

Operators Manual  
With Illustrated Parts Lists





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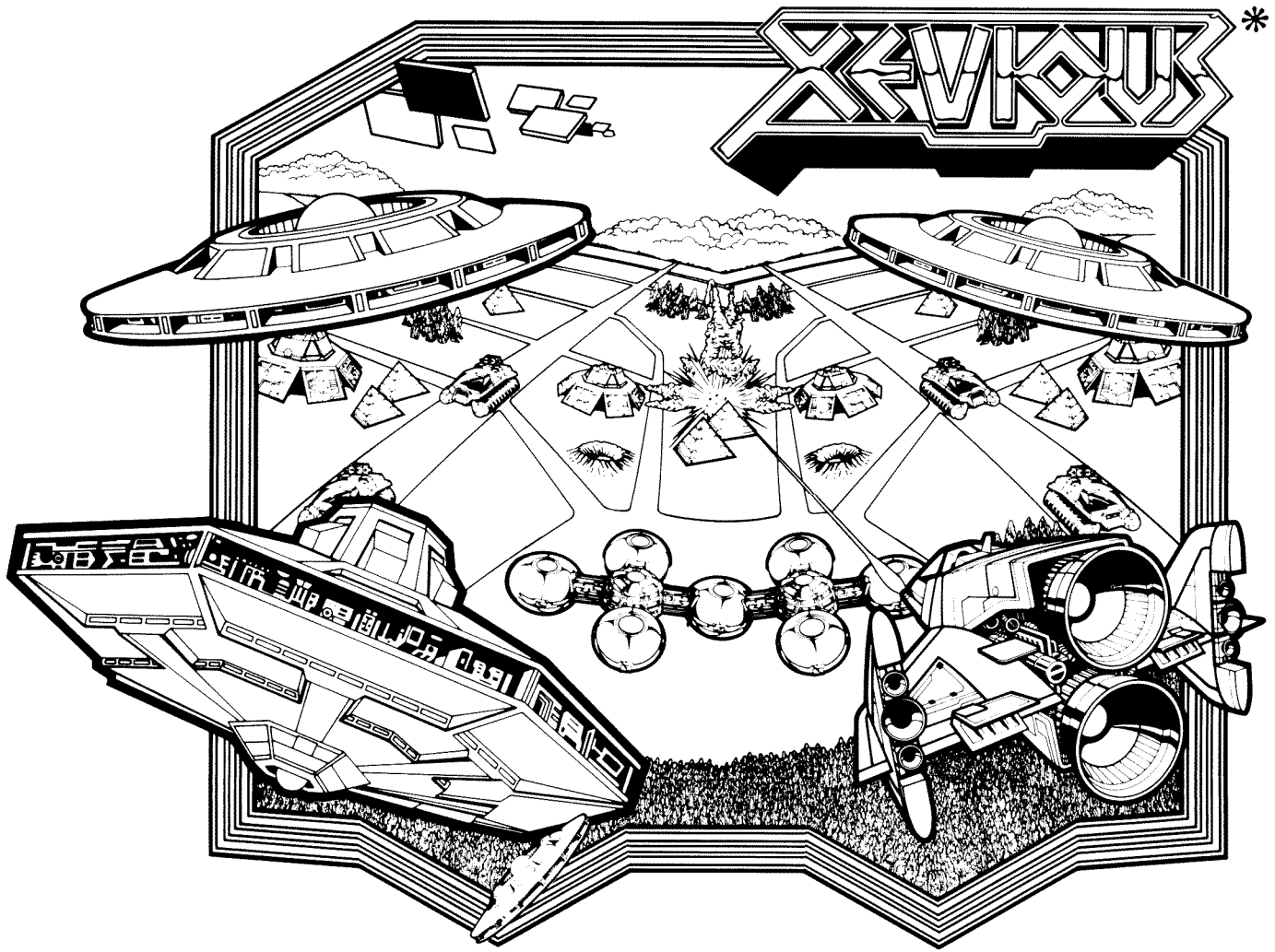
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# Operators Manual

With Illustrated Parts Lists

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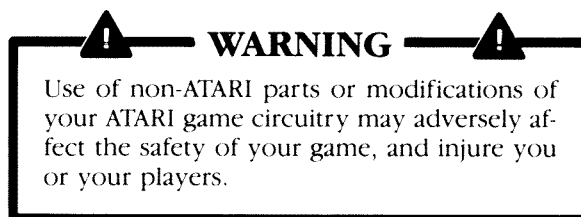
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## Notice Regarding Non-ATARI Parts



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 in the game
- modify or alter any circuits in the game by using kits or parts *not* supplied by Atari.



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### **Note**

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 green 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.
- The game printed-circuit board(s) (PCB) is properly installed within the Electromagnetic Interference (EMI) cage.
- The EMI Shield PCB is properly installed and connected in series with the game PCB harness.
- All filter capacitors required on the EMI Shield PCB are properly soldered in place.


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



# Set-Up Procedures

## A. How to Use This Manual

This manual, written for game operators and service technicians, describes the Xevious game. The manual contains information about both the Ireland- and U.S.-built games. Whenever information is unique to the Ireland-built game, this symbol appears: 

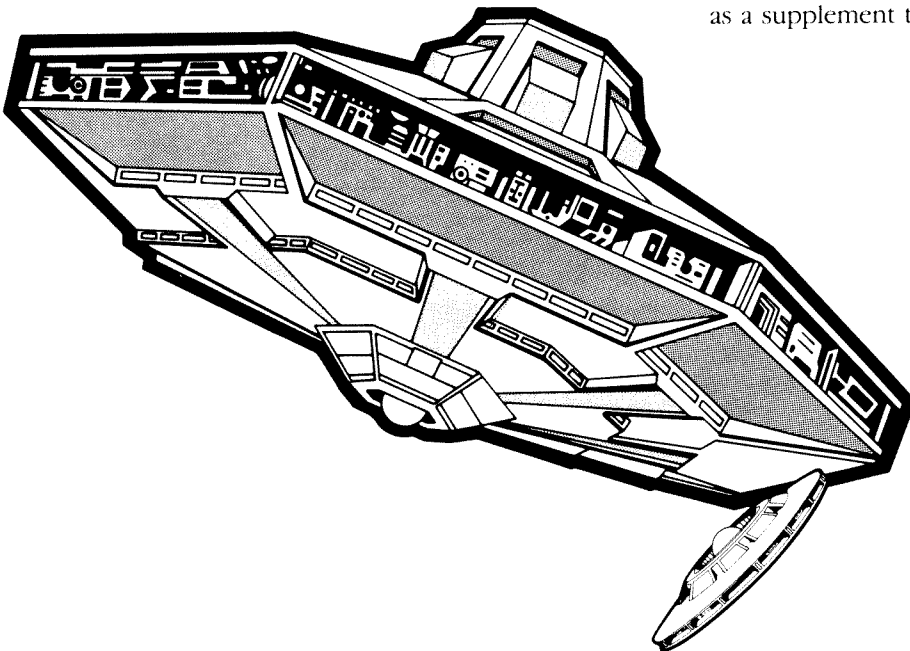
Whenever information is unique to the U.S.-built game, this symbol appears: 

Chapter 1 contains game specifications, inspection procedures, voltage plug and fuse information, switch locations, and option information.

Chapter 2 contains self-test procedures.

