

*Universal Cabinet
for Kits up to
Four Players*

Service Manual



For technical assistance:

If reading through this manual does not lead to solving your game maintenance or repair problem, call TELE-HELP® at one of these Atari Games Customer Service offices:

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(Monday–Friday, 9:00 a.m.–5:30 p.m. GMT)

Showcase 33™

Showcase 33



Service Manual

Universal cabinet for kits up to four players

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Note re. Radio Frequency Interference
.....

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of Federal Communications Commission (FCC) Rules, which

are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area or modification to this equipment is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference. If you suspect interference from an Atari game at your location, check the following:

- All ground wires in the game are properly connected as shown in the game wiring diagram.
- The power cord is properly plugged into a grounded three-wire outlet.
- On games provided with an Electromagnetic Interference (EMI) ground plane and/or Filter Board, be sure that the game printed-circuit boards (PCBs) are properly installed on the EMI ground plane and that the Filter Board is securely installed with **all** screws in place and tightened.

The person installing a game printed-circuit board in the Showcase 33 cabinet is responsible for assuring that such board does not cause radio interference. If the game board does cause radio interference, you must purchase a JAMMA Filter Board, available from your Atari Games distributor as Atari part no. A047292-01.

If you are still unable to solve the interference problem, please contact Customer Service at Atari Games Corporation. See the inside front cover of this manual for service in your area.

Notice Re. Non-Atari Parts
.....

WARNING

Use of non-Atari parts or modifications of any Atari game circuitry may adversely affect the safety of your game, and may cause injury to you and your players.

You may void the game warranty (printed on the inside back cover of this manual) if you do any of the following:

- Substitute non-Atari parts, including cabinetry, in the game.
- Modify or alter any circuits in the game by using kits or parts *not* supplied by Atari Games Corporation.

Safety Summary



The following safety precautions apply to all game operators and service personnel. Specific warnings and cautions will be found in this manual whenever they apply.

WARNING

Properly Ground the Game. Players may receive an electrical shock if this game is not properly grounded! To avoid electrical shock, do not plug in the game until it has been inspected to ensure it is properly grounded. This game should only be plugged into a grounded three-wire outlet. If you have only a two-wire outlet, we recommend you hire a licensed electrician to install a three-wire grounded outlet. If the control panel is not properly grounded, players may receive an electrical shock! After servicing any part on the control panel, check that the grounding wire is firmly secured to the inside of the control panel. After you have checked this, lock up the game.

AC Power Connection. Before you plug in the game, be sure that the game's power supply can accept the AC line voltage in your location. The line voltage requirements are listed in the first chapter of this manual.

Disconnect Power During Repairs. To avoid electrical shock, disconnect the game from the AC power before removing or repairing any part of the game. If you remove or repair the video display, be very careful to avoid electrical shock. High voltages continue to exist even after power is disconnected in the display circuitry and the cathode-ray tube (CRT). Do not touch the internal parts of the display with your hands or with metal objects! Always discharge the high voltage from the CRT before servicing it. Do this after you disconnect it from the power source. First, attach one end of a large, well-insulated, 18-gauge jumper wire to ground. Then momentarily touch the free end of the grounded jumper wire to the CRT anode by sliding the wire under the anode cap. Wait two minutes and do this again.

Use Only Atari Parts. To maintain the safety of your Atari game, use only Atari parts when you repair it. Using non-Atari parts or modifying the game circuitry

may be dangerous, and could injure you and your players.

Handle the CRT With Care. If you drop the CRT and it breaks, it may implode! Shattered glass from the implosion can fly six feet or more.

Use the Proper Fuses. To avoid electrical shock, use replacement fuses which are specified in the parts list for this game. Replacement fuses must match those replaced in fuse type, voltage rating, and current rating.

CAUTION

Properly Attach All Connectors. Make sure that the connectors on each printed circuit board (PCB) are properly plugged in. The connectors are keyed to fit only one way. If they do not slip on easily, do not force them. If you reverse a connector, it may damage your game and void your warranty.

Ensure the Proper AC Line Frequency. Video games manufactured for operation on 60 Hz line power (used in the United States) must not be operated in countries with 50 Hz line power (used in Europe). If a 60 Hz machine operates on 50 Hz line power, the fluorescent line ballast transformer will overheat and cause a potential fire hazard. Check the product identification label on your machine for the line frequency required.

ABOUT NOTES, CAUTIONS, AND WARNINGS

In Atari publications, notes, cautions and warnings have the following meaning:

NOTE — A highlighted piece of information.

CAUTION — Equipment and/or parts can be damaged or destroyed if instructions are not followed. You will void the warranty on Atari printed-circuit boards, parts thereon, and video displays if equipment or parts are damaged or destroyed due to failure of following instructions.

WARNING — Players and/or technicians can be killed or injured if instructions are not followed.

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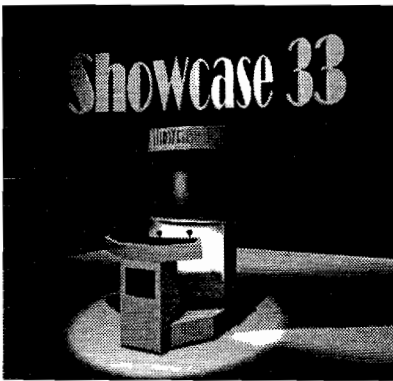
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**The JAMMA Filter PCB Assembly is not included as standard equipment in the Showcase 33 cabinet. However, you may need to purchase this filter board to eliminate radio interference caused by your game board. The schematic and assembly diagrams of the filter board are provided here for your convenience.*

Installation

HOW TO USE THIS MANUAL

THE SHOWCASE 33™ cabinet accommodates a game kit for up to four players. This manual provides information for installing, testing, and troubleshooting the Showcase 33 cabinet. ♦ Chap-



ter 1 describes how to install a kit in your Showcase 33 cabinet. ♦ Chapter 2 contains a troubleshooting table. ♦ Chapter 3 contains the Showcase 33 cabinet parts and power supply illustrations.

Cabinet Equipment Requirements

WARNING

For safe use, you must install a game kit that has received Underwriters Laboratories listing.

Refer to Table 1-1 for the specifications of the Showcase 33 cabinet and what is required of your game kit printed-circuit board (PCB).

Equipment	Specification
Video Display	33-inch color standard-resolution RGB monitor Separate positive horizontal and vertical sync or negative composite sync Horizontal mounting Horizontal frequency: 15.750 KHz Vertical frequency: 60 Hz Video input: 1V to 3V peak-to-peak positive polarity
Cabinet Harness	Is compatible with JAMMA standard (Japan Amusement Machinery Manufacturers Association)
Speakers	One on each side of video display: 4½-inch diameter, 8 Ω, 10 W Provision for an additional 8-inch diameter, 2 Ω, round speaker near bottom front of cabinet. Available from Atari Games Customer Service as part no. 148021-001.
Coin Counter	+5 VDC or +12 VDC
Volume Control	50 Ω; controls all speakers
Power Cord	NEMA 5-15P three-conductor with ground
Power Supply	+5 VDC ± 0.25V @ 1.0 amps +12 VDC @ 1.0 amp -5 VDC @ 1.0 amp
Line Voltage	102 to 132 VAC, 60 Hz
Line Fuse Rating	250 V, 3 amps, slow-blow
Input Current	3 amps

Table 1-1 Specifications of Showcase 33 Cabinet

WARNING

To avoid electrical shock, unplug the cabinet while installing the kit. After installation, plug the game only into a grounded 3-wire outlet.

Turn off power to the game, and unplug the power cord.

Tools Required

- Drill with a ½-inch and ⅜-inch drill bits
- Phillips screwdriver
- Flat-blade screwdriver
- Socket wrench set and ratchet
- ½-inch hex wrench
- Wire cutters and strippers
- Straight edge
- Squeegee
- X-ACTO™ knife
- Carbon paper
- Saber saw
- File
- Bandsaw
- Tape or glue

Assembling the Control Panel

Parts Needed for this Kit

To assemble the control panel, you need to decide on where to cut the control panel holes. Refer to the large template sheet that was provided with your Showcase 33 cabinet. That template shows suggested placements for controls in two-, three-, and four-player games. You will also need the following parts:

- Clear Lexan cover for the control panel (supplied with the Showcase 33 cabinet)
- Control panel decal supplied by the game kit manufacturer
- Buttons, switches, and other controls, as supplied by game kit manufacturer

NOTE

Spare blank (uncut) metal control panels and Lexan control panel covers are available from your distributor or Atari Games Customer Service. The metal control panel is Atari part no. 052821-01; the Lexan cover is part no. 052866-01.

Installing the Parts

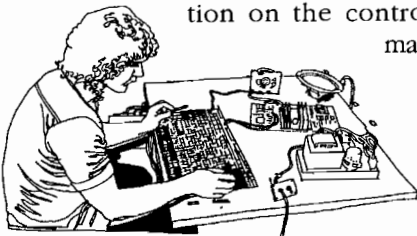
1. Using the large template provided, locate the recommended player positions that your game kit requires — two, three, or four. Mark the location of the primary control, for example, joystick, and then position the buttons as per the instructions provided in your game kit.
2. On the metal control panel, drill/cut out the holes for mounting the controls of your game kit. Deburr the sharp edges with a file.
3. Lay the metal control panel on top of the Lexan control panel cover, and outline all of the control and button holes.
4. Drill a ½-inch hole inside all of the large holes. Using a saber saw, cut out these holes. Drill any smaller holes required. Carefully deburr all the edges.

WARNING

Wear safety glasses when drilling the plastic control panel cover. Use care to avoid shattering or chipping the plastic.

5. Apply the control panel decal provided in your game kit to the metal control panel. Then assemble the controls to the metal panel.
6. Terminate the wires of the control panel adapter harness (one for each player) to match the controls being used. Make all of the proper connections.
7. Mount the control panel assembly and the control panel cover to the cabinet using the hardware provided.

