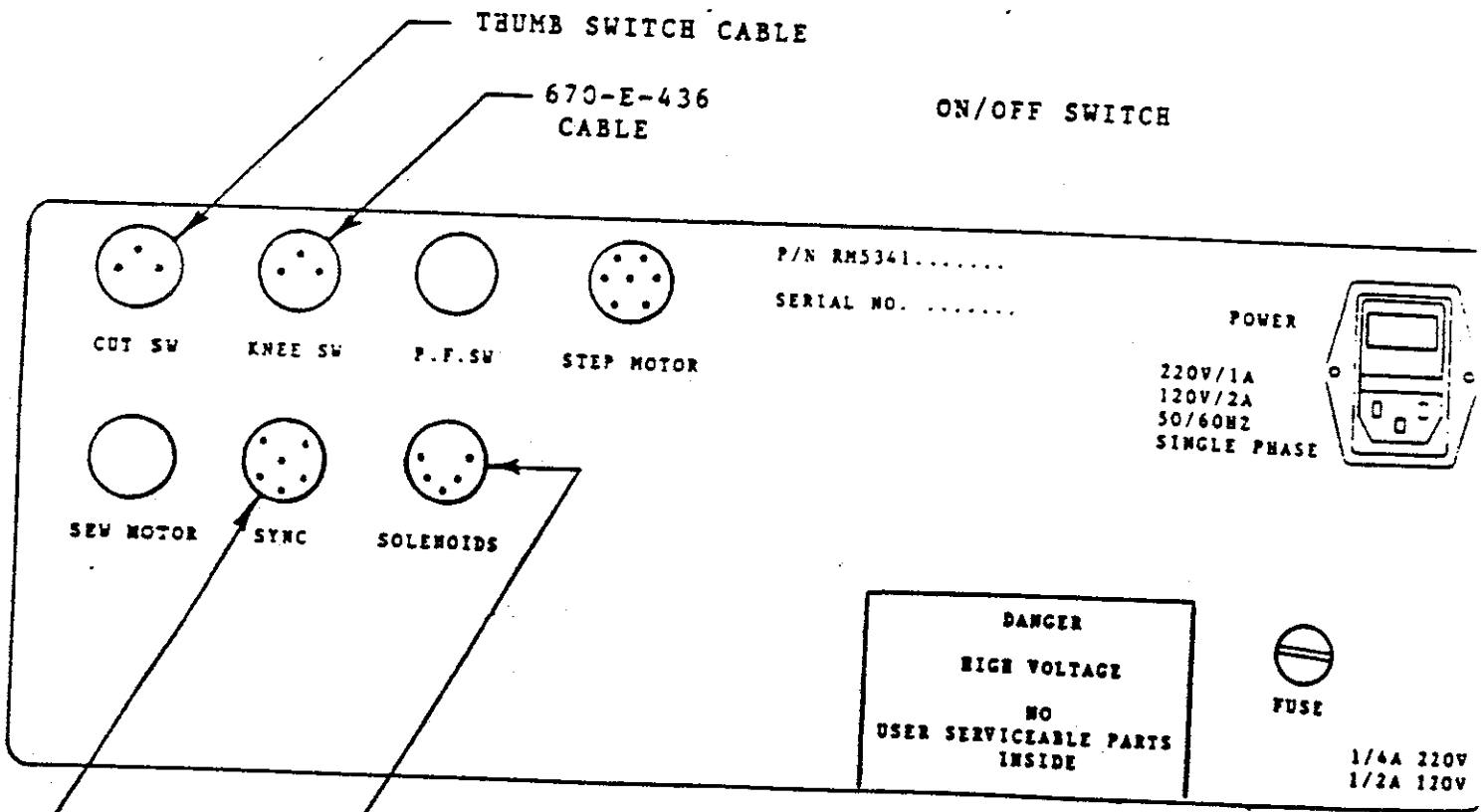
cc: G. Gilbson  
    D. Navlyt  
      
    D. Ford  
    F. Jaudas  
    R. Deitz







ELECTRONIC BOX  
FRONT VIEW



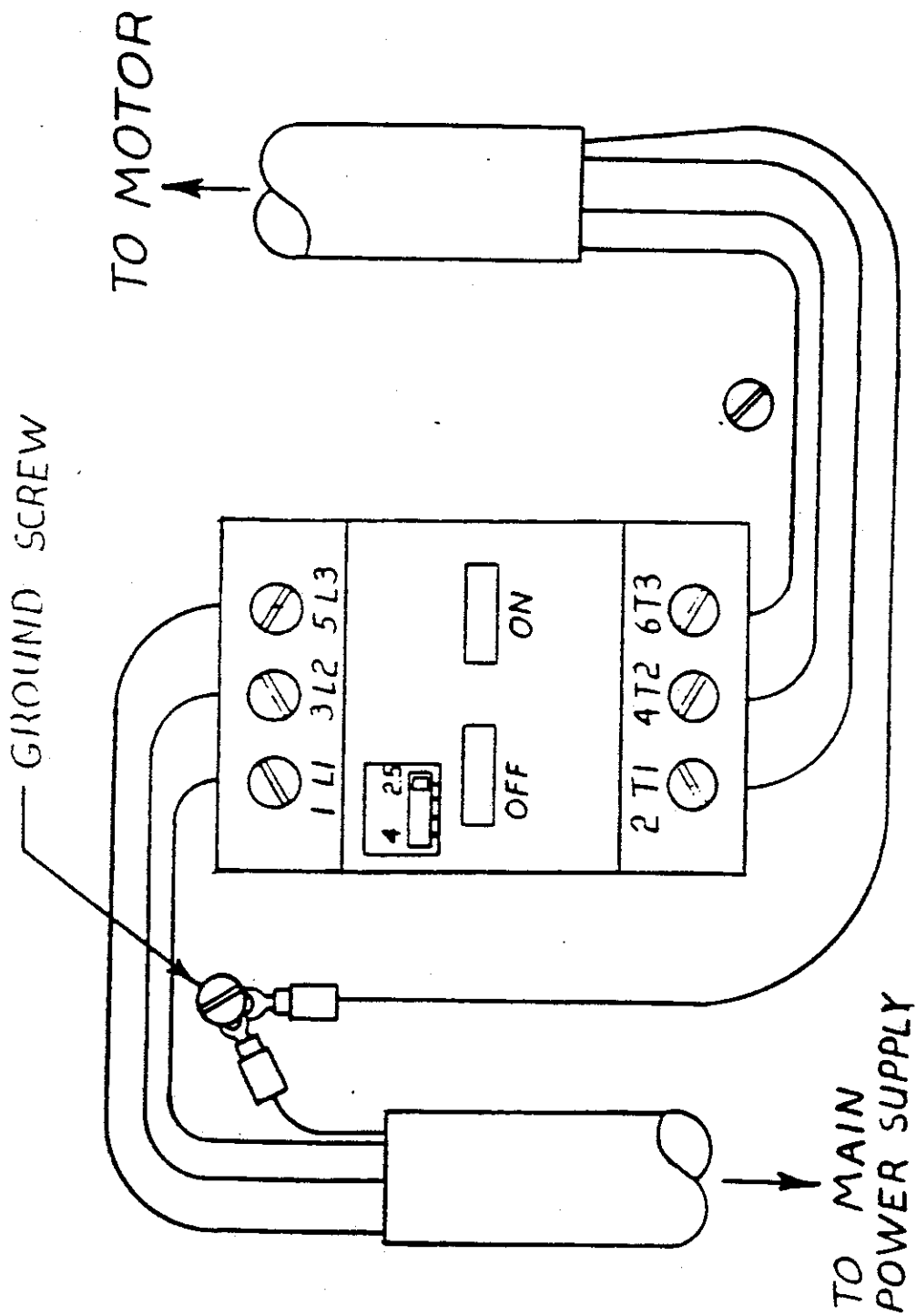
ELECTRONIC BOX  
BACK VIEW

