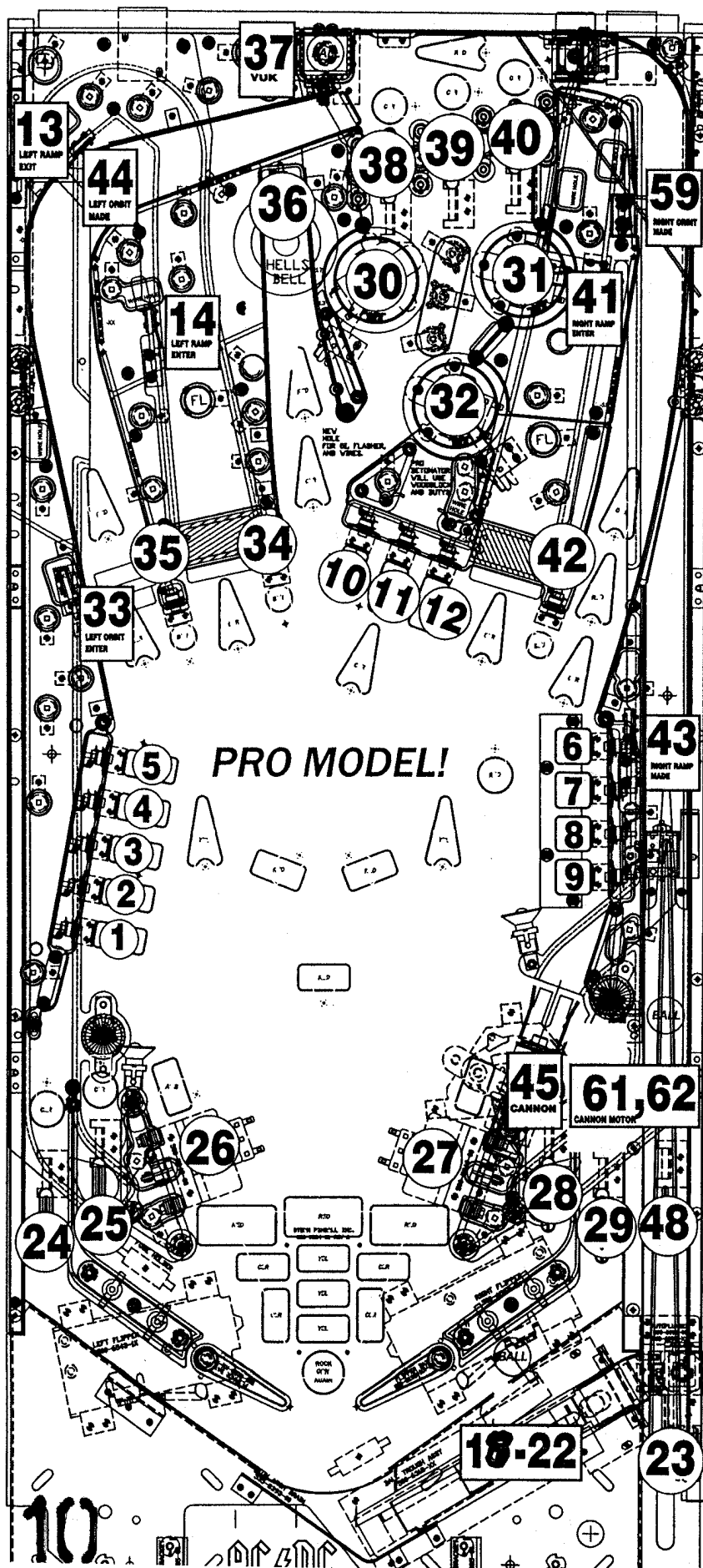
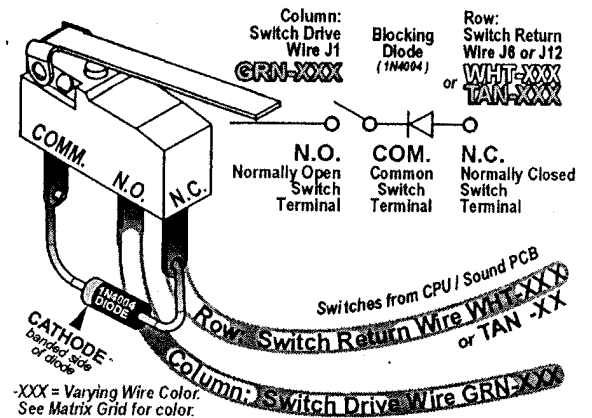


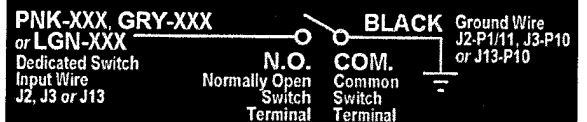
SWITCH MENU: SWITCH, ACTIVE, SINGLE & SERVICE



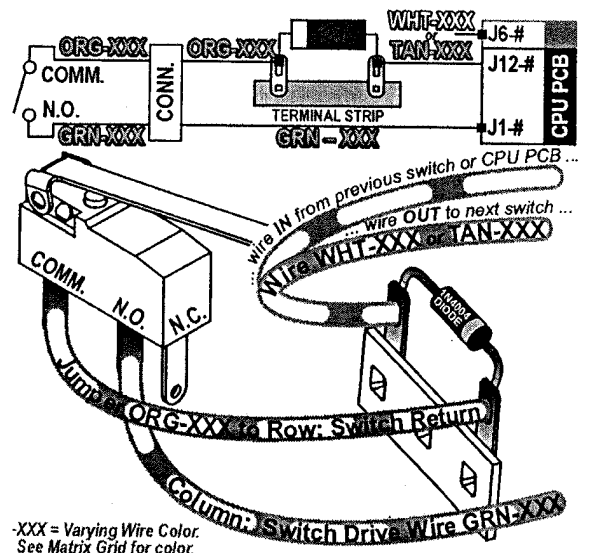
Typical Switch Wiring & Schematic



Dedicated Switch Schematic



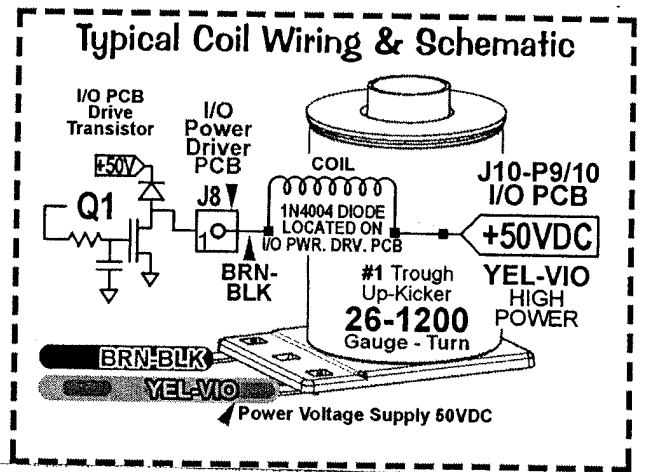
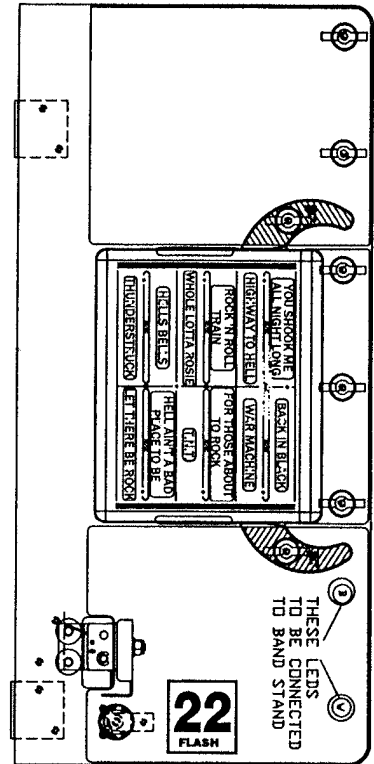
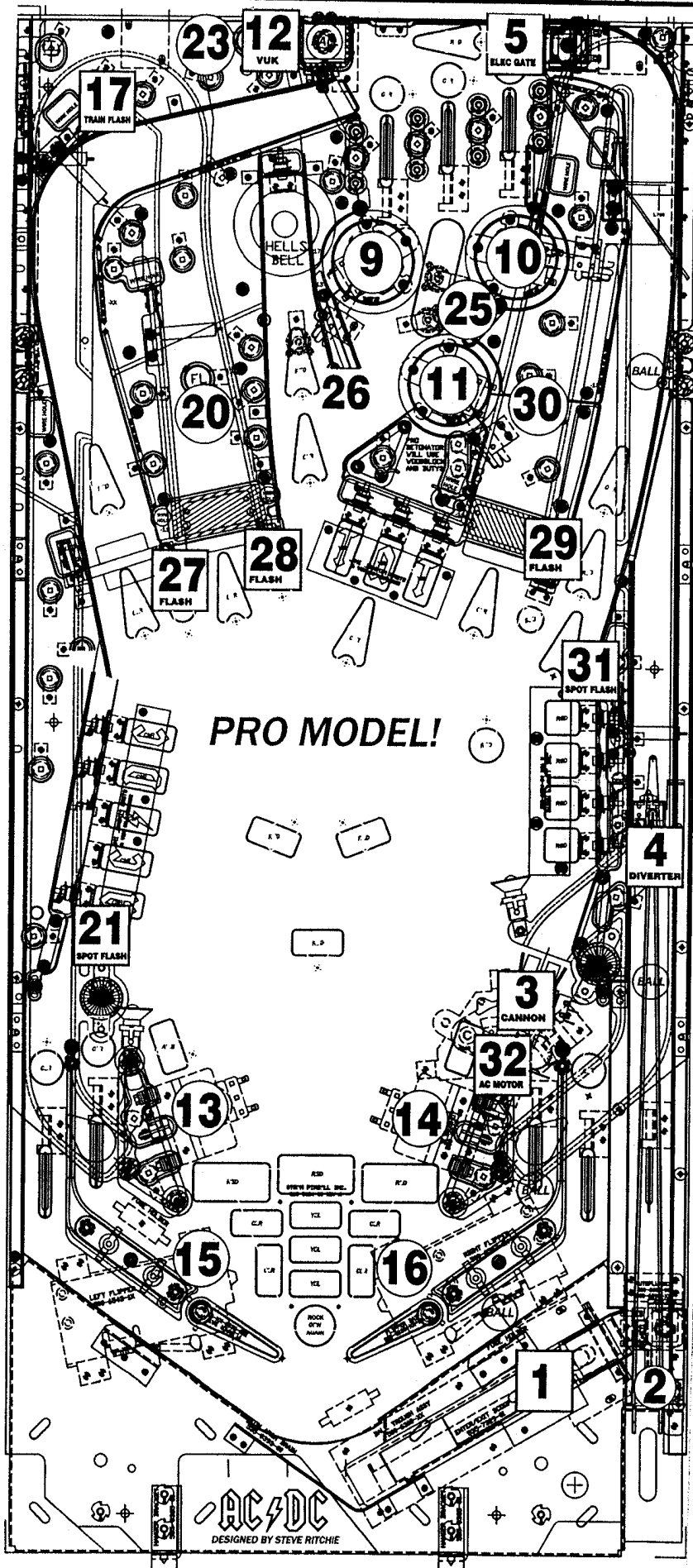
Typical Switch Wiring & Schematic ... with Switch Diode on a Terminal Strip (DOTS)



1P1R()