For maintenance and servicing information on the controls, refer to the kit manufacturer's manual.

**Checking the JAMMA Connections**

Before plugging in the game PCB, turn on the power to the game, and check +5 Volts on pins 3, 4, C, and D of the JAMMA connector; +12 Volts on pins F and 6; and -5 Volts on pins E and 5.

Check that the video display and the attraction lamp have power. Now turn off the power to the game.

Connecting the Control Panel Harness

The Showcase 33 cabinet has an unterminated adapter harness for connecting any type of control installed in the control panel. This adapter harness disconnects from the main harness in the cabinet, to allow you to quickly remove the entire control panel if necessary.

The Showcase 33 cabinet has a standard JAMMA harness that mates to a JAMMA-standard game printed-circuit board. Use the wiring diagram in Figure 1-1 to make the proper connections for all of your kit components. Table 1-2 shows all control panel harness connections and signal names.

Installing the Game PCB

1. After you have checked the power on the JAMMA connector (above), install the game board in the cabinet. Use the four screws and standoffs supplied with the game board to mount it onto the wood cabinet surface.

CAUTION

The person installing a game printed-circuit board in the Showcase 33 cabinet is responsible for assuring that such board does not cause radio interference. If the game board does cause radio interference, you must purchase a JAMMA Filter Board, available from your Atari Games distributor as Atari part no. A047292-01.

If you are still unable to solve the interference problem, please contact Customer Service at Atari Games Corporation. See the inside front cover of this manual for service in your area.

2. If you need to install a JAMMA Filter PCB, plug it into the game board. Install the ½-inch standoffs with adhesive to support the Filter PCB.
3. Connect the JAMMA harness connector to the Filter PCB.

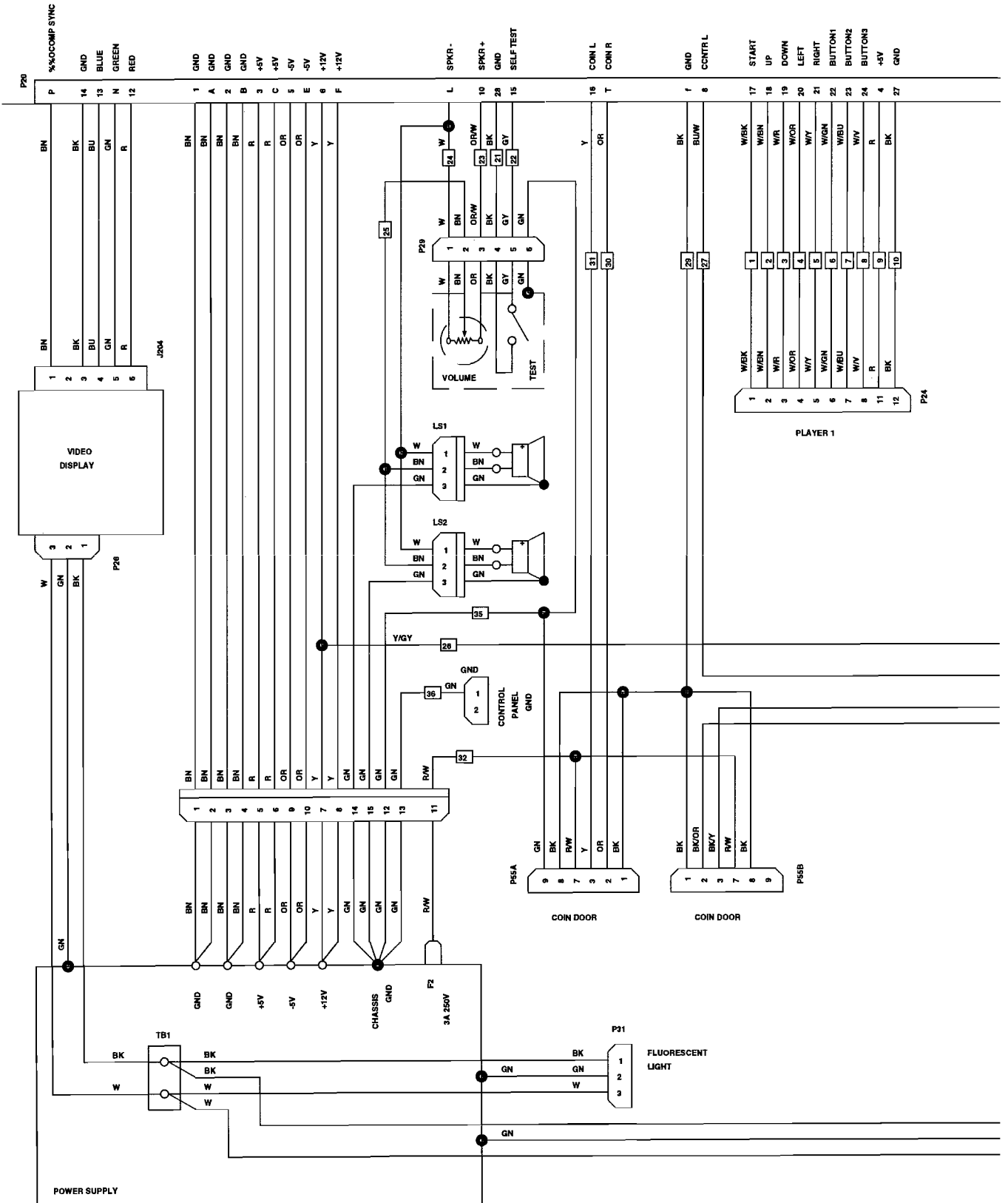


Figure 1-1 Cabinet Wiring Diagram

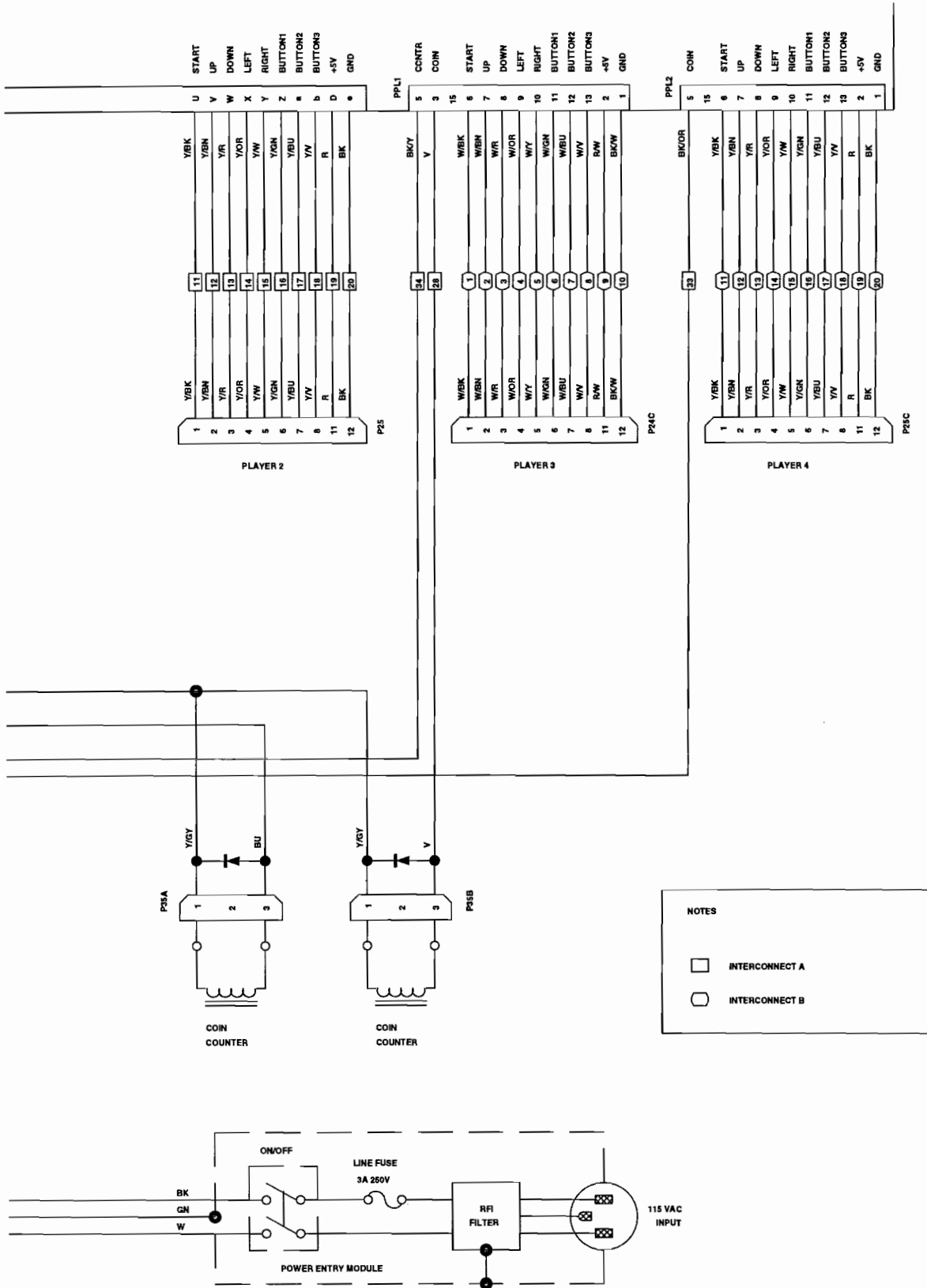


Figure 1-1 Cabinet Wiring Diagram, Continued

PLYR 1

Pos.	Color	JAMMA Conn.	Signal
1	W	17	STRT1
2	BN	18	UP1
3	R	19	DN1
4	OR	20	LF1
5	Y	21	RT1
6	GN	22	FIRE1
7	BU	23	ACTA1
8	V	24	ACTB1
12	BK	28	GND

PLYR 2

Pos.	Color	JAMMA Conn.	Signal
1	W	U	STRT2
2	BN	V	UP2
3	R	W	DN2
4	OR	X	LF2
5	Y	Y	RT2
6	GN	Z	FIRE2
7	BU	AA	ACTA2
8	V	BB	ACTB2
12	BK	FF	GND

PLYR 3

Pos.	Color	JPL1 Conn.	Signal
1	W	6	STRT3
2	BN	7	UP3
3	R	8	DN3
4	OR	9	LF3
5	Y	10	RT3
6	GN	11	FIRE3
7	BU	12	ACTA3
8	V	13	ACTB3
12	BK	1	GND

PLYR 4

Pos.	Color	JPL2 Conn.	Signal
1	W	6	STRT4
2	BN	7	UP4
3	R	8	DN4
4	OR	9	LF4
5	Y	10	RT4
6	GN	11	FIRE4
7	BU	12	ACTA4
8	V	13	ACTB4
12	BK	1	GND

Table 1-2 Wire Connections in Control Panel Harness

- Secure the JAMMA harness away from the PCB with cable ties.
- Turn on the power to the game. Check that the game PCB functions. If a video picture is not present, see Chapter 2 of this manual.