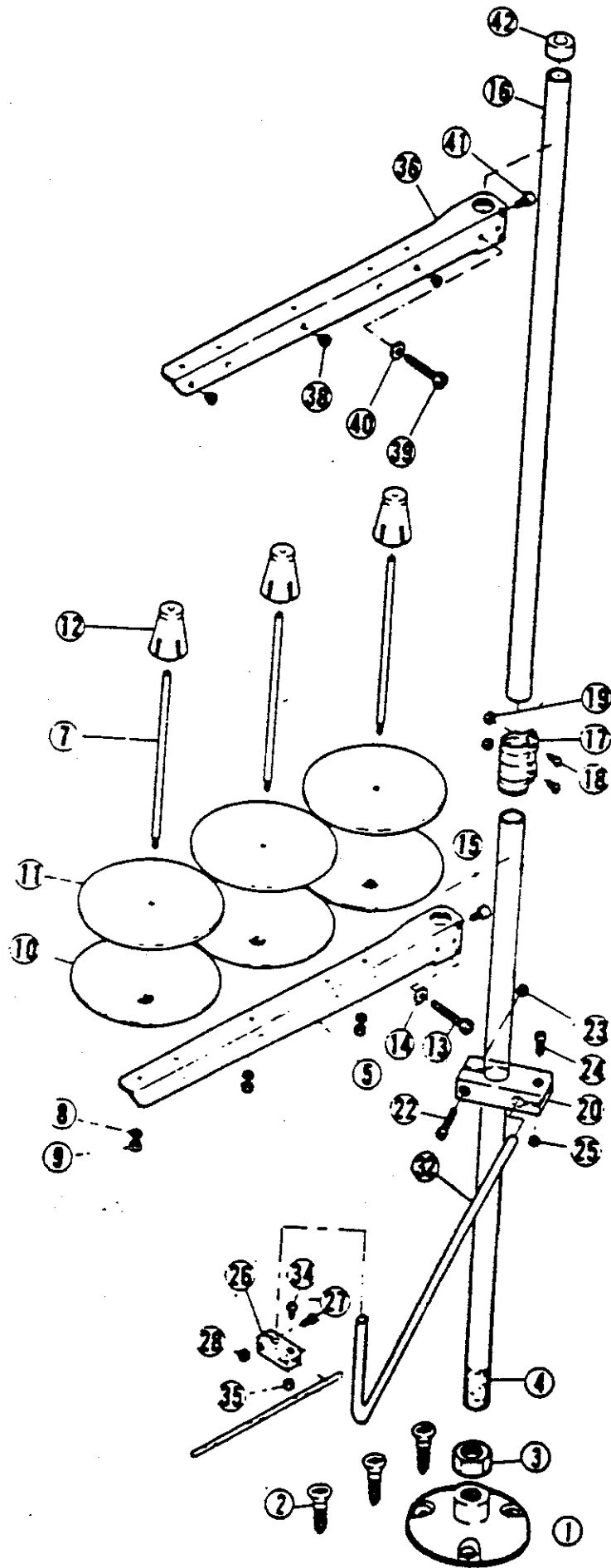
670-E-438  
CABLE

670-E-437  
CABLE

**DANGER**  
**HIGH VOLTAGE**  
**NO**  
**USER SERVICEABLE PARTS**  
**INSIDE**

1/4A 220V  
1/2A 120V





THREAD STAND ASSEMBLY

THREAD STAND ASSEMBLY

DETAIL NO.