COILS DETAILED CHART TABLE

High Current Coils Group 1		Drive Transistor	Driver Output PCB	Power Line Color	Power Line Connection	Power Voltage	Drive Transistor Control Line Color	D.T. Control Line Connect	Coil GA-Turn or Bulb Type
#1	TROUGH UP-KICKER	Q1	▲ I/O Power Driver ▼	YEL-VIO	J10-P9/10	50VDC	BRN-BLK	J8-P1	28-1200 090-5044-ND
#2	AUTO LAUNCH	Q2		YEL-VIO	J10-P9/10	50VDC	BRN-RED	J8-P3	24-940 090-5036-ND
#3	CANNON EJECT	Q3		YEL-VIO	J10-P9/10	50VDC	BRN-ORG	J8-P4	23-800 090-5001-ND
#4	RIGHT RAMP DIVERTER	Q4		YEL-VIO	J10-P9/10	50VDC	BRN-YEL	J8-P5	23-800 090-5001-ND
#5	RIGHT CONTROL GATE	Q5		YEL-VIO	J10-P9/10	50VDC	BRN-GRN	J8-P6	32-1800 515-6595-01
#6		Q6				50VDC	BRN-BLU	J8-P7	
#7		Q7					BRN-VIO	J8-P8	
#8	SHAKER MOTOR (OPTIONAL)	Q8		RED-WHT	J17-P7	16VAC	BRN-GRY	J8-P9	502-5027-00
High Current Coils Group 2		Drive Transistor	Driver Output PCB	Power Line Color	Power Line Connection	Power Voltage	Drive Transistor Control Line Color	D.T. Control Line Connect	Coil GA-Turn or Bulb Type
#9	LEFT POP BUMPER	Q9	▲ I/O Power Driver ▼	YEL-VIO	J10-P9/10	50VDC	BLU-BRN	J8-P1	28-1200 090-5044-ND
#10	RIGHT POP BUMPER	Q10		YEL-VIO	J10-P9/10	50VDC	BLU-RED	J8-P2	28-1200 090-5044-ND
#11	BOTTOM POP BUMPER	Q11		YEL-VIO	J10-P9/10	50VDC	BLU-ORG	J8-P4	28-1200 090-5044-ND
#12	TOP EJECT	Q12		YEL-VIO	J10-P9/10	50VDC	BLU-YEL	J8-P5	28-1200 090-5044-ND
#13	LEFT SLINGSHOT	Q13		YEL-VIO	J10-P9/10	50VDC	BLU-GRN	J8-P6	28-1200 090-5044-ND
#14	RIGHT SLINGSHOT	Q14		YEL-VIO	J10-P9/10	50VDC	BLU-BLU	J8-P7	28-1200 090-5044-ND
#15	LEFT FLIPPER (50V RED/YEL)	Q15		GRY-YEL-3A Fuse-RED-YEL	J10-P6/7	50VDC	ORG-GRY	J8-P8	22-1080 090-5032-ND
#16	RIGHT FLIPPER (50V RED/YEL)	Q16		GRY-YEL-3A Fuse-RED-YEL	J10-P6/7	50VDC	ORG-VIO	J8-P9	22-1080 090-5032-ND
Low Current Coils Group 1		Drive Transistor	Driver Output PCB	Power Line Color	Power Line Connection	Power Voltage	Drive Transistor Control Line Color	D.T. Control Line Connect	Coil GA-Turn or Bulb Type
#17	TRAIN FLASHER	Q17	▲ I/O Power Driver ▼	ORG	J6-P10	20VDC	VIO-BRN	J7-P2	#89 BULB 165-5000-89
#18		Q18					VIO-RED	J7-P3	
#19		Q19					VIO-ORG	J7-P4	
#20	LEFT RAMP FLASHER	Q20		ORG	J6-P10	20VDC	VIO-YEL	J7-P6	#89 BULB 165-5000-89
#21	LEFT SIDE FLASHER	Q21		ORG	J6-P10	20VDC	VIO-GRN	J7-P7	#89 BULB 165-5000-89
#22	BACK PANEL FLASHER	Q22		ORG	J6-P10	20VDC	VIO-BLU	J7-P8	#89 BULB 165-5000-89
#23	TOP EJECT FLASHER	Q23		ORG	J6-P10	20VDC	VIO-BLK	J7-P9	#89 BULB 165-5000-89
#24	OPTIONAL (e.g. COIN METER)	Q24		RED	J16-P4-8	5VDC	VIO-GRY	J7-P10	COIN METER
Low Current Coils Group 2		Drive Transistor	Driver Output PCB	Power Line Color	Power Line Connection	Power Voltage	Drive Transistor Control Line Color	D.T. Control Line Connect	Coil GA-Turn or Bulb Type
#25	POP BUMPERS FLASH (X3)	Q25	▲ I/O Power Driver ▼	ORG	J6-P10	20VDC	BLK-BRN	J6-P1	#89 BULB 165-5000-89
#26	BELL ARROW FLASHER	Q26		ORG	J6-P10	20VDC	BLK-RED	J6-P2	#89 BULB 165-5000-89
#27	LEFT RAMP LEFT SIDE FLASHER	Q27		ORG	J6-P10	20VDC	BLK-ORG	J6-P3	#89 BULB 165-5000-89
#28	LEFT RAMP RIGHT SIDE FLASHER	Q28		ORG	J6-P10	20VDC	BLK-YEL	J6-P4	#89 BULB 165-5000-89
#29	RIGHT RAMP RIGHT SIDE FLASHER	Q29		ORG	J6-P10	20VDC	BLK-GRN	J6-P5	#89 BULB 165-5000-89
#30	RIGHT RAMP FLASHER	Q30		ORG	J6-P10	20VDC	BLK-BLU	J6-P6	#89 BULB 165-5000-89
#31	RIGHT SIDE FLASHER	Q31		ORG	J6-P10	20VDC	BLK-VIO	J6-P7	#89 BULB 165-5000-89
#32	CANNON MOTOR	Q32		BRN	J7-P1	20VDC	BLK-GRY	J6-P8	MOTOR 041-5111-00



LAMP MATRIX GRID [#1 - #80] {Lamp Locations : next page}

I/O	01	02	03	04	05	06	07	08
Power Driver Board	IC-U17	IC-U16	IC-U15	IC-U14	IC-U13	IC-U12	IC-U11	IC-U10
01	18VDC YEL-BRN J13-P9	18VDC YEL-RED J13-P8	18VDC YEL-ORG J13-P7	18VDC YEL-BLK J13-P6	18VDC YEL-GRN J13-P5	18VDC YEL-BLU J13-P4	18VDC YEL-VIO J13-P3	18VDC YEL-GRY J13-P1
02	START	TOURNAMENT START	LEFT OUTLANE	LEFT RETURN LANE	2X	3X	RIGHT RETURN LANE	RIGHT OUTLANE
03	AC/D(C)	AC/(D)C	AC(/)DC	A(C)/DC	(A)C/DC	FACE LEFT EYE	FACE RIGHT EYE	
04	FACE MOUTH	L. LOOP ARROW (WHT./NOTE)	L. RAMP STANDUP (L.)	L. RAMP ARROW (WHT./NOTE)	L. RAMP STANDUP (R)	(T).N.T.	T.(N.)T.	T.N.(T.)
05	T.N.T. ARROW (WHT./NOTE)	R. RAMP ARROW (WHT./NOTE)	EXTRA BALL	R. LOOP ARROW (RED/HORNS)	R. LOOP ARROW (WHT./NOTE)	(R)OCK	R(O)CK	RO(C)K
06	ROC(K)	SPECIAL	BELL ARROW (RED/HORNS)	BELL ARROW (WHT./NOTE)	LEFT TOP LANE	CENTER TOP LANE	RIGHT TOP LANE	TUNES N STUFF
07	JAM MULTIBALL	SUPER TARGETS	SUPER LANES	ALBUM MULTIBALL	CANNON FODDER	CANNON VOLLEY	CANNON CHAOS	ROCK AGAIN
08	TOUR MULTIBALL	SUPER COMBO	SUPER LOOPS	L. LOOP ARROW (RED/HORNS)	YOU SHOOK ME ALL NIGHT LONG	HIGHWAY TO HELL	ROCK-N-ROLL TRAIN	WHOLE LOTTA ROSIE
09	RED VIO J12-P8	RED VIO J12-P9	RED VIO J12-P9	RED VIO J12-P9	RED VIO J12-P9	RED VIO J12-P9	RED VIO J12-P9	RED VIO J12-P9
10	RED VIO J12-P10	RED VIO J12-P10	RED VIO J12-P10	RED VIO J12-P10	RED VIO J12-P10	RED VIO J12-P10	RED VIO J12-P10	RED VIO J12-P10
11	RED VIO J12-P11	RED VIO J12-P11	RED VIO J12-P11	RED VIO J12-P11	RED VIO J12-P11	RED VIO J12-P11	RED VIO J12-P11	RED VIO J12-P11

« FOR MORE ABOUT DIODE ON THER-
MINAL STRIPS «D.O.T.S.» SEE
SEC.5, CHP 2, PAGES 104-105 »

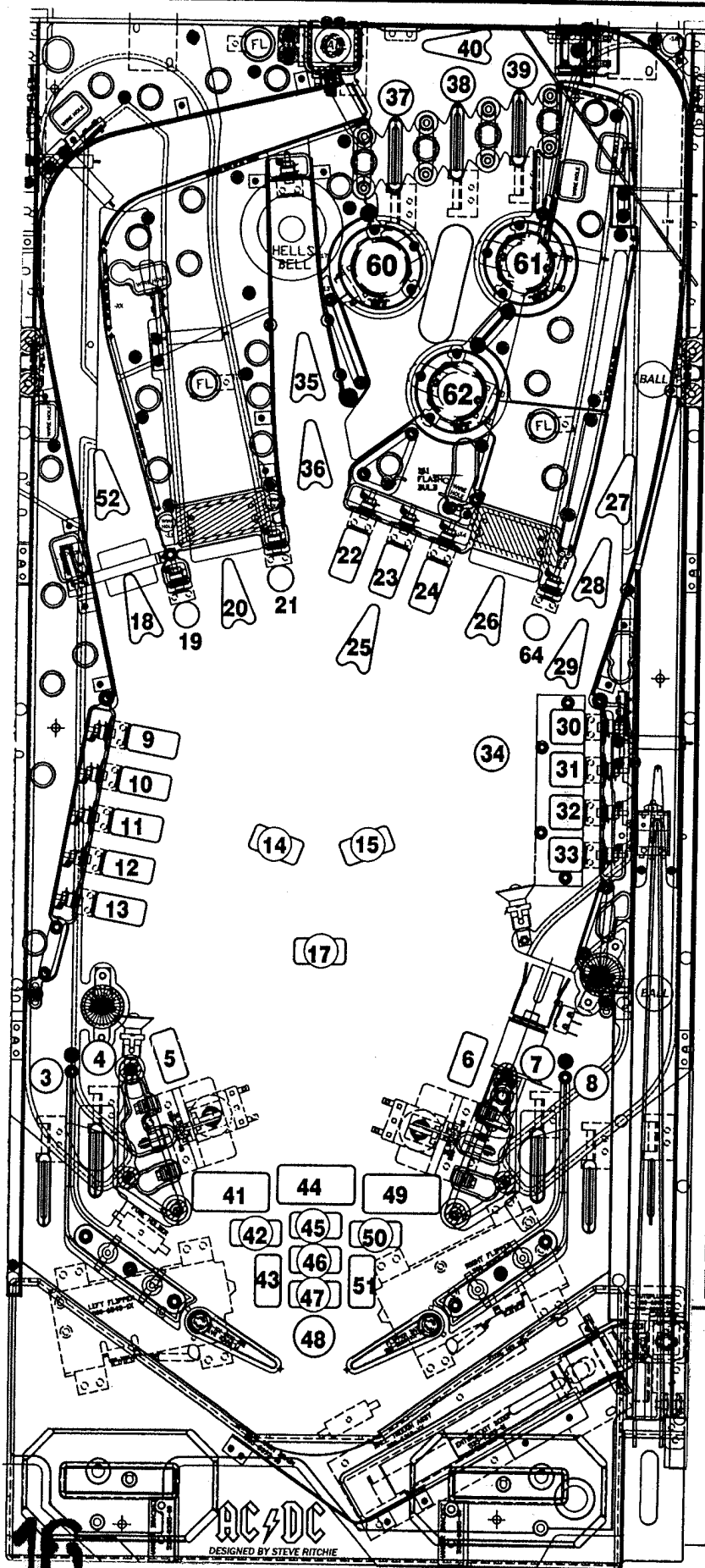
Wire Color Abbreviations Use: **BLK** Black **BLU** Blue **BRN** Brown **GRY** Gray **GRN** Green **ORG** Orange **RED** Red **VIO** Violet **WHT** White **YEL** Yellow

