

GOTCHA



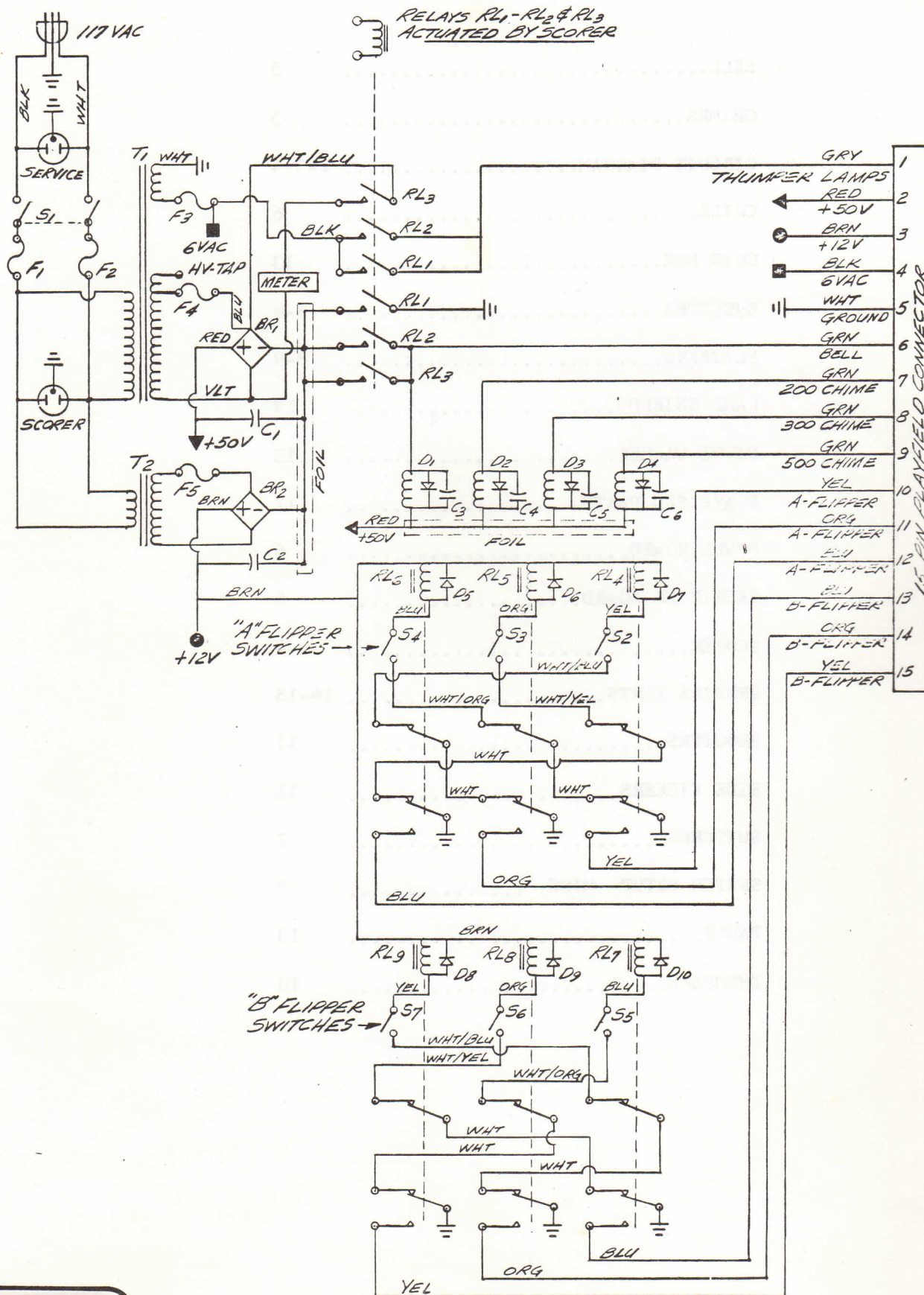
AGAMCO, INC.
22819 HESLIP DR.
NOVI, MI. 48050
313-348-3420

PARTS
CATALOG
AND
SERVICE
MANUAL

SUBJECT INDEX

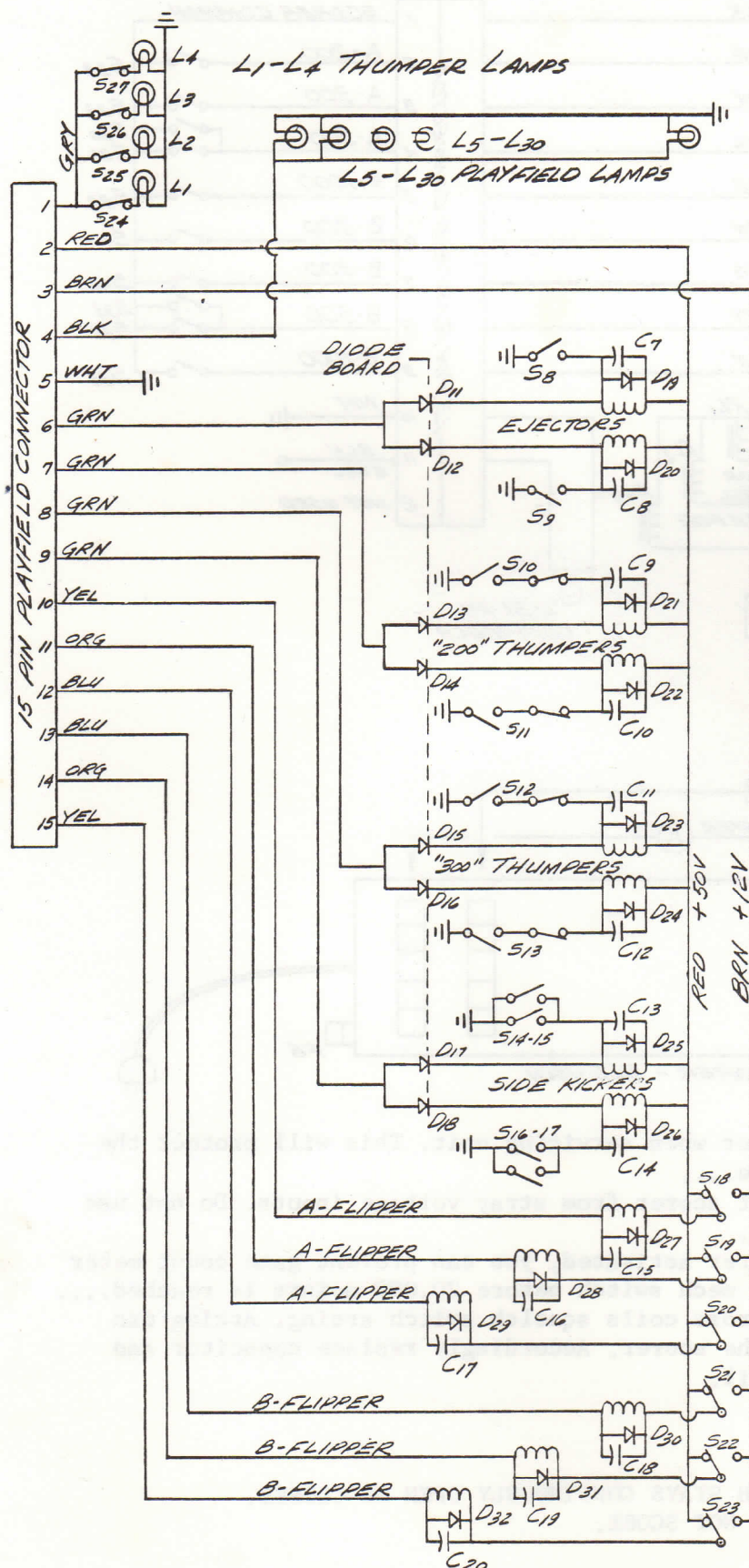
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CIRCUIT DIAGRAM 1 OF 3