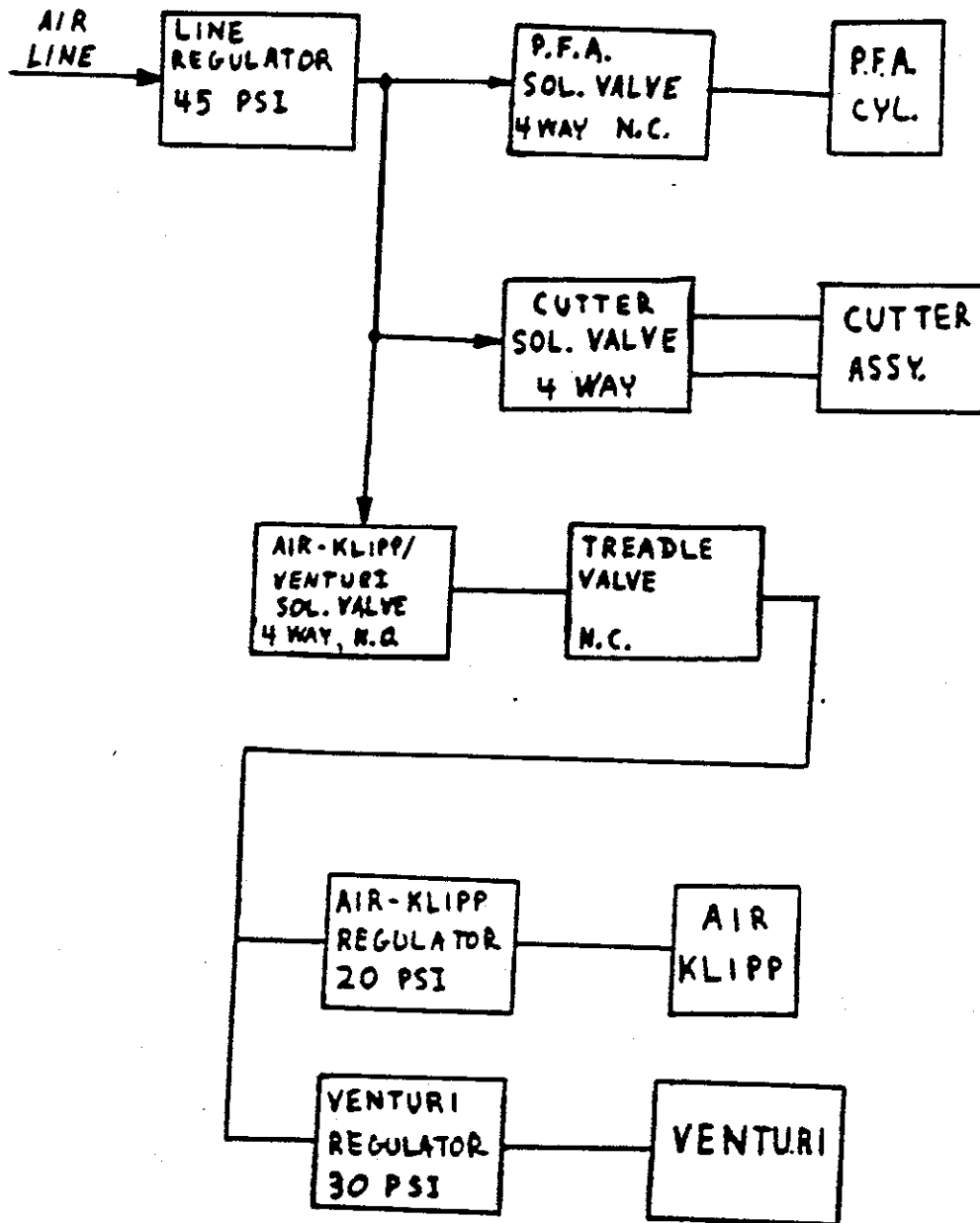
DESCRIPTION

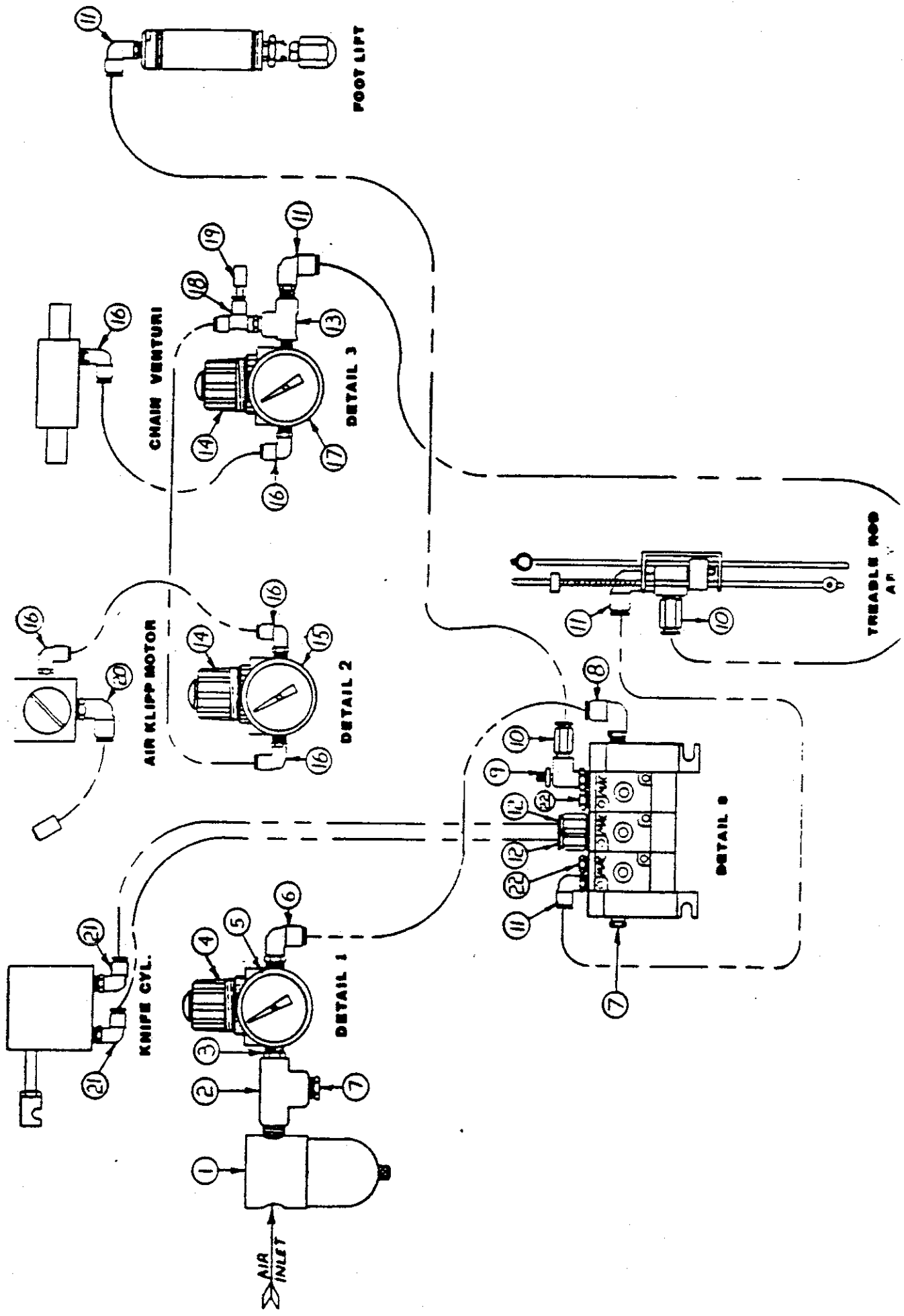
QTY.

1	Thread Stand Base	1
2	Screw	1
3	Nut	1
4	Thread Stand Rod (Lower)	1
5	Bracket	1
7	Spool Pin	3
8	Spring Washer	3
9	Nut	3
10	Spool Tray	3
11	Seat	3
12	Spool Retaining Fig	3
13	Screw	1
14	Washer	1
15	Screw	1
16	Thread Stand Rod (Upper)	1
17	Joint	1
18	Screw	2
19	Nut	2
20	Holder (Large)	1
21	Thread Guide Bar	1
22	Screw	1
23	Nut	1
24	Screw	1
25	Nut	1
26	Holder (Small)	1
27	Screw	1
28	Nut	1
32	Thread Guide Bar	1
34	Screw	1
35	Nut	1
36	Bracket	1
38	Thread Eyelet	1
39	Screw	3
40	Washer	1
41	Screw	1
42	Cap	1