Chapter 3 contains illustrated parts lists. Figures 3-1 and 3-2 illustrate the U.S.-built and the Ireland-built game cabinets. Italicized type on these figures refer you to other places in the manual for more information about specific cabinet parts.

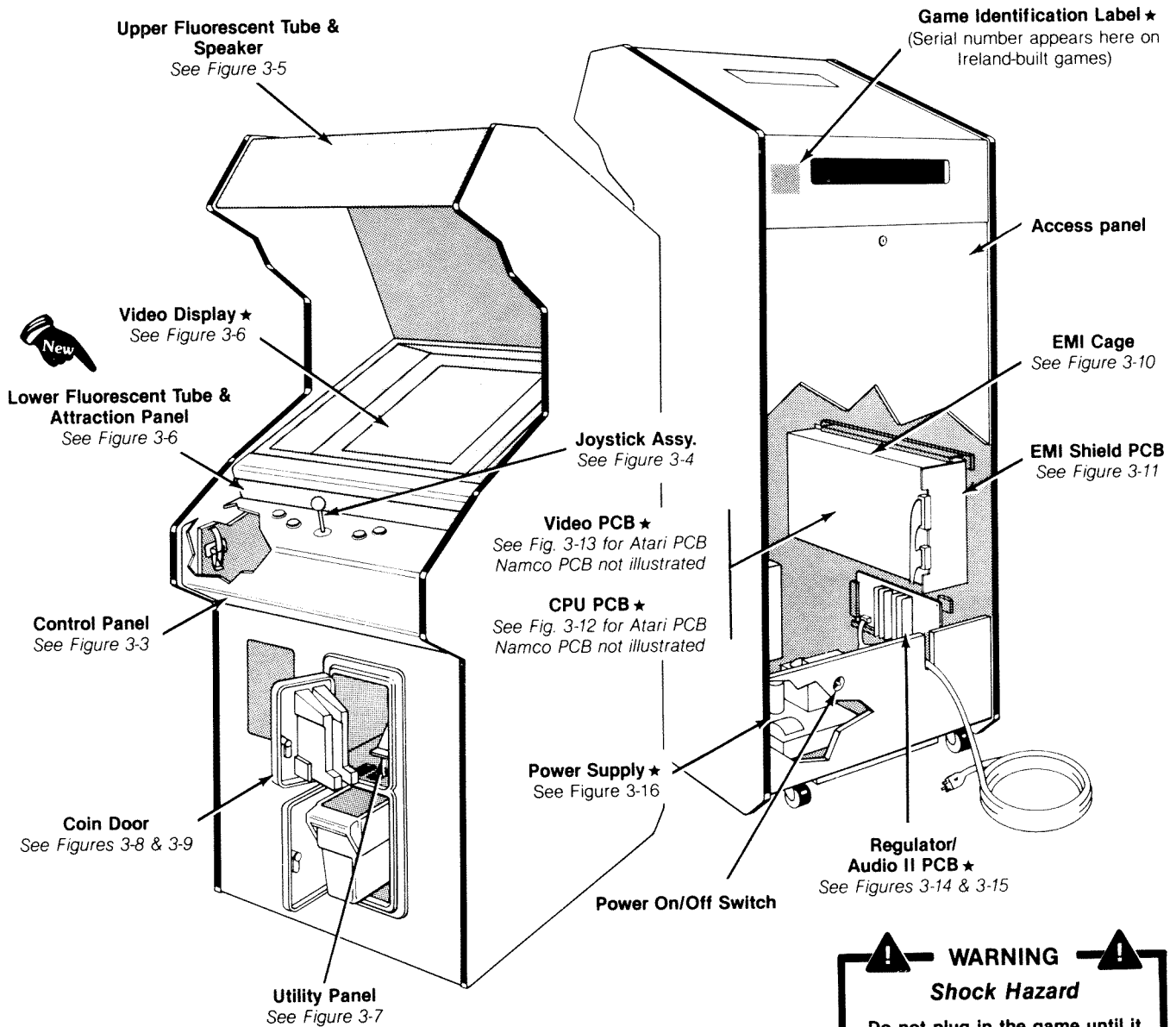
Schematic diagrams of the game circuitry are included as a supplement to this manual.



Chapter

**1**





★ Item with a serial number label (U.S.-built cabinet)

**WARNING**

**Shock Hazard**

Do not plug in the game until it has been inspected. This game should only be connected to a grounded 3-wire outlet. If you have only a 2-wire outlet, we recommend you hire a licensed electrician to install a grounded outlet. *Players may receive an electrical shock if this game is not properly grounded!*

Figure 1-1 Game Overview



## B. Game Overview

The game Xevious carries you as the Solvalou spacecraft pilot. You will fly through a host of flying enemies and land-based obstacles that try to shoot you from the sky. Your mission is to reclaim the enemy-occupied Earth by shooting and bombing the enemy into oblivion. You must skillfully pilot your spacecraft through harder and harder encounters with the enemy.

A new feature for this game is an additional attraction panel located below the video display. This lower attraction panel enhances the visual appeal of the cabinet. Whenever this new feature is mentioned in this manual, you will see this symbol:



All major parts of the Xevious game are illustrated in Figure 1-1.

## C. Installation Specifications

Table 1-1 describes the physical, electrical, and environmental specifications of the game.

**Table 1-1 Installation Specifications**

Width	62.5 cm (25.5 in.)
Depth	90.5 cm (36 in.)
Height	181.5 cm (72 in.)
Line Voltage	100 to 240 VAC
Power Consumption	150 W
Temperature	0° to +38°C (+32° to +100° F)
Humidity	Not to exceed 95% relative

## D. Inspecting the Game

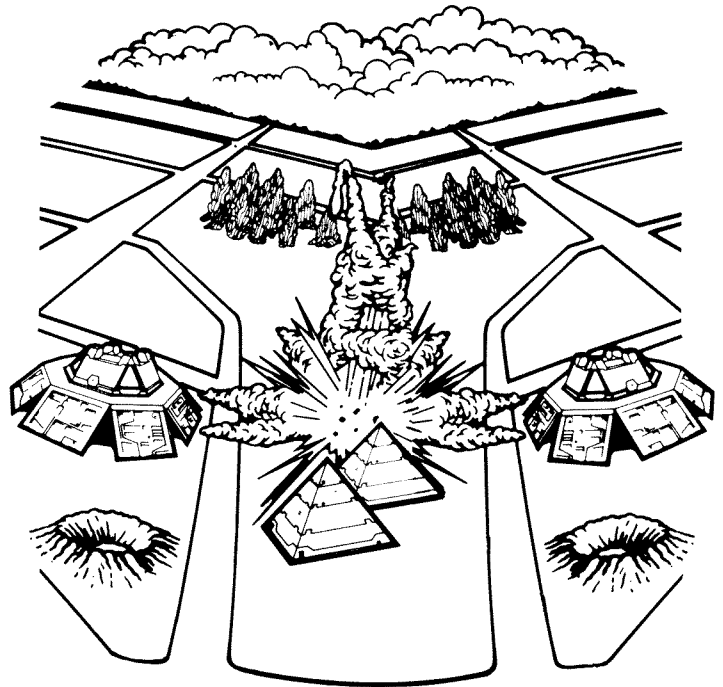
Please inspect your game carefully to ensure that it was delivered to you in good condition.

### WARNING Shock Hazard

To avoid electrical shock, do not plug in the game until the procedures in Sections D and E have been completed!

