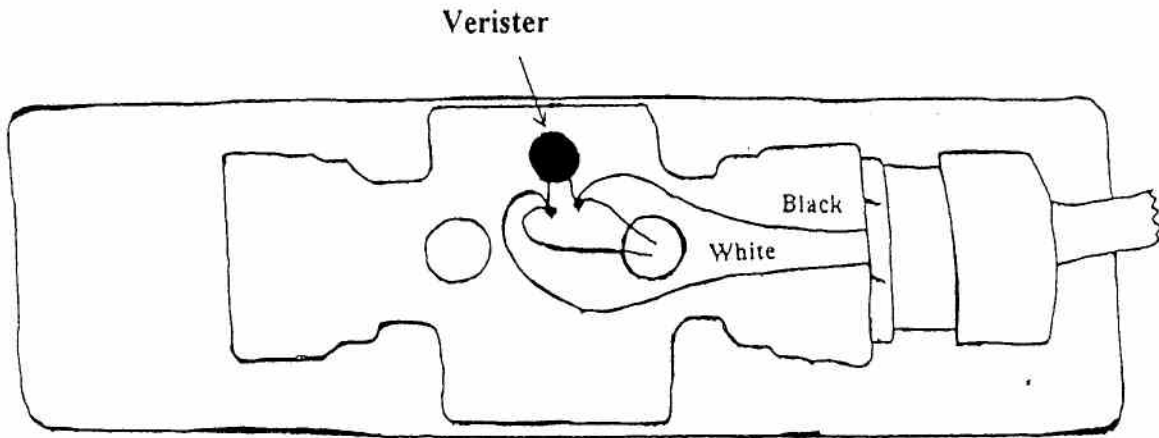


THROW ARM/TURRET VALVE WIRING GUIDE "G" Series

The bottom valve on a standard PAT-TRAP®
The middle valve on a PAT-TRAP® WOBBLE

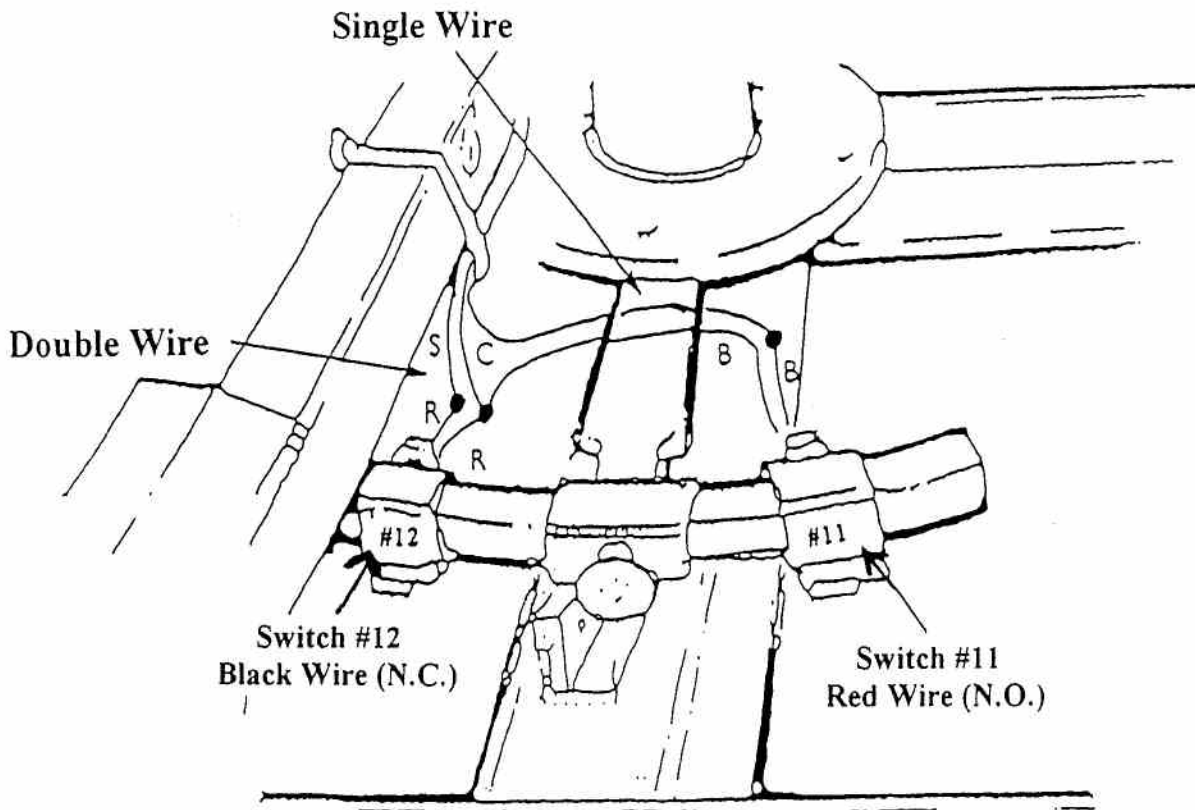


Parker Standard

(Diagram 43)

NOTE: *Release the throw arm and turn off the machine.*

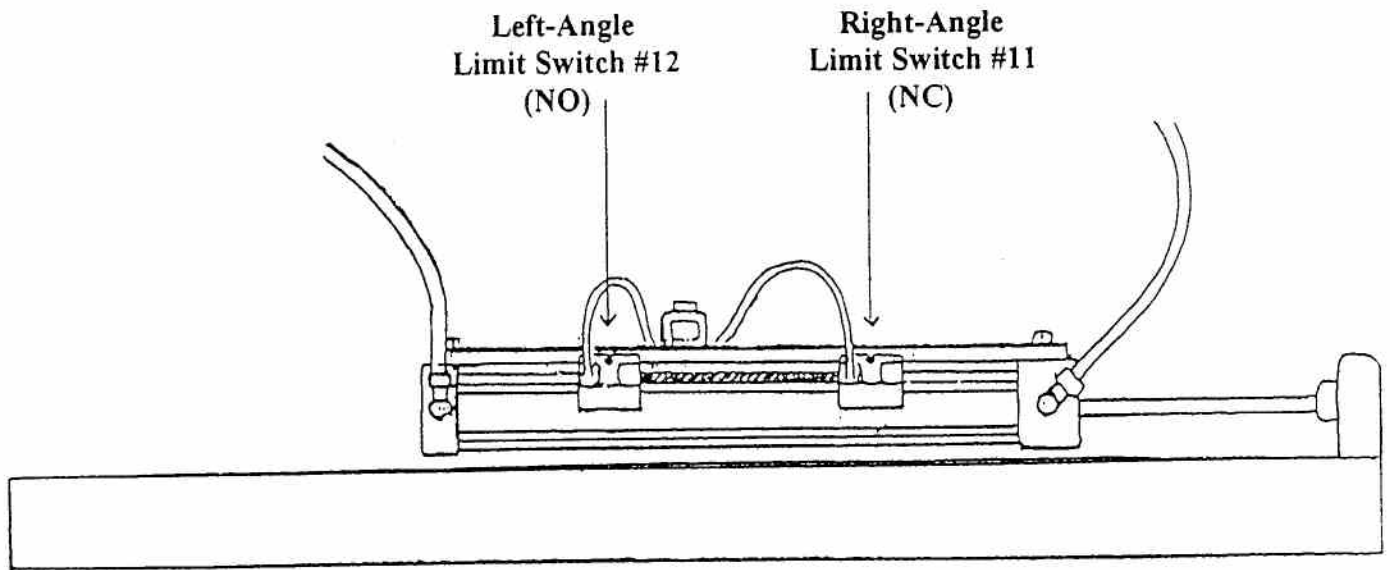
WIRING GUIDE
#11 and #12 SWITCHES
Up to Serial # 2739



(Diagram 40)

- B = Black Wire**
- R = Red Wire**
- S = Silver Wire**
- C = Copper Wire**

WIIRING GUIDE
#11 and #12 SWITCHES
From Serial # 2740



(Diagram 57)