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CIRCUIT DIAGRAM 2 OF 3



CAPACITORS

C1-Electrolytic-300 mfd-150WVDC.
C2-Electrolytic-500 mfd-50WVDC.
C3-C20-0.1 mfd-200VDC.

FUSES

F1,F2,F4.AGC-5A,1/4x1-1/4,250V.
F3.AGC-6A,1/4x1-1/4.
F5.AGC-2A,1/4x1-1/4.
F6.AGC-1A,1/4x1-1/4.

LAMPS

L1-L31. #47 Bayonet.

METER

48 VAC,6 Digit,Non-Reset.

RECTIFIERS

D1-D32.Low Current,1N4004.

RECTIFIERS-BRIDGE

BR1.Single Phase,Full Wave,
8.0A @150V,(Min).
BR2.Single Phase,Full Wave,
4.0A @50V,(Min).

RELAYS

RL1-RL3.6VDC,DPDT,10A,50 Ohm.
(Do not use less than 32 Ohm).
RL4-RL9.12VDC,DPDT,5A,300 Ohm.

SWITCHES

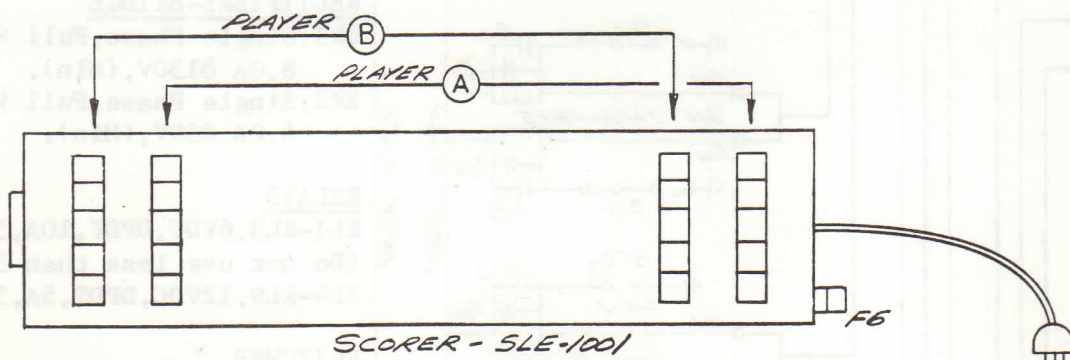
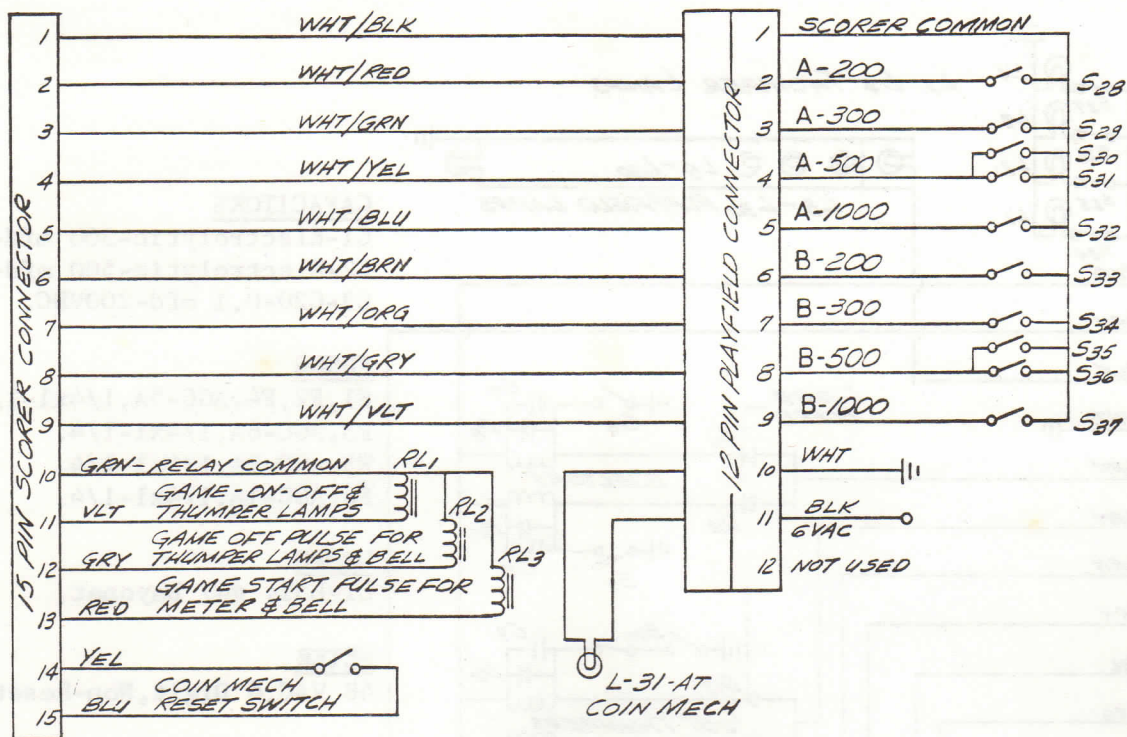
S1.DPST,5A @ 125V.
S2-S7.SLE-1009.
S8,S9.Cherry E51-60E.
S10-S13.ESU-1003.
S14-S17.SLE-1004.
S18-S23.SLE-1005.
S24-S27.Part of SLE-1007.
S28,S29,S33,S34.Part of SLE-1007
S30,S35.SLE-1008.
S31,S36.SLE-1004.
S32,S37.SLE-1010.

TRANSFORMERS

T1.SLE-1002.
T2.117 V PRI,12 V SEC,2A.

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CIRCUIT DIAGRAM 3 OF 3



Unplug 15 pin scorer connector when servicing unit. This will protect the scorer from electrical damage....

A fuse is provided to protect scorer from stray voltage inputs. Do not use fuse greater than 1-1/2 A....