Installing the Bezel and Attraction Assembly

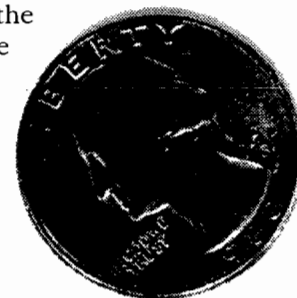
Installing the Display Bezel

If your game kit includes a cardboard video display bezel, make sure it can fit the 33-inch video display used in the Showcase cabinet. Cut the hole and out-

side edges as required. Then find the game instructions label in the kit, and adhere that label to the control panel, under the Lexan cover.

Installing the Attraction Assembly

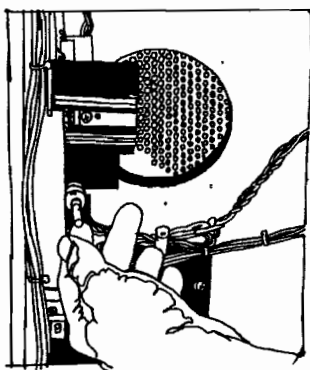
Find the game attraction film in your kit (the attraction shield of the Showcase 33 cabinet should be reused). Using the existing shield as a template, cut the film to size, if necessary. Install them in the cabinet attraction assembly.



Troubleshooting

INTRODUCTION

THIS CHAPTER contains a troubleshooting table for your Showcase 33™ cabinet. Use the self-test procedure of your game printed-circuit board to check the condition of the game circuitry and controls. ♦ You should perform the self-test when you first in-



stall a kit in the cabinet, each time you collect the money, or when you suspect a failure. ♦ Table 2-1 (troubleshooting) on the next page can help you pinpoint problems in your game. This table lists possible sources of problems in various parts of the game.

Problem	Suggested Action
Coin Mechanism Problem	<ol style="list-style-type: none"> 1. Check the wiring to the coin switch and counter. 2. Test the coin switch with the sound test screen in the self-test.
Game Play Problem	<ol style="list-style-type: none"> 1. Check the harness and connectors. 2. Perform the self-test. 3. Check the voltage levels on the PCB.
Control Problems	<ol style="list-style-type: none"> 1. Has the control been lubricated? If not, lubricate it. Refer to the game kit manual for instructions on how to lubricate the parts. 2. Check the harnesses and connectors. 3. If tested in the game self-test, check the controls' functioning by using the self-test procedure. 4. If you took the control apart, have you reassembled it correctly? 5. Make sure all the parts on the controls are in good repair. Repair or replace parts.
Sound Problem	<ol style="list-style-type: none"> 1. Is the speaker volume turned up? (Volume is usually adjusted on the game PCB.) 2. Check the voltage on the game PCB edge connector. 3. Check the wiring from the PCB to the speaker. 4. Check the voltage level to the PCB. 5. Replace the speaker.
Video Display Problem Screen is dark.	<ol style="list-style-type: none"> 1. Is the game plugged in? 2. Is the game turned on? 3. Are the connections good? 4. Is the line fuse good? 5. Is the display brightness turned up? 6. Are the edge connectors on the game PCB and JAMMA Filter PCB tightly connected? 7. Check all of the items below. If you answer <i>no</i> to any question, you have a problem with the video display, not with the game circuitry. See your video display service manual. <ol style="list-style-type: none"> a. Do you have power to the video display? b. Are the video display's filaments lit? c. Do you have high voltage to the video display? 8. Are the voltage levels to the video display PCB correct? (Power voltage is 100 VAC or 110 VAC, depending on the type of video display. Video signal voltage is 0.5 to 3.5 Volts.) 9. If the level is not correct, check the connectors and the harness.
Only a colored screen appears.	You probably have a serious RAM problem.
Display area wavers or is too small.	<ol style="list-style-type: none"> 1. Do you have correct power voltage to the video display PCB? 2. Do you have correct high voltage to the video display?
Picture is wavy.	<ol style="list-style-type: none"> 1. Is the monitor ground connected to the monitor? 2. Are the sync inputs connected properly?
Picture is upside down.	Check the possible DIP switch settings on the game PCB. If such a setting exists, this toggle should be in the normal screen position for an upright game, not a cocktail game. Another possibility is if you serviced the display, you may have connected the wires incorrectly. Switch the horizontal or vertical yoke wires on the display.
Convergence, purity or color problems.	Use one of the screens in the game's self-test to adjust the video display. Use the adjustment procedures in the 33-Inch Hantarex Polo video display manual.
Picture is not centered.	Use the centering procedures in the Hantarex video display manual.

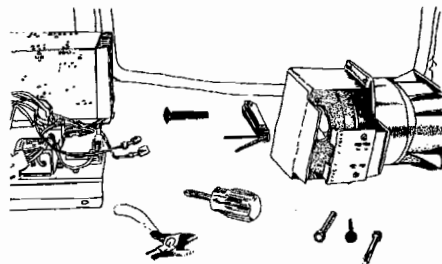
Table 2-1 Troubleshooting Table

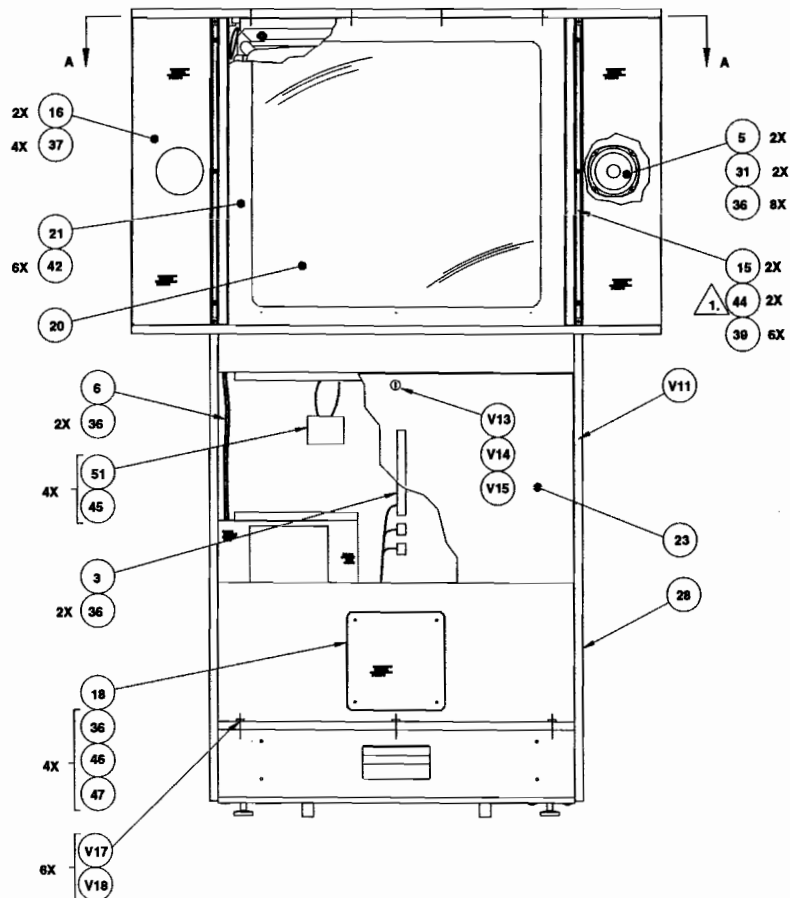
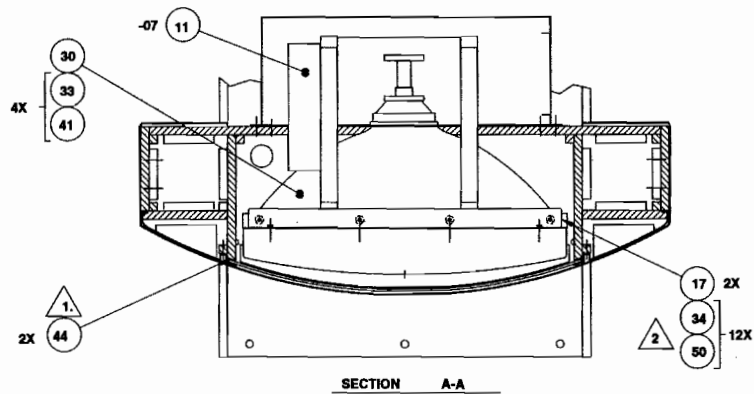
Parts Illustrations