CONNECTIONS TO THE #2 RELAY

SWITCH # 11 (NC):

Red wire to pin #3
Black wire to pin #2

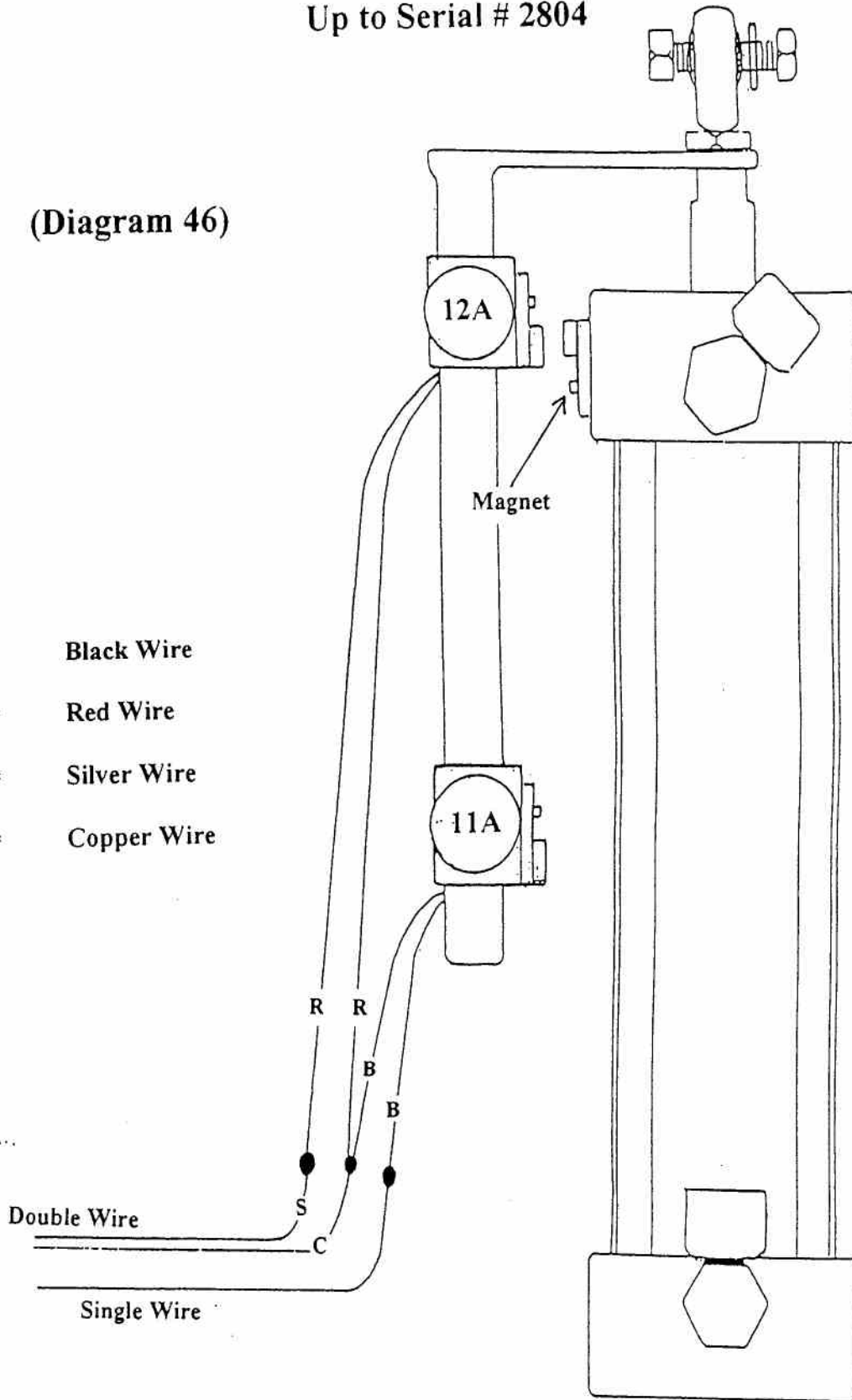
SWITCH # 12 (NO):

Red wire to pin # 1
Black wire to pin # 2

HYDRAULIC CYLINDER FOR WOBBLE WIRING GUIDE Up to Serial # 2804

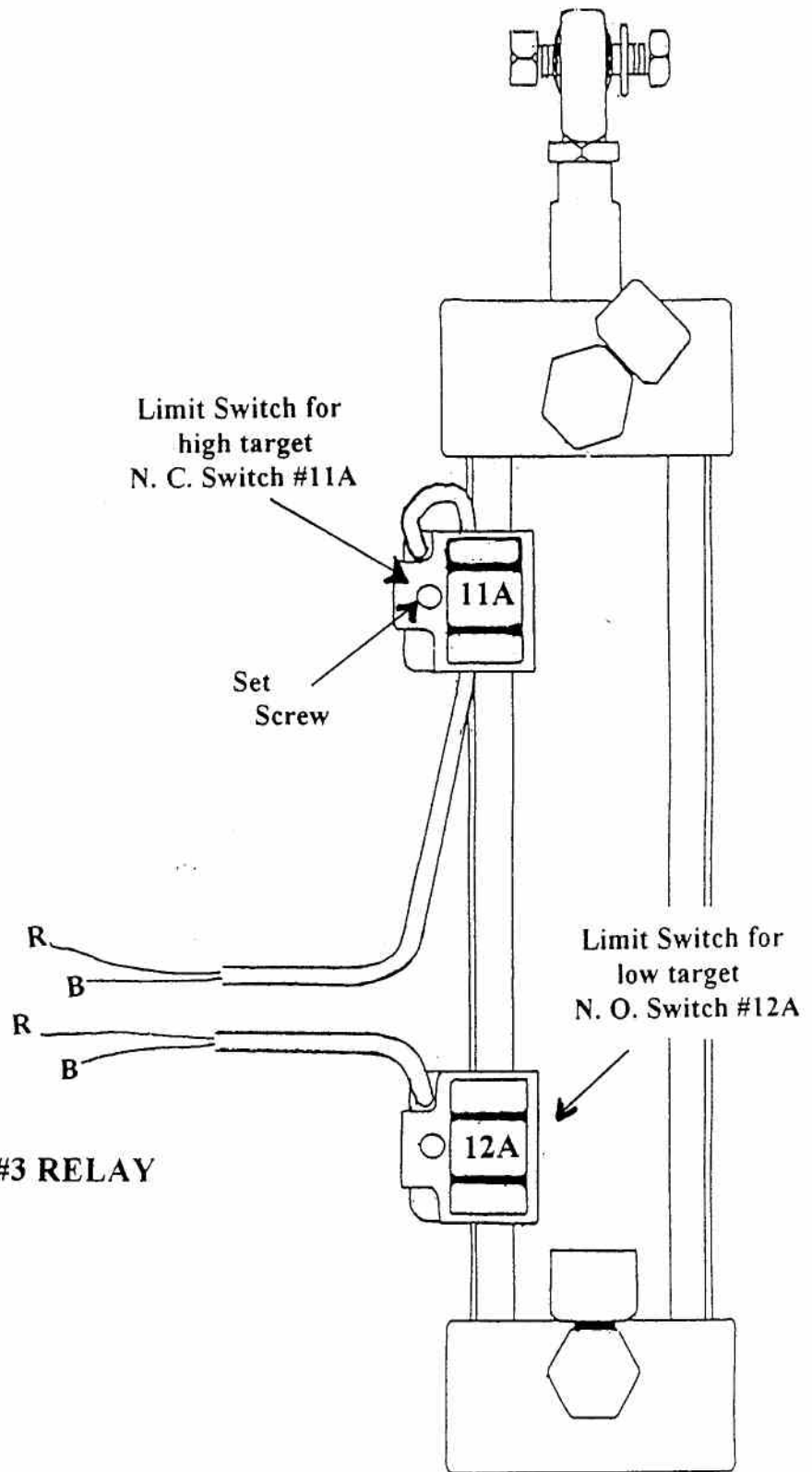
(Diagram 46)