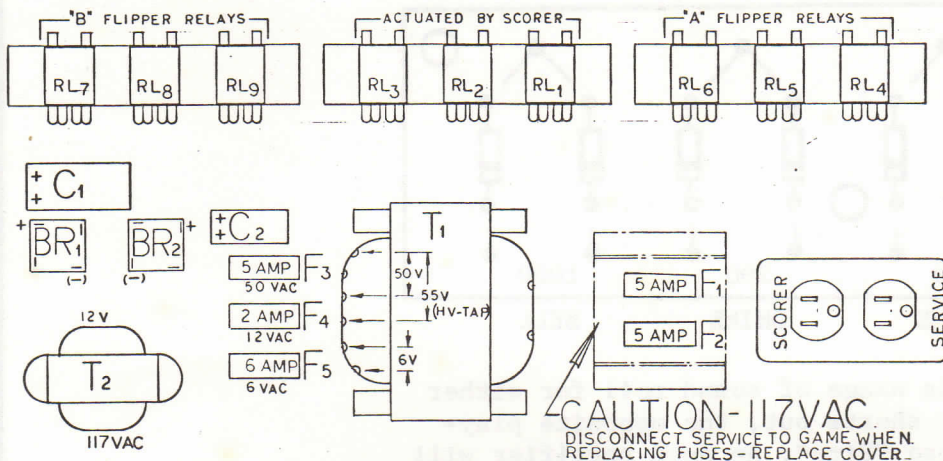
When servicing unit with scorer activated, you can prevent game count meter from registering. Reset coin mech switch before 20,000 points is reached....

Capacitors and rectifiers across coils squelch switch arcing. Arcing can generate false inputs into the scorer. Accordingly replace capacitor and rectifier when changing a coil.

IF ANY SCORING SWITCH STAYS CONTINUOUSLY OPEN OR CLOSED,
DURING GAME, IT WILL NOT SCORE.

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POWER BOARD



POWER UNIT INCLUDES:

117VAC service outlet.
Switched scorer outlet.
6VAC lamp circuit.
12VAC rectified to 12VDC.
50VAC rectified to 50VDC.
55V transformer tap for
low voltage situations.

12 VDC is used for flipper relays and for holding flipper plungers in.

50 VDC is used for game and sound coils.

50 VAC is used for game count meter.

Capacitor C1 provides surge current for 50 VDC operation. (Approx. 70 volts surge).

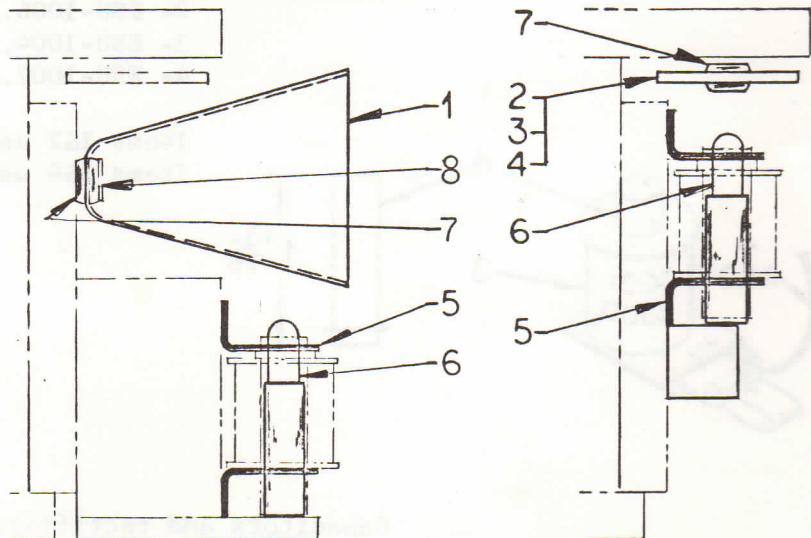
Capacitor C2 provides surge current for 12 VDC operation. (Approx. 17 volts surge).

Capacitors C1 & C2 also provide for partial filtering of the pulsating DC and accordingly reduce coil "hum".

BELL & CHIMES

Part No. Part Description

- 1- PF-1013..Bell
- 2- SM-1010..Chime-Short
- 3- SM-1011..Chime-Medium
- 4- SM-1012..Chime-Long
- 5- SU-1013..Bracket-Coil Bushing
- 6- SU-1017..Plunger-Nylon Tipped
- 7- PL-1001..Grommet
- 8- W-1001...Washer-SAE#8

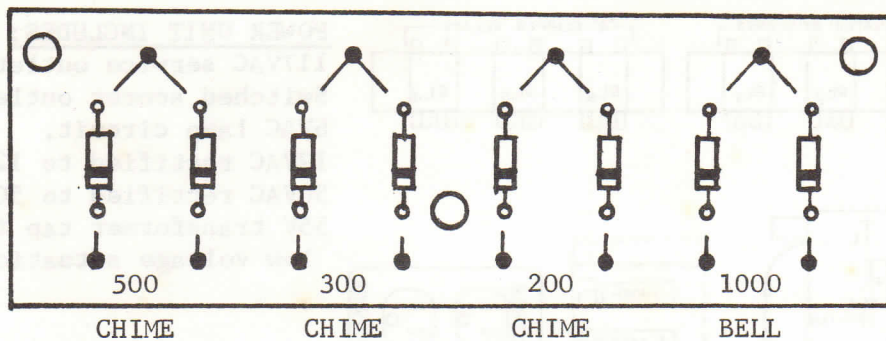


BELL ADJUSTMENT

To raise bell tighten 2 screws.
through grommets-inside of bell.
To lower bell-Loosen the screws.

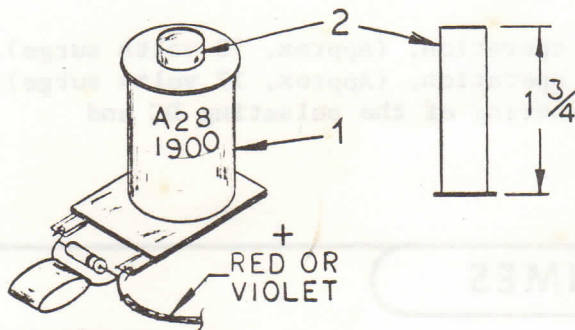
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RECTIFIER BOARD



Rectifier board permits usage of sound coil for either player. If a rectifier shorts out, the opposite playfield solenoid will also "Fire". An open rectifier will not activate the sound coil. Banded end of rectifier MUST be located as shown.