Do not touch internal parts of the display with your hands or with metal objects held in your hands!

1. Examine the exterior of the game cabinet for dents, chips, or broken parts.
2. Remove the screws from the rear access panel. Unlock and open this panel and the coin door. Inspect the interior of the game as follows:
  - a. Ensure that all plug-in connectors (on the game harnesses) are firmly plugged in. Replug any connectors found unplugged. Do not force connectors together. The connectors are keyed so they only fit in the proper orientation. *A reversed edge connector may damage a PCB and will void your warranty.*
  - b. Ensure that all plug-in integrated circuits on the PCB are firmly plugged into their sockets.
  - c. Remove the tie-wrap that secures the coiled power cord inside the cabinet. Inspect the power cord for any cuts or dents in the insulation. Repair or replace it as required. Place the square strain-relief plate in the wood slot at the bottom of the rear panel opening.
  - d. Inspect major subassemblies, such as the power supply, control panel, and video display. Make sure they are mounted securely and that the green ground wires are connected.





## E. Voltage-Plug Selection and Fuses

The power supply in your game contains six fuses. When you replace a fuse, use the identical type fuse with the same electrical rating (see Figure 1-2).

The power supply operates on the line voltage of many countries. The power supply comes with either one, two, or three voltage-selection plugs. Plug voltages

and wire colors are 100 VAC (violet wire color), 120 VAC (yellow wire color), 220 VAC (blue wire color), and 240 VAC (brown wire color).

See Figure 1-2 for placement of the voltage-selection plug. Before plugging in your game, check your line voltage. Next, check the wire color on the voltage-selection plug. Make sure the voltage-selection plug is correct for the voltage of your location.

Now plug the game into a *grounded* 3-wire outlet.

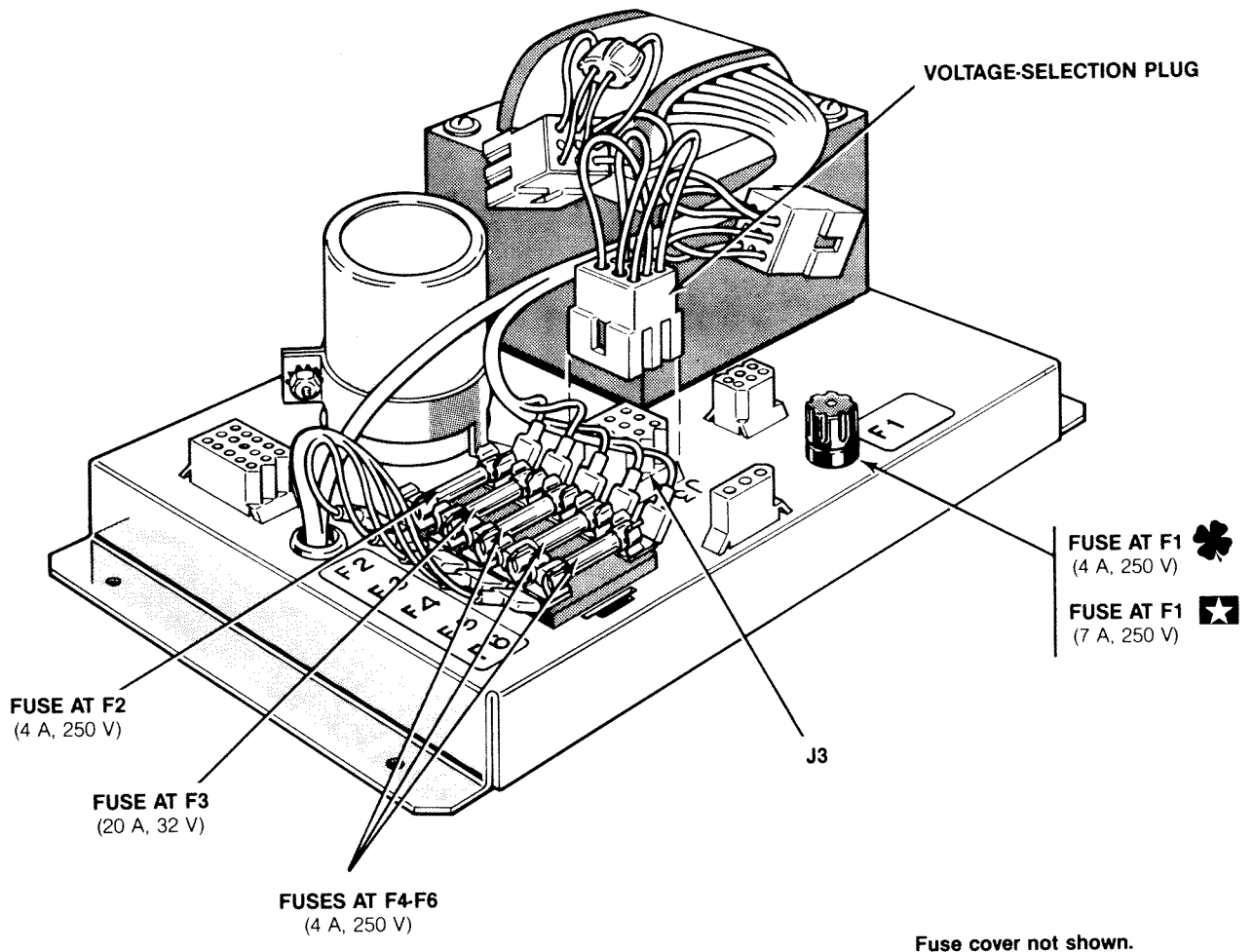


Figure 1-2 Voltage-Selection Plug and Fuse Locations



## F. Switch Locations

### Power On/Off Switch

The power on/off switch is located on the back of the cabinet on the lower left side (see Figure 1-1).

### Utility Panel Switches

The volume control, coin counter(s), self-test switch, and auxiliary coin switch are on the utility panel. The utility panel is located inside the upper coin door (see Figure 1-1.) The volume control adjusts the level of sound produced by the game. The coin counter(s) records the number of coins entered into the game. The self-test switch initiates the self-test mode. The auxiliary coin switch is used to credit the game without activating a coin counter.

### Option Switches

Option switches for game price, number of lives, bonus, and difficulty selection are on the CPU printed-circuit board (PCB). These switches are at locations 10B and 10D on the ATARI PCB, or at locations 7D and 8D on the NAMCO PCB (see Figure 1-3.)

## G. Selecting the Options

Settings of the option switches are explained in Tables 1-2 and 1-3. Options preset at the factory are shown by the ◀ symbol. However, you may change the settings to suit your individual needs.

To verify option switch settings, first obtain a self-test display as described in Chapter 2, *Obtaining a Self-Test Display*. Then, verify the option switch settings on the self-test display as described in Chapter 2, *Checking Option Settings*.

Table 1-2 describes the settings for the 8-toggle switch at location 10D on the ATARI CPU PCB and 7D on the NAMCO CPU PCB. This switch selects both the game price options available for the left coin mechanism and the bonus play options. Table 1-3 describes the settings for the 8-toggle switch at location 10B on the ATARI CPU PCB and 8D on the NAMCO CPU PCB. This switch selects both the game price options available for the right coin mechanism and the game difficulty options.

The basic unit of measurement is a coin worth \$.25 or 1 DM. Thus, if you have a 2 DM/1 DM coin door with two coin counters, set switch 8 at location 10D on the ATARI PCB or 7D on the NAMCO PCB\* to off. Then different denominations are counted on the two coin counters.