INTRODUCTION

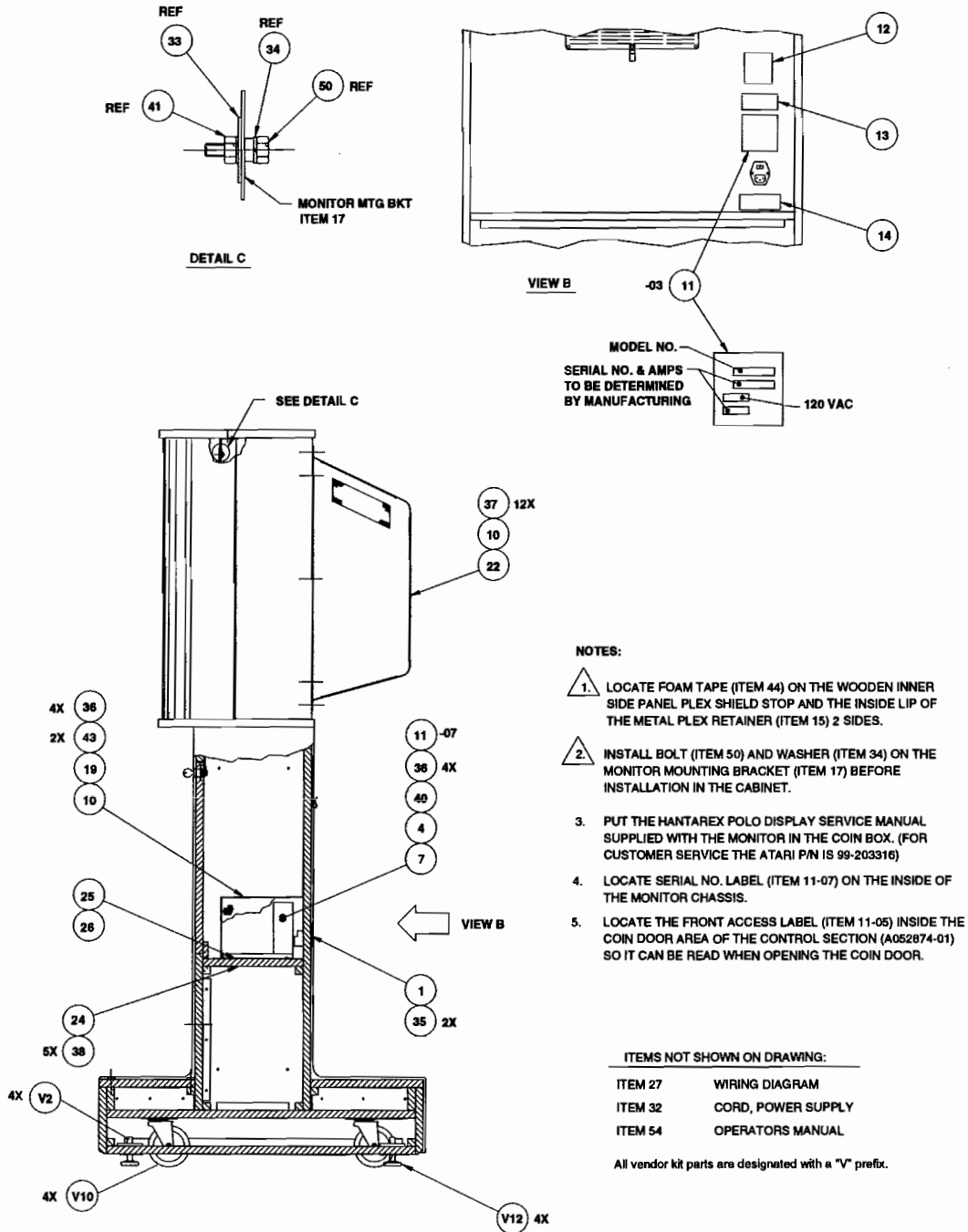
THIS CHAPTER provides information you need to order replacement parts for your Showcase 33 cabinet. All the common hardware parts included in the cabinet, such as screws, nuts, washers, and so on, are included in these parts illustrations. In addition, the JAMMA Filter PCB schematic diagram and assembly drawing is included in this chapter (although this board is not included as standard equip-

ment in your Showcase 33 cabinet). ♦ When you order parts, give the part number, part name, the number of this manual, and the serial number of your cabinet. With this information, we can fill your order rapidly and correctly. We hope this will create less downtime and more profit from your games. Atari Games Customer Service phone numbers are listed on the inside front cover of this manual.





**Figure 3-1 Showcase 33 Cabinet Assembly
A052875-01 B**



**Figure 3-1 Showcase 33 Cabinet Assembly, Continued
A052875-01 B**

**Figure 3-1 Cabinet Assembly
A052875-01 B**

Parts List

Item No.	Part No.	Quantity	Description
1	A051839-01	1	ASSEMBLY, ON/OFF SWITCH MODULE
2			
3	A052910-01	1	ASSEMBLY, HARNESS, MAIN
4	A052911-01	1	ASSEMBLY, HARNESS, SECONDARY POWER
5	A052913-01	2	ASSEMBLY, HARNESS, SPEAKER
6	A052914-01	1	ASSEMBLY, HARNESS, PRIMARY POWER
7	A052920-01	1	ASSEMBLY, POWER SUPPLY
8			
9			
10	038086-01	2	LABEL, SHOCK WARNING
11	038158-01	1	LABELS, PRODUCT I.D.
12	039450-01	1	LABEL, FCC COMPLIANCE
13	049514-02	1	LABEL, UL, LISTING MARK
14	051079-01	1	LABEL, FUSE, 3A, SLOW BLOW
15	052813-01	2	RETAINER, PLEX
16	052814-01	2	GRILLE, SPEAKER
17	052816-01	2	BRACKETS, MONITOR MOUNTING
18	052822-01	1	GRILLE, SPEAKER
19	052823-01	1	COVER, POWER SUPPLY
20	052824-01	1	SHIELD, FRONT
21	052828-01	1	BEZEL, MASKING
22	052829-01	1	COVER, MONITOR
23	052840-01	1	DOOR
24	052847-01	1	SHELF, ELECTRONICS
25	052879-01	1	LABEL, POWER SUPPLY RATING
26	052880-01	1	LABEL, INSTALLATION WARNING
27	052909-01	REF	WIRING DIAGRAM
28	052870-01	1	CABINET, WOOD
29			
30	139035-001	1	VIDEO DISPLAY, COLOR RASTER (HANTAREX POLO 33")
31	148007-104	2	SPEAKER, 4 1/2 DIA., 8 OHM, 10W, 10 OZ., SHLDED
32	150041-001	1	CORD, POWER SUPPLY
33	175002-007	4	WASHER, FLAT, .281 X 1.25, STL/ZINC
34	175015-0125	12	WASHER, LOCK, EXT., #1/4, ZINC
35	176003-108	2	SCREW, TAPPING, #4 X 1/2" LG, X-REC
36	176015-110	24	SCREW, TAPPING, #10 X 5/8 LG, X-REC
37	176019-212	16	SCREW, LPW, SQ DR, #8 X 3/4" LG, BLK
38	176020-220	5	SCREW, LPW, X-REC, #8 X 1 1/4 LG, BLK
39	176037-4016	6	SCREW, BUTTON HD, CAP, #10-24 X 1.0, HEX, TAMPER PROOF, BLK
40	177000-138	1	NUT, HEX, #8-32, STL/ZINC
41	177026-0044	4	NUT, WASHER ASSY, #1/4-20
42	178018-001	6	STAPLE, 1/2" CROWN X 5/8" LG
43	178205-001	6"	EXTRUSION, 1/16", PANEL EDGE, BLK, PVC/ALUM.
44	178263-1202	120"	TAPE, VINYL FOAM, 3/4" X 1/8" THK, BLK
45	178265-001	4	STANDOFF, L-STYLE, NYLON
46	178282-003	4	WASHER, FASTENER CAP, .062
47	178282-006	4	CAP, FASTENER, 0.70, MATTE, WHITE
48			