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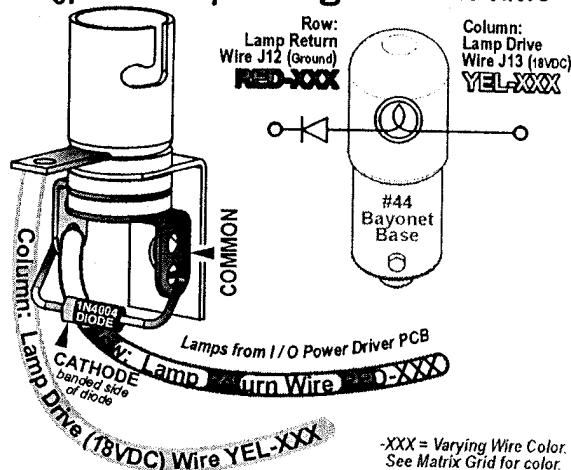
GO TO LAMP MENU

SINGLE LAMP TEST

LAMP MENU: ONE, ALL, ROW, COLUMN & ORDERED

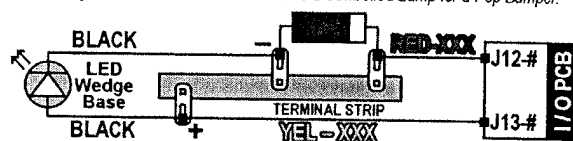


Typical Lamp Wiring & Schematic

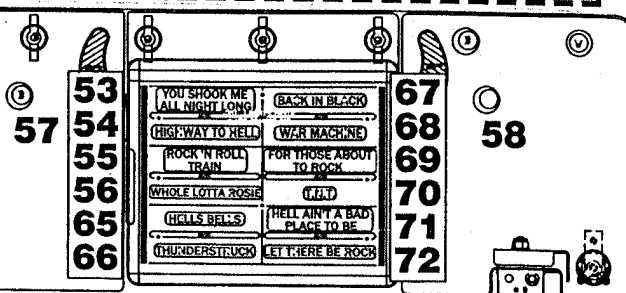
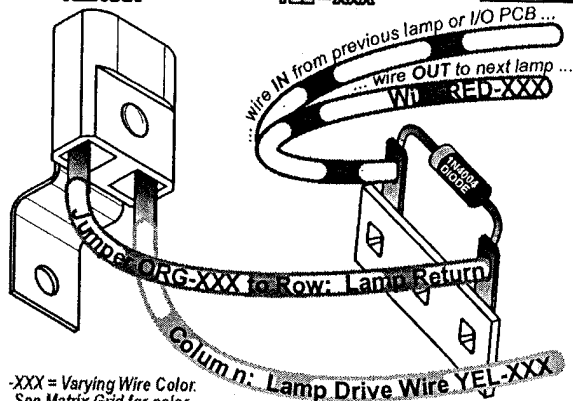
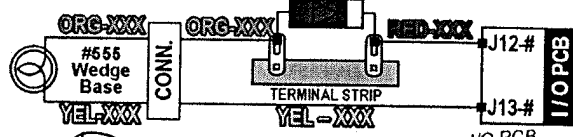


Typical Lamp Wiring & Schematic

... with Lamp Diode on a Terminal Strip (DOTS)
Usually when an LED Module is used as a Controlled Lamp for a Pop Bumper.

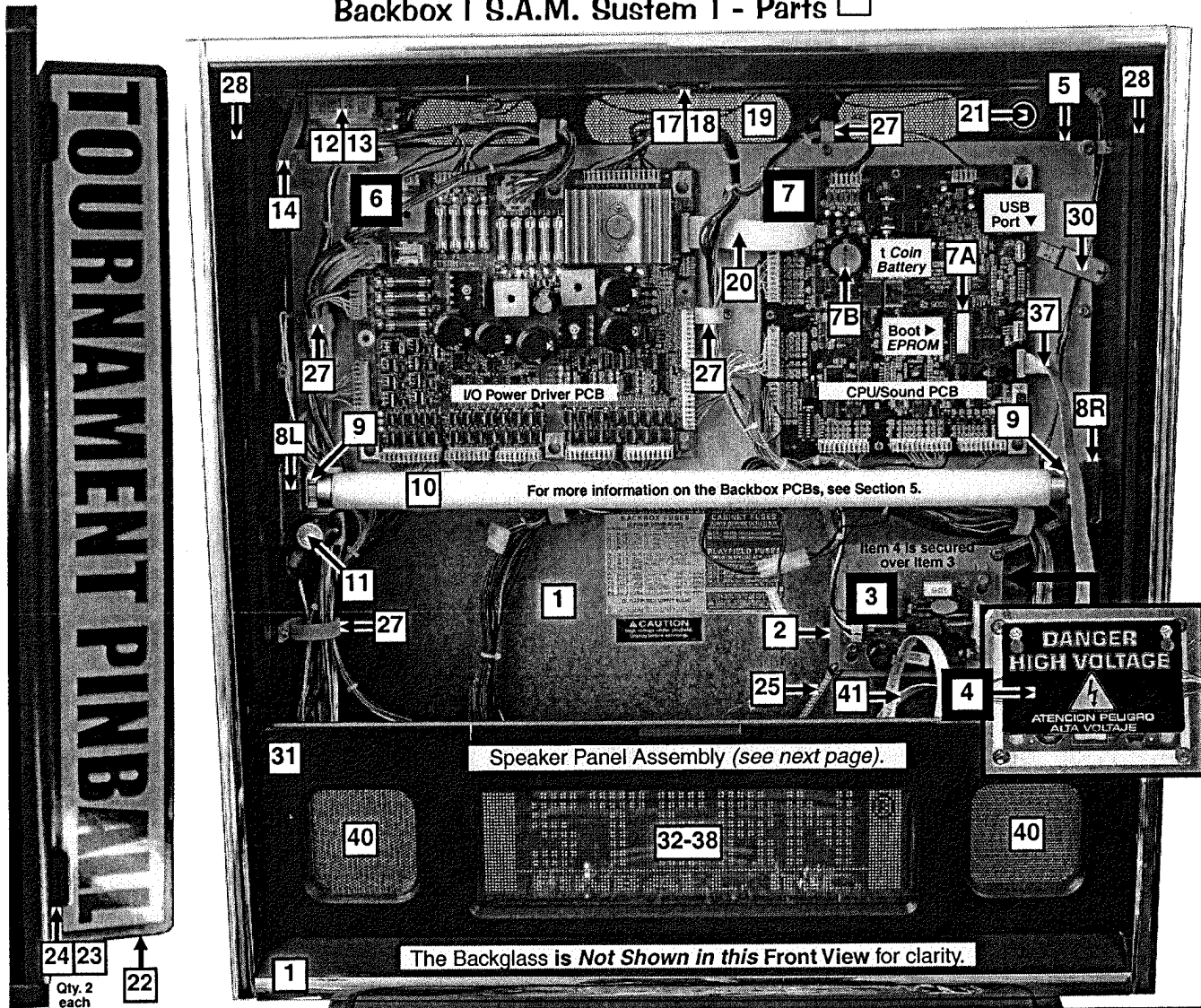


... with Lamp Diode on a Terminal Strip (DOTS)
Usually when a #555 Bulb is used as a Controlled Lamp for a Spot Light.



120

Backbox [S.A.M. Sistem] - Parts



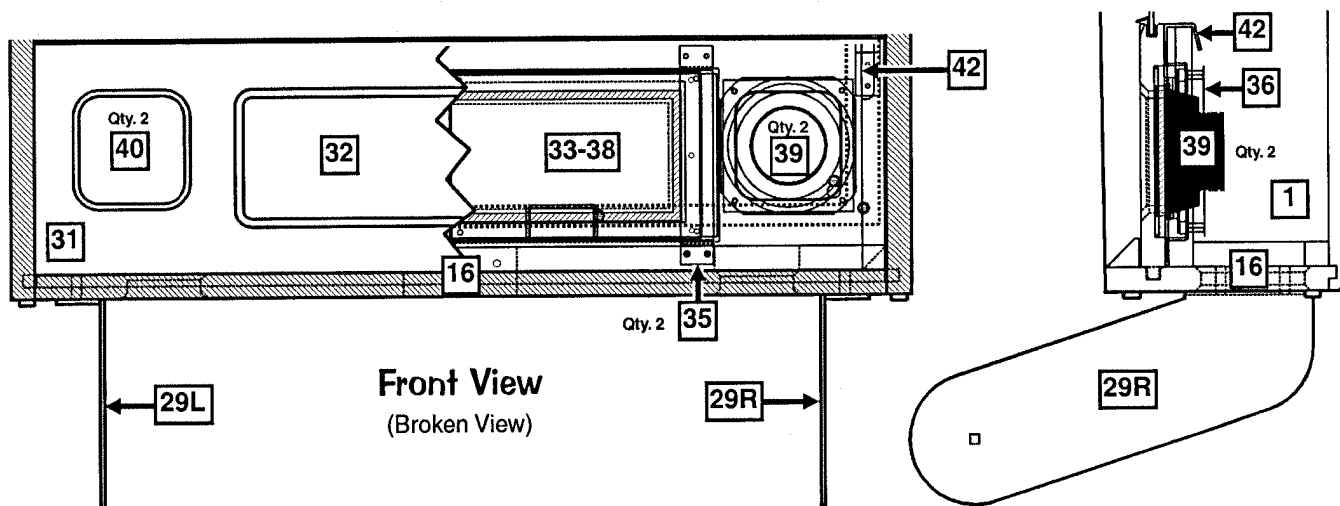
Parts Identification

Nr.	BACKBOX PARTS	QTY.	SPI PART Nr.
1	Backbox ACDC™ (No Parts)	1	525-5631-17-C5
Item 1 Note: Chrome T-Molding is installed and cannot be ordered separately. Fuse Description (820-6384-00) and High Voltage Caution (UL) (820-6082-01 & -02) Decals.			
2	PCB Metal Mounting Plate [Display]	1	535-9769-00
3	Display Power Supply PCB	1	520-5138-00
Item 3 is secured to bottom by: #8-32 X 3/8" SHWH Swg. (Zinc) (Qty. 2) (237-5975-00)			
4	Plastic Cover [DANGER HIGH VOLTAGE]	1	830-6053-00
Items 3 & 4 are secured to top by: 1-1/4" X 3/8" Plastic Spacer Gray (Qty. 2) (254-5000-05) and #8-32 X 1-3/4" SHWH Ser. (Zinc) (Qty. 2) (237-5975-28)			
5	PCB Metal Mounting Plate [I/O+CPU]	1	535-9664-00
Items 2 & 5 are secured to Item 1 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/each) (234-5101-00) and #10 Washer 7/32" I.D. X .5" O.D. X 1/16" Thick (Qty. 1/each) (242-5003-00) Note: Where a Wire Clamp (Item 27) is mounted, a #10 Washer is not required.			
6	I/O Power Driver LED	1	520-5317-00
7	CPU/Sound PCB LE GAMES NEW USB	1	520-5337-01
7A: 8MB EPROM #M27C801-100F1 (960-5016-00) Ordering Note: Programmed EPROM (965-B00T-SAM) 7B: Coin Cell Battery (CR2430 3V) (000-0644-01) For USB Memory Stick Information, see Item 30 on the next page.			
Items 6 & 7 are secured to Item 5 by: #8-32 X 3/8" SHWH Swage (Zinc) (Qty. 10) (237-5975-00) and 1/4" Sil. Rtn. Spacer White (Qty. 5 [I/O] / Qty. 4 [CPU]) (254-5007-05)			
8L	Fluorescent Light Bracket (Left Style)	1	535-7739-00
8R	Fluorescent Light Brckt. (Right Style)	1	535-7739-01
Items 8L & 8R are secured to Item 1 by: #10-24 X 1-1/4" Carriage Bolt Square Neck (Qty. 2/per) (231-5012-00), #10-24 Keps Nut (Qty. 2/per) (240-5207-00) and 3/4" X 3" Reinforced Strapping Tape (Qty. 1, sold in 12' length only) (626-5040-00)			
9	Fluorescent Lamp Holder (Socket)	2	077-5214-01
Item 9 is secured to Items 8L and 8R by: #6-32 X 5/8" PPH MS (Sems) Zinc (Qty. 1/per) (232-5203-00) Lock-In Fluor. Bulb with Yellow Socket Clip (Qty. 1/per) (545-6271-00)			
10	Fluorescent Tube 24" (F18T8CW)	1	165-5061-00