*\*The NAMCO PCB requires a modification to use the second coin counter. Contact your Customer Service office for information.*

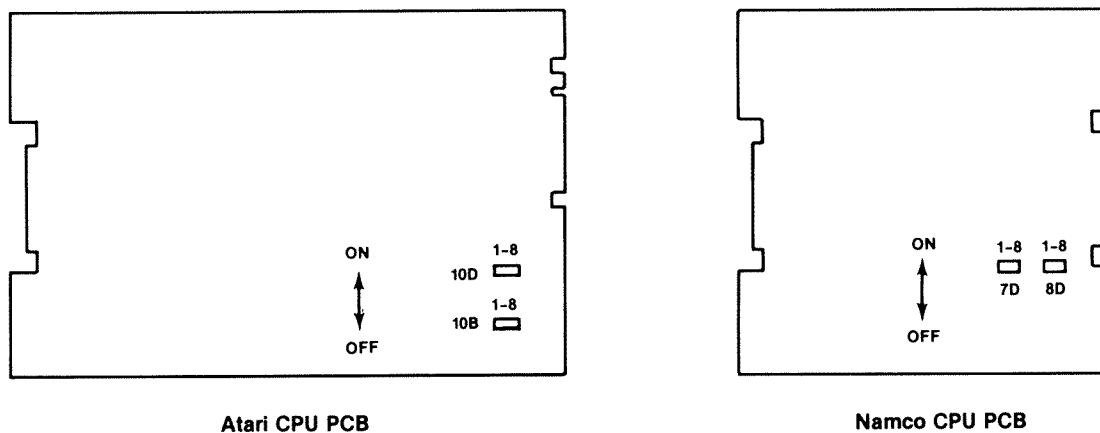


Figure 1-3 Option Switch Locations



**Table 1-2 Switch Settings for Price and Bonus Options**

Settings of 8-Toggle Switch on Xevious CPU PCB (at 10D*)								Option
8	7	6	5	4	3	2	1	
						Off	Off	1 coin/1 credit ◀
						Off	On	1 coin/2 credits
						On	Off	2 coins/1 credit
						On	On	2 coins/3 credits
<b>Bonus lives (Solvalous) awarded at the following point values:</b>								
Switches 6 and 7 set for 1 through 3 lives (Solvalous)								
			Off	Off	Off			20,000 and every 60,000 ◀
			Off	Off	On			10,000 and every 40,000
			Off	On	Off			10,000 and every 50,000
			Off	On	On			20,000 and every 50,000
			On	Off	Off			20,000 and every 70,000
			On	Off	On			20,000 and every 80,000
			On	On	Off			20,000 2nd bonus at 60,000
			On	On	On			No bonus
Switches 6 and 7 set for 5 lives (Solvalous)								
			Off	Off	Off			20,000 and every 70,000
			Off	Off	On			10,000 and every 50,000
			Off	On	Off			20,000 and every 50,000
			Off	On	On			20,000 and every 60,000
			On	Off	Off			20,000 and every 80,000
			On	Off	On			30,000 and every 100,000
			On	On	Off			20,000 2nd bonus at 80,000
			On	On	On			No bonus
	Off	Off						3 lives (Solvalous) ◀
	Off	On						1 life
	On	Off						2 lives
	On	On						5 lives
Off								2 coin counters
On								1 coin counter

\*This switch is located at 7D on the NAMCO CPU PCB.  
 ◀Manufacturer's recommended setting

**Table 1-3 Switch Settings for Price and Difficulty Options**

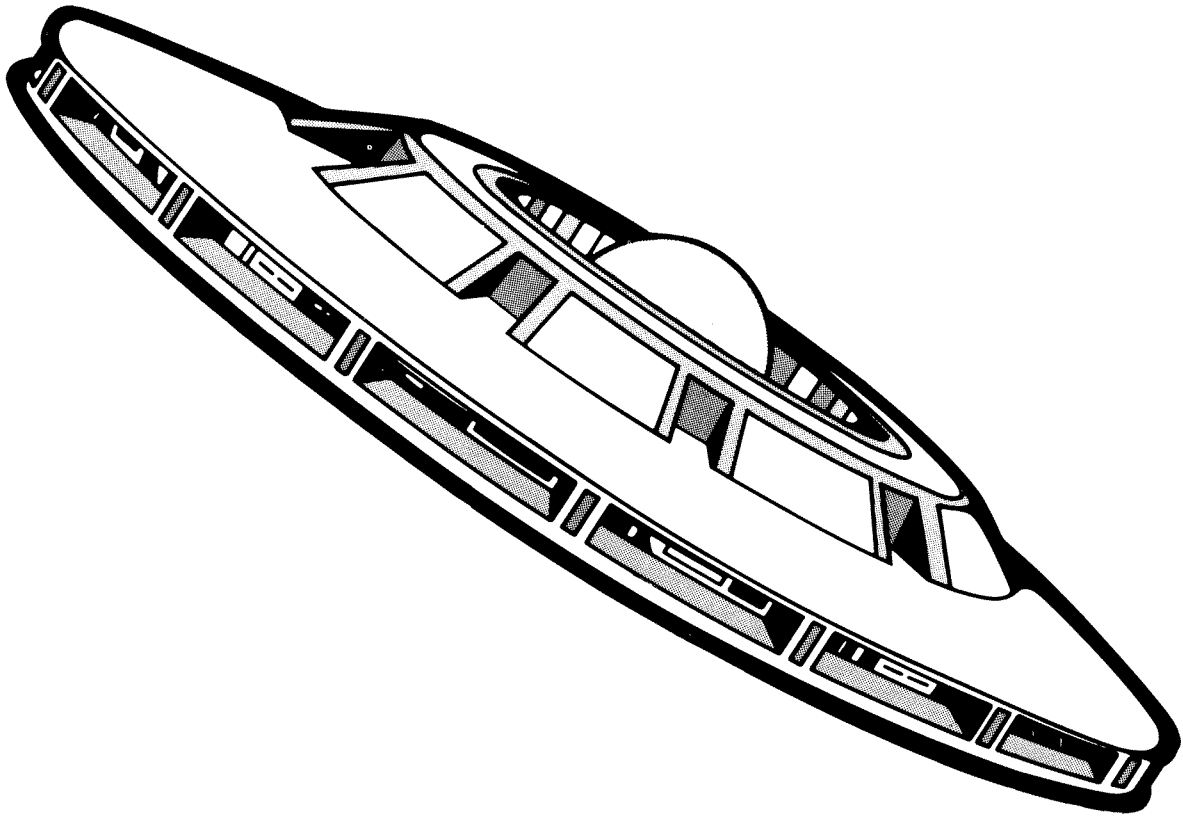
Settings of 8-Toggle Switch on Xevious CPU PCB (at 10B*)								Option
8	7	6	5	4	3	2	1	
			Off			Off	Off	Must be off or Blaster fires continuously ◀
Off								Must remain off
				Off	Off			1 coin/1 credit ◀
				Off	On			1 coin/2 credits
				On	Off			2 coins/1 credit
				On	On			2 coins/3 credits
	Off	Off						Standard game play
	Off	On						Easy game play
	On	Off						Hard game play ◀
	On	On						Very hard game play

\*This switch is located at 8D on the NAMCO CPU PCB.  
 ◀Manufacturer's recommended setting

# Self-Test Procedure

This game will test itself and provide data to show that the game circuitry and controls are operating properly. Self-test data is presented visually on the video display and audibly through the speakers. No additional equipment is required.