Figure 3-1 Cabinet Assembly A052875-01 B

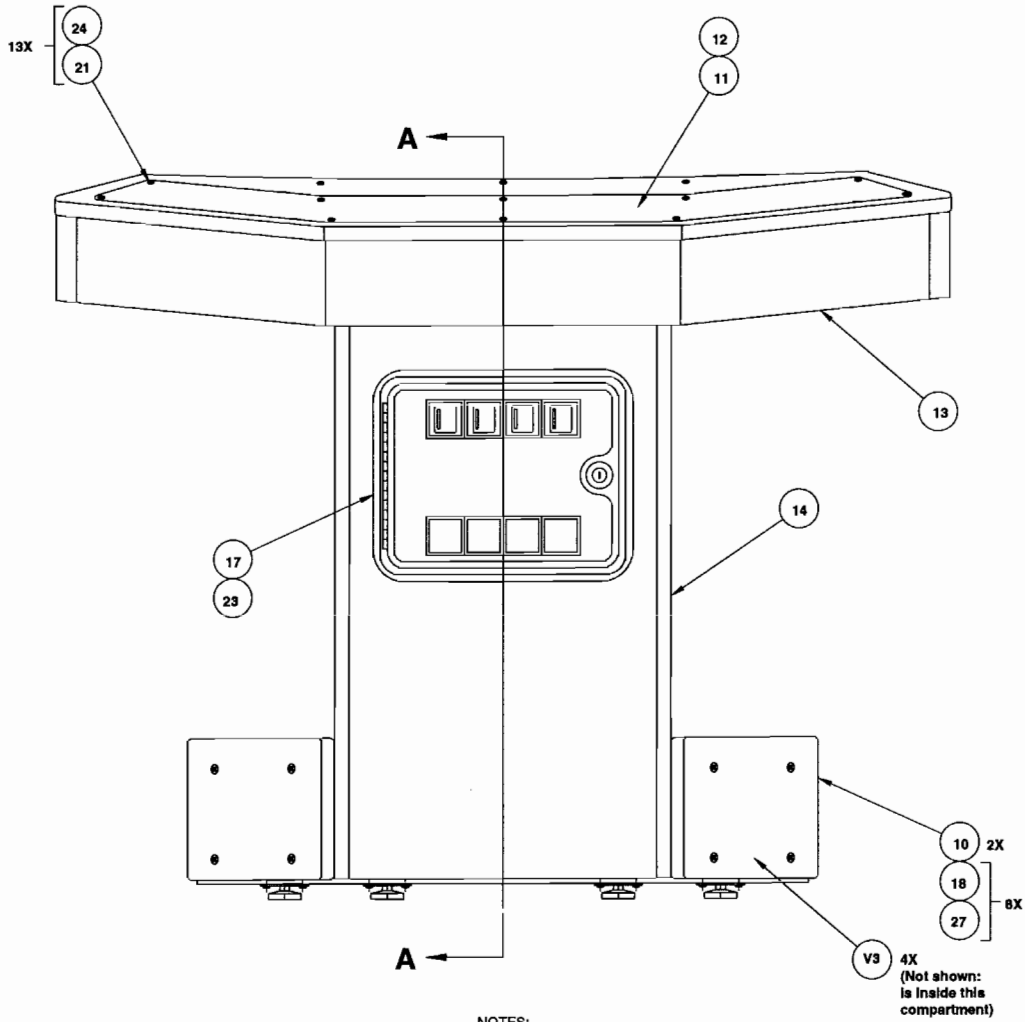
Parts List, Continued

Item No.	Part No.	Quantity	Description
49			
50	72-5516	12	BOLT, HEX HD, #1/4-20 X 1.0" LG (PULL THD)
51	72-6608S	4	SCREW, PAN HD, TYPE AB, #6 X 1/2" LG
52			
53			
54	TM-393	1	MANUAL, OPERATORS (SHOWCASE 33)
V2	049517-01	4	PLATE, LEVELER
V4	178387-001	20"	CHANNEL, CORNER, 1/2" WHITE, STYRENE (20 INCHES REQ'D)
V10	178023-003	4	CASTER, SWIVEL, 4" HARD RUBBER
V11	178034-1024	33'	T-MOLDING, MOUNTAIN GRAY, 3/4" (33 FEET REQ'D)
V12	178195-004	4	GLIDE, ADJUSTABLE, #1/2-13 X 2.0"
V13	178197-001	1	LOCK & KEY ASSY
V14	178198-002	1	CAM, OFFSET, 1 1/2" X 3/32"
V15	178276-002	1	ANCHOR, WASHER (WOOD)
V17	178282-003	6	WASHER, FASTENER, CAP, .062
V18	178282-005	6	CAP, FASTENER 0.70, MATTE, GRAY

NOTE

The person installing a game printed-circuit board in the Showcase 33 cabinet is responsible for assuring that such board does not cause radio interference. If the game board does cause radio interference, you must purchase a JAMMA Filter Board, available from your Atari Games distributor as Atari part no. A047292-01.

If you are still unable to solve the interference problem, please contact Customer Service at Atari Games Corporation. See the inside front cover of this manual for service in your area.

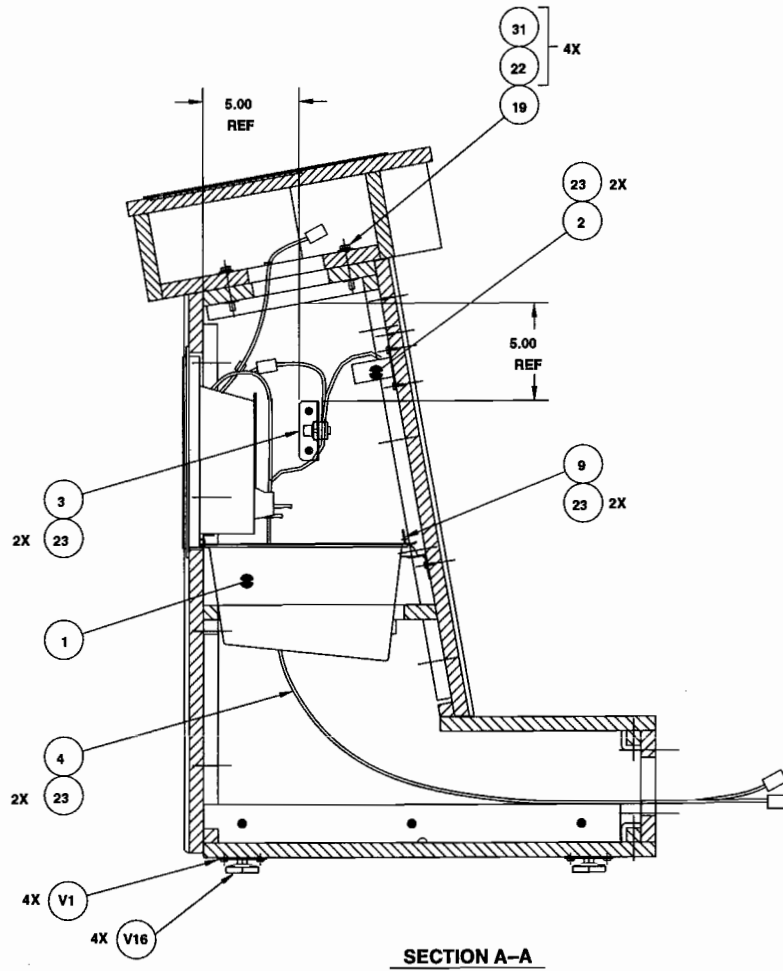


NOTES:

1. THE FOLLOWING ITEMS ARE TO BE PLACED INSIDE THE PLASTIC BAG (ITEM 25) AND SHIPPED IN THE COIN BOX ASSY (ITEM 1):

		<u>QTY</u>
ITEM 5	ASSY, GROUND JUMPER	1
ITEM 6	ASSY, HARNESS CONTROL	4
ITEM 31	BOLT, HEX HD, #1/2-20 x 2"	6
ITEM 28	CAP, FASTENER, GRAY	8
ITEM 20	WASHER, FLAT #1/4	6
ITEM 22	WASHER, LOCK #1/4	6
ITEM 26	DRIVER, HEX KEY	1

**Figure 3-2 Showcase 33 Control Section Assembly
A052874-01 A**



**Figure 3-2 Showcase 33 Control Section Assembly, Continued
A052874-01 A**

**Figure 3-2 Showcase 33 Control Section Assembly
A052874-01 C**

Parts List

Item No.	Part No.	Quantity	Description
1			
2	A044072-01	1	ASSEMBLY, COIN COUNTER
3	A047222-01	1	ASSEMBLY, BRACKET COMPONENT
4	A052912-01	1	ASSEMBLY, HARNESS, POD
5	A052915-01	1	ASSEMBLY, GROUND JUMPER CONTROL
6	A052916-01	4	ASSEMBLY, HARNESS, CONTROL
7	030247-01	1	HANDLE, CASH BOX II
8	035941-01	1	COIN BOX, MOLDED (400)
9	044448-01	1	BRACKET, COIN BOX
10	052802-01	2	PANEL, FILLER
11	052821-01	1	PANEL, CONTROL (BLANK)
12	052866-01	1	COVER, CONTROL PANEL (BLANK LEXAN)
13	052868-01	1	CONTROL POD, WOOD
14	052869-01	1	CONTROL SECTION, WOOD
15	049300-01	1	LID, CASH BOX (4-ENTRY)
16			
17	171101-003	1	COIN DOOR, 4 ENTRY, \$.25 USA, 2 BLANK, WITH BRKTS
18	172025-4424	8	SCREW, PAN HD, #1/4-20 X 1.50 LG, X-REC, ZINC
19	175002-007	4	WASHER, FLAT, .281 X 1.25, STL/ZINC
20	175014-1050	6	WASHER, FLAT, #1/4, ZINC
21	175014-3040	13	WASHER, FLAT, .219 X .500 X .049, STEEL, BLK OXIDE
22	175017-2025	10	WASHER, SPLIT LOCK, #1/4, STL/ZINC
23	176015-110	9	SCREW, TAPPING, PAN, #10 X 5/8 LG, X-REC
24	176037-4016	13	SCREW, BUTTON HD, CAP, #10-24 X 1.0, HEX, TAMPER PROOF, BLK
25	178041-005	1	BAG, P.E., 7" X 10", 4 MIL, CLEAR
26	178126-002	1	DRIVER, HEX KEY, 5/32", TAMPER PROOF
27	178282-003	8	WASHER, FASTENER, CAP
28	178282-005	8	CAP, FASTENER, 0.70, MATTE, GRAY
29			
30			
31	72-5532	10	BOLT, HEX HD, #1/4-20 X 2.0 LG (FULL THD)
V1	043939-01	4	PLATE, LEG LEVELER
V3	052812-01	4	BRACKET, MOUNTING
V16	178255-004	4	GLIDE, ADJUSTABLE, #3/8-16 X 1.50"