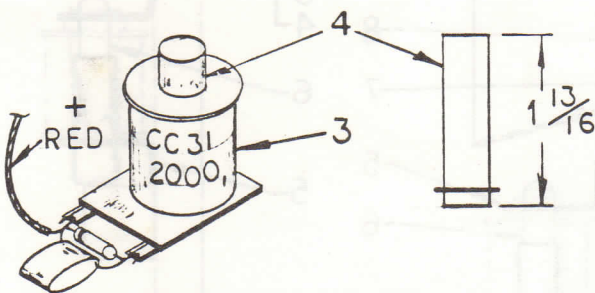
COILS



Part No.	Part Description
----------	------------------

- | | |
|----------------|---------------------------------|
| 1- ESU-1002... | Coil, A28-1900 |
| 2- ESU-1006... | Bushing-Brass Coil, 1-3/4"Lg |
| 3- ESU-1004... | Coil, CC31-2000 |
| 4- ESU-1007... | Bushing-Nylon Chime, 1-13/16"Lg |

Items 1&2 used for all playfield coils.
Items 3&4 used for all sound coils.

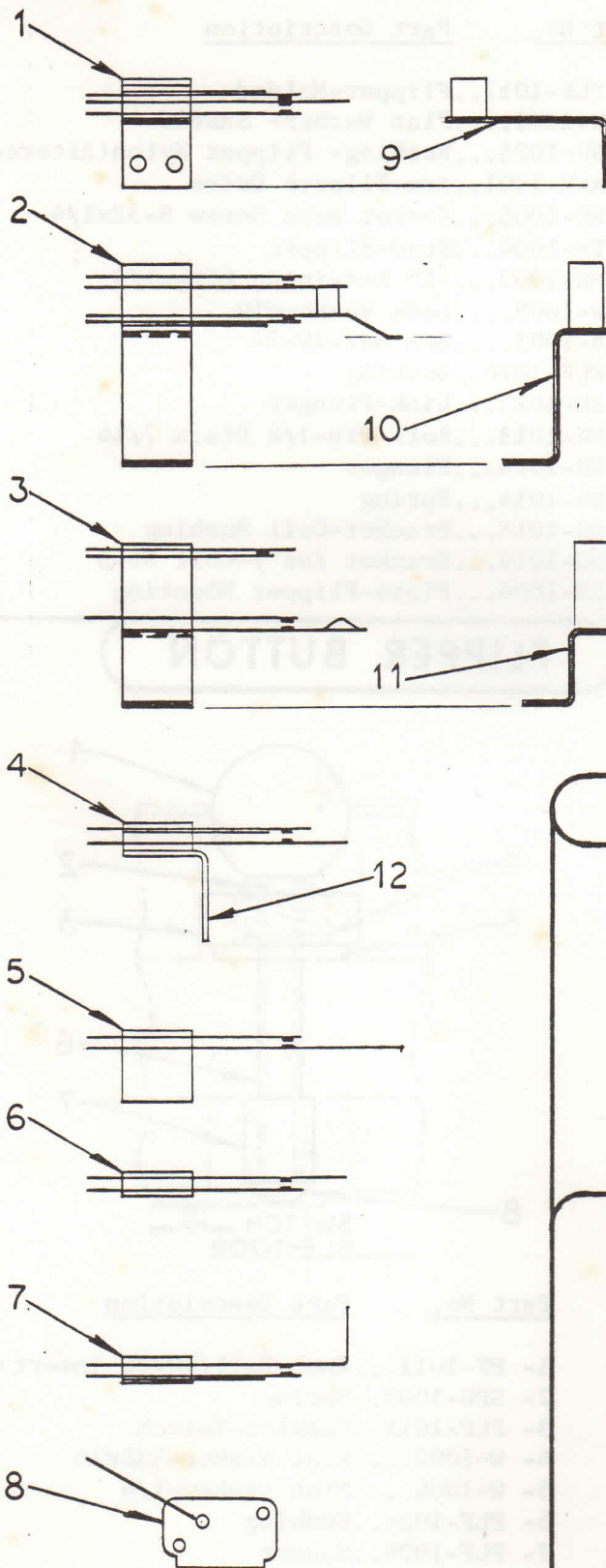


Capacitors and rectifiers across coils squelch switch arcing. Banded end of rectifier MUST be connected to Positive lead. (Red or violet wire)....

When noticeable (bright) switch arcing occurs- check rectifier and capacitor solder connections. Replace capacitor if problem persists. A shorted rectifier will blow fuses....

Before replacing an unburned coil- first check for a break in the coil winding leads at coil terminals.

SWITCHES



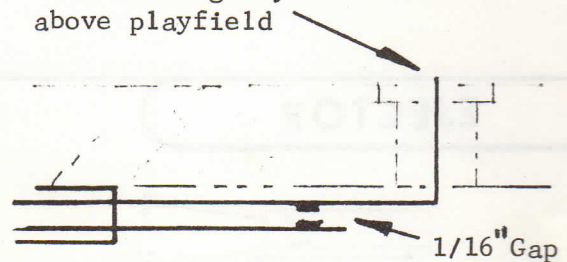
Part No. Part Description

- 1- SLE-1005...Switch
- 2- SLE-1007...Switch
- 3- ESU-1003...Switch
- 4- SLE-1004...Switch
- 5- SLE-1008...Switch
- 6- SLE-1009...Switch
- 7- SLE-1010...Switch
- 8- LE-1006...Switch
- 9- SM-1002...Bracket-Switch
- 10-SM-1004...Bracket-Switch
- 11-SM-1003...Bracket-Switch
- 12-SM-1001...Bracket-Switch

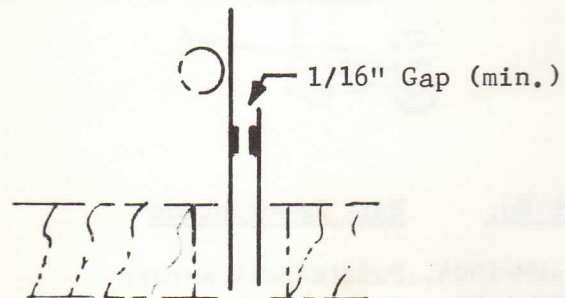
MISC. SWITCH SETUP

"1000" OUT SCORING SWITCH SLE-1010

Even or slightly
above playfield



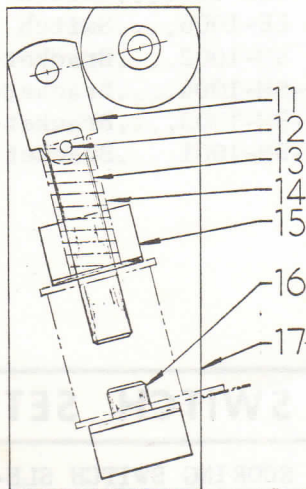
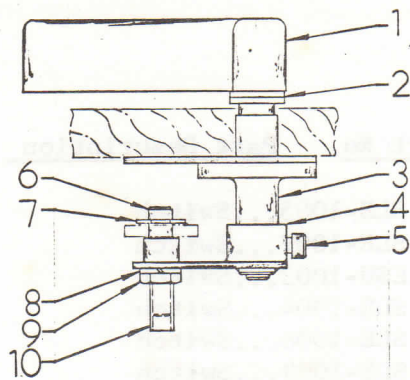
"500" END SCORING SWITCH SLE-1004



This is a silent switch located at ends of playfield. This switch is provided to shorten game time, where desirable. Do not set contacts too close. Rapid additions to the score would be absurd!