- B = Black Wire
- R = Red Wire
- S = Silver Wire
- C = Copper Wire



**HYDRAULIC CYLINDER FOR WOBBLE
WIRING GUIDE
From Serial # 2805 ...**

(Diagram 49)



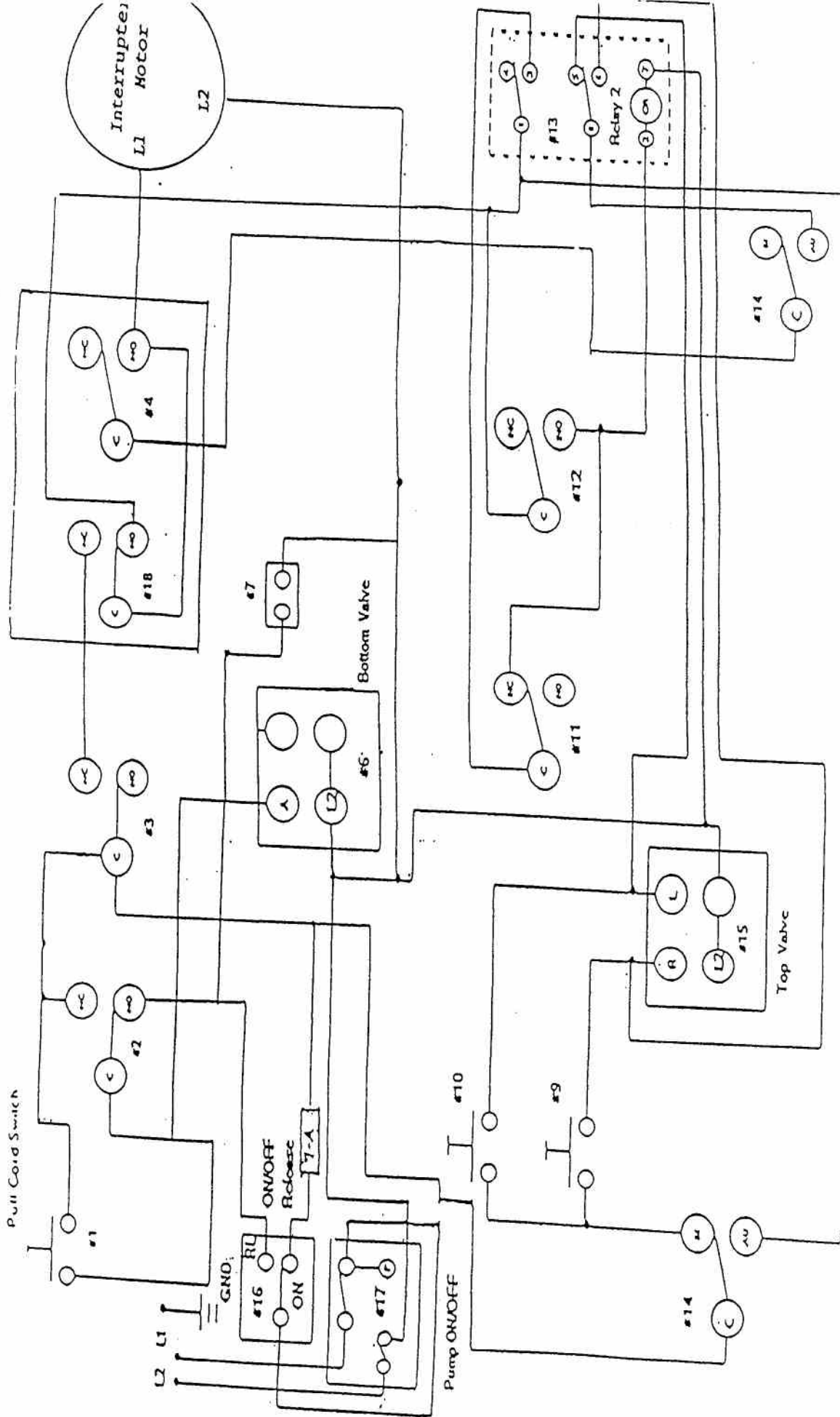
CONNECTIONS TO THE #3 RELAY

SWITCH #11A (NC):

Red wire to pin #3
Black wire to pin #2

SWITCH #12A (NO):

Red wire to pin #1
Black wire to pin #2



"C" SERIES

PAT TRAP® - Wiring Diagram

INDEX

Adjustment(s)

Angle (Up to Serial #2739)	19
Angle (From Serial #2740...)	21
Cold Weather	25
Doubles	16
Field-Angle (Up to Serial #2739)	18
Height For Singles/Doubles Wobble	16
Height of Target (Up to Serial #2739)	19
Height of Target (From Serial #2740...)	21
Release Time	25
Wobble	16

Assembly

Throw Arm Brake	27
Throw Arm Cocking Pin	31
Uni-Band (Main Spring)	36
Changing Uni-Bands	38
Clutch, Main Shaft	37
Cocking Pin Assembly (Throw Arm)	31
Cold Weather	25
Compression, Elevator Spring	44
Connection	
Elevator Spring (Up to Serial #2804)	43
Elevator Spring (From Serial #2809 ...)	43
Power Source	4
Cycling (Problem)	25

Diagram

#1	.....	ii
#2	.....	2, 5
#3	.....	5
#4	.....	5
#5	.....	2
#6	.....	2
#8	.....	51
#9	.....	7
#10	.....	8
#11	.....	11
#12	.....	13
#13	.....	13, 20, 22
#14	.....	42
#15	.....	15
#16	.....	15
#17	.....	15
#18	.....	15
#19	.....	48
#20	.....	23
#21	.....	17
#22	.....	20, 22
#23	.....	32
#24	.....	32
#25	.....	7, 22
#27	.....	26
#28	.....	36
#31	.....	27
#32	.....	8, 27
#33	.....	46
#34	.....	34
#35	.....	28
#37	.....	45
#38	.....	50
#40	.....	54
#41	.....	47
#42	.....	3
#43	.....	53
#46	.....	56
#47	.....	43
#48	.....	43
#49	.....	57
#50	.....	7
#51	.....	9
#52	.....	9
#53	.....	18, 20
#54	.....	44
#55	.....	24

#56	48
#57	55
#58	52
#59	39
#60	40
#61	41
#62	41
Disconnecting the Uni-Band (Main Spring)	35
Distance/Speed	17
Doubles	14
Adjustments	14
"X" Doubles Finger	33
Elevator Spring, Compression	44
Elevator Spring, Replacement	42
Elevator Spring Connection	43
Field Angle Adjustment (Up to Serial # 2739)	18
Flush Hydraulic Oil	49
Guide Spring Position, Target	48
Hydraulic Cylinder For Wobble (Up to #2804)	45, 56
Hydraulic Cylinder For Wobble (#2805)	46, 57
Installation	
Elevator Compression Spring	44
Main Shaft Clutch	37
PAT-TRAP®	1
Throw Arm	30
Throw Arm Brake	28
Uni-Band (Main Spring)	36, 39
"X" Doubles Finger	33
Loading the PAT-TRAP®	10

Main Shaft Clutch, Installation	37
Main Spring, Disconnecting	35
Maintenance	
Flushing the Hydraulic Oil	49
Hydraulic Cylinder for the Wobble	45, 46
Pump Motor	50
Roller Plate	23
Target Brush(s)	24
Throw Arm Brake	28
Throw Arm Shaft Bearing	47
Mounting the Power Control Box	4
OFF, How to Turn	10
Oil, How to Flush	49
ON, How to Turn	10
Oscillation Soft Shift Valve	51, 52
PAT-TRAP®	
Doubles	14
How It Works	6
Installation	1
Loading	10
Singles	12
Turn OFF	10
Turn ON	10
Wiring Guide	58
Wobble	16
Power Control Box	
Connecting	4
Mounting	4
Power Source Connection	4
Pump Motor	50
Flushing Hydraulic Oil	49