N O T E S

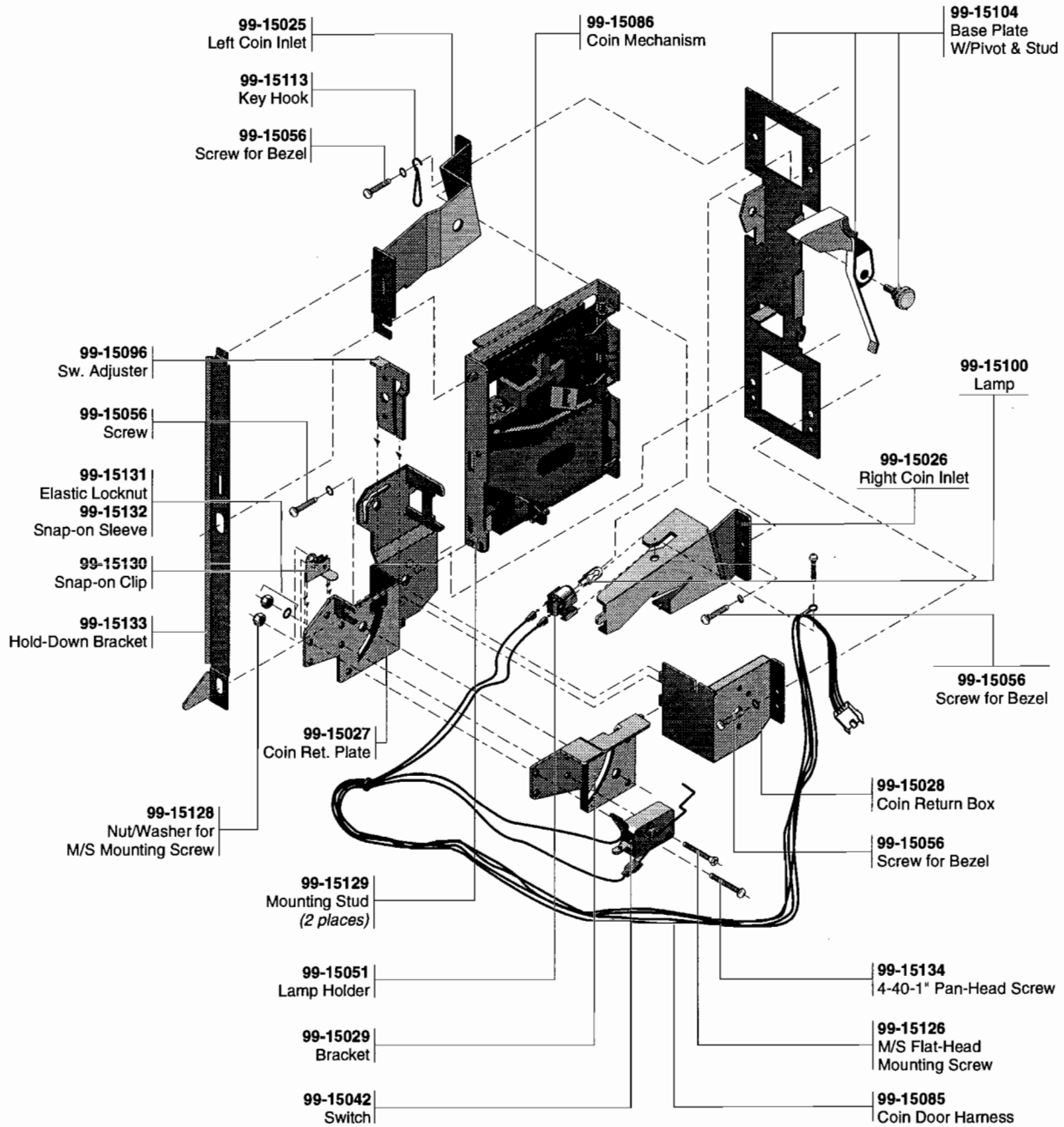
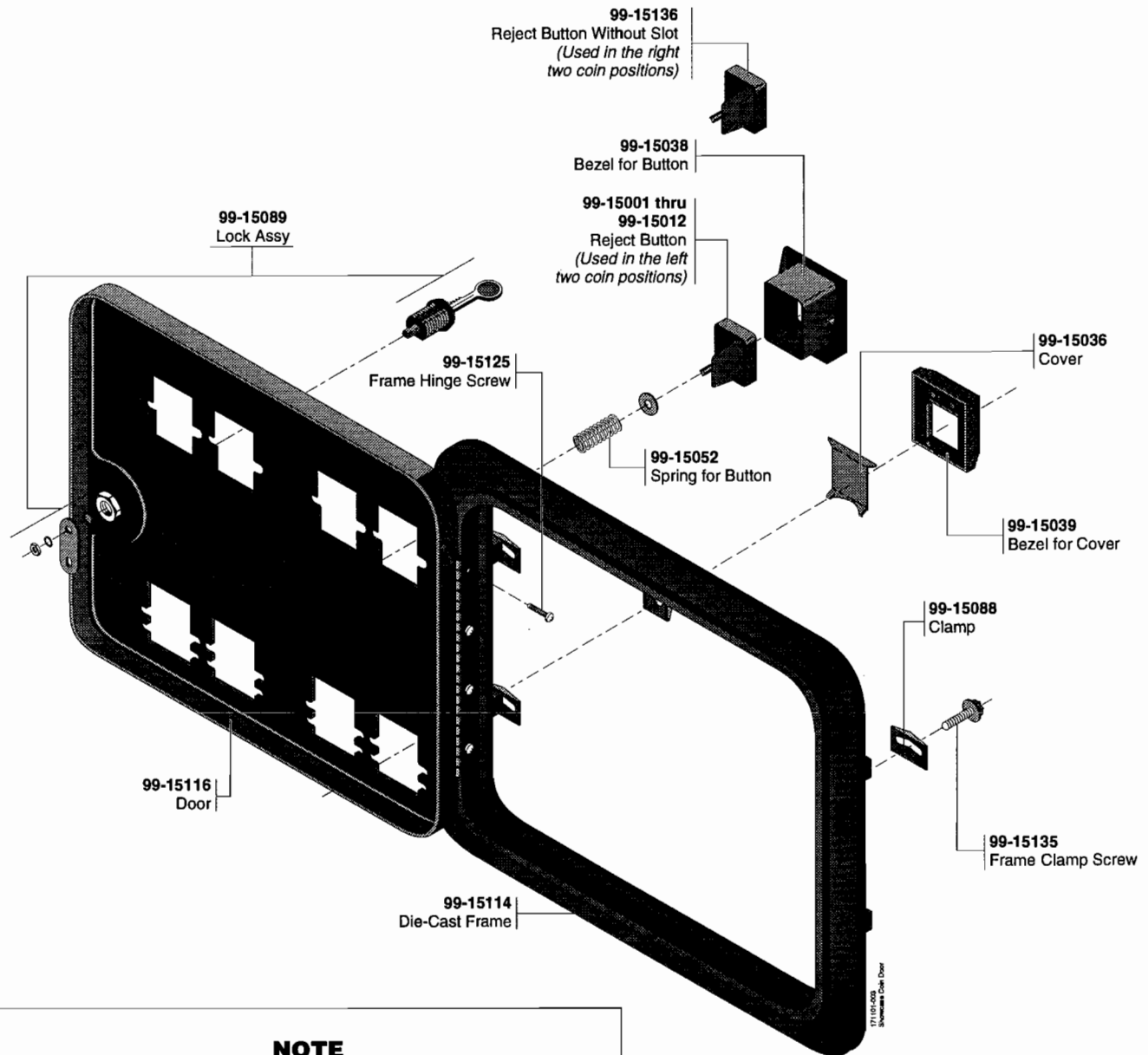


Figure 3-3 Coin Door Assembly (Coin Mechanism Details)
171101-003

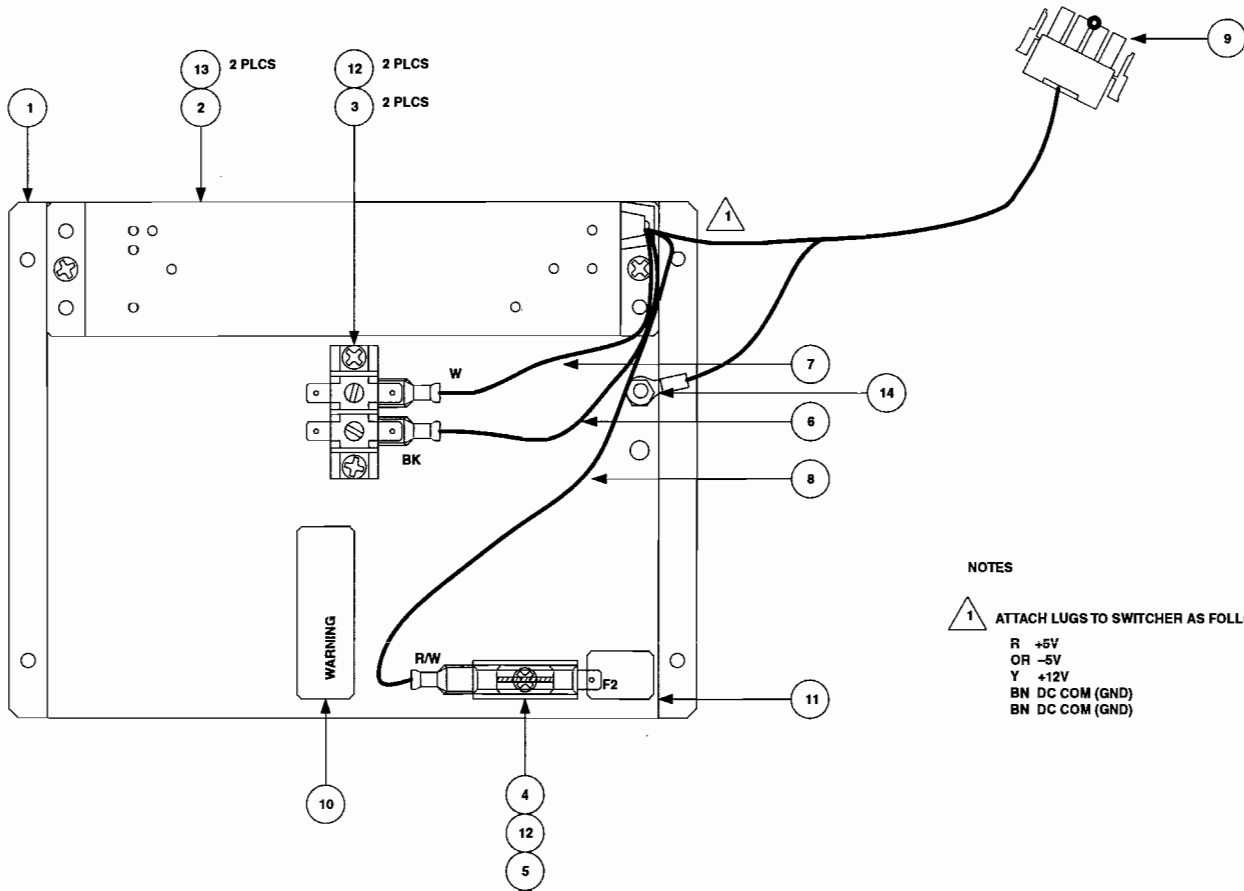


NOTE

The coin box is not part of this assembly. It is shown in the Control Section Assembly drawing (Figure 3-2 of this manual).