PNEUMATICS DIAGRAM  
WITHOUT WASTE REMOVAL SYSTEM



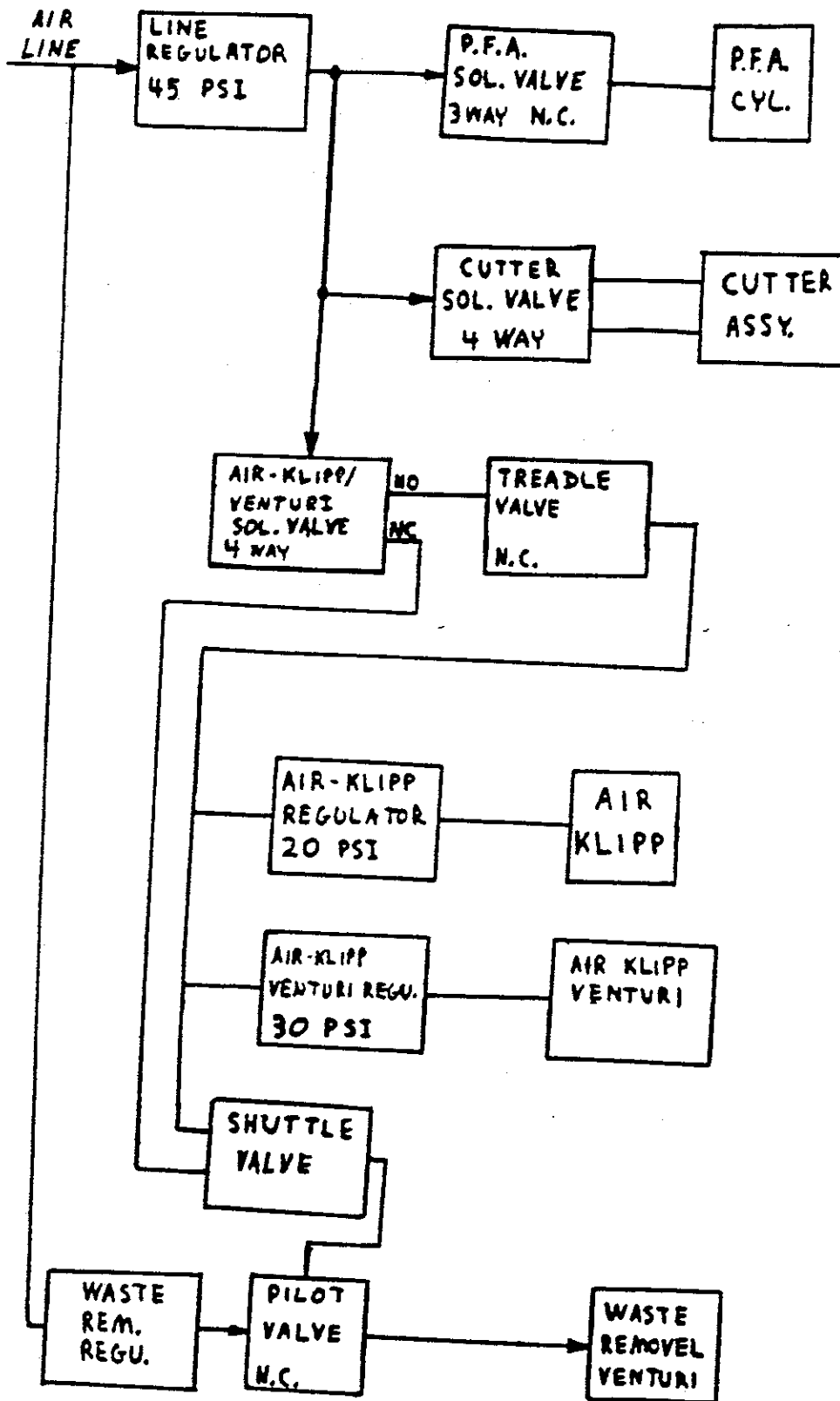


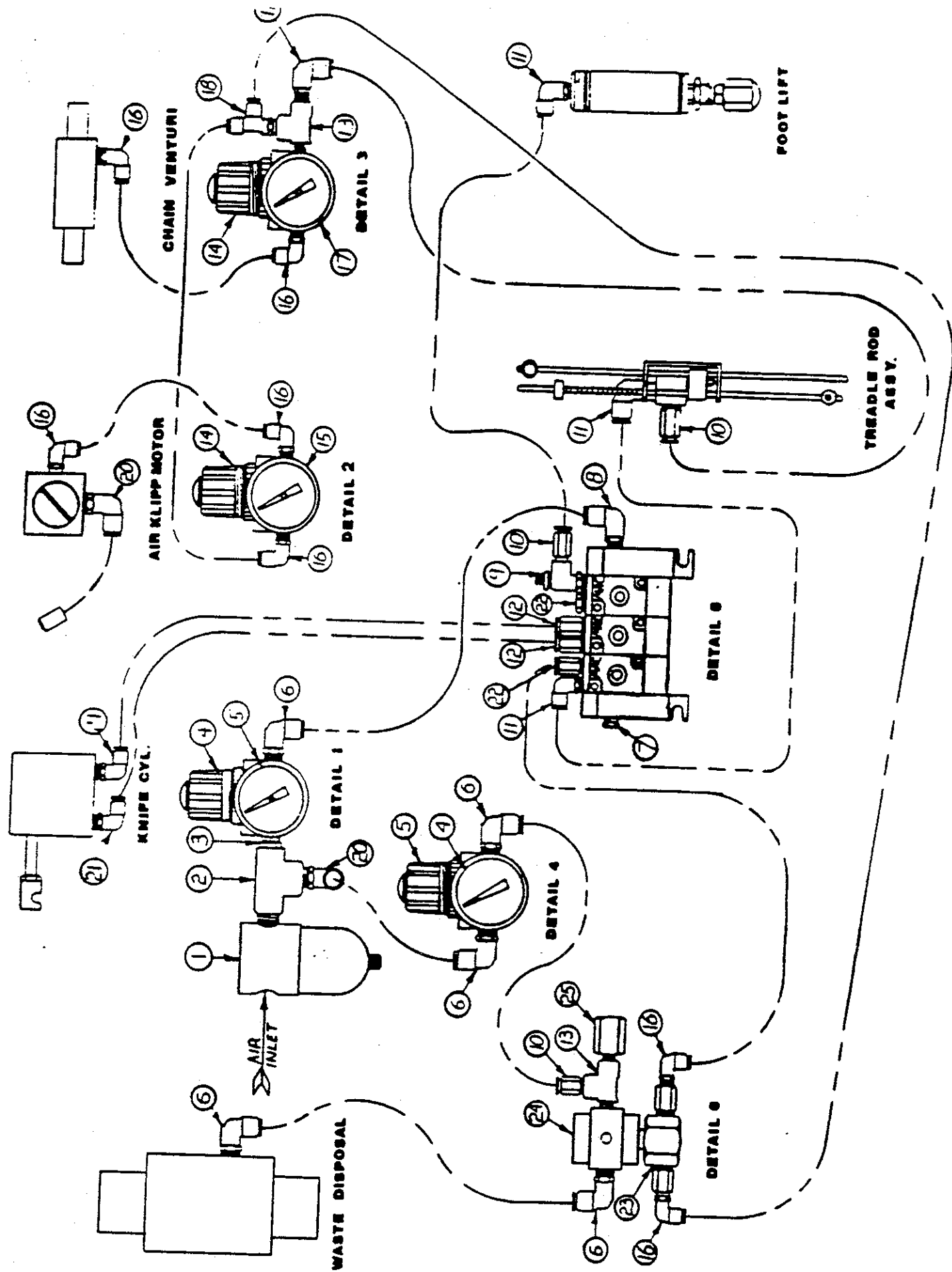
PNEUMATIC DIAGRAM WITHOUT WASTE DISPOSAL

PARTS LIST

<u>REF. NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	671 D-5	Air Filter	
2	671 F-13	1/4" Tee	
3	RM-3320-1	Reducing Nipple	
4	671 D-10	100 PSI Gauge	
5	RM-3110 D	Regulator	
6	671 F-81 C	1/4 T. 1/8 N.P.T. Elbow	
7	671 F-87	1/4 Pipe Plug	
8	671 F-81 A	1/4 T. 1/4 N.P.T. Elbow	
9	671-106 B	Flow Control	
10	671 F-81 D	1/4 T. 1/8 N.P.T. Connector	
11	671 F-81 C	1/4 T. 1/8 N.P.T. Elbow	
12	671 F-82 A	5/32 T. 1/8 N.P.T. Connector	
13	RM-2850 D	Tee	
14	671 D-9	Regulator	
15	671 D-22	30 P.S.I. Gauge	
16	671 F-82 C	5/32 T. 1/8 N.P.T. Elbow	
17	671 D-15	60 P.S.I. Gauge	
18	671 F-82 E	#5/32 T. 1/8 N.P.T. Tee	
19	671 F-89 A	Push-In Plug	
20	671 F-81 A	1/4 T. 1/4 N.P.T. Elbow	
21	671 F-82 F	5/32 T. 10/32 N.P.T. Elbow	
22	RM-2947-1	1/8 Pipe Plug	