We suggest you perform a self-test when you first set up, each time you collect money, when you change the game options, or when you suspect game failure. (All credits are cancelled when you switch to self-test.)



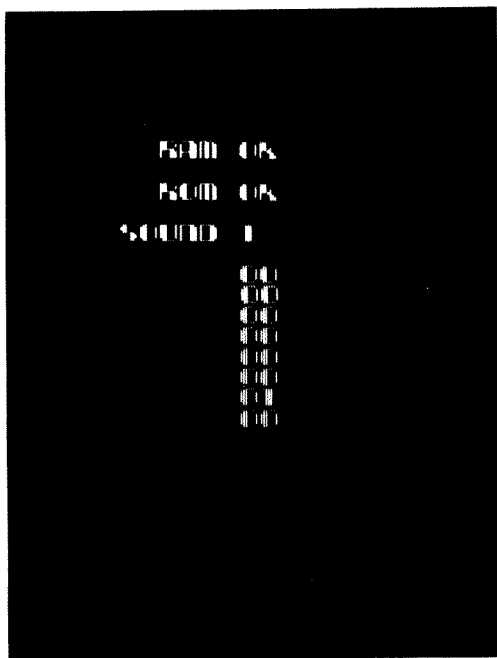
Chapter

2



## A. Obtaining a Self-Test Display

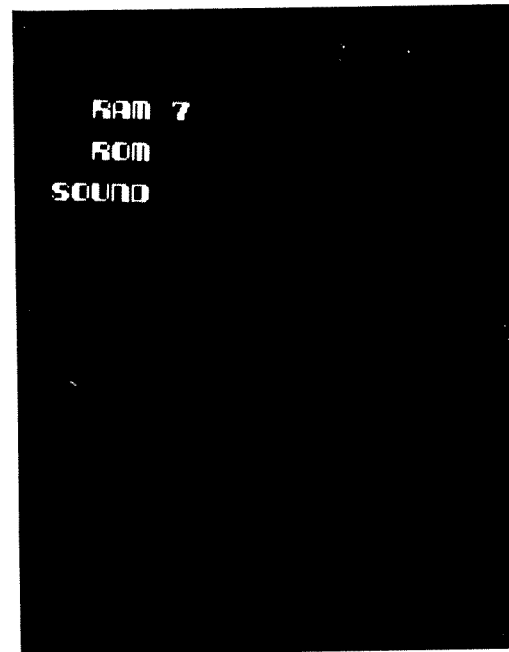
To enter the self-test mode, set the self-test switch to the on position (see Figure 1-1 for the location of this switch). Patterns will appear on the display for about 8 seconds, then a self-test display will appear. If the RAM and ROM chips are operating properly, the self-test display will appear as shown in Figure 2-1. If the display shows that the RAM and ROM chips are operating properly, perform the sound test and check the option switch positions as described in the following procedures.



**Figure 2-1 Self-Test Display (RAM and ROM Operating Properly)**

### RAM FAILURE

The first test performed is a RAM test. A RAM failure is indicated by the display shown in Figure 2-2. Examine the display and locate the defective RAM as described in the following procedure.



**Figure 2-2 Self-Test Display (RAM Failure)**

A RAM failure is indicated by the word *RAM* and a number or letter displayed at the top of the screen. The number or letter identifies the failed RAM. The following table lists the locations of each RAM.

**Table 2-1 RAM Locations**

Failed RAM Display	RAM Location (ATARI and NAMCO PCB)
RAM 7	1H (CPU PCB)
RAM 8	2S (Video PCB)
RAM 9	2R (Video PCB)
RAM A	2P (Video PCB)
RAM B	2D, 2H (Video PCB)
RAM C	2E, 2F (Video PCB)

### ROM FAILURE

The second test performed is a ROM test. A ROM failure is indicated by the display shown in Figure 2-3. Examine the display and locate the defective ROM as described in the following procedure.



**Figure 2-3 Self-Test Display (ROM Failure)**

A ROM failure is indicated by the word *ROM* and a number displayed at the top of the screen. The number identifies the failed ROM. The following table lists the location of each ROM.

**Table 2-2 ROM Locations**

Failed ROM Display	ROM Location	
	(CPU PCB) ATARI PCB	NAMCO PCB
ROM 1	1L	2L
ROM 2	1L	2M
ROM 3	1M	3M
ROM 4	1M	3P
ROM 5	4C	3J
ROM 6	4C	3F
ROM 7	2C	2C

## B. Checking Controls and Sounds

This game generates 16 individual sounds indicated by the word *SOUND* and a number or letter displayed on the screen as shown in Figure 2-1. Check the operation of each control and of the audio IC by pressing the ZAPPER, BLASTER, coin switch, start buttons, or moving the joystick to advance through the sounds. Table 2-3 lists the sounds and the event that the sound represents.

**Table 2-3 Xevious Sounds**

Display	Event
0	Credit
1	Get ready
2	Enter initials for high score
3	Enter initials for 2nd through 5th highest score
4	Bonus Solvalou
5	Destroy airborne enemy
6	Andor Genesis Mother Ship appearing
7	Mother Ship (Andor Genesis)
8	Escort appears (Sheonite)
9	Black balls (Brag Zakato)
A	Shots hit shields (Bacula)
B	ZAPPER
C	BLASTER
D	Special sound
E	Background
F	No sound



### C. Checking Option Settings

The self-test display indicates each position of the two 8-toggle option switches as shown in Figure 2-1. The left column of 8 zeros (0) or ones (1) represents the option switch at location 10D on the ATARI CPU PCB and 7D on the NAMCO CPU PCB. The right column represents the option switch at location 10B on the ATARI CPU PCB and 8D on the NAMCO CPU PCB. Switches are numbered from 1 at the top through 8 at the bottom of the column. A zero (0) displayed indicates that the corresponding option switch is in the off position; a one (1) displayed indicates the on position.

**NOTE**

Switch 1 in the right column is controlled by the BLASTER button. Switch 8 in the left column is always zero (0).

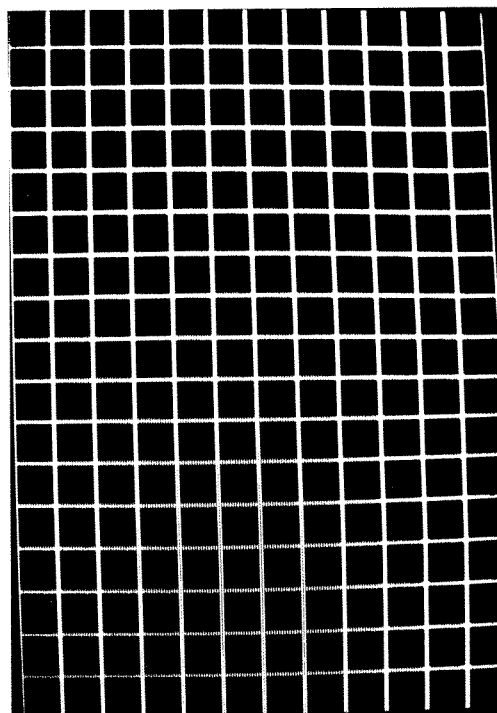


Figure 2-4 Crosshatch Pattern Display

### D. Checking Display Convergence

A crosshatch pattern as shown in Figure 2-4 is available in the self-test mode to check the video convergence. Refer to the raster-scan video display manual for specific convergence information.