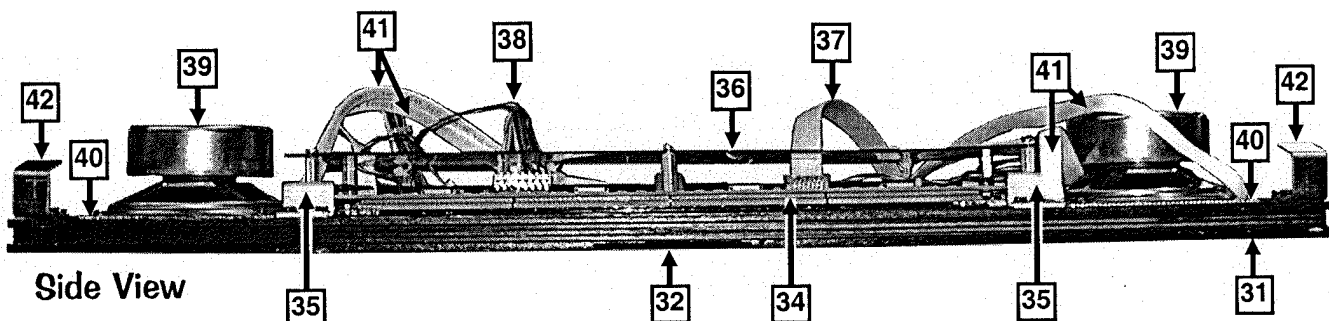
Nr.	BACKBOX PARTS	QTY.	SPI PART Nr.
11	Starter - Fluorescent (FS2 Light)	1	165-5011-01
	Starter Base (with leads) [on Item 8L]	1	077-5213-00
Item 11 is secured to Item 8L by: #4-40 X 1/2" PPH MS (Sems) Zn. (Qty. 2) (237-5813-00)			
12	Ballast Mounting Plate	1	535-8657-00
13	Ballast CU452-W 1/2" Core 120v 60 Hz 13W	1	010-5015-00
Items 12 & 13 are secured to Item 1 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2) (234-5101-00) >>> CAUTION - VERY HOT" Decal (820-6266-00) EU / UK Only : Ballast, 5/8" Core 50/60 Hz (010-5015-01)			
14	Ground Strap (5")	1	600-5006-05
15*	Roto Lock Male (on Cabinet)	1	355-5006-01
16	Roto Lock Female (R2-0002-02)	1	355-5006-02
Item 16 is secured by: #10-24 X 1-3/4" CBSN (231-5022-00), #10-24 Keps Nut (Qty. 2) (240-5207-00), #10-24 X 2" CBSN (231-5045-00) and #10 Washer 7/32" I.D. X .5" O.D. X 1/16" (Qty. 5) (242-5003-00); See opposite next page.			
17	Lock Mounting Plate	1	535-0072-00
18	Lock 5/8" Barrel, 3/4"ø, 1.5" Flat Cam	1	355-5055-00
Items 17 & 18 are secured by: #8 X 1/2" TP Torx T20 Black (Qty. 2) (237-6173-05)			
19	Back Vent Grill 2-1/2" X 18"	3	545-5072-02
20	Ribbon Cable, 20-Pin (3.5")	1	036-5000-350
Item 20 connects the I/O Pwr. Dvr. PCB to the CPU/Sound PCB; For 14-Pin see next page.			
21	Button Hole Plug (Blk) (Happ #52-6214-00)	1	500-6566-00
Item 21 plugs the Access Hole required if using optional BETAbrite Sign or Data cables.			
22	Header Sign TOURNAMENT PINBALL	1	545-6133-00
23	Bracket, Tournament Sign (Black)	2	535-0081-02
Item 22 is mounted to item 23 with #8-32 X 3/8" PPA screw (Qty. 2/per) (232-5303-01) & #8-32 Nylock Nut (Qty. 2/per) (240-5102-00); Item 23 is secured to Item 1 by: #8 X 5/8" PPH (Qty. 2/per) (232-5101-01)			

PARTS TABLE & VIEWS CONTINUED ON THE NEXT PAGE. ▶

Backbox [S.A.M. System] - Parts ☐



Speaker Panel [S.A.M. System] - Parts ☐



Nr.	BACKBOX PARTS	QTY.	SPI PART Nr.	Nr.	SPEAKER PANEL PARTS	QTY.	SPI PART Nr.
PARTS TABLE & VIEWS CONTINUED FROM THE PREVIOUS PAGE.							
25	Braided Wire (1-1/2 Feet)	1	600-5001-00	31	Speaker Panel (Black Wood)	1	525-5515-00
Item 25 is secured by: Staple 5/16" (Qty. 23) (631-5000-00)				32	Plastic Shield (Display Front Cover)	1	545-5884-00
26*	Zip Cable Tie (Screw Down Style)	4	040-5005-00	Item 33 is secured to inside Item 31 by: #6 X 3/8" SHWH AB (Zinc) (Qty. 8) (234-5000-00)			
Item 26 is secured @ inside bot. by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00)				33*	Foam 3/16" Thick X 1/4" Wide X 12"	6	626-5026-00
27	Clamps [Multiple Sizes]	31	040-5000-XX	Above Item 33 is self-adhesive. Located between Items 32-34. Sold in 12" Lengths only.			
Item 27 secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00) For the following sizes, replace -XX with: .1/4" Double = -23 (Qty. 5); 1/2" Single = -06 (Qty. 3); 3/4" Single = -08 (Qty. 4); 1" Single = -09 (Qty. 1); 1-1/4" Double = -30 (Qty. 1)				128 X 32 Dot Matrix Display PCB			
28	Foam 3/16" Thick X 1/4" Wide X 12"	6	626-5026-00	34	// EURO ONLY RoHS // 128 X 32 DM PCB	1	520-5052-15
Above Item 28 is self-adhesive. 17.5" strip on each side. Sold in 12" Lengths only.				// EURO ONLY RoHS // Dot Matrix Bezel			
29L	Pivot Hinge Red (Left Style)	1	535-7999-22	Item 34 is secured to Item 35 by (at corners): 3/16" X 3/8" Spacer Gray (Qty. 4) (254-5000-18) and #6-32 X 1/2" SHWH Scape (Serr) Zinc (Qty. 4) (237-5976-03)			
29R	Pivot Hinge Red (Right Style)	1	535-7999-23	35	Dot Matrix Display Mounting Bracket	2	535-8368-01
Items 29L-29R are secured to Backbox by: 1/4"-20 X 1-1/4" C.B. Sq. Neck (Qty. 4) (231-5003-00) and 1/4"-20 Flange Nut (Qty. 4) (240-5300-00)				Item 35 is secured to Item 31 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 4/per) (234-5101-00)			
Items 29L-29R are secured to Cabinet by: Spacer Hex Nut 1/2" O.D. - 1/4-20 X 1/2" TD (Black) (Qty. 1/per) (254-5042-00), Nylon Spacer (Black) (Qty. 1/per) (242-5084-00), 1/4-20 X 1/2" Carriage Bolt Square Neck (Black) (Qty. 1/per) (231-5072-00) and Washer 1" O.D. X 1/2" I.D. X 1/16" (Black) (Qty. 1/per side, only if required) (242-5087-00)				36	Plastic Shield (Display Back Cover)	1	830-6040-00
30*	Memory Stick USB 1.1+ [Generic] 64MB	970-0064-00		Item 36 is secured to Item 34 by: 1/2" X 1/4" Hex Spacer #6-32 Tap (Qty. 4) (254-5008-03), 3/4" X 1/4" Hex Spacer #6-32 Tap (Qty. 2) (254-5008-04), #6-32 X 1/4" PPH MS (Serr) Zinc (Qty. 2) (232-5200-00) and #6-32 X 3/8" PPH (Qty. 6) (232-5201-00)			
	Memory Stick USB 1.1+ [Generic] 128MB	970-0128-00		37	Ribbon Cable, 14-Pin (33")	1	036-5260-33
Item 30 was not included with your game. Read the inside cover or go on-line for more info. To order with the latest game code copied onto it, add -A3 to the Part Nr. (970-0128-00-A3). File(s) can be downloaded from our website (Files are 25MB or larger, DSL or Fast Modem recommended). Not all manufacturers of Memory Sticks are compatible with our system. Test it out, if it doesn't work properly, return your purchase and order the memory stick through your local pinball distributor. (Siern Pinball Memory Sticks guaranteed compatible).				Item 37 (14-Pin) connects the 128 X 32 Dot Matrix Display PCB to the CPU/Sound PCB.			
(ASM. REF. 505-6002-A3-A3, Items 1-42 Only, [29-30 not included in assembly])				38	Display Cable (Wiring Harness)	1	036-5454-01
				// EURO ONLY RoHS // LED Display Adapter Harness			
				39	Speaker (Shld.) 4 x 4" 8Ω OHM MG	2	031-5004-02
				ELE 4060SH			
				40	Speaker Grill (Chrome w/Artwork)	2	535-8081-04
				Items 39-40 are secured by: #8 X 1/2" SHWH AB (Black) (Qty. 4/per) (234-5101-01)			
				41	Ground Strap (25") [2 per : Items 35 & 39]	4	600-5006-25
				42	Speaker Panel Hook Bracket	2	535-7009-02
				Item 42 is secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2/per) (234-5101-00)			

Take Note:

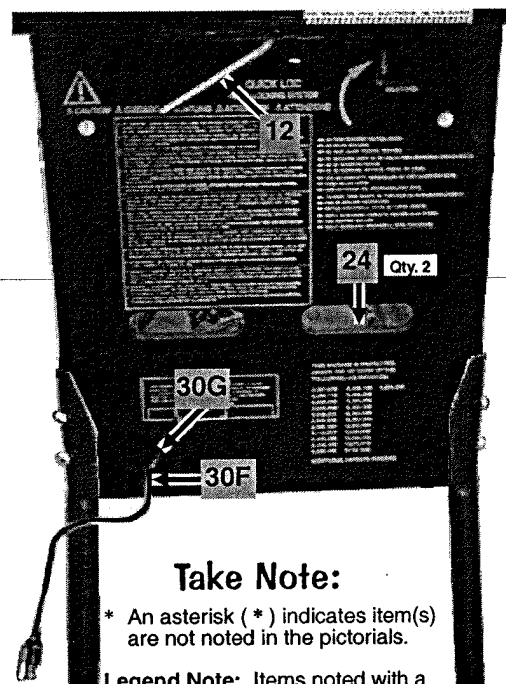
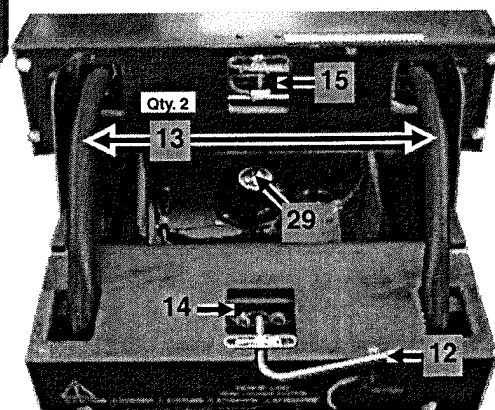
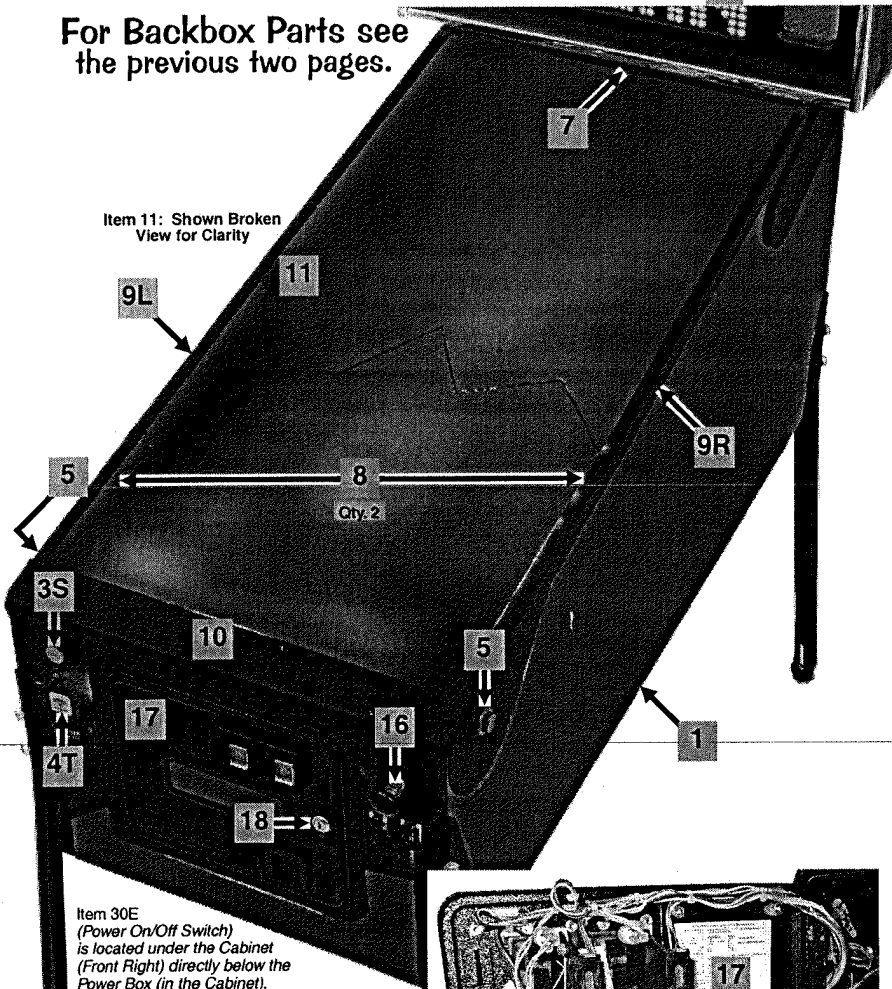
* An asterisk (*) indicates item(s) are not noted in the pictorials.

Nr.	BACKGLASS PARTS	QTY.	SPI PART Nr.	Nr.	BACKGLASS PARTS	QTY.	SPI PART Nr.
i*	Glass (Tempered) 25.906" X 19.187" X .125"	1	660-5038-02	iv*	Bottom Plastic Lift Channel - 26"	1	545-6313-01
ii*	ACDC™ PRO Film Art (#C5)	1	830-52C5-00	v*	Plastic Edging (Left/Right) - 18-1/8"	2	545-5018-14
iii*	Top Plastic Channel - 26"	1	545-5018-15	Items i-v are secured to Item i by: 3M Tape (Double-Sided), 12" (Qty. 1) (626-5080-00)			
				Note: Only 6" required, sold in 12" lengths only.			

(ASM. REF. 515-5450-00-A9, Items i-v)

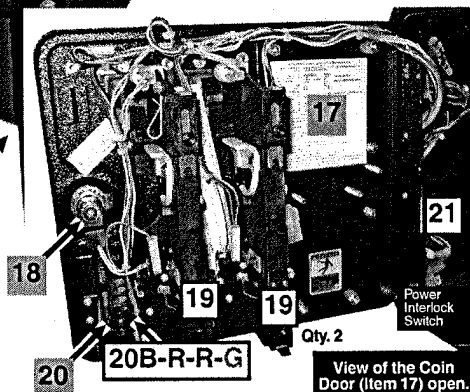
Cabinet - Parts & Switches

For Backbox Parts see the previous two pages.



Item 30E (Power On/Off Switch) is located under the Cabinet (Front Right) directly below the Power Box (in the Cabinet).

Qty. 4
Item 2 Ordering Note: Leg comes with Leveler. Leveler can be purchased separately. Leg **cannot** be ordered **WITHOUT** Leveler (see Parts Table below, Item 2).



Parts Identification

Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.
1	Screened Cabinet ACDC™ (No Parts)		525-5395-15P-C5
2	Black Leg with Leveler Asm	4	500-5921-50
3S	Start Button (Green Round) with Sw. + Led	1	500-6388-44-TL
4T	Tournament Button (Yel. Sq.), w/Sw. + Led		500-6587-06-LED

Item 3S & 4T includes the Switch & Lamp (No Wiring; desolder old wiring where required).
Switch or Bulb replacement: **⚠ TWIST ⚠ LOCK (-TL) >> not snap-in <<**
Assembly **Parts Included**: Microswitch (180-5174-00); Led Hi Int White 106W-WB (112-5024-08); If 4T is not desired, use optional Button Plug Black (500-6566-00).
Requires 3-Lug Terminal Strip (055-5204-03) and Diodes, 1N4004 (Qty. 2) (112-5003-00) inside cabinet under button(s) for **Lamp Operation** (Diode for Switch, located on Switch.)

5 Flipper Button (Yellow) Assy (No Sw.) 2 500-5026-36
Item 5 is secured by: Pal Nut for Flipper Button (Metal) (Qty. 2/per) (240-5003-01)
Pal Nut inside cabinet secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00) and Washer (Zinc), .187" ID X .875" OD X .048" Thick (Qty. 1/per) (242-5059-00)

6S Flipper Switch Single Assembly 2 500-6889-01
Assembly **Parts Included**: Flipper Switch Stack Single (Paliney Contact) (180-5160-01) and Capacitor - Ceramic .05 Mfd 25 volt (130-5001-00)
Item 6S/6D are secured to Cab. by: #6 X 1-1/4" SHWH AB (Zinc) (Qty. 2/per) (237-5959-00)

6D Flipper Switch Double Assembly 500-6890-01
Assembly **Parts Included**: Flipper Switch Stack Double (Paliney Contact) (180-5164-01) and Capacitor - Ceramic .05 Mfd 25 volt (130-5001-00)
Item 6S/6D are secured to Cab. by: #6 X 1-1/4" SHWH AB (Zinc) (Qty. 2/per) (237-5959-00)

Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.
7	Rear Glass Channel 20-3/8" Length	1	545-5038-00
8	Plastic Channel 42-5/8" Lg. (Left/Rt.)	2	545-5017-00
9L	Side Armor (Left) Black W/Hole	1	535-7297-02
9R	Side Armor (Right) Black W/Hole	1	535-7297-02
10	Front Molding Assy/Latch-W/Cntr. Button	1	500-7235-03-00
11	Playfield Glass (Tempered) 21" X 43" X 3/16"	1	660-5001-00
12	Hex Key Allen Wrench 5/16"	1	777-0001-00
13	Corrugated Tubing Black 1" x 2' Lg.	1	605-5008-03
14	Roto Lock Male (R2-0055-02)	1	355-5006-01
15	Roto Lock Female (on Backbox)	1	355-5006-02
16	Ball Shooter (Plunger) Assembly	1	500-6146-00-04

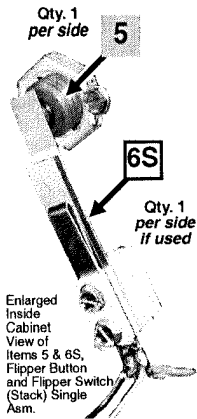
Items 9L & 9R are secured @ front & side by: Perm Stud 1/4 X 1" Flange Head Black (Qty. 1/per) (237-6116-01); 1/4-20 Flange Nut (Qty. 1/per) (240-5300-00) and #8 X 1/2" T20 Tamper Proof Black (Qty. 5/per) (237-6173-05); @ rear (backbox) by: #10-24 X 1" Sq. Neck Carr. Bolt Black (Qty. 1/per) (231-5021-00) and #10-24 Hex Nut (Qty. 1/per) (240-5202-00)

Item 10 includes: Self-Adhesive Foam Rubber 3/8" X 3/16" X 20-3/8" (3) (626-5001-00)
Items 10 works with Item 22 (next page) ONLY.

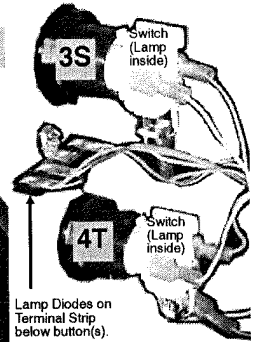
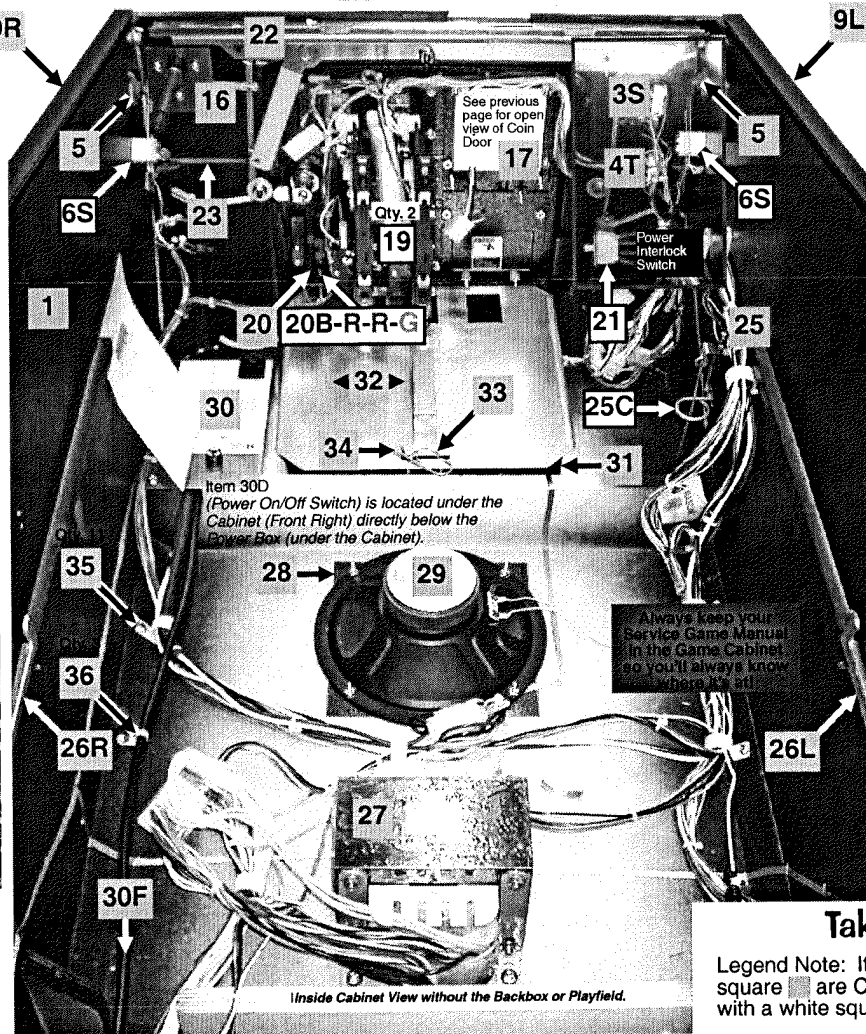
Above Item 13 covers the Cable Wiring Harnesses going into the Backbox from the Cabinet.