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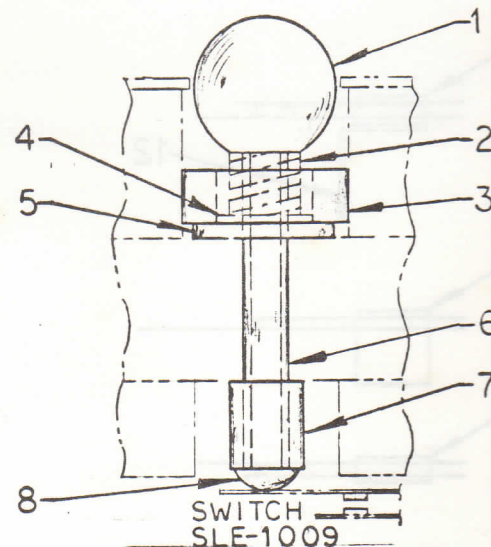
FLIPPER



Part No. Part Description

- 1- PLF-1017..Flipper-Molded
- 2- W-1002....Flat Washer- SAE#10
- 3- SU-1025...Bushing- Flipper Nylon(Altered)
- 4- AWM-1001..Arm-Flipper Drive
- 5- MS-1005...Socket Head Screw 8-32x1/4
- 6- TM-1004...Stud-Flipper
- 7- MH-1002..."E" Retaining Ring-1/4
- 8- W-1008....Lock Washer#10
- 9- N-1003....Hex Nut-10-24
- 10-PLF-1026..Bushing
- 11-SU-1023...Link-Plunger
- 12-MH-1013...Roll Pin-1/8 Dia.x 7/16
- 13-SU-1024...Plunger
- 14-SU-1014...Spring
- 15-SU-1018...Bracket-Coil Bushing
- 16-SU-1019...Bracket Ass'y-Coil Stop
- 17-SM-1006...Plate-Flipper Mounting

FLIPPER BUTTON



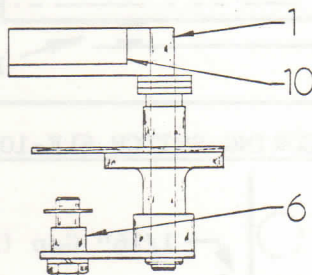
Part No. Part Description

- 1- PF-1011...Knob-Ball(10-32 Insert)
- 2- SPG-1003..Spring
- 3- PLF-1018..Cushion-Switch
- 4- W-1002....Flat Washer-SAE#10
- 5- W-1006....Flat Washer-1/4
- 6- PLF-1024..Bushing
- 7- PLF-1029..Spacer
- 8- MS-1012...Machine Screw-10-32x2

DISASSEMBLY

With top open-depress ball knob firmly and turn machine screw counter-clockwise with screwdriver.

EJECTOR



Part No. Part Description

- 1- AWM-1004..Paddle-Ball Return
- 6- TM-1006...Stud-Ball Return
- 10-PL-1007...Cushion-Ejector

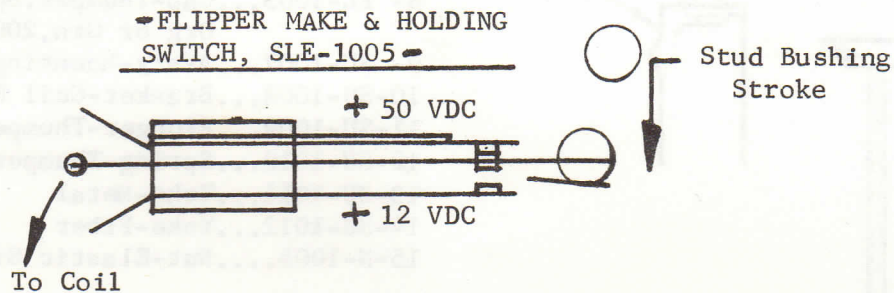
BALANCE OF STOCKLIST-SAME AS FLIPPER

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FLIPPER OPERATION

Flipper button on table top closes leaf switch underneath and actuates relay. Relay provides negative current to activate the flipper coil. This current is supplied through 2 other relays. Conversely when a relay is energized, it in turn deprives these same relays of current. This prevents a player using more than 1 flipper at a time. See Circuit Diagram.

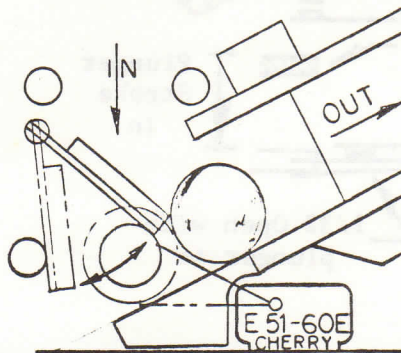
Break-make switch at end of plunger stroke reduces voltage from 50 VDC to 12 VDC for holding plunger in. Power is reduced from 90 watts actuating stroke to 5 watts for holding. (Approx).



Flippers will not function properly if contacts of adjacent relays, operating relay, table top switch or flipper break-make switch are contaminated.

EJECTOR OPERATION

Ejector switch should close when the pin ball is within 1/16" of "pocketing" into positioning hole.



Ejector paddle MUST have sufficient stroke to allow switch to open. If the ejector stroke was too short and the pin ball "parked" on the switch, the coil would be energized. A burned out coil would result. Because the bell coil is also activated by this switch, it would be affected accordingly.

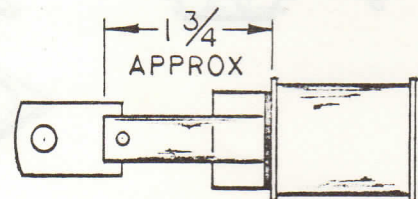
Nominal setting of the plunger, when extended, is 1-3/4" beyond the coil spool.

If the ejector is having difficulty expelling the pin ball- shorten plunger stroke.

If the ejector is overpowering the pin ball- lengthen the stroke.