Also, the Showcase 33 cabinet provides for two players with provision for up to four players. To convert to a four-coin-mech game, add two coin mechanisms (Atari part no. 99-15086) and two reject buttons (99-15001 for U.S. quarters). The reject buttons replace the buttons without slots (99-15136).

Figure 3-3 Coin Door Assembly (Frame & Door)
171101-003

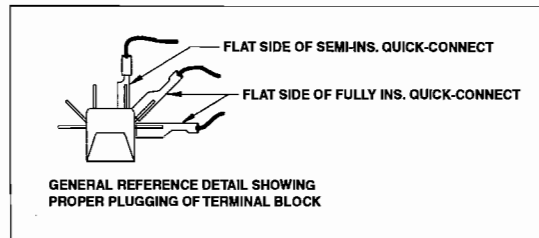


NOTES



ATTACH LUGS TO SWITCHER AS FOLLOWS:

- R +5V
- OR -5V
- Y +12V
- BN DC COM (GND)
- BN DC COM (GND)



**Figure 3-4 Power Supply Assembly
A052920-01 A**

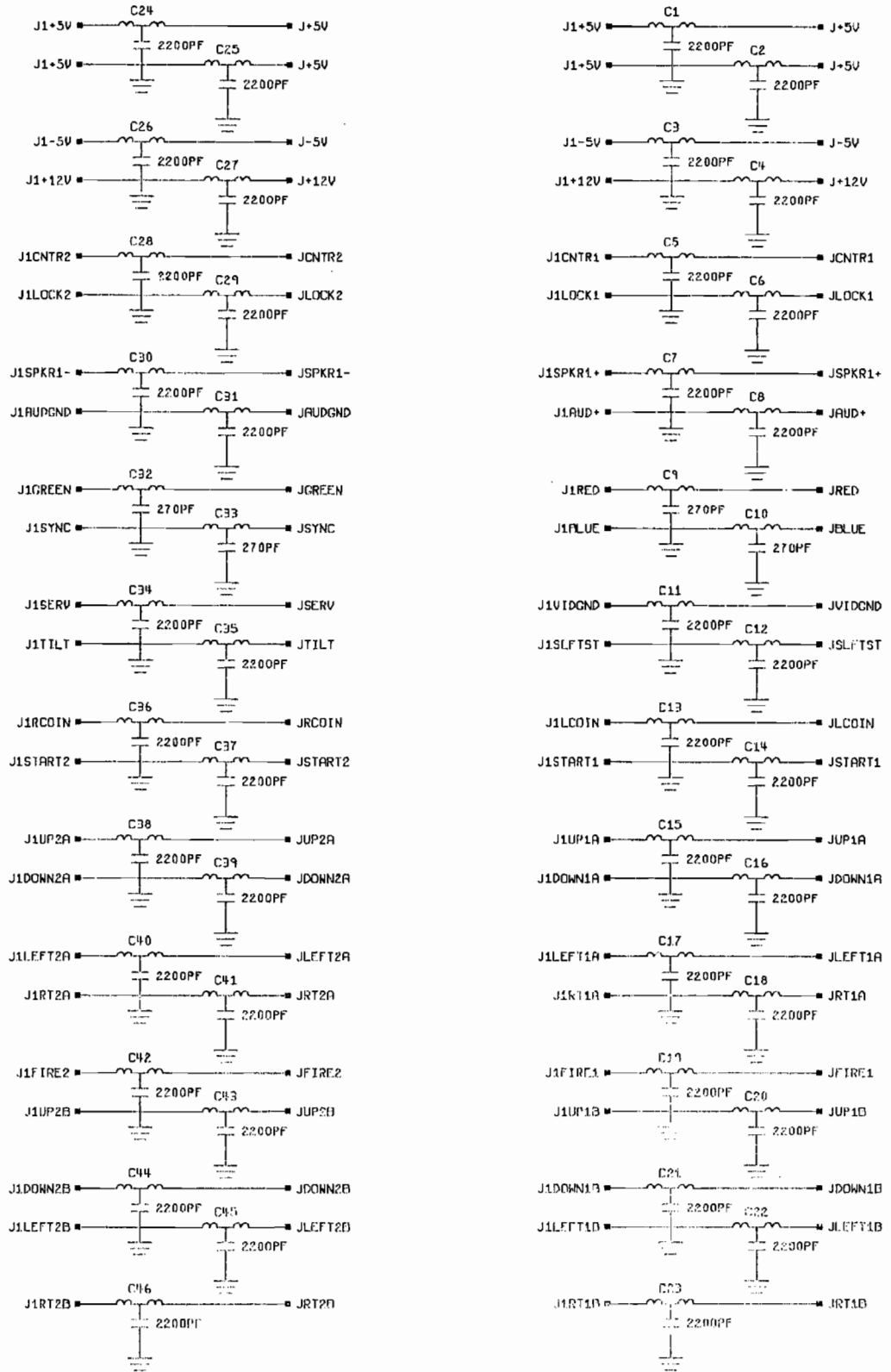
**Figure 3-4 Power Supply Assembly
A052920-01 A**

Parts List

Item No.	Part No.	Quantity	Description
1	046924-01	1	CHASSIS, POWER SUPPLY BASE
2	149014-001	1	POWER SUPPLY, SWITCHING, 5V @ 7A, 12V @ 1A, -5V @ 1A
3	179231-002	1	TERMINAL BLOCK, 2 POS, FLAT-45-90
4	179225-2201	1	FUSE BLOCK, 1 POS
5	146008-3022	1	FUSE, 3 AMP, SLOW BLOW, 250V
6	A049295-01	1	ASSY, JUMPER (BK, 6")
7	A049295-02	1	ASSY, JUMPER (W, 6")
8	A049293-01	1	ASSY, JUMPER, 5V (R/W, 10")
9	A052911-01	1	ASSY, HARNESS, SECONDARY POWER
10	037640-01	1	LABEL, POWER SUPPLY (WARNING)
11	043908-01	1	LABEL, POWER SUPPLY (FUSE)
12	72-HA4606S	3	SCREW, THD FORM, X-REC, #6-32 X 3/8
13	72-HA4806S	2	SCREW, THD FORM, X-REC, #8-32 X 3/8
14	177026-0038	1	NUT/WASHER ASSY, #8-32

FROM GAME BOARD

- 1 ○ — GND
- 2 ○ — GND
- 3 ○ — J1+5V
- 4 ○ — J1+5V
- 5 ○ — J1-5V
- 6 ○ — J1+12V
- 7 ○ — KEY
- 8 ○ — J1CNTR2
- 9 ○ — J1LOCK2
- 10 ○ — J1SPKR1-
- 11 ○ — J1AUDGND
- 12 ○ — J1GREEN
- 13 ○ — J1SYNC
- 14 ○ — J1SERV
- 15 ○ — J1TILT
- 16 ○ — J1RCOIN
- 17 ○ — J1START2
- 18 ○ — J1UP2A
- 19 ○ — J1DOWN2A
- 20 ○ — J1LEFT2A
- 21 ○ — J1RT2A
- 22 ○ — J1FIRE2
- 23 ○ — J1UP2B
- 24 ○ — J1DOWN2B
- 25 ○ — J1LEFT2B
- 26 ○ — J1RT2B
- 27 ○ — GND
- 28 ○ — GND
- A ○ — GND
- B ○ — GND
- C ○ — J1+5V
- D ○ — J1+5V
- E ○ — J1-5V
- F ○ — J1+12V
- H ○ — KEY
- J ○ — J1CNTR1
- K ○ — J1LOCK1
- L ○ — J1SPKR1+
- M ○ — J1AUD+
- N ○ — J1RED
- P ○ — J1BLUE
- R ○ — J1VIDGND
- S ○ — J1SLFTST
- T ○ — J1LCOIN
- U ○ — J1START1
- V ○ — J1UP1A
- W ○ — J1DOWN1A
- X ○ — J1LEFT1A
- Y ○ — J1RT1A
- Z ○ — J1FIRE1
- AA ○ — J1UP1B
- BB ○ — J1DOWN1B
- CC ○ — J1LEFT1B
- DD ○ — J1RT1B
- EE ○ — GND
- FF ○ — GND