To obtain a crosshatch display, set the self-test switch to the off position and back to the on position. To remove the crosshatch display, turn the game power off, then on again.

# Illustrated Parts Lists

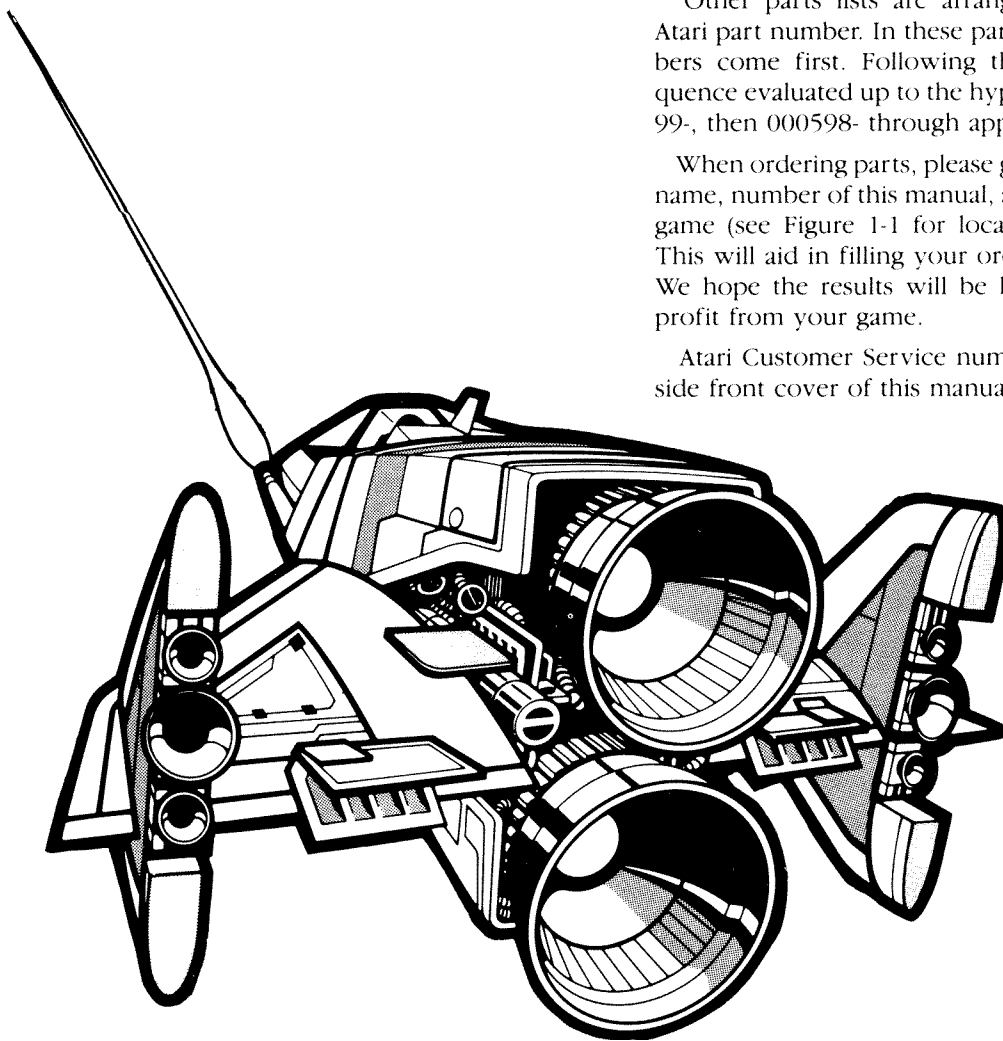
This chapter provides information needed to order parts for your game. Common hardware (screws, nuts, washers, etc.) has been deleted from most of the parts lists. However, a parts list for the hardware needed to mount the game and Regulator/Audio II printed-circuit boards to the cabinet has been included.

The PCB parts lists are arranged in alphabetical order by component type. Each component subsection is arranged alphanumerically by reference designator.

Other parts lists are arranged alphanumerically by Atari part number. In these parts lists, all A- prefix numbers come first. Following these are numbers in sequence evaluated up to the hyphen, namely 00- through 99-, then 000598- through approximately 201000-.

When ordering parts, please give the part number, part name, number of this manual, and serial number of your game (see Figure 1-1 for locations of serial numbers.) This will aid in filling your order rapidly and correctly. We hope the results will be less downtime and more profit from your game.

Atari Customer Service numbers are listed on the inside front cover of this manual for your convenience.