Removal/Replacement

Elevator Spring	42
Throw Arm	29
Turret	3

Roller Plate Maintenance	23
--------------------------------	----

Shifting the Target Field	21
---------------------------------	----

Singles	12
---------------	----

Soft Shift Valve	51, 52
------------------------	--------

Speed/Distance	17
----------------------	----

Springs

Disconnecting the Uni-Band (Main Spring)	35
Elevator Compression Spring	44
Elevator Spring	42, 43, 44
Main Spring (Uni-Band)	36, 39
Target Guide Spring	48
Uni-Band (Main Spring)	36, 39

Straight-Away Targets	19, 21
-----------------------------	--------

Switches

#11 and #12 Wiring Guide	54, 55
--------------------------------	--------

2-Hole Targets	19, 21
----------------------	--------

Target Brush Maintenance	24
--------------------------------	----

Target(s)

Angle Adjustment (Up to Serial #2739)	18, 19
Angle Adjustment (From Serial #2740...)	21
Height Adjustment (Up to Serial #2739)	19
Height Adjustment (From Serial #2740...)	21
Setting Speed and Distance	17
Target Field, Shifting (From Serial #2740...)	21

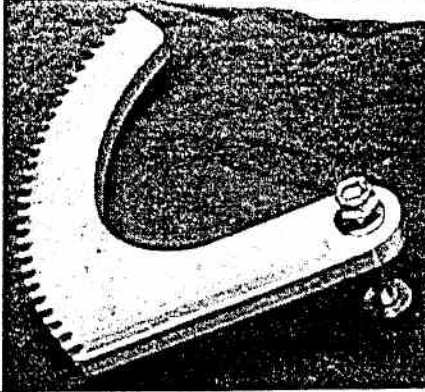
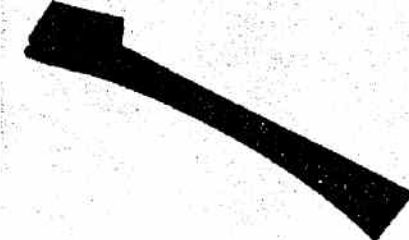


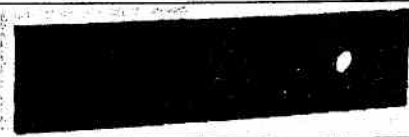
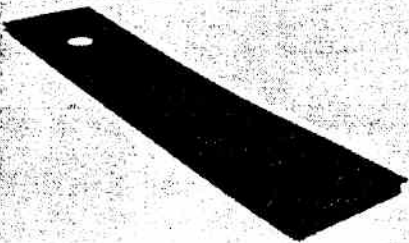
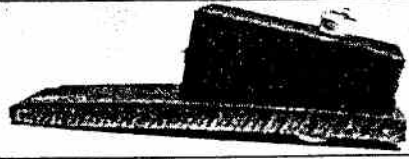
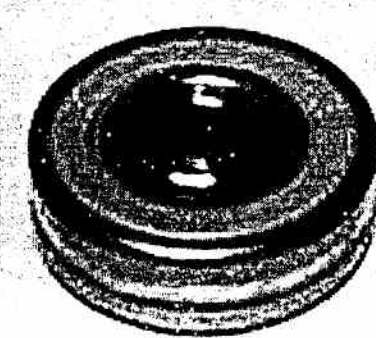
Target Guide Spring Position	48
Temperature/Release Time	25
Throw Arm	
Brake Assembly	27
Brake Installation	28
Cocking Pin Assembly	31
Installation	30
Removal of	29
Shaft Bearing	47
Throw Arm/Turret Valve Wiring Guide	53
Turret, Removal/Replacement	3
Uni-Band	35, 36, 38, 39
Valves	
Soft Shift, Oscillation	51, 52
Throw Arm/Turret	53
Wiring Guide	
Hydraulic Cylinder For Wobble (Up to Serial #2804)	56
Hydraulic Cylinder For Wobble (From Serial #2805 ...)	57
Oscillation Soft Shift Valve (Up to Serial #2609)	51
Oscillation Soft Shift Valve (From Serial #2610...)	52
PAT-TRAP®	58
Switches: #11 and #12 (Up to Serial #2739)	54
Switches: #11 and #12 (From Serial #2740...)	55
Throw Arm/Turret Valve	53
Wobble	
Change over to	16
Height Adjustment For Singles/Doubles	16
Hydraulic Cylinder	45, 46, 56, 57
“X” Finger	33

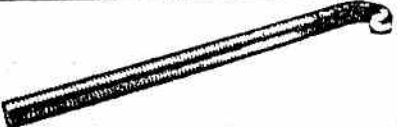

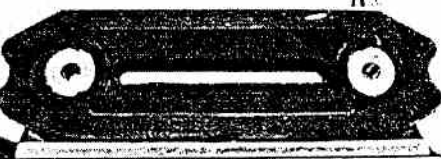



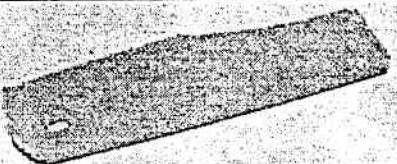


"G" SERIES PRICE/PARTS LISTING






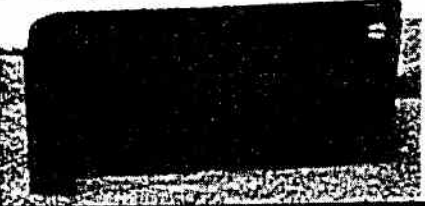
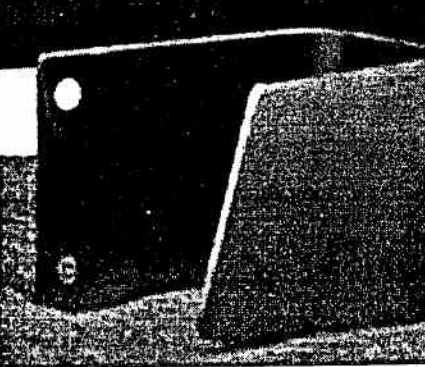
****Prices are subject to change without notice. Price does not include shipping.			
PART #	DIAGRAM #	DESCRIPTION	RETAIL
9012	25	Oscillation Cylinder, Complete	\$185.00
9013	37, 46	Oscillation Cylinder, Complete - WOBBLE	\$246.00
9017		3/8" Hydraulic Hose to Cylinder	\$12.00
9023	30	Singles Finger, Plastic	\$6.00
9024	22	Elevation Cog	\$28.00
9025	30, 17	X Doubles Finger	\$28.00
9026	32	Throw Arm	\$128.00
9026B		Repair Throw Arm Rubber	\$20.00
9027	31	Throw Arm Brake Rubber	\$6.00
9027A	31	Throw Arm Brake Flat Spring	\$6.00
9027B	31	Brake, Complete	\$24.00
9029	28	Uni-Band Anchor Bolt, Threaded Rod (Main Spring)	\$40.00
9029A	29	Uni-Band Bearing Connector	\$53.00
9031	21	Main Spring Crank Handle	\$33.25
9032	28	Uni-Band/pair (Main Spring)	\$33.25
9034	59, 60	Main Shaft Clutch Assembly	\$150.00
9035	23	Cocking Pin Assembly	\$19.00
9036	23	Cocking Pin Bushings/pair	\$6.00
9037	23	Cocking Pin Spacers/pair	\$6.00
9041	44A	Target Brush	\$6.00
9048	13, 15	Hydraulic Motor	\$225.00
9060	43	Hydraulic Valve	\$145.00
9061	8	Soft Shift Valve	\$178.00
9077	14, 4, 48	Elevator Spring(s) -- Extension	\$6.00
9078	54	Elevator Spring (s) -- Compression	\$6.00
9095	44	Target Guide, Spring Mount	\$14.00
9098	19	Target Drop Guide Spring #2	\$10.00
9100	20	Extention Spring/Roller Plates	\$3.00
9101	20	Eye Bolt	\$1.00
9102	20	Eye Bolt Anchor Bracket	\$3.25
9104	12	O Ring(s) -- Roller	\$0.50
9105	20	Singles Roller Plate	\$100.00
9106	20	Doubles Roller Plate	\$125.00
9107	12	Doubles Roller	\$95.00
9107A	12	Singles Roller	\$95.00
9129	38	Pump, Vickers VTM 42	\$285.00
9129A	38	Pump Filter	\$22.50
9130	38	Pulley for Pump	\$5.00
9131	38	Electric Motor	\$138.00
9132	38	Pulley for Electric Motor	\$4.50
9133	38	V-Belt	\$7.50