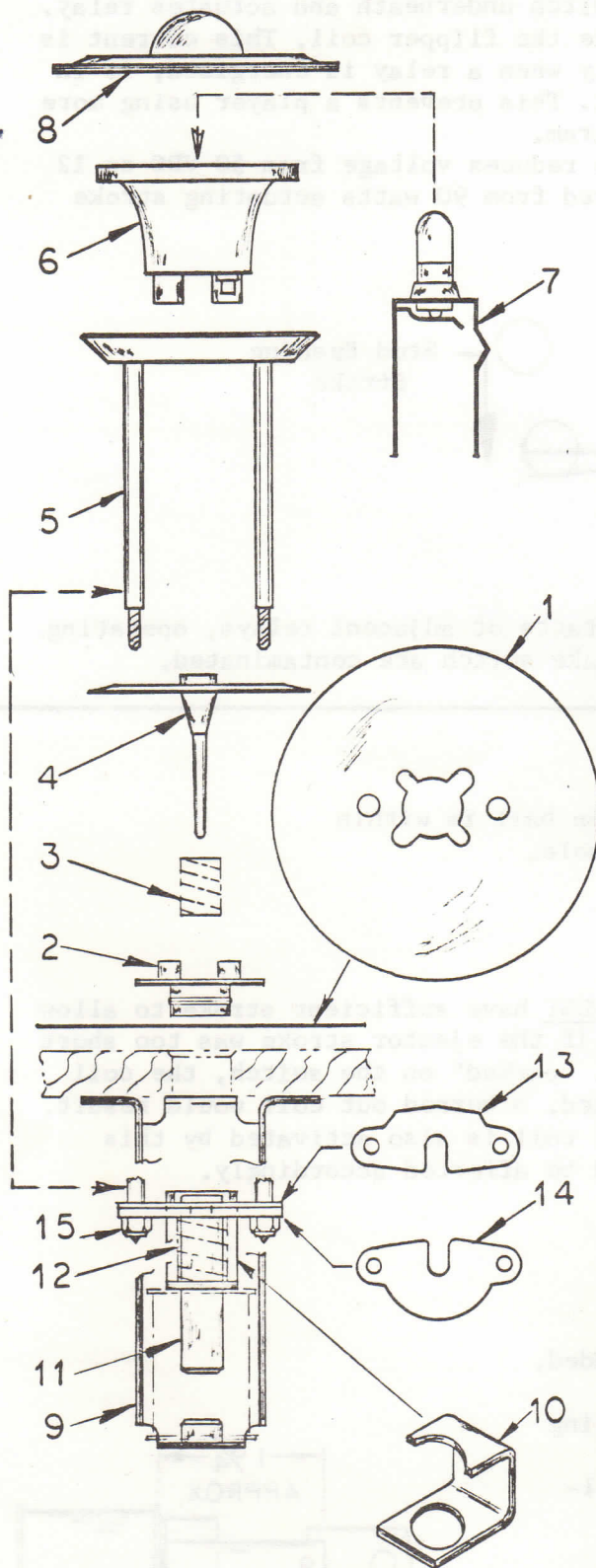
Make adjustments in 1/8" increments.

Overpowering the pin ball can cause it to escape into the playing area.



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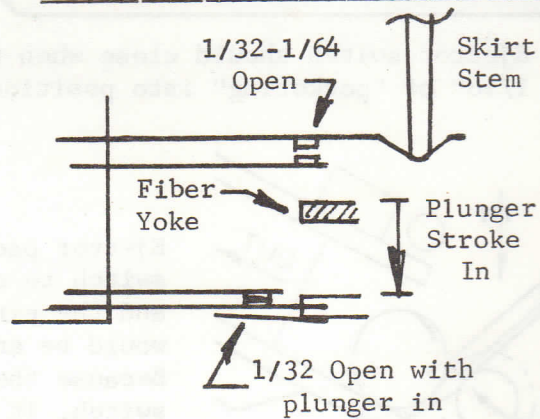
THUMPER



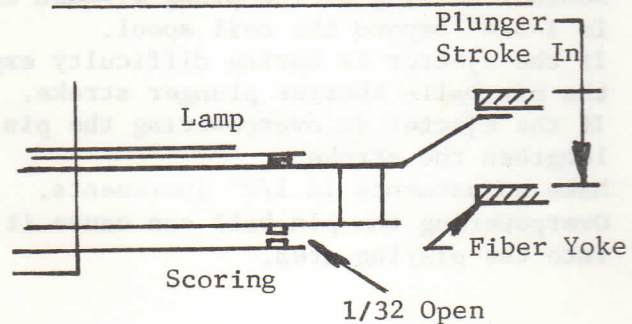
Part No.	Part Description
1- SU-1001...	Platter-Trim
2- SU-1002...	Base-Thumper
3- SU-1003...	Spring-Thumper
4- SU-1004...	Skirt-Thumper
5- SU-1005...	Ass'y-Ring and Rod
6- SU-1006...	Body-Thumper
7- ESU-1001..	Lamp Socket-Thumper
8- PL-1003...	Cap-Thumper, Specify Org or Grn, 200 or 300.
9- SU-1007...	Ass'y-Mounting Bracket
10-SU-1008...	Bracket-Coil Retaining
11-SU-1009...	Plunger-Thumper
12-SU-1010...	Spring-Thumper Return
13-SU-1011...	Yoke-Metal
14-SU-1012...	Yoke-Fiber
15-N-1005....	Nut-Elastic Stop, 6-32