Item 14 is secured by: #10-24 X 1-3/4" Carriage Bolt Square Neck (Qty. 2) (231-5022-00), #10-24 Nylon Stop Nut (Qty. 2) (240-5206-00) and #10 Washer, 7/32" ID X 1/2" OD X 1/16" Thick (Qty. 2) (242-5003-00)

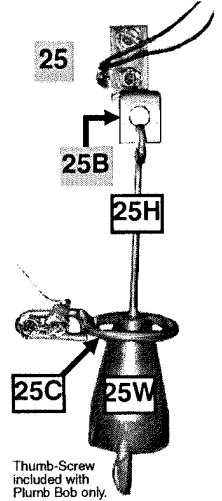
Cabinet - Parts & Switches Continued



Enlarged Inside Cabinet View of Items 30, Power Box (30A), Service Outlet (30E), Fuse (30i) and Fuse Holder (30J).



Enlarged Inside Cabinet View of Items 3S, 4T and 25 (25B, 25C, 25H & 25W), Plumb Bob Tilt Switch.

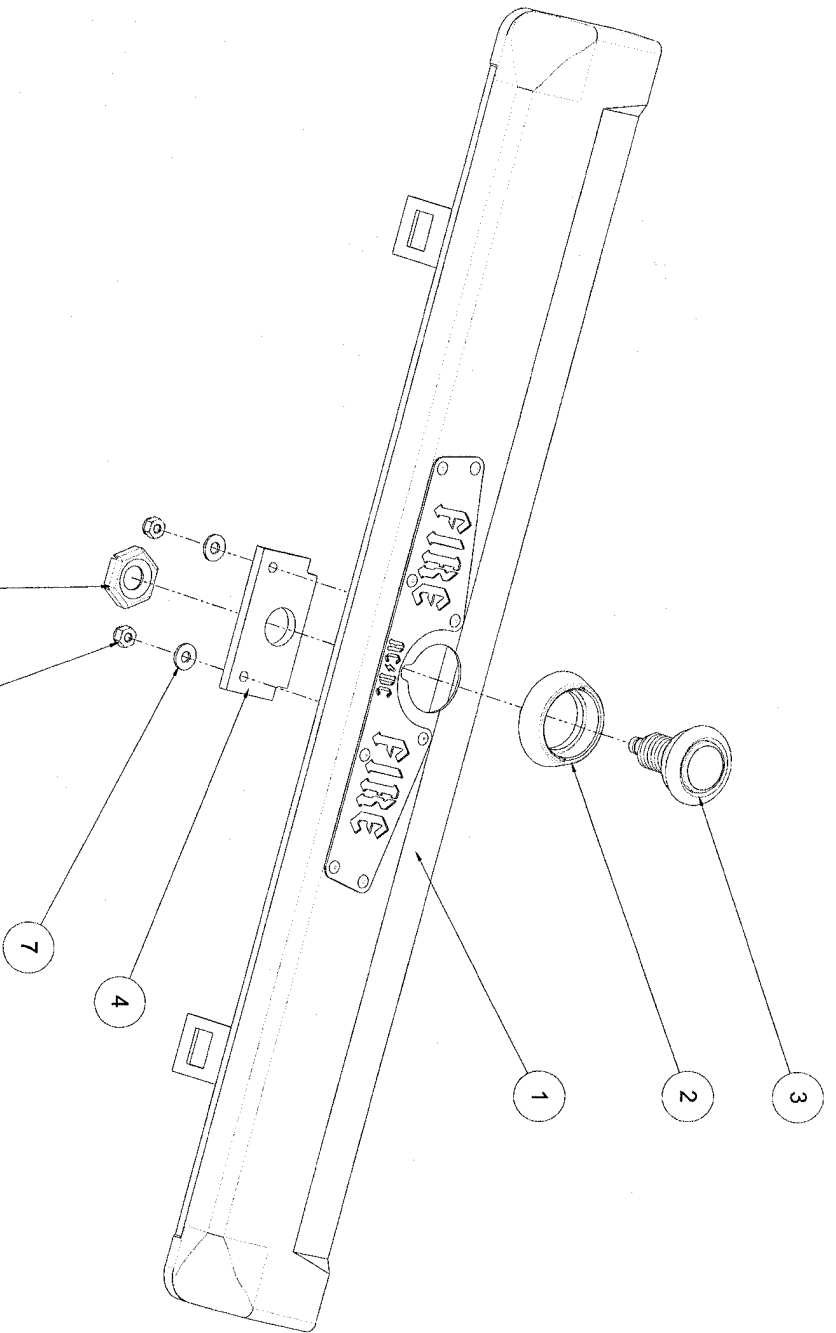


Take Note:

Legend Note: Items noted with a cyan square ■ are Cabinet Parts. Items noted with a white square □ are Switches.

Parts Identification

Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.	Nr.	CAB. PARTS & SWITCHES	QTY.	SPI PART Nr.
PARTS TABLE & VIEWS CONTINUED FROM THE PREVIOUS PAGE.				27	Transformer 5.7VAC (with Ballast Winding)	1	010-5012-01
17	Coin Door 2-Cht \$V Up-Stk. 4-Button Bracket	1	501-5018-172	Item 27 is secured by: 1/4"-20 X 5/8" PPH MS (Zinc) (Qty. 4) (237-5854-00) and 1/4" Split Lock Washer (Qty. 4) (244-5000-00)			
Item 17 is secured by: 1/4"-20 X 1-1/4" Carriage Bolt Square Neck (Qty. 4) (231-5003-00) 1/4"-20 Flange Nut (Qty. 4) (240-5300-00) and Fend Washer 1/4" I.D. X 1" O.D. (Qty. 3) (242-5009-00) Note: For Coin Door other than USA call Technical Support for SPI Part Nr.				28	Woofers (Speaker) Grill 12" X 12"	1	535-0547-00
18	Lock 5/8" Barrel, 3/4, Flt. Cam	1	355-5055-00	29	Woofers 12" ø Round 8Ω	1	031-5009-00
Coin Door Switch (USA) (Happ)				Items 28 & 29 are secured by: #6-32 X 1-1/4" Fin Shank Screw (Qty. 4) (237-5883-00) and #6-32 Keps Nut (Qty. 4) (240-5008-00)			
19	ALT. SW.: 19C: Coin Door Switch (USA) (Coin Control) (180-5024-00)	2	180-5024-01	Power Input Box Asm. + Univ. Cable			
ALT. SW.: 19J: Coin Door Switch (Japan) (180-5091-00)				30A:	Power Box (No Parts) Mounting Frame (535-5932-00)	1	515-5360-08
4-Button Bracket (for Service Menu Buttons)				30B*:	Line Filter (150-5000-00)		
20	SWITCH: 20B: Push-Button Service Switch (Black) (180-5192-00)	1	535-6860-04	30C*:	Varistor* TNR159211KM (Domestic) (150-5001-00)		
SWITCH: 20R: Push-Button Service Switch (Red) (Qty. 2) (180-5192-02)				or Varistor TRM15G431KM (Euro) (150-5002-00)			
SWITCH: 20G: Push-Button Service Switch (Green) (180-5192-04)				SWITCH:	30D: On/Off Rocker Switch + Bracket Assembly (515-7085-00)		
Ordering Note: Securing hardware for switches included. Decal in kit sold separately.				30D incl.:	Switch, APEM R2101C5NBB (180-5001-03) + Bracket (535-8318-00)		
21	Power Interlock-Memory Protect Switch Asm.	1	500-5808-05	30E:	Service Outlet (3-Prong / US) (180-5008-01) / International N/A		
Assembly Parts Included: Mounting Bracket (535-9794-00), Power Interlock (Playfield) Switch (180-5136-00) and secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 2) (234-5101-00)				30F:	Line Cord 10' ROJ 3" + Ring Terminal Asm. (515-6566-00)		
22	Front Molding Lockdown Asm.	1	500-7237-00	30G:	Recessed (Black) Cup (rear of Cabinet) (545-5122-00)		
Item 22 is secured by: #10-24 X 1-1/4" Carr. Bolt (Qty. 2) (231-5012-00) and #10-24 Keps Nut (Qty. 2) (240-5207-00)				30H*:	Snap Bushing 9/16" (White) (280-5001-01)		
23	Lockdown Spring (connected to handle)	1	265-5008-00	30I:	Fuse 8 Amp 250V Slo-Blo (Domestic) (200-5000-05)		
Item 23 is secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1) (234-5101-00) and #10 Washer, 7/32" ID X 1/2" OD X 1/16" Thick (Qty. 1) (242-5003-00)				or Fuse 5 Amp 250V Slo-Blo (International) (Qty. 2) (200-5003-00)			
24	Grills 2-1/2" X 18" (on Back & Bottom)	3	545-5072-02	30J:	Fuse Holder (205-5001-00)		
Plumb Bob Tilt Switch Individual Parts Only Ind. Parts Only				Universal Cable & Jumper Caps (all voltage variations): See the Yellow Pages, Page y 10.			
25	SWITCH: 25B: Bracket for Hanger Wire (535-5221-00)			31	Cash Box Plastic Bottom	1	545-5090-00
25C: Contact Wire Form (535-7563-01)				32	Cash Box Cover (Validator)	1	535-5013-03
25H: Hanger Wire (535-5319-02)				33	Cash Box Lock Bracket (U-Wire)	1	535-7562-00
25W: Plumb Bob Weight (535-5029-00) (includes Thumb-Screw)				Item 33 is secured by: #8 X 5/8" HWH AB (Green) (Qty. 2) (234-5102-04)			
Item 25B is secured to Cabinet by: #6 X 5/8" SHWH AB (Zinc) (Qty. 4) (234-5002-00)				34	Large Hair-Pin Clip	1	535-7772-00
26L	Slide & Pivot Support Bracket (Left)	1	535-5989-00	35	Clamps [Multiple Sizes]	31	040-5000-XX
26R	Slide & Pivot Support Bracket (Right)	1	535-5990-00	Item 35 is secured to Item 1 by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00)			
Items 26L & 26R are secured by: #10-24 X 1-1/4" Carriage Bolt Square Neck Black (3/per) (231-5012-00) and #10-24 KEPS Nut (3/per) (240-5207-00)				For following sizes, replace -XX with: 3/4" Single = -08 (Qty. 9); 1-1/2" Single = -10 (Qty. 3)			
				36	Zip Cable Tie (Screw Down Style)	4	040-5005-00
				Item 36 is secured by: #8 X 1/2" SHWH AB (Zinc) (Qty. 1/per) (234-5101-00)			
				37†	Meter +12VDC with Bracket Optional	opt.	G-0053-013-102
				† Meters (Diode included) are optional and were not included in this Pinball Machine. Order without the bracket use G-0053-013-102A. More information or Qs? Call Technical Support.			