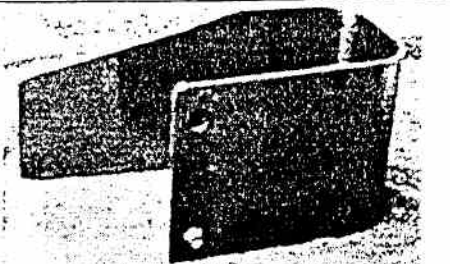
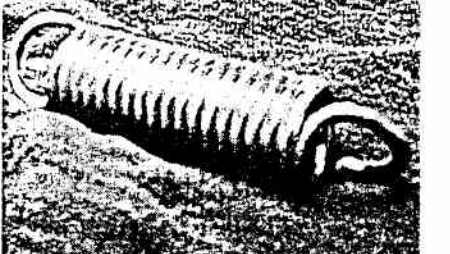
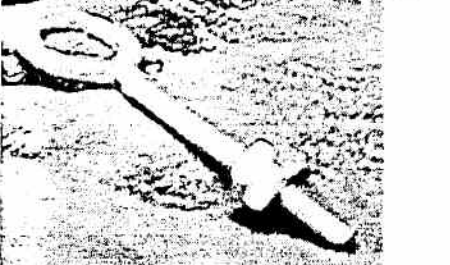

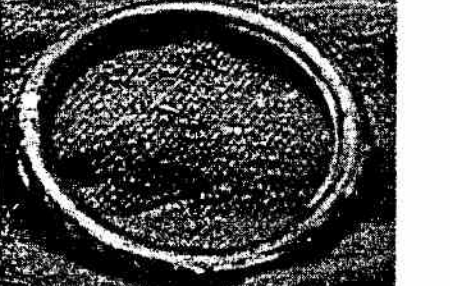

"G" SERIES PRICE/PARTS LISTING

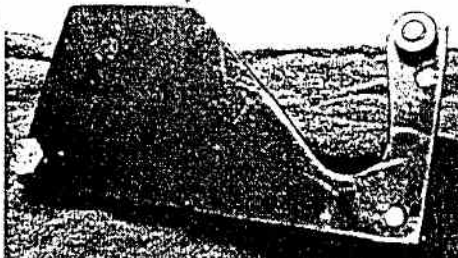



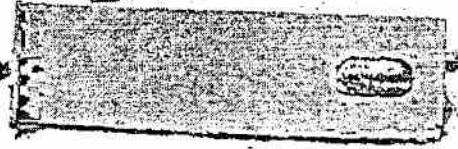
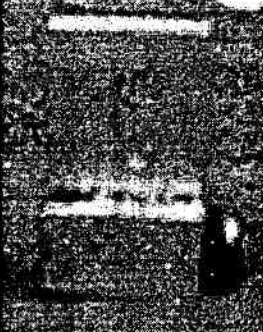
PART #	DIAGRAM #	DESCRIPTION	RETAIL
9134	38	Mobil 1: OW-30, Quart	\$6.00
9138	38	Pump Unit, Complete	\$725.00
9139	5, 6	8' High Pressure Hydraulic Hose, 3/8"	\$25.00
9141	5, 6	8 1/2' Hydraulic Hose Return, 3/8"	\$10.00
9142	5, 6	O-Ring for Coupling	\$1.00
9144	5	Hydraulic Coupling, Female	\$14.50
9145	5	Hydraulic Coupling, Male	\$8.00
9198		Valve Wire (3-wire)	\$1.50
9200		Counter	\$30.00
9201	3	Male Connector for Pullcord	\$15.25
9202	3	Female Lock Cap Connector for Pullcord	\$20.50
9207		Fuse (7 AMP)	\$1.00
9208		Relay #2 -- 8-Pin (10 AMP)	\$13.00
9209B		#2 & #3 Switch Bracket	\$133.00
9210A	27	1 1/8" Activator Bolt for # 9210B	\$8.00
9210B	27	#2 & #3 Activator	\$10.00
9211	10, 25, 27, 39	Proximity Sensor (N/C- Black Wires)	\$8.50
9212	8, 10, 27, 39	Proximity Sensor (N/O- Red Wires)	\$8.50
9213		Roller Switch #2 & #3 with wire leads	\$8.00
9215	8, 23A	Magnet (Hamlin)	\$4.50
9216		Timer/Interrupter	\$48.00
9218		Push Button Manual for Left/Right	\$6.00
9219	13, 15	Toggle Switch -- Auto/Manual	\$6.00
9220	11	On/Off Switch	\$6.75
9221	11	On/Off/Momentary Switch	\$6.75
9222	25	Reed Switch for Angle Limit -- N/O	\$39.00
9223	25	Reed Switch for Angle Limit -- N/C	\$39.00
9300		Turret, Complete	\$925.00
9301	42	Upright	\$24.00
9302		Side Loader Upright	\$49.00
9303		Side Loader Upright, Top Piece	\$24.00
9304		Turret Bushing Cap	\$1.00
9305	50, 53	Switch Bracket for Angle Limit Switch	\$33.25
9320		Pullcord, Complete	\$100.00
9321	9	Trap Release for Pullcord	\$34.00
9322	9	Switch for Trap Release	\$10.00
9400-G		"G" Series Manual -- Red	\$8.00
9425		Singles Score Pad(s) -- 50 sheets	\$3.00
9430		Doubles Score Pad(s) -- 50 sheets	\$3.00
P		Parts Kit -- G Series	\$50.00


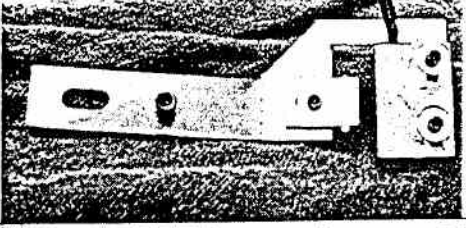
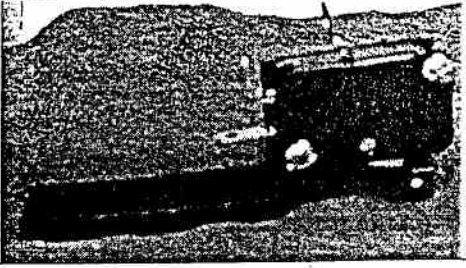
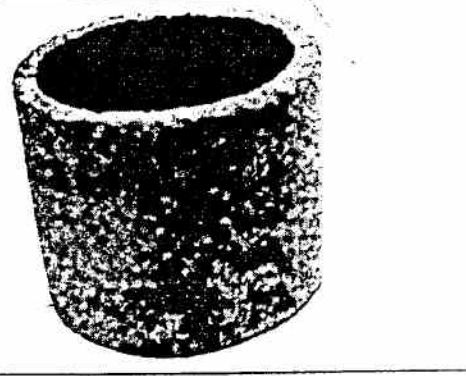
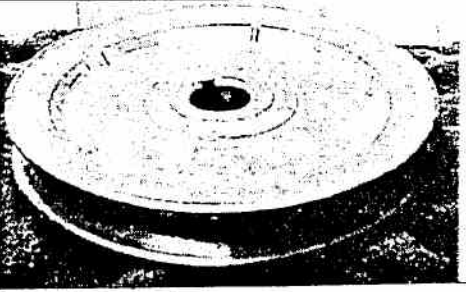
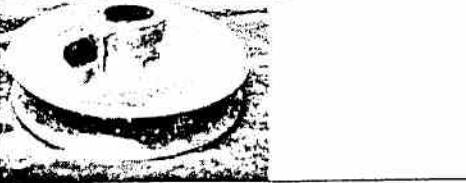
PT9024	Elevation Cog	
PT9025	X Doubles Finger	
PT9026	Throw Arm	
PT9026A	Throw Arm Throw Rubber	
PT9027	Throw Arm Brake Rubber	
PT9027A	Throw Arm Brake Rubber	
PG9027B	Brake, Complete	
PT9029		