THUMPER OPERATION

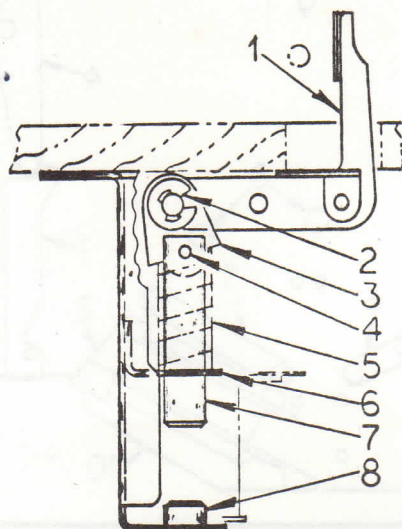
THUMPER ACTIVATING SWITCH ESU-1003



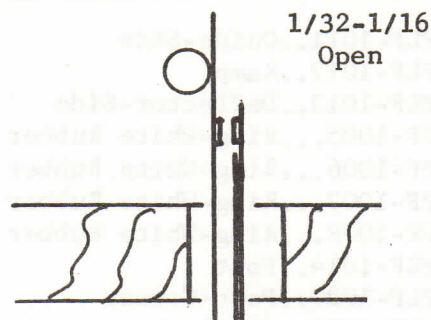
LAMP & SCORING SWITCH SLE-1007



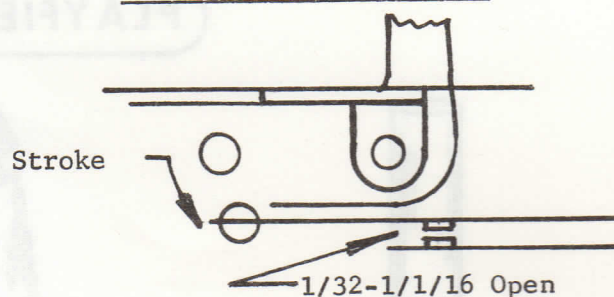
SIDE KICKER



ACTIVATING SWITCH SLE-1004



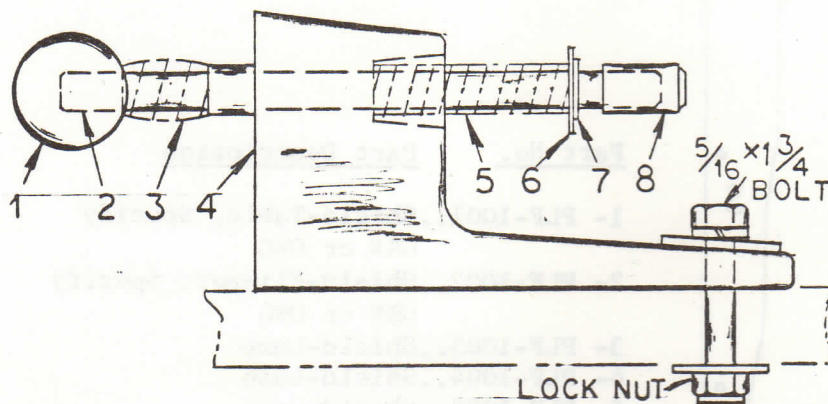
SCORING SWITCH SLE-1008



Part No. Part Description

- 1- SU-1016...Ass'y-Kicker Crank
- 2- MH-1003..."E" Retaining Ring, 7/32
- 3- SU-1020...Link-Plunger
- 4- MH-1013...Roll Pin, 1/8Dia.x7/16
- 5- SU-1010...Spring
- 6- SU-1013...Bracket-Coil Bushing
- 7- SU-1015...Plunger
- 8- SU-1007...Ass'y-Mounting Bracket

SHOOTER



Part No. Part Description

- 1- PF-1012....Knob-Shooter
- 2- TM-1001....Rod-Shooter
- 3- SPG-1002...Spring-Recoil
- 4- PLF-1019...Guide-Shooter
- 5- SPG-1004...Spring-Rod
- 6- W-1005....Washer-5/16 Flat
- 7- MH-1001..."E" Ring-3/8
- 8- PF-1010....Cap-Shooter

ADJUSTMENTS

Periodic shooter adjustments will be necessary. Tighten bolt to lock nut. Shooter should be free moving and able to hold aim.

DISASSEMBLY

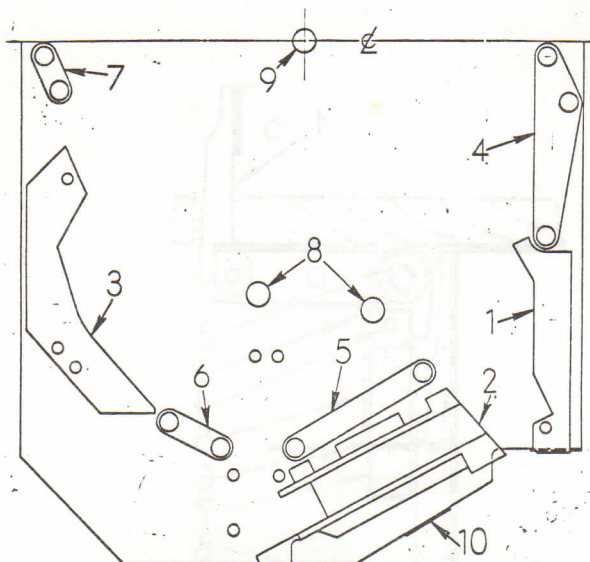
Remove cap, "E" ring and washer. Pull rod out of housing. To remove knob, grip rod (under cap end) with pliers and turn knob counter- clockwise.

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PLAYFIELD PARTS

Part No. Part Description

- 1- PLF-1011..Guide-Side
- 2- PLF-1012..Ramp
- 3- PLF-1013..Deflector-Side
- 4- PF-1005...Ring-White Rubber 3" I.D.
- 5- PF-1006...Ring-White Rubber 2-1/2" I.D.
- 6- PF-1007...Ring-White Rubber 1-1/4" I.D.
- 7- PF-1008...Ring-White Rubber 1" I.D.
- 8- PLF-1014..Post
- 9- PLF-1020..Post-Center
- 10-PLF-1007..Shield-Lamp