**Figure 3-5 JAMMA Filter PCB Schematic Diagram
A047292-01 B**

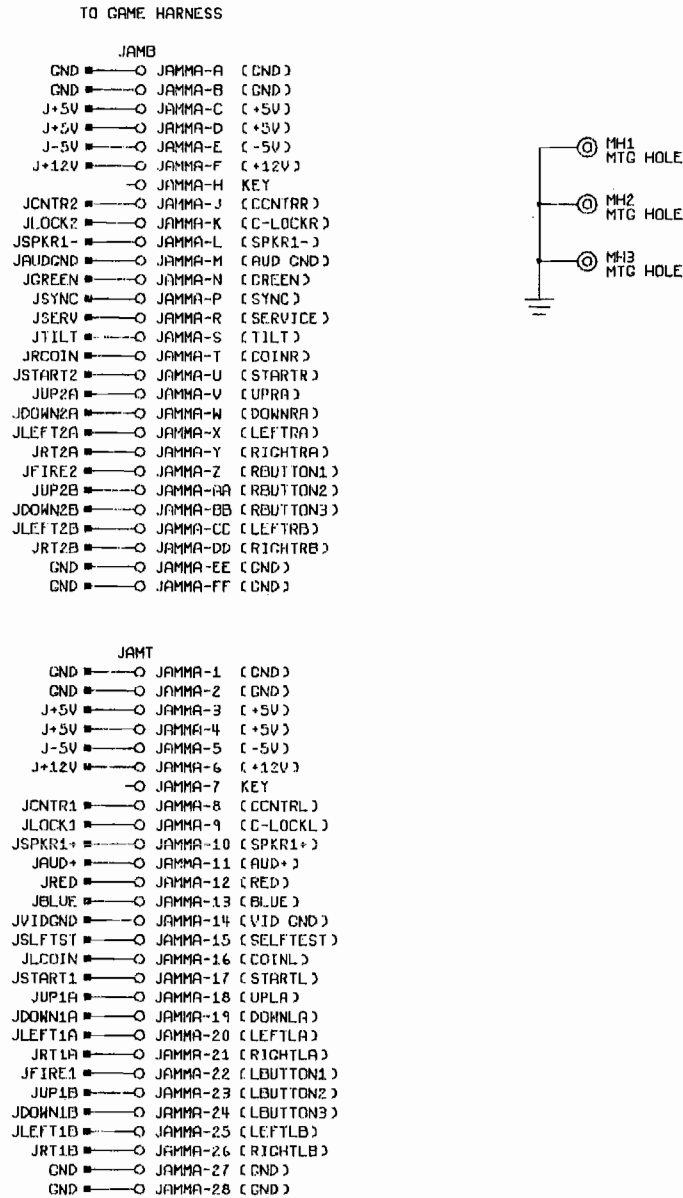
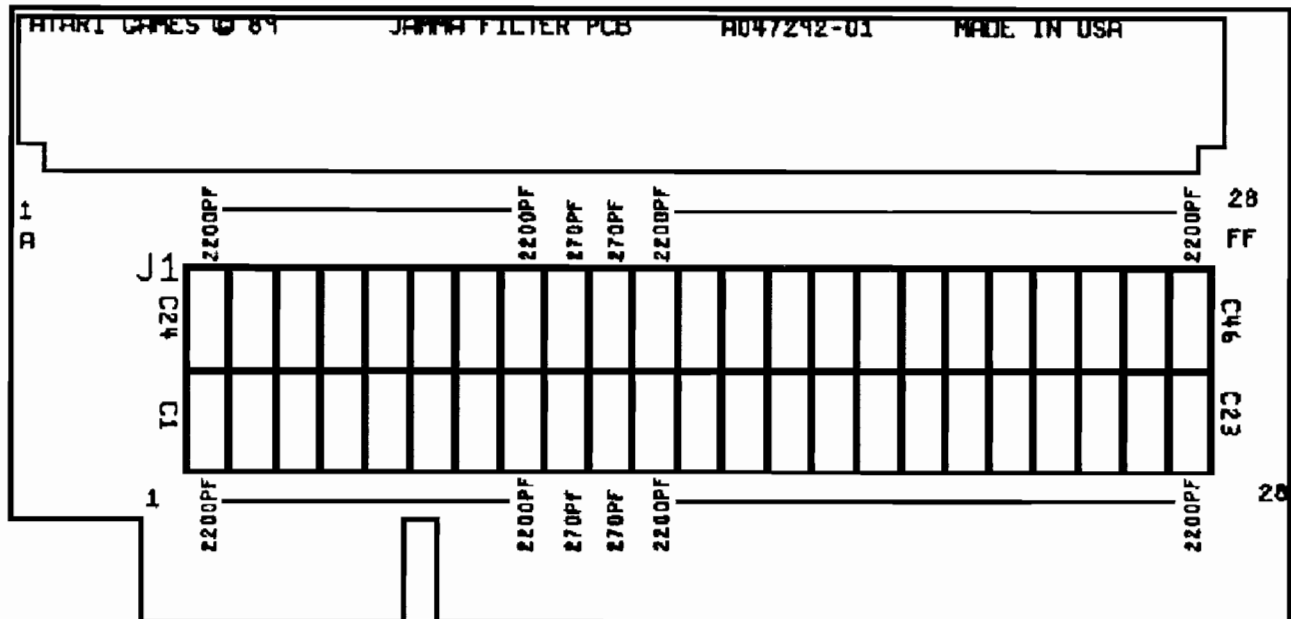


Figure 3-5 JAMMA Filter PCB Schematic Diagram, Continued
A047292-01 B



**Figure 3-6 JAMMA Filter PCB Assembly
A047292-01 B**

**JAMMA Filter PCB Assembly
Parts List**

Designator	Description	Part No.	Designator	Description	Part No.
C1-8	2200 pF, 50V, 3-Pin EMI Filter Cap.	140006-222	C32, C33	270 pF, 50V, 3-Pin EMI Filter Cap.	140006-271
C9, C10	270 pF, 50V, 3-Pin EMI Filter Cap.	140006-271	C34-46	2200 pF, 50V, 3-Pin EMI Filter Cap.	140006-222
C11-31	2200 pF, 50V, 3-Pin EMI Filter Cap.	140006-222	J1	Connector, 56 Ckt., .156 Ctr, RT	179240-056

Warranty

Seller warrants that its printed-circuit boards and parts thereon are free from defects in material and workmanship under normal use and service for a period of ninety (90) days from date of shipment. Seller warrants that its video displays and laser-video disc players (in games supplied with displays and video-disc players) are free from defects in material and workmanship under normal use and service for a period of thirty (30) days from date of shipment. None of the Seller's other products or parts thereof are warranted.

If the products described in this manual fail to conform to this warranty, Seller's sole liability shall be, at its option, to repair, replace, or credit Buyer's account for such products which are returned to Seller during said warranty period, provided:

- (a) Seller is promptly notified in writing upon discovery by Buyer that said products are defective;
- (b) Such products are returned prepaid to Seller's plant; and
- (c) Seller's examination of said products discloses to Seller's satisfaction that such alleged defects existed and were not caused by accident, misuse, neglect, alteration, improper repair, installation, or improper testing.

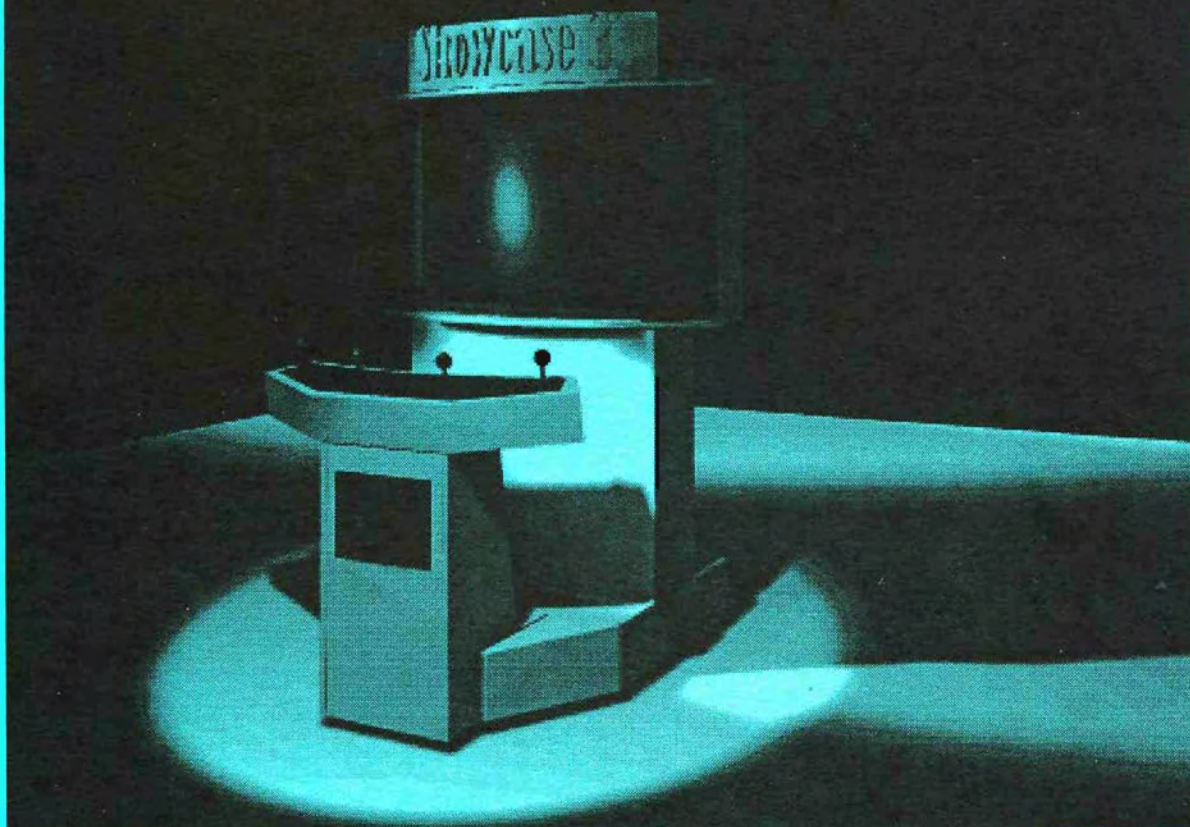
In no event shall Seller be liable for loss of profits, loss of use, incidental or consequential damages.

Except for any express warranty set forth in a written contract between Seller and Buyer which contract supersedes the terms herein, this warranty is expressed in lieu of all other warranties expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose, and of all other obligations or liabilities on the Seller's part, and it neither assumes nor authorizes any other person to assume for the Seller any other liabilities in connection with the sale of products by Seller.

The use of any non-Atari parts may void your warranty, according to the terms of the warranty. The use of any non-Atari parts may also adversely affect the safety of your game and cause injury to you and others. Be very cautious in using non-Atari-supplied components with our games, in order to ensure your safety.

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Showcase 33™



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