PNEUMATICS DIAGRAM  
WITH WASTE REMOVAL SYSTEM





PNEUMATIC DIAGRAM - WITH WASTE DISPOSAL

PARTS LIST

<u>REF. NO.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	671 D-5	Air Filter	
2	671 F-13	1/4" Tee	
3	RM-3320-1	Reducing Nipple	
4	671 D-10	100 PSI Gauge	
5	RM-3110 D	Regulator	
6	671 F-81 C	1/4 T. 1/8 N.P.T. Elbow	
7	671 F-87	1/4 Pipe Plug	
8	671 F-81 A	1/4 T. 1/4 N.P.T. Elbow	
9	671-106 B	Flow Control	
10	671 F-81 D	1/4 T. 1/8 N.P.T. Connector	
11	671 F-81 C	1/4 T. 1/8 N.P.T. Elbow	
12	671 F-82 A	5/32 T. 1/8 N.P.T. Connector	
13	RM-2850 D	Tee	
14	671 D-9	Regulator	
15	671 D-22	30 P.S.I. Gauge	
16	671 F-82 C	5/32 T. 1/8 N.P.T. Elbow	
17	671 D-15	60 P.S.I. Gauge	
18	671 F-82 E	45/32 T. 1/8 N.P.T. Tee	
19	671 F-89 A	Push-In Plug	
20	671 F-81 A	1/4 T. 1/4 N.P.T. Elbow	
21	671 F-82 F	5/32 T. 10/32 N.P.T. Elbow	
22	RM-2947-1	1/8 Pipe Plug	
23	671-20	Shuttle Valve	
24	RM-4098-1	Pilot Valve	
25	RM-3315	Regulator Stud	

MISCELLANEOUS REPLACEMENT PARTS

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
21101 W-3	Thread Stand
21233 JW	Light Fixture Assy.
21233 KB	Light Bulb
21233 SH	Light Fixture base
21261 M-370	Belt
21371 G	Table Drawer
21374 BF	K-Leg Stand
2899 R	Junger Pull Off N 22/34
670 B-90	Switch Box (Siemens)
670 B-99	Knee Switch Assembly
670 E-16	Connector Cable
670 E-426	Connecting Cable
670 E-436	Knee Switch Harness
670 E-437	Solenoid Valve Harness
670 E-438	Motor Interface Cable
670 E-440	Foot Lifter Cable (VE2)
670 H-49	Efka VD552L/8831X (2P-FL)
670 L-35	Electrical Box
AS-56-13	Tableboard
AS-56-21	Treadle Switch Kit
AS-56-6	Control Box Support
AS-56-7	Control Box Platform
RM-5341	Control Box Assembly
AS-56-1	Pneumatics Mounting Bracket
670M-5	EFKA SYNCHRONIZER

PARENT NUMBER: W842800VE2H1

DESCRIPTION: SWIMWEAR WORKSTATION (DOPPEL-POSITIONER)

SEQ NO	COMPONENT	QTY PER	DESCRIPTION	PART CODE
010	2884B4	1	CONTROL BOX ASSEMBLY	P-R
010	2884B5	1	TABLE & LEG ASSEMBLY	M-R
010	2889R1	1	PULL-OFF DEVICE (SAHL)	P-R
010	670B90	1	SWITCH BOX (SIEMENS)	P-R
010	670H49	1	EFKA VD552L/6831X (2P-FL)	P-R
010	RM3656-16	1	37" V-BELT 3L	P-R
010	W842800-1	1	SWIMWEAR MACHINE ASSEMBLY	T-R



PARENT NUMBER: 8W42800-1

DESCRIPTION: SWIMWEAR MACHINE ASSEMBLY

NO.	COMPONENT	QTY PER	DESCRIPTION
	21102B	1	ROD
	21104B18	1	ROD
	21104B9	2	ROD
	21173A	1	CONNECTION
	880-715	3	CABLE STAPLE
	871837A	14	5/32 TUBING
	871837B	10	1/4" NYLON TUBING
	871F29	1	COUPLING
	871F82C	2	PUSH IN 5/32 TUBE FITTING
	93064H1	2	CONE
	A856-23	1	CLAMPING BLOCK
	A856-24	1	3 SPOOL THREAD STAND ASSEMBLY
	A856-54	1	CHIP CHUTE
	G21217A	1	ROD CONNECTION
	RM2671B	20	CABLE TIE
	RM3293-5	2	#6 F.W
	RM3832-1	8	HARNESS WRAP
	RM3832-2	3	HARNESS WRAP
	8C298	2	FLAT HEAD WOOD SCREW
	21371Q	1	TABLE DRAWER
	2884B1	1	SWIMWEAR PNEUMATIC ASSEMBLY
	2884B2	1	JUNCTION BOX ASSEMBLY
	870B99	1	KNEE SWITCH ASSEMBLY
	870E18	1	CONNECTOR CABLE
	870E438	1	MOTOR INTERFACE CABLE (8W)
	C1054	4	WASHER
	RM3293-2	3	5/16 F.W.WASHER
	RM3438-1	3	5/16-18 X 1 1/2 H.H.C.S
	RM3993-5	3	5/16 H.S.L.W
	8C3298	4	RD HD WOOD SC
	8C330	3	#12 X 1 R.H.W.S
	212339H	1	LGT FDXT BASE
	2884B3	1	VENTURI ASSEMBLY
	29480AAB	1	TREADLE VALVE KIT
	871F81C	1	PUSH-IN 1/4" TUBE ELBOW
	871F81D	1	PUSH-IN 1/4" TUBE CONNECTOR
	A856-27	1	LITE FDXTURE (S.W.)
	RM2719-3	4	#10 X 1 1/2" P.H.S.M.S. (BLTD)
	8C303	3	FLAT HEAD WOOD SCREW
	3045013	1	SHIPPING SUPPORT STRAP
	6-151-24-1	1	PALLET (WS)
	6-151-24-2	1	SHIPPING CARTON (W/S)
	6-151-24-3	2	2X4 BRACE 36" LONG