PLAYFIELD POSTS



PLF-1028 Post-Red
PLF-1030 Post-White

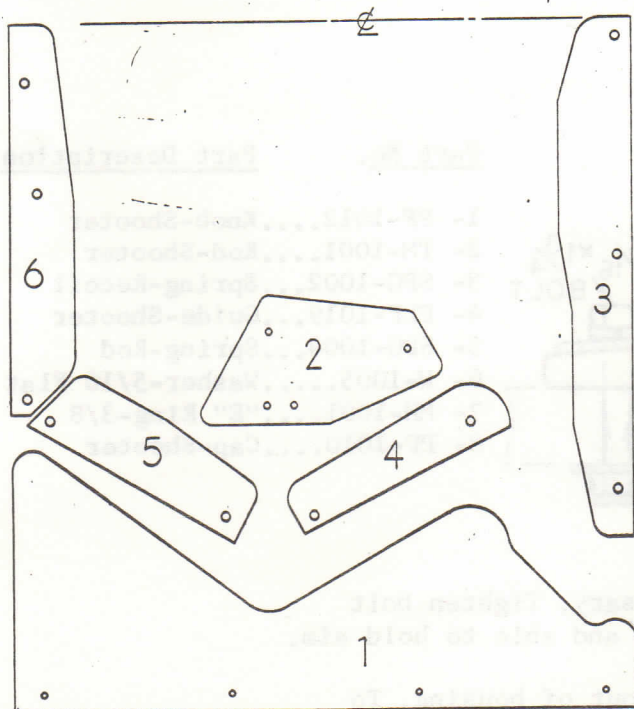


PF-1002 Post-Bumper
Specify Color



PF-1002 Post-Bumper
Short-Specify Color

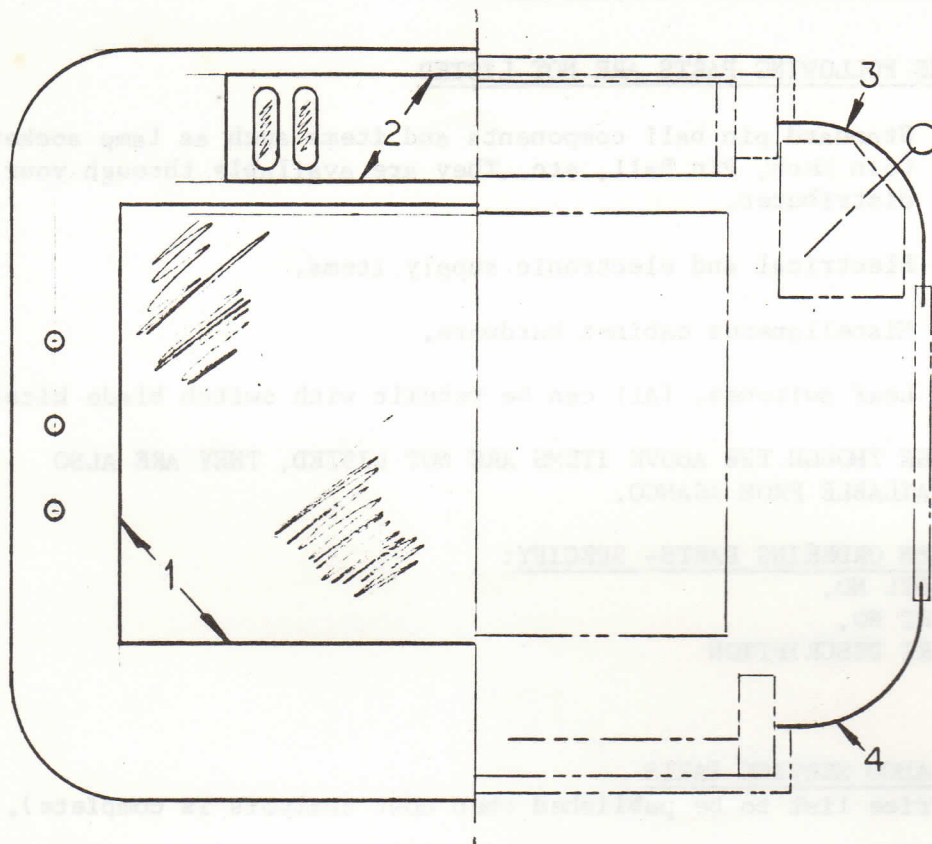
LAMP SHIELDS



- | <u>Part No.</u> | <u>Part Description</u> |
|-----------------|------------------------------------|
| 1- PLF-1001.. | Shield-Table, Specify GRN or ORG |
| 2- PLF-1002.. | Shield-Flipper, Specify GRN or ORG |
| 3- PLF-1003.. | Shield-Lamp |
| 4- PLF-1004.. | Shield-Lamp |
| 5- PLF-1005.. | Shield-Lamp |
| 6- PLF-1006.. | Shield-Lamp |

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TABLE

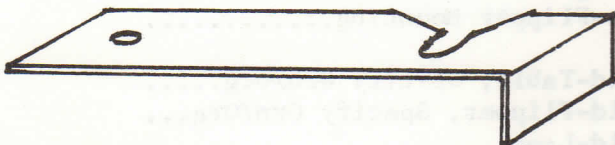


Part No.

- 1- M-1002....Glass-Top 3/16x17-7/8x29-7/8
- 2- M-1003....Glass-Scorer
- 3- PLF-1009..Guard-Shooter Grn or Org
- 4- PLF-1010..Guard-Corner Grn or Org

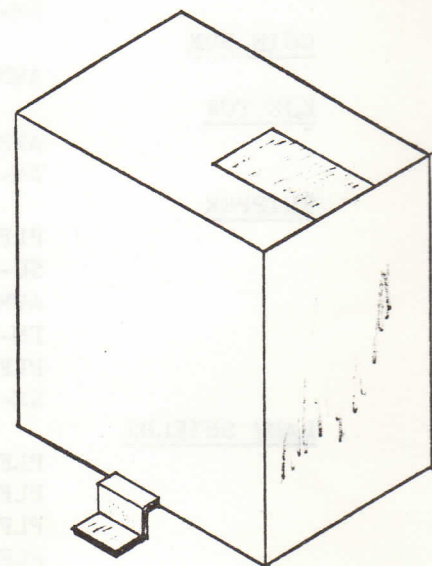
PIVOT WASHER

SM-1005



COIN BOX

AWM-1003



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SERVICE PARTS

THE FOLLOWING PARTS ARE NOT LISTED

- 1- Standard pin ball components and items such as lamp sockets, Coin Mech, Pin Ball, etc..They are available through your distributor.
- 2- Electrical and electronic supply items.
- 3- Miscellaneous cabinet hardware.
- 4- Leaf switches. (All can be rebuilt with switch blade kits).

EVEN THOUGH THE ABOVE ITEMS ARE NOT LISTED, THEY ARE ALSO AVAILABLE FROM AGAMCO.

WHEN ORDERING PARTS- SPECIFY:

MODEL NO.

PART NO.

PART DESCRIPTION

AGAMCO SERVICE PARTS

(Price list to be published when cost analysis is complete).

<u>SUBJECT</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
<u>BELL & CHIMES</u>	PF-1013.....	Bell.....	
	PL-1001.....	Grommet.....	
	SM-1010.....	Chime-Short.....	
	SM-1011.....	Chime-Medium.....	
	SM-1012.....	Chime-Long.....	
<u>COIN BOX</u>	AWM-1003.....	Coin Box.....	
<u>EJECTOR</u>	AWM-1004.....	Paddle-Ball Return.....	
	TM-1006.....	Stud-Ball Ejector.....	
<u>FLIPPER</u>	PLF-1017.....	Flipper-Molded.....	
	SU-1025.....	Bushing-Flipper Nylon (Altered)...	
	AWM-1001.....	Arm-Flipper Drive.....	
	TM-1004.....	Stud-Flipper.....	
	PLF-1026.....	Bushing.....	
	SM-1006.....	Plate-Flipper Mounting.....	
<u>LAMP SHIELDS</u>	PLF-1001.....	Shield-Table, Specify Grn/Org.....	
	PLF-1002.....	Shield-Flipper, Specify Grn/Org...	
	PLF-1003.....	Shield-Lamp.....	
	PLF-1004.....	Shield-Lamp.....	
	PLF-1005.....	Shield-Lamp.....	
	PLF-1006.....	Shield-Lamp.....	

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SERVICE PARTS

<u>SUBJECT</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
<u>PIVOT WASHER</u>	SM-1005.....	Washer-Pivot.....	
<u>PLAYFIELD PARTS</u>	PLF-1011.....	Guide-Side.....	
	PLF-1012.....	Ramp.....	
	PLF-1013.....	Deflector-Side.....	
	PLF-1014.....	Post.....	
	PLF-1020.....	Post-Center.....	
	PLF-1007.....	Shield-Lamp.....	
	PLF-1028.....	Post-Red.....	
	PLF-1030.....	Post-White.....	
	PF-1002.....	Post-Bumper (Altered),.....	
<u>SCORER</u>	SLE-1001.....	Scorer.....	
<u>SHOOTER</u>	PF-1012.....	Knob-Shooter.....	
	TM-1001.....	Rod-Shooter.....	
	PLF-1019.....	Guide-Shooter.....	
	SPG-1004.....	Spring-Rod (Altered).....	
<u>TABLE</u>	M-1002.....	Glass-Top.....	
	M-1003.....	Glass-Scorer.....	
	PLF-1009.....	Guard-Shooter..Grn/Org.....	
	PLF-1010.....	Guard-Corner..Grn/Org.....	
<u>THUMPER</u>	PL-1003.....	Cap-Thumper, Specify-Grn/Org & 200/300.....	
<u>TRANSFORMER</u>	SLE-1002.....	Transformer.....	

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