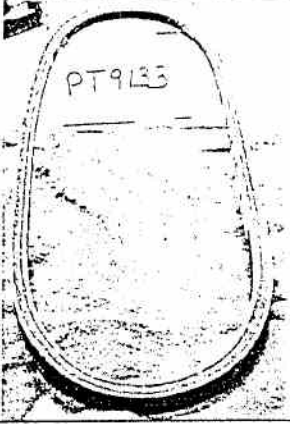
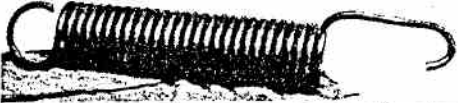


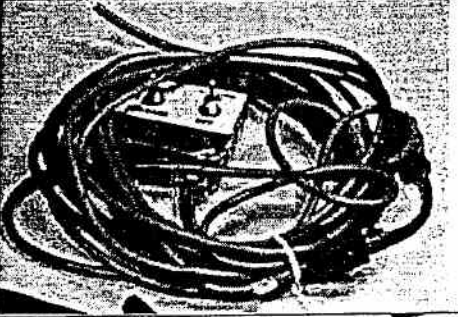
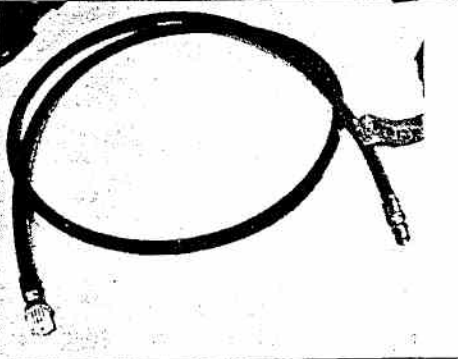
PT9030	Main Spring Anchor Bolt (Threaded Rod)	
PT9031	Main Spring Crank	
PPT9032	Uni-Band/Pair (Mainspring)	
PT9039	Throw Arm Backstop, Complete	
PT9040	Throw Arm Backstop, Spring	
PT9040A	Throw Arm Backstop Bolt W/Nut 1/4-28	
PT9040B	Throw Arm Backstop, Plastic	
PT9040C	Throw Arm Backstop Flat Spring	
PT9041	Target Brush	

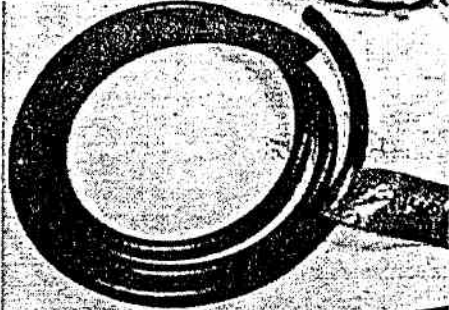
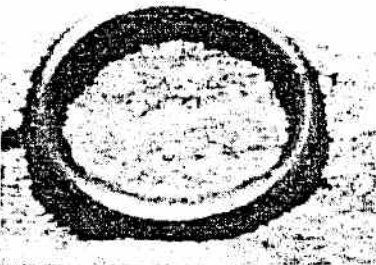

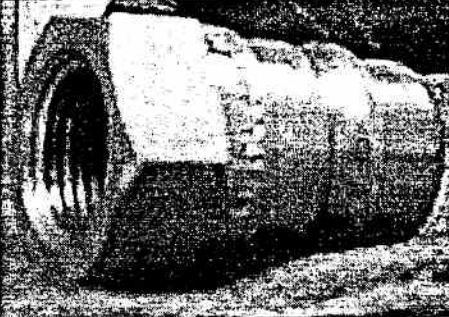
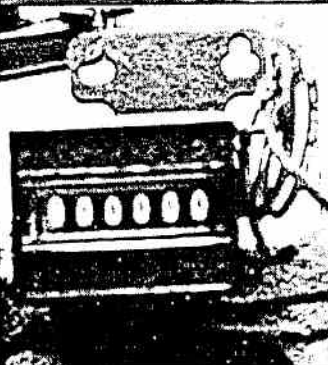
PT9048	Hydraulic Motor	 A black hydraulic motor with two circular ports on its side and a mounting bracket on top.
PT9061	Soft Shift Valve	 A complex mechanical assembly with multiple hydraulic ports and a central valve body.
PT9075	Hydraulic Cylinder Target Elevator	 A long, horizontal hydraulic cylinder with a central rod and mounting brackets.
PT9076	Elevator Guide Rod	 A long, cylindrical metal rod with a threaded section at one end.
PT9095	Target Guide Spring Mount	 A cylindrical metal component with a central hole and a mounting flange.
PT9097	Target Guide Spring #1	 A dark, rectangular metal plate with a central slot and mounting holes.
PT9098	Target Drop Guide Spring #2	 A dark, rectangular metal plate with a central slot and mounting holes, similar to PT9097 but with a different shape.




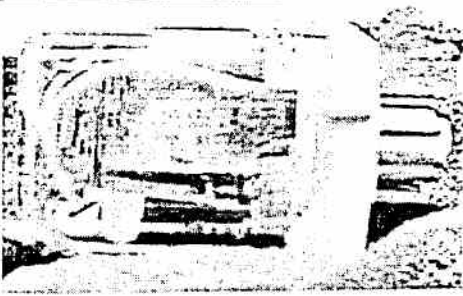
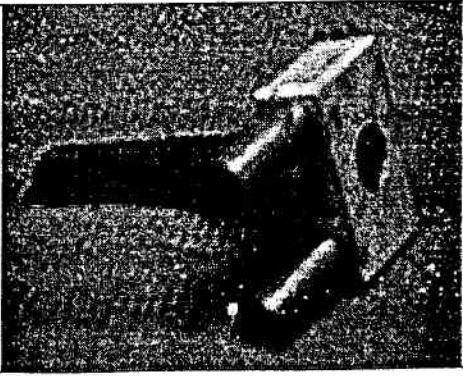
PT9099	Target Drop Guide Spring #3	 A rectangular metal plate with a spring mechanism attached to one side.
PT9100	Extension Spring/Roller Plates	 A coiled metal spring with two hooks at the ends.
PT9101	Eye Bolt	 A metal eye bolt with a circular head and a threaded shaft.
PT9102	Eye Bolt Anchor Bracket	 A metal bracket with a central circular hole and several smaller holes around it.
PT9104	O Ring/Roller	 A circular metal ring with a textured inner surface.
PT9105	Single Roller Plate	 A metal plate with a roller mechanism and a bolt.