PARENT NUMBER: 288481

DESCRIPTION: SWIMWEAR PNEUMATIC ASSEMBLY

SEQ NO	COMPONENT	QTY PER	DESCRIPTION	PART CODE
010	22840M32	5	SCREW	P-R
010	40-50	5	WASHER	P-H
010	660-478	2	LOCKNUT	P-R
010	660-763	2	SILENCER	P-H
010	670E438	1	KNEE SWITCH HARNESS	P-R
010	670E437	1	SOLENOID VALVE HARNESS	P-R
010	670E440	1	FOOT LIFTER CABLE (VEZ)	P-R
010	671-103A	3	4 WAY SOLENOID VALVE	P-R
010	671-104A	1	VALVE STACKING KIT	P-R
010	671-108B	1	FLOW CONTROL	P-R
010	671-20	1	SHUTTLE VALVE	P-R
010	671D10	1	AIR PRESS GAUGE	PUR
010	671D15	1	AIR PRESS GAUGE	PUR
010	671D22	1	GAUGE	P-R
010	671D40	1	0-100 GAUGE 1/8 BACK MOUNTED	P-R
010	671D5	1	AIR FILTER	P-H
010	671D9	2	REGULATOR	PUR
010	671F13	1	IMPERIAL TEE	PUR
010	671F81A	2	PUSH-IN 1/4 TUBE FITTING	P-R
010	671F81C	9	PUSH-IN 1/4 TUBE ELBOW	P-R
010	671F81D	2	PUSH-IN 1/4 TUBE CONNECTOR	P-R
010	671F82A	3	PUSH IN 5/32 TUBE FITTING	P-R
010	671F82C	2	PUSH IN 5/32 TUBE FITTING	P-R
010	671F87	1	1/4 PIPE PLUG	P-R
010	A856-1	1	PNEUMATICS MOUNTING BRACKET	P-R
010	RM2733A	3	6-32 x 1/2 B.H.M.S	P-R
010	RM2747-2	3	#6 INTERNAL TOOTH LOCK WASHER	P-R
010	RM2791-2	3	#6-32 HEX NUT	P-R
010	RM2850D	1	TEE	PUR
010	RM2871B	3	CABLE TIE	PUR
010	RM2947-1	1	HEX PIPE PLUG	P-R
010	RM2951B	1	CABLE CLAMP	P-R
010	RM3110D	2	REGULATOR	P-R
010	RM3289-2	2	10-32 x 5/8 B.H.M.S	P-R
010	RM3293-3	8	3/8 F.W	PUR
010	RM3315	8	REGULATOR STUD	P-R
010	RM3320-1	1	REDUCING NIPPLE	P-H
010	RM3352	10	SPADE TERMINAL	P-R
010	RM3625-3	1	TERMINAL STRIP	P-R
010	RM4098-1	1	PILOT VALVE	PUR

PARENT NUMBER: 286482

DESCRIPTION: JUNCTION BOX ASSEMBLY

SEQ NO	COMPONENT	QTY PER	DESCRIPTION	PART CODE
010	860-478	2	LOCKNUT	P-R
010	860-542	1	BRASS RD HD SCR	P-R
010	881-59	5	HEYCO CONNECTOR	P-R
010	881-58A	1	HEYCO CONNECTOR	P-R
010	870E428	1	CONNECTING CABLE	P-R
010	870E488	1	POWER CABLE ASSEMBLY	P-R
010	870G81D	2	3 POSITION BARRIER JUMPER	M-R
010	870L35	1	ELECTRICAL BOX	P-R
010	RM2747-2	2	#6 INTERNAL TOOTH LOCK WASHER	P-R
010	RM2791-2	2	#6-32 HEX NUT	P-R
010	RM2806-3	2	6-32 x 3/4 S.H.M.S	P-R
010	RM3628-1	1	TERMINAL	P-R

PARENT NUMBER: 285483

DESCRIPTION: VENTURI ASSEMBLY

SEQ NO	COMPONENT	QTY PER	DESCRIPTION	PART CODE
010	660-536	1	HOSE CLAMP	P-R
010	671-63	1	VENTURI	P-R
010	671B11	1	AIR TUBE	P-H
010	671B12	1	AIR TUBE	P-H
010	671FB1C	1	PUSH-IN 1/4 TUBE ELBOW	P-R
010	RM3321-2	1	HOSE CLAMP ADJUSTABLE	P-R

PARENT NUMBER: 288484

DESCRIPTION: CONTROL BOX ASSEMBLY

SEQ NO	COMPONENT	QTY PER	DESCRIPTION	PART CODE
010	22082A8	3	SCREW	P-H
010	A856-6	1	CONTROL BOX SUPPORT	P-R
010	A856-7	1	CONTROL BOX PLATFORM	P-R
010	BC63A	1	CARTON #28	P-H
010	RM2791-1	4	#8-32 HEX NUT	P-R
010	RM3293-5	4	#8 F.W	P-R
010	RM3963-4	7	#8 H.S.L.W	P-R
010	RM5341	1	CONTROL BOX ASSEMBLY	P-R

PARENT NUMBER: 288485

DESCRIPTION: TABLE & LEG ASSEMBLY

SEQ NO	COMPONENT	QTY PER	DESCRIPTION	PART CODE
010	213748F	1	K-LEG STAND	P-H
010	A855-13	1	TABLEBOARD	P-R

**PROGRAMMING INSTRUCTIONS FOR SWIMWEAR CONTROL BOX #S341**

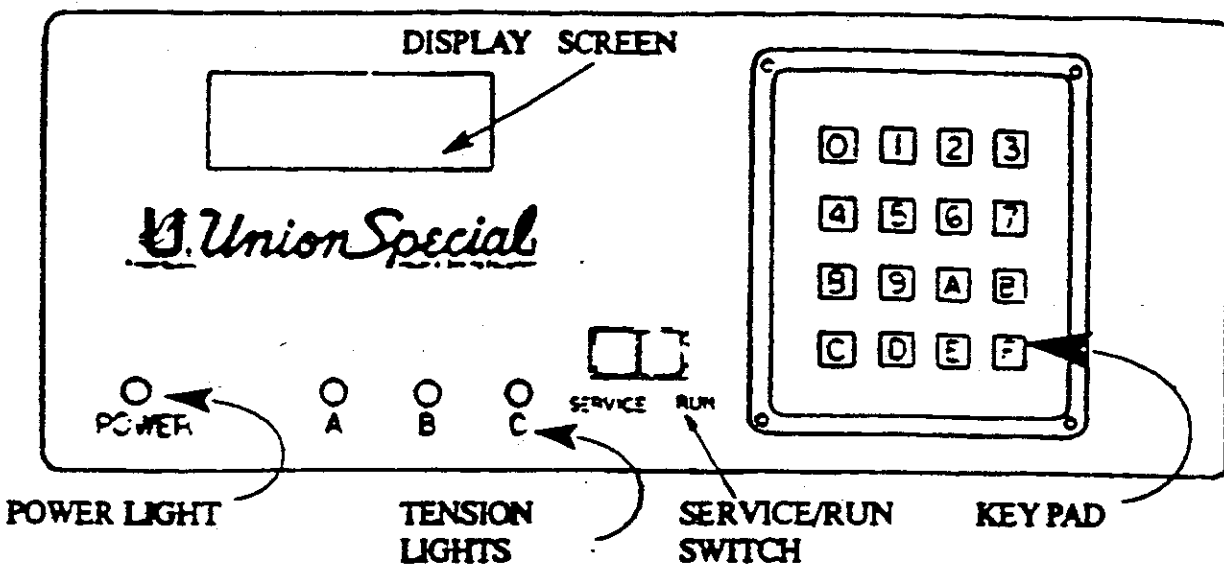
**WITH STITCH COUNTING SOFTWARE PACKAGE #V011088**

**PROGRAMS: 1-9**

(Note that program "0" has settings shared by programs 1-9)

**CAPABILITIES OF EACH PROGRAM (1-9):**

- 1.) Choice of 1, 2 or 3 tensions.
- 2.) Choice of tension sequence (A, A-B, A-B-C)
- 3.) Ability to pre-tension the elastic for an immediate gathering of material.
- 4.) Choice of manual or stitch-counted change (during sew).



**EXPLANATION AND OPERATION OF THE FRONT PANEL**

<b>DISPLAY SCREEN</b>	1.) Shows current program and tension settings when sewing. 2.) Shows individual functions when changing a program.
<b>POWER LIGHT</b>	Illuminated green when power is on.
<b>TENSION LIGHTS</b>	Signals operator is sewing using tension "A", "B" or "C" by illuminating red. (Light will change when tension is changed.)
<b>SERVICE RUN SWITCH</b>	Service - Control box, metering device and knee-switch are off. Sewing is possible without elastic attachment. Run - Control box, metering device and knee-switch operate as programmed.