ITEM #	QTY	PART #	DESCRIPTION
1	1	500-7235-03-00	FRONT MOLDING ASSEMBLY, LATCHED - W/CENTER BUTTON
2	1	545-7292-10	TOP BUTTON SPACER-MOLDED
3	1	515-7791-00	BUTTON ASSY - CLEAR
4	1	545-7291-00	TOP BUTTON BAR
5	1	240-5003-01	PAL NUT
6	2	240-5102-00	# 8-32 NYLON LOCK NUT
7	2	242-5005-00	#8 WASHER

FRONT MOLDING ASSEMBLY - CENTER BUTTON - PRO

500-7238-00

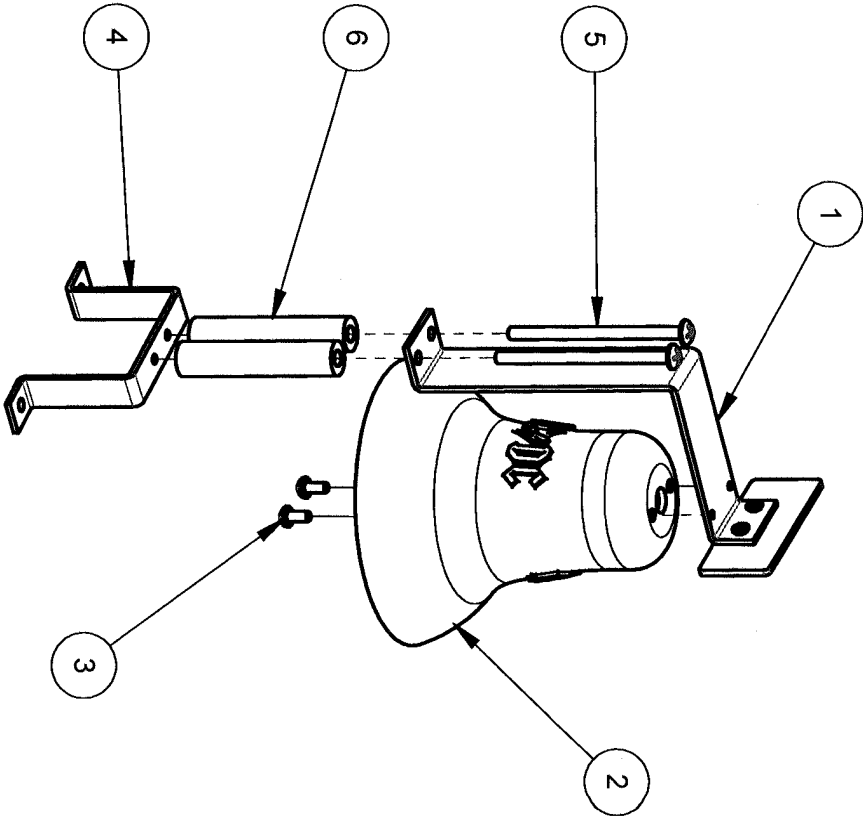
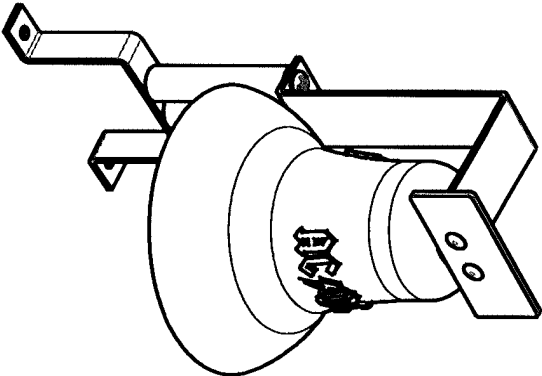
PRO

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	510-5762-00	RIVETED ASSEMBLY - BELL BRACKET	1
2	545-7283-00	MOLDED BELL, GRINDER	1
3	237-5909-00	SCREW, 4-40 X 1/4" PPH SEMS	2
4	535-0570-00	BELL BRACKET SUPPORT	1
5	237-5513-00	SCREW, 6-32 X 2" PPH MS	2
6	254-5000-17	NYLON SPACER - BLACK - 3/8 OD X .175 ID X 1-3/4"	2

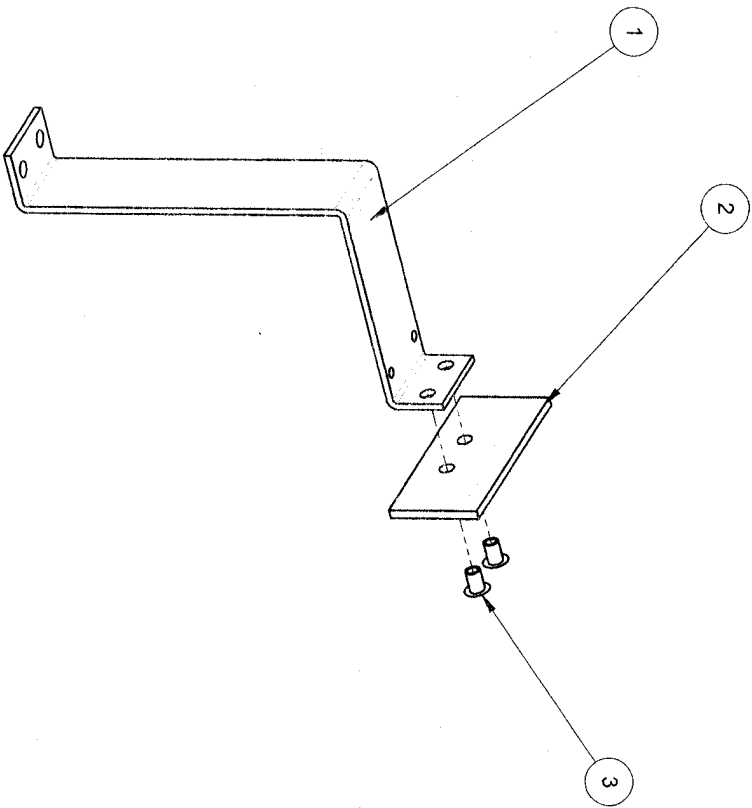
BELL ASSEMBLY - STATIONARY

AC/DC PRO

511-6983-00



ITEM #	QTY	PART #	DESCRIPTION
1	1	535-0569-00	BELL BRACKET
2	1	830-BELL PLASTIC	BUTY # ?
3	2	249-5001-00	RIVET - 1/8 X 3/16



PRC

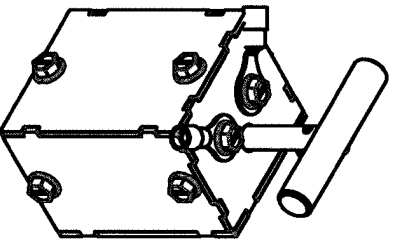
RIVETED ASSEMBLY - BELL BRACKET

510-5762-00

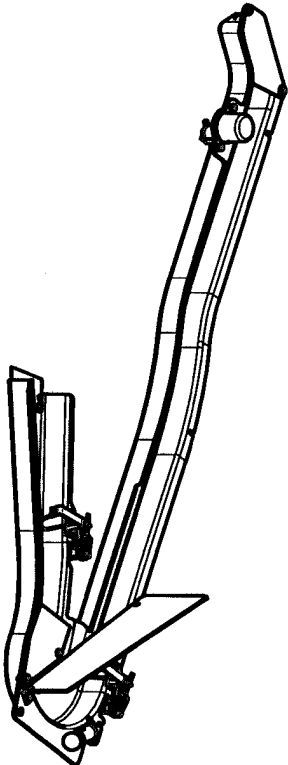
SHEET

IPRO()

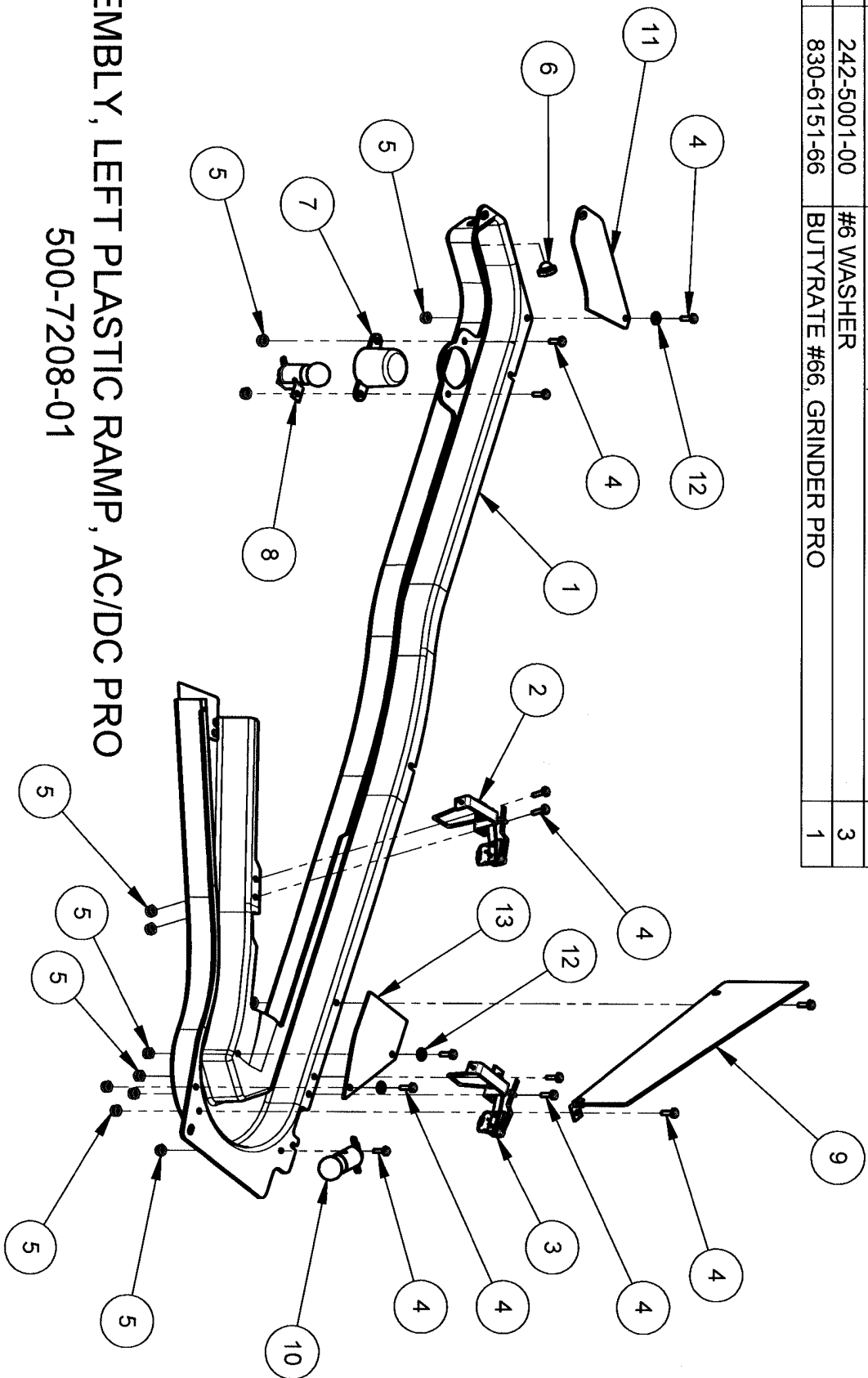
830-0131-20	BUTY #20, DET RIGHT, GRINDER PRO	1
830-6151-27	BUTY #27, DET BACK, GRINDER PRO	1
234-5000-00	SCREW, #6 X 3/8" HWH	9
530-7762-01	PLUNGER, DETONATOR, GRINDER PRO	1
237-5863-00	SCREW, 4-40 X 3/4 PRH	1
242-5002-00	#4 FLAT WASHER - 5/16" O.D.	1
511-6962-00	ASSEMBLY, DET HANDLE, GRINDER	1
237-6169-00	SCREW, 4-40 X 1/4 PPH MS	1
036-5579-00	CABLE, DET RED WIRE, GRINDER	1
036-5579-01	CABLE, DET BLACK WIRE, GRINDER	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	510-5147-01	RIVET ASSY, LEFT RAMP, GRINDER PRO	1
2	515-6556-03-GE	R/U SWITCH ASSEMBLY -.03 W/ GENERIC CABLE	1
3	515-6556-02-GE	R/U SWITCH ASSEMBLY -.02 W/ GENERIC CABLE	1
4	232-5202-00	SCREW, 6-32 X 1/2" PPH MS SEMS	12
5	240-5005-00	6-32 NYLON STOP NUT	12
6	545-5105-00	RUBBER BUMPER	1
7	550-5031-06	MINI MARS W/ EARS - YELLOW SB	1
8	511-5241-00	FLASH LAMP ASSY, GENERIC	1
9	510-5163-06	RIVETED ASSY, BUTY #6, GRINDER PRO	1
10	511-5241-01	ASSY FLASH LAMP	1
11	830-6151-64	BUTYRATE #64, GRINDER PRO	1
12	242-5001-00	#6 WASHER	3
13	830-6151-66	BUTYRATE #66, GRINDER PRO	1