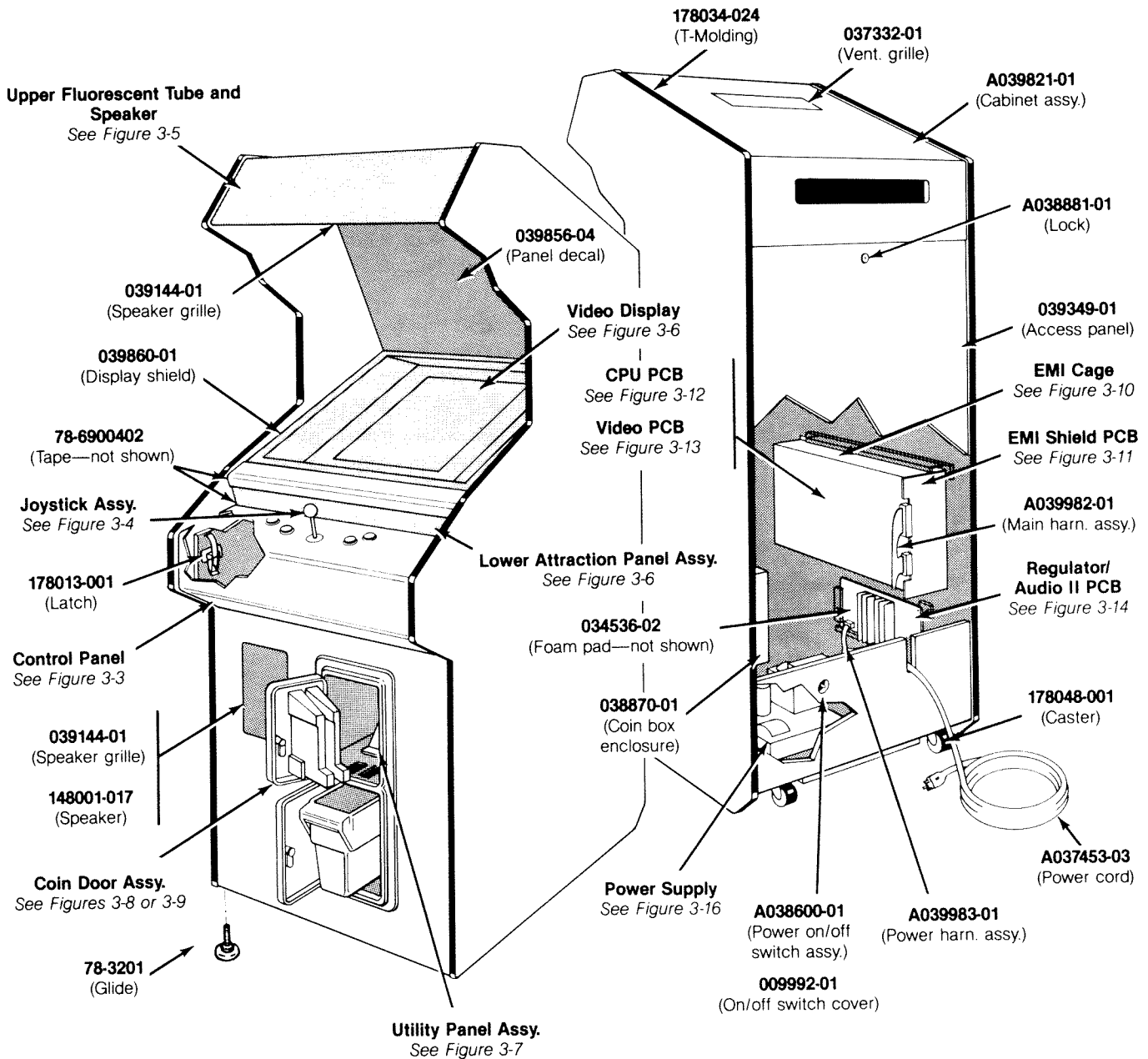
Chapter

3



# A. Cabinet-Mounted Assemblies

**Manuals, Schematics, & Self-Test Label—**  
See parts list on following page



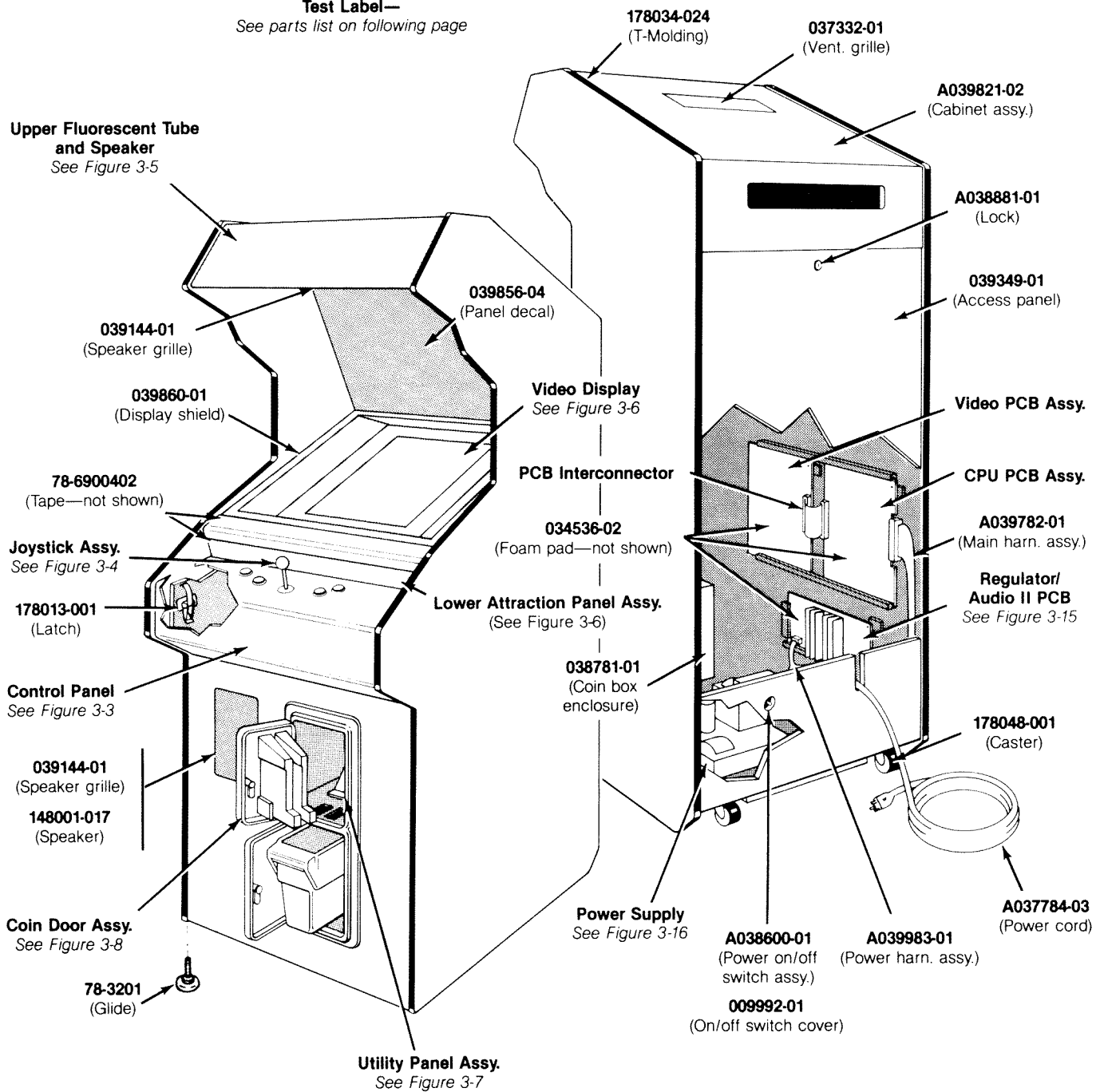
**Figure 3-1 Cabinet-Mounted Assemblies**  
**U.S.-Built A039820-01 A**

## Cabinet-Mounted Assemblies Parts List

<i>Part No.</i>	<i>Description</i>
A037453-03	Strain-Relief Power Cord <i>(U.S. and Canada)</i>
A037701-01	Electromagnetic Interference (EMI) Cage Assembly
A038600-01	Power On/Off Switch Mounting Plate Assembly
A038881-01	Lock Assembly <i>(for rear access panel)</i> <i>Acceptable substitute is part no. A038881-03.</i>
A039821-01	Cabinet Assembly <i>(includes glides and PCB retainers, but not the rear access panel)</i>
A039850-01	Lower Attraction Shield Assembly
A039941-01	EMI Shield PCB Assembly
A039982-01	Main Harness Assembly
A039983-01	Power Harness Assembly
<i>The following four items are the technical information supplements to this game:</i>	
SP-230	Xevious Schematic Package
ST-230-01	Xevious Label with Self-Test Procedure and Option Switch Settings
TM-220	Service Manual for 19-Inch Matsushita Color Raster-Scan Display <i>(use with part no. 139003-1004)</i> <i>Acceptable substitute is TM-160, for use with part no. 92-049.</i>
TM-230	Xevious Operators Manual
78-3201	Adjustable Glide
78-6900-02	Vinyl Foam Single-Coated Adhesive Tape, ¼-Inch Wide x ⅛ Inch Thick <i>(not shown—apply to the inside top and bottom of the lower attraction panel retainer and to the inside top of the control panel)</i>
009992-01	On/Off Switch Cover
034536-02	Foam Pad <i>(not shown—place between the Regulator/Audio II PCB and cabinet)</i>
037332-01	Ventilation Grille
038091-01	Molded Coin Box <i>(not shown)</i>
038870-01	Coin Box Enclosure
039144-01	Speaker Grille
039349-01	Rear Access Panel <i>(does not include lock)</i>
039856-04	Panel Decal
039860-01	Video Display Shield
139003-1004	Matsushita 19-Inch Color Raster Display <i>Acceptable substitute is 19-Inch Electrobome Display part no. 92-049.</i>
148001-017	6- x 9-Inch Oval, 8-Ohm, 6-Ounce, Shielded High-Fidelity Speaker
178013-001	Spring Draw Latch
178034-024	¾-Inch Black Plastic T-Molding
178048-001	2-Inch Rigid Caster