## KEY PAD OPERATION

ENTERING A PROGRAM CHANGE/VIEW SETTINGS ("F"-KEY)	Key "F" followed by a number will enter that program to change it or to view its contents. Example - Press key "F", then "2". You are now at the first setting listed under "SETTING PROGRAMS 1-9" which is "ENTER SEQUENCE" ( for program "2").
CHANGING/VIEWING SETTINGS ("E"-KEY)	Once within a program ( see "ENTERING A PROGRAM TO CHANGE/VIEW SETTINGS", above) you may change settings using the number keys (0-9). To lock a setting in, press key "E" (enter). The display will now move to the next setting to be changed. (If you wish to simply view the contents of a program, press "E" only, and no changes will occur. Once the last setting in the program is reached, pressing "E" will return you to the beginning of program "1" and the box is ready to perform as programmed.
"D"-KEY	Used to simply "go to" a program to sew without changing it.
"A", "B" AND "C" KEYS	Used to change tension sequence.
NUMERIC KEYS (0-9)	1.) Used following "F" and "D" keys to tell which program to go to. 2.) Used to change settings within all programs.

## SETTING PROGRAMS 1-9

TENSION SEQUENCE	Determines the order of tensions A, B and C. Also how many tensions are to be used. If only "A" is entered, tension can not change while sewing. If "A-B" is entered, tension will change from "A" to "B" to "A", etc.
TENSION "A"	Determines the speed of the metering device which determines how much gathering will be produced. Approximately "015" will produce flat goods. The higher the number, the more gathering.
TENSION "B"	See explanation of Tension "A" (above).
TENSION "C"	See explanation of Tension "A" (above).
INITIAL INSERT	How much elastic will be inserted into the presser foot when the operator heels down. The number entered is measured in 1/64".



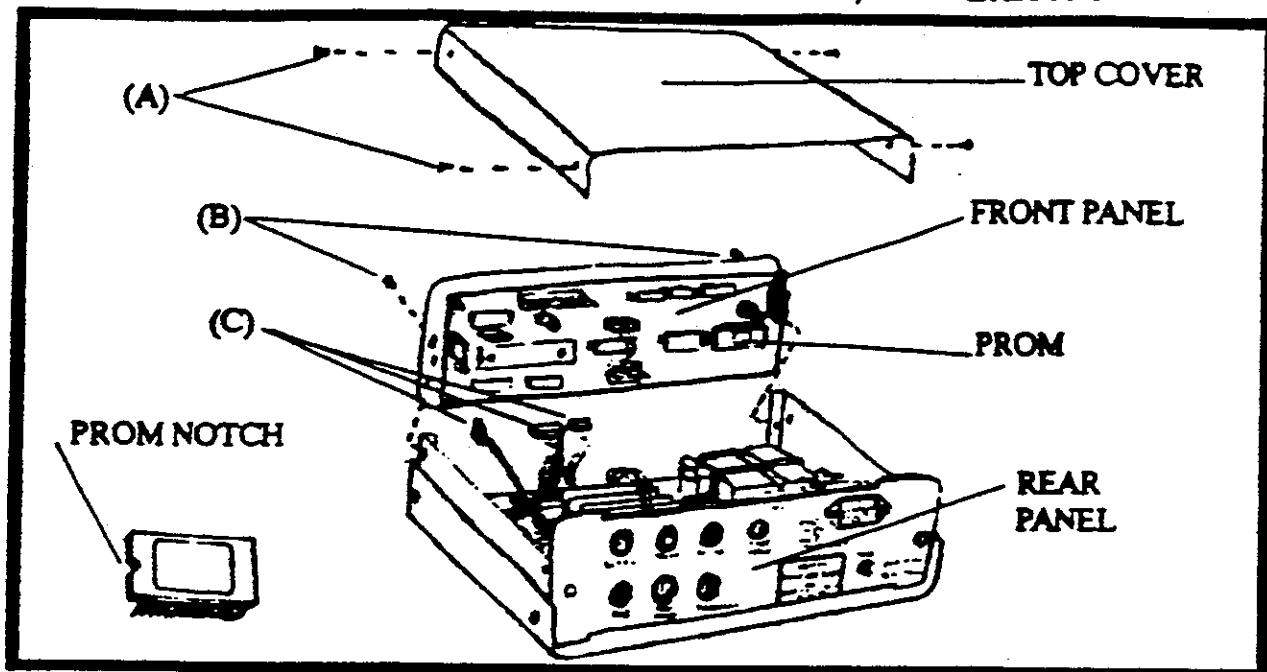
<b>FULL BACK</b>	Used to gain immediate gathering of material. When the treadle is toed, the metering device reverses to stretch the elastic (See "PULL BACK DELAY").
<b>STITCH COUNT "A"</b>	Determines the amount of stitches to be sewn with tension setting "A". Once this amount has been reached, the metering device will automatically switch to the next tension in sequence (See "TENSION SEQUENCE") (NOTE- Must be set at "000" to use "COMPENSATION STEPS" in program "0")
<b>STITCH COUNT "B"</b>	See explanation of "STITCH COUNT "A"" (above). (NOTE- Must be set at "000" to use "COMPENSATION STEPS" in program "0")
<b>STITCH COUNT "C"</b>	See explanation of "STITCH COUNT "A"" (above). (NOTE- Must be set at "000" to use "COMPENSATION STEPS" in program "0")

**SETTING PROGRAM "0"**

<b>PROGRAM SEQUENCE</b>	Determines the programs to be used in sequence to produce a garment (up to eight programs). Example - Setting "1-3-6". After the cut-switch is activated, the box jumps to program "3", then program "6", then back to program "1".
<b>ENTER CODE</b>	Enter code "5341". This is to limit access to only those authorized.
<b>AIR SAVER START</b>	How many stitches after sew begins before the Air-Klipp and venturi shut off.
<b>INITIAL INSERT.</b>	How fast the elastic will be inserted into the presser foot when the operator heels down.
<b>AIR SAVER FINAL</b>	How many stitches after the cut-switch is activated before the Air-Klipp and venturi return on.
<b>INSERT DELAY</b>	Ensures that the presser foot has fully risen to the metering device before elastic is inserted.
<b>COMPENSATION SPEED</b>	Speed of the stepping motor when reversing or forwarding when using compensation (below).
<b>COMPENSATION STEPS "AB"</b>	Forwards or reverses the stepping motor "x" number of steps to make immediate changes in gathering (x= number entered). Example- to go from tension "A"=015 to tension "B"=035, "COMPENSATION STEPS "AB" would be about "15" to "20". (NOTE- Must be set at "00" to use "STITCH COUNT" in "SETTING PROGRAMS 1-9")

COMPENSATION STEPS "BC"	See explanation of "COMPENSATION STEPS 'AB'" (above). (NOTE-Must be set at "00" to use "STITCH COUNT" in "SETTING PROGRAMS 1-9"
COMPENSATION STEPS "CA"	See explanation of "COMPENSATION STEPS 'AB'" (above). (NOTE-Must be set at "00" to use "STITCH COUNT" in "SETTING PROGRAMS 1-9"
PULL BACK DELAY	Allows stitches to be sewn before "PULL BACK" begins ( see "PULL BACK", above.).