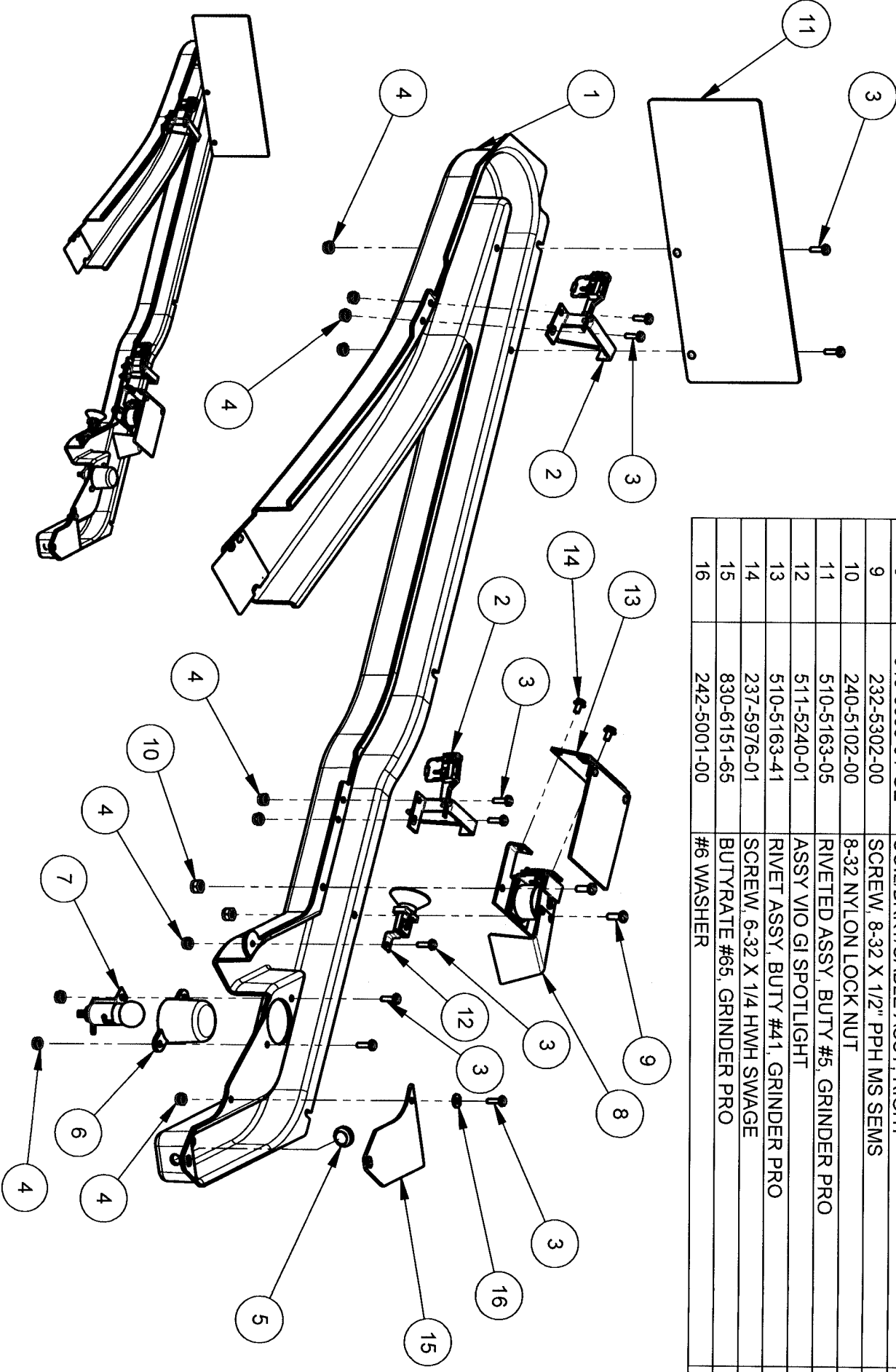
PRO



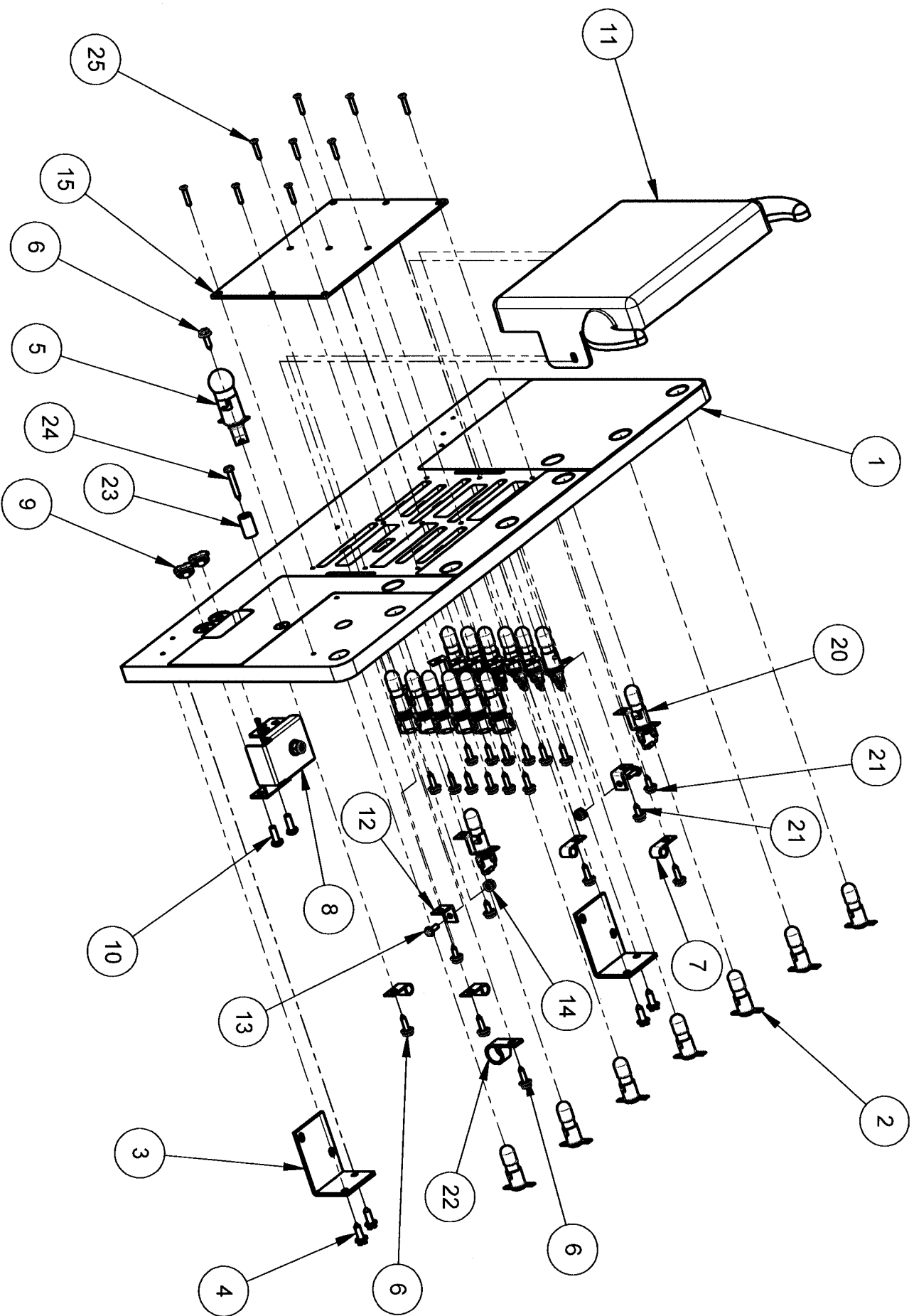
ASSEMBLY, LEFT PLASTIC RAMP, AC/DC PRO
500-7208-01

ASSY, RIGHT PLASTIC RAMP
AC/DC PRO
500-7209-01

ITEM #	PART NUMBER	DESCRIPTION	QTY.
1	510-5148-01	RIVET ASSY, RT RAMP, GRINDER PRO	1
2	515-6556-02-GE	RU SWITCH ASSEMBLY -02 W/ GENERIC CABLE	2
3	232-5202-00	SCREW, 6-32 X 1/2" PPH MS SEMS	10
4	240-5005-00	6-32 NYLON STOP NUT	10
5	545-5105-00	RUBBER BUMPER	1
6	550-5031-02	MINI MARS W/ EARS - RED SB	1
7	511-5241-00	FLASH LAMP ASSY, GENERIC	1
8	515-6596-01-GE	COIL/BRKT/CABLE ASSY, RIGHT	1
9	232-5302-00	SCREW, 8-32 X 1/2" PPH MS SEMS	2
10	240-5102-00	8-32 NYLON LOCK NUT	2
11	510-5163-05	RIVETED ASSY, BUTY #5, GRINDER PRO	1
12	511-5240-01	ASSY VIO GI SPOTLIGHT	1
13	510-5163-41	RIVET ASSY, BUTY #41, GRINDER PRO	1
14	237-5976-01	SCREW, 6-32 X 1/4 HWH SWAGE	2
15	830-6151-65	BUTYRATE #65, GRINDER PRO	1
16	242-5001-00	#6 WASHER	1



PRO



PRO

BACK PANEL ASSEMBLY, AC/DC PRO 500-7207-01

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	525-5713-01	BACK PANEL, GRINDER PRO	1
2	519-5000-00-HF	SOCKET & BULB ASSY, CLEAR	7
3	535-8964-00	BRACKET - BACK PANEL SUPPORT	2
4	234-5101-00	SCREW, #8 X 1/2" SLT HWH AB ZINC	4
5	519-5106-00-HF	SOCKET#89 BULB ASSY - RVRS MNT - HEAVY FIL	1
6	234-5001-02	SCREW, #6 X 1/2" HWH	18
7	040-5000-03	1/4" CABLE CLAMP	4
8	511-5096-01	ASSY, ELEC GATE RIGHT, RAIL MT	1
9	240-5101-00	8-32 T-NUT	2
10	232-5302-00	SCREW, 8-32 X 1/2" PPH MS SEMS	2
11	545-6845-00	JUKEBOX COVER, GRINDER	1
12	535-8941-04	BRACKET - PLASTIC MTG	2
13	232-5201-00	SCREW, 6-32 X 3/8" PPH MS SEMS	2
14	240-5005-00	6-32 NYLON STOP NUT	2
15	830-6151-32	BUTY #32, BACK PANEL, GRINDER PRO	1
16	820-7000-12	DECAL #12, BACK PANEL LEFT, GRINDER	1
17	820-7000-14	DECAL #14, BACK PANEL CENTER, GRINDER	1
18	820-7000-13	DECAL #13, BACK PANEL RIGHT, GRINDER	1
19	519-5008-00-HF	SOCKET/BULB/DIODE, CLEAR - HEAVY FIL	12
20	519-5008-02-HF	SOCKET/BULB/DIODE, RED - HEAVY FIL	2
21	234-5000-00	SCREW, #6 X 3/8" HWH	4
22	040-5000-06	1/2" CABLE CLAMP	1
23	254-5000-14	NYLON SPACER - BLACK - 3/8 OD X .175 ID X 5/8"	1
24	232-5004-00	SCREW, #6 X 1 PPH AB ZINC	1
25	237-5833-00	SCREW, #4 X 5/8" PFH - BLACK	9
96*	036-5639-15-C5	BACK PANEL LAMPS CABLE ASSEMBLY	1
97*	600-5003-00	BRAIDED WIRE - 20GA.	3 FT.
98*	631-5000-00	STAPLE - 5/16	18
99*	036-5639-04-C5	BACK PANEL CABLE ASSEMBLY	1

* ITEM NOT SHOWN