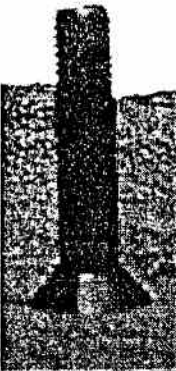
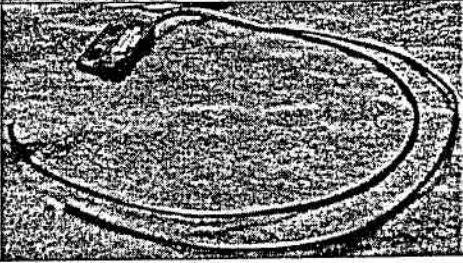

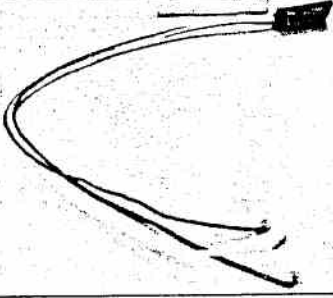
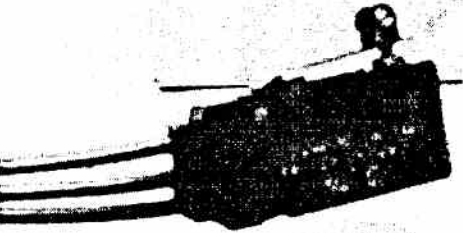
PT9106	Double Roller Plate	
PT9107	Doubles Roller	
PT9107A	Singles Roller	
PT9108	Bronze Roller Bushing	
PT9123A	Pinon Backstop Spring (L-Shape)	
PT9123B		

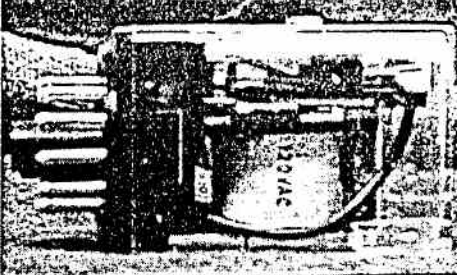
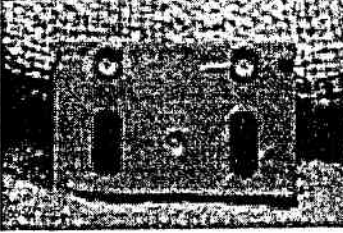
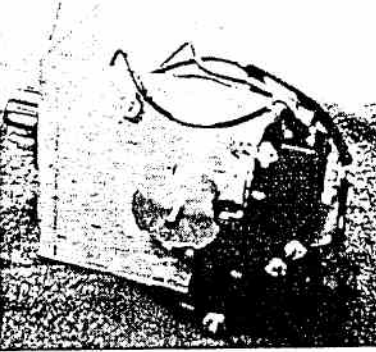
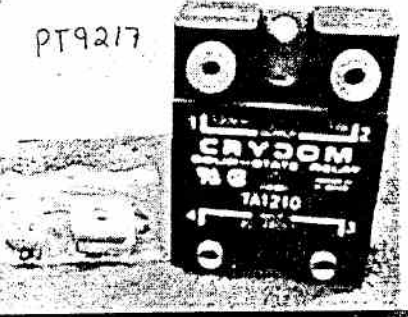
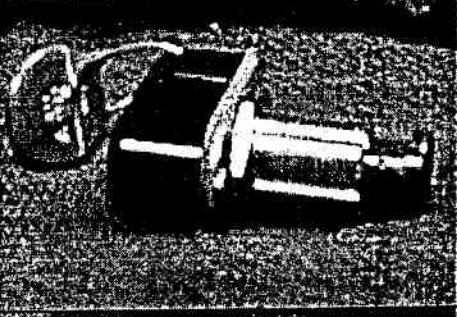
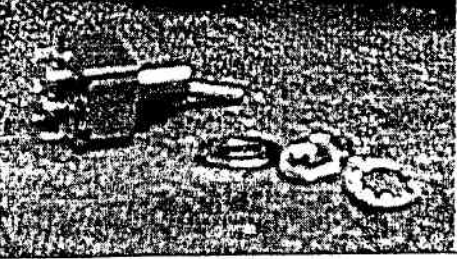
PT9123C	Plastic Pinon Backstop	 A vertical, rectangular plastic component with a small circular hole near the top.
PT9124	#4 Snap Action Switch/Interrupter Switch	 A metal component with a rectangular base and a curved top section, featuring two electrical terminals on the right side.
PT9125	#4 Switch Bracket, New Roller Style (Micro) Complete	 A dark, rectangular metal bracket with a textured surface and several mounting points.
PT9129A	Pump Filter	 A cylindrical, porous filter component with a dark, textured surface.
PT9130	Pulley For Pump	 A circular metal pulley with a central hole and a slightly raised outer rim.
PT9132	Pulley For Electric Motor	 A circular metal pulley with a central hole and a slightly raised outer rim, similar to the one above but with a different profile.


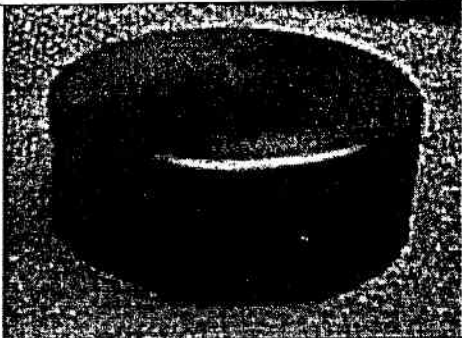
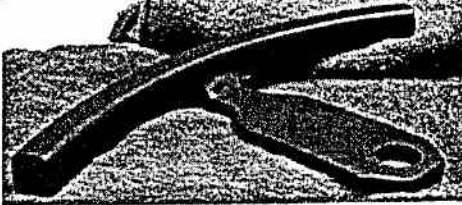
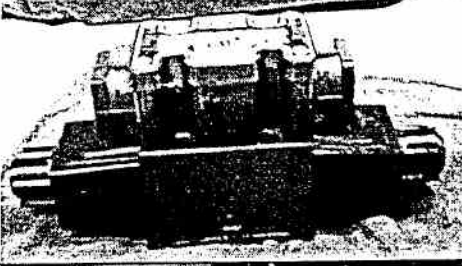
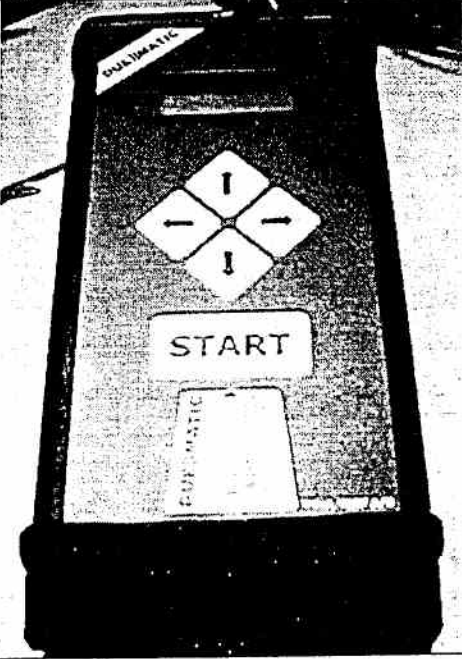
PT9133	V-Belt	
PT9135		
PT9136		
PT9137		
PT9138	Pump Unit, Complete	
PT9139	Hydraulic Hose	




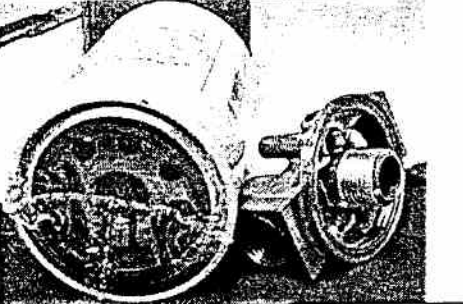
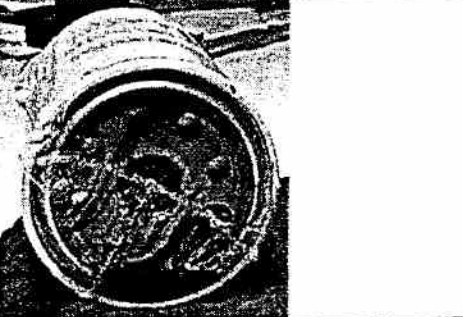
PT9140	Hydraulic Hose Return, 3/8"	 A close-up photograph of a hydraulic hose return fitting, showing a circular opening with a flange and a hose attached to the side.
PT9142	O-Ring For Coupling	 A close-up photograph of an O-ring, a circular seal used in hydraulic couplings.
PT9144	Hydraulic Coupling, Female	 A photograph of a female hydraulic coupling, showing a cylindrical component with a textured surface and a central opening.
PT9145	Hydraulic Coupling, Male	 A photograph of a male hydraulic coupling, showing a cylindrical component with a textured surface and a central opening.
PT9200	Counter	 A photograph of a counter, showing a mechanical device with a dial and a hand, used for counting or measuring.