## REMOVAL/INSTALLATION OF PROM #5387, ALL VERSIONS



- 1.) Remove 4 top cover screws (A), and remove top cover.
- 2.) Remove 2 front panel screws (B) and unplug blue plugs (C) being cautious not to damage pins or plugs (a short, side to side pull should be sufficient). Now remove front panel.
- 3.) Next, lay the front panel flat and locate the correct prom (see Fig. 1) and remove carefully, being cautious not to damage prom pins.
- 4.) Locate the notch on one side of the new prom. This notch must face in the same direction as the other proms on the board. Carefully line all of the pins onto the terminal and gently push into place.
- 5.) Replace blue plugs to the front panel, then re-attach the front panel and top cover for operation.
- 6.) See "Programming Instructions" table of contents (see swimwear catalog) to program your new prom.

Your prom was accompanied with a label to be affixed to the control box. Choose the label that matches the voltage being used and affix the label over the old part number (found on the rear panel). This is important for service information. Discard the unused label.

### ORDERING PROCEDURE FOR REPAIR BOXES

Please use the following part numbers to order updated boxes for repair purposes:

RM 5387 AR (for 110 V)

RM 5387 BR (for 220 V)

**IMPORTANT** - Please retain these instructions for future reference.

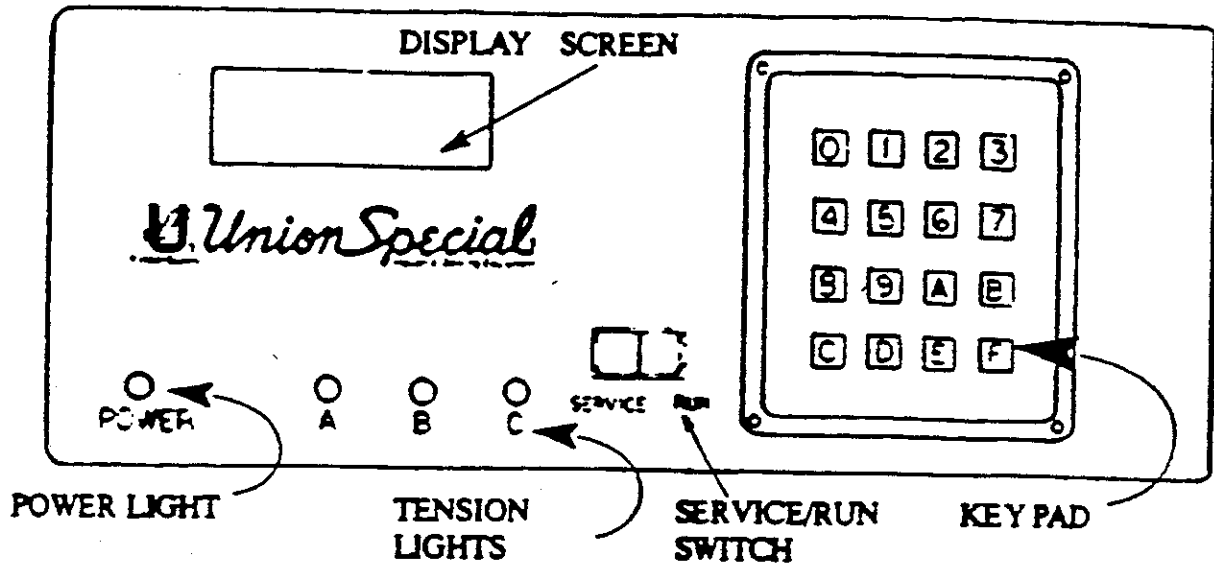
## PROGRAMMING INSTRUCTIONS FOR SWIMWEAR CONTROL BOX #5341

### PROGRAMS: 1-9

(Note that program "0" has settings shared by programs 1-9)

### CAPABILITIES OF EACH PROGRAM (1-9):

- 1.) Choice of 1, 2 or 3 tensions.
- 2.) Choice of tension sequence (A, A-B, A-B-C)
- 3.) Ability to pre-tension the elastic for an immediate gathering of material.



### EXPLANATION AND OPERATION OF THE FRONT PANEL

DISPLAY SCREEN	1.) Shows current program and tension settings when sewing. 2.) Shows individual functions when changing a program.
POWER LIGHT	Illuminated green when power is on.
TENSION LIGHTS	Signals operator is sewing using tension "A", "B" or "C" by illuminating red. (Light will change when tension is changed.)
SERVICE RUN SWITCH	Service - Control box, metering device and knee-switch are off. Sewing is possible without elastic attachment. Run - Control box, metering device and knee-switch operate as programmed.

## KEY PAD OPERATION

ENTERING A PROGRAM CHANGE/VIEW SETTINGS ("F"-KEY)	Key "F" followed by a number will enter that program to change it or to view its contents. Example - Press key "F", then "2". You are now at the first setting listed under "SETTING PROGRAMS 1-9" which is "ENTER SEQUENCE" ( for program "2").
CHANGING/VIEWING SETTINGS ("E"-KEY)	Once within a program ( see "ENTERING A PROGRAM TO CHANGE/VIEW SETTINGS", above) you may change settings using the number keys (0-9). To lock a setting in, press key "E" (enter). The display will now move to the next setting to be changed. (If you wish to simply view the contents of a program, press "E" only, and no changes will occur. Once the last setting in the program is reached, pressing "E" will return you to the beginning of program "1" and the box is ready to perform as programmed.
"D"-KEY	Used to simply "go to" a program to sew without changing it.
"A", "B" AND "C" KEYS	Used to change tension sequence.
NUMERIC KEYS (0-9)	1.) Used following "F" and "D" keys to tell which program to go to. 2.) Used to change settings within all programs.

## SETTING PROGRAMS 1-9

ENTER SEQUENCE	Determines the order of tensions A, B and C. Also how many tensions are to be used. If only "A" is entered, tension can not change while sewing. If "A-B" is entered, tension will change from "A" to "B" to "A", etc.
ENTER "A"	Determines the speed of the metering device which determines how much gathering will be produced. Approximately "015" will produce flat goods. The higher the number, the more gathering.
ENTER "B"	See explanation of Tension "A" (above).
ENTER "C"	See explanation of Tension "A" (above).
INITIAL INSERT	How much elastic will be inserted into the presser foot when the operator heels down. The number entered is measured in 1/64".

<p><b>PULL BACK</b></p>	<p>Used to gain immediate gripping of material. When the needle is used, the metering device reverses to stretch the elastic. (See "PULL BACK DELAY")</p>
<p><b>SETTING PROGRAM "0"</b></p>	
<p><b>AIR SAVER START</b></p>	<p>How many stitches after sew begins before the Air-Klipp and venturi shut off</p>
<p><b>INITIAL INSERT. SPEED</b></p>	<p>How fast the elastic will be inserted into the presser foot when the operator heels down.</p>
<p><b>AIR SAVER FINAL</b></p>	<p>How many stitches after the cut-switch is activated before the Air-Klipp and venturi return on.</p>
<p><b>FED STITCH COUNT</b></p>	<p>Allows stitches to be sewn before "PULL BACK" begins (see "PULL BACK", above.)</p>