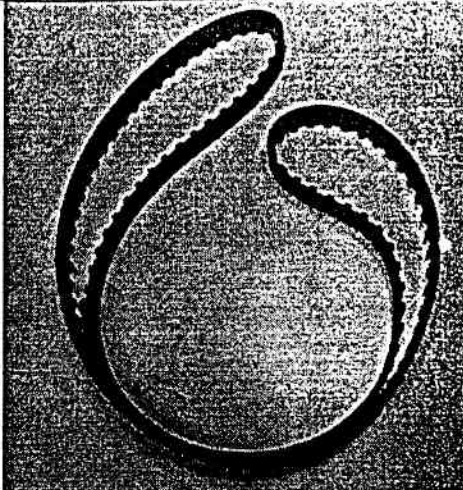
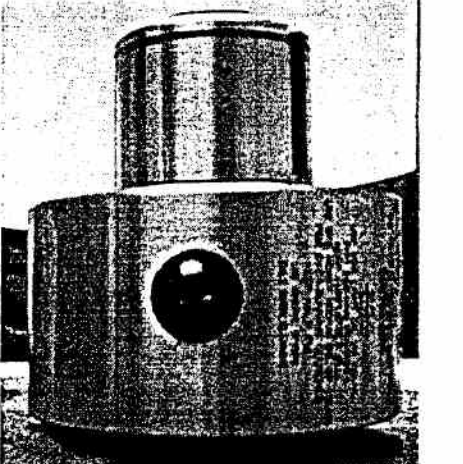


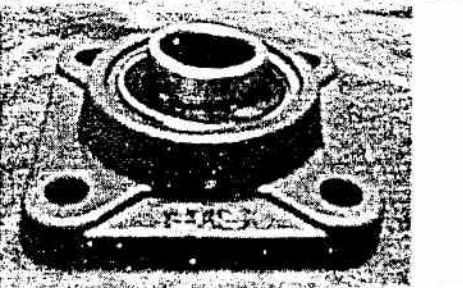
PT9201	Hubble Male Connector	
PT9202	Hubble Female Lock Cap	
PT9207	Fuse (7 Amp)	
PT9208	Relay #2 10 Amp (8-Pin)	
PT9209	Double Magnet	

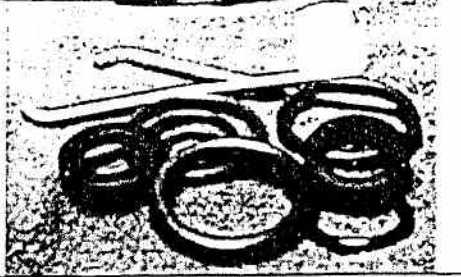
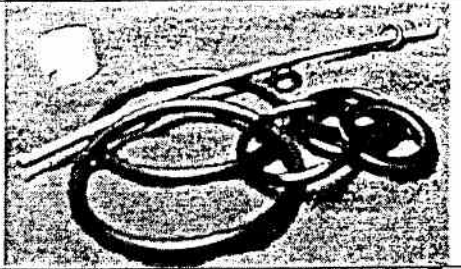
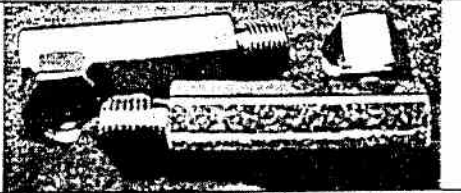
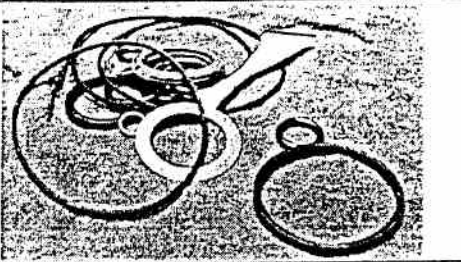
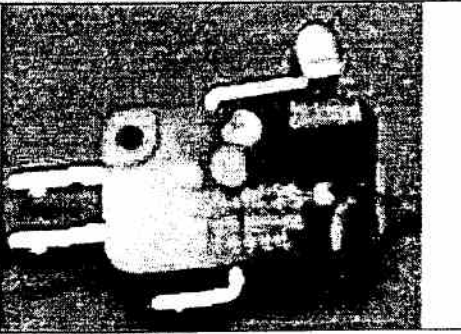
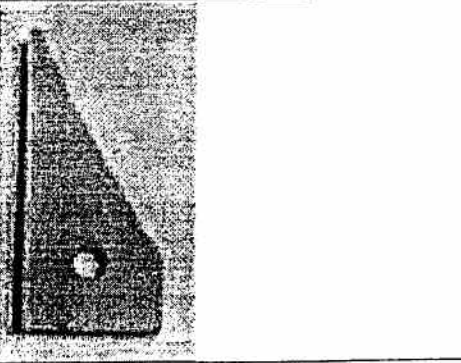
PT9210	Activator Bolt For PT9209	
PT9211	Prox Sensor (N/C Black Wires)	
PT9212	Prox Sensor (N/O Red Wires)	
PT9212A	Prox Sensor 3 Wire	
PT9213	Roller Switch #2 And #3	

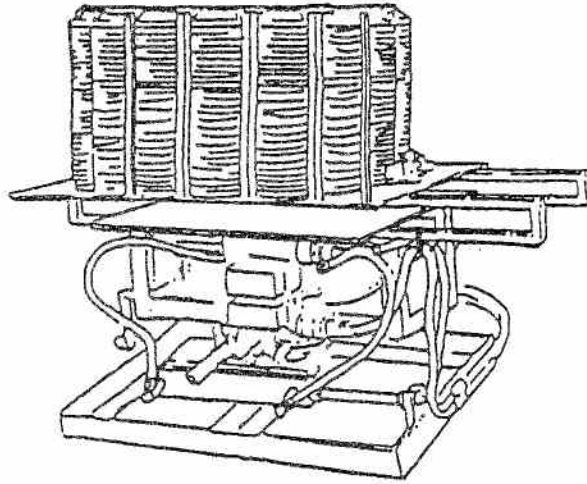
PT9214	Relay #1 (11-Pin)	
PT9215	Magnet (Hamlin)	
PT9216	Timer/Interrupter	
PT9217	Relay, Solid State	
PT9218	Push Button Manual For Left/Right	
PT9219	Toggle Switch Auto/Manual	

PT9303	Side Loader, Upright Top Piece	
PT9304	Turret Bushing Cap	
PT9305	Switch Bracket for Angle Limit Switch	
		
Tester		

Part #	Description	Photo
PT1	Chain Sprocket	
PT3	Chain And Link	
PT30	Full Link	
PT37	Filter Assembly	
PT38	Filter	

PT39	Browning Belt	
PT41	Clutch for Large Pulley Wheel	
PT48	6202RS Bearing	
PT49	Bushing For Roller Plate	
PT50	Pillow Block Bearing	

PT51	Packing Kit For Elevator	
PT52	Seal Kit For Oscillation Cylinder	
PT53	Long Elbows	
PT54	Seal Kit For Drive Motor (Replaces PT 9048)	
PT57	Switch For PT9125	
PT9023	Singles, Finger, Plastic	



U.S. PATENT(s): 5249563, 6176229

Pat-Trap®

AUTOMATIC DOUBLES

Manufactured by:

Pat-Trap, Inc.
110 Western Avenue
Henniker, New Hampshire 03242

Telephone: (603) 428-3396 Fax: (603) 428-7340

Pat-Trap, Inc. warrants the PAT-TRAP® Automatic Doubles machine against defects in material or workmanship for a period of one year from the date of the original purchase; and agrees to repair *or*, at our option, replace any defective unit without charge.

IMPORTANT: This warranty does not cover transportation costs. Nor does it cover any damage resulting from accident, misuse or abuse, and any modifications or alterations including attaching the unit to other than the recommended receptacle or voltage.

**NO RESPONSIBILITY IS ASSUMED FOR ANY SPECIAL,
INCIDENTAL OR CONSEQUENTIAL DAMAGES.**