**Manuals, Schematics, & Self-Test Label—**  
See parts list on following page

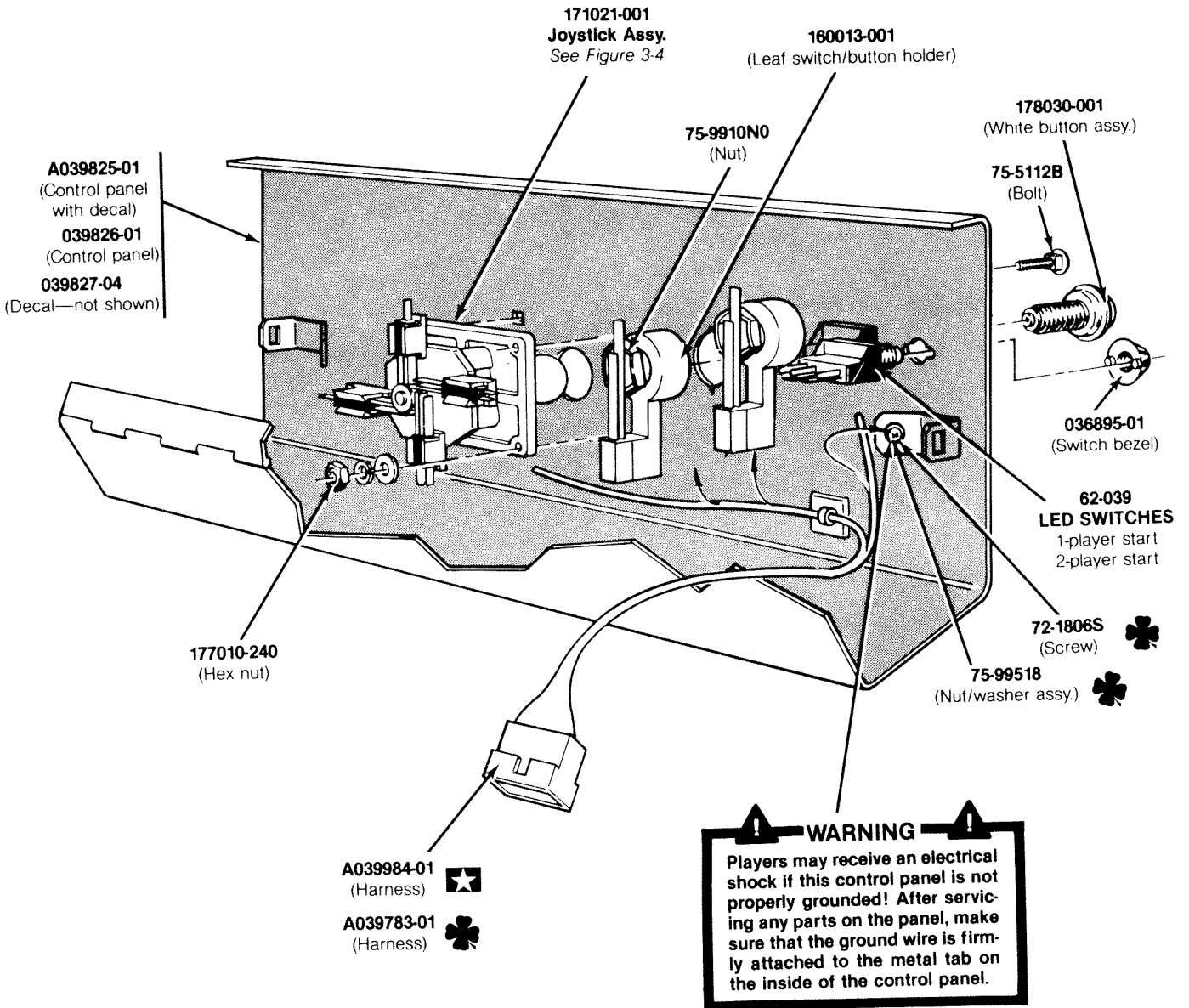


**Figure 3-2 Cabinet-Mounted Assemblies**  
**Ireland-Built A039820-02 A**

## Cabinet-Mounted Assemblies Parts List

Part No.	Description
A037784-03	Strain-Relief Power Cord <i>(United Kingdom, Ireland, Lebanon, Saudi Arabia, India, Hong Kong, Singapore, Egypt, Nigeria, Republic of South Africa, Zimbabwe)</i>
A038600-01	Power On/Off Switch Mounting Plate Assembly
A038881-01	Lock Assembly <i>(for rear access panel) Acceptable substitute is part no. A038881-03.</i>
A039782-01	Main Harness Assembly
A039821-02	Cabinet Assembly <i>(includes glides and PCB retainers, but not the rear access panel)</i>
A039983-01	Power Harness Assembly
<i>The following four items are the technical information supplements to this game:</i>	
SP-233	Xevious Schematic Package
ST-233-01	Xevious Label with Self-Test Procedure and Option Switch Settings
TM-160	Service Manual for 19-Inch Electrohome Color Raster-Scan Display <i>(use with part no. 92-049)</i> <i>Acceptable substitute is TM-220, for use with part no. 139003-1004.</i>
TM-230	Xevious Operators Manual
78-3201	Adjustable Glide
78-6900402	Vinyl Foam Single-Coated Adhesive Tape, ¼-Inch Wide x ⅛-Inch Thick <i>(not shown—apply to the inside top and bottom of the lower attraction panel retainer and to the inside top of the control panel)</i>
92-049	Electrohome 19-Inch Color Raster Display <i>Acceptable substitute is 19-Inch Matsushita Display part no. 139003-1004.</i>
009992-01	On/Off Switch Cover
034536-02	Foam Pad <i>(place between the Regulator/Audio II PCB, CPU PCB, and Video PCB and cabinet)</i>
037332-01	Ventilation Grille
038091-01	Molded Coin Box <i>(not shown)</i>
038781-01	Coin Box Enclosure
039144-01	Speaker Grille
039349-01	Rear Access Panel <i>(does not include lock)</i>
039856-04	Panel Decal <i>(not shown)</i>
039860-01	Video Display Shield
148001-017	6- x 9-Inch Oval, 8-Ohm, 6-Ounce, Shielded High-Fidelity Speaker
171046-001	CPU PCB, Video PCB, and Interconnector Cable Kit Assembly
175004-708	#8 Flat Fiber Washer
176015-112	#10 x ¼-Inch Cross-Recessed Pan-Head Tapping Screw
178013-001	Spring Draw Latch <i>(not shown)</i>
178034-024	¼-Inch Black Plastic T-Molding
178048-001	2-Inch Rigid Caster

## B. Control Panel Assemblies



**Figure 3-3 Control Panel Assembly**  
**U.S.-Built Cabinet A039824-01 A**  
**Ireland-Built Cabinet A039824-02 A**



## Control Panel Assembly Parts List

*Part No.*                      *Description*

### **U.S.-Built Cabinet**

A039984-01                      Control Panel Harness Assembly

### **Ireland-Built Cabinet**

A039783-01                      Control Panel Harness Assembly  
75-99518                      #8-32 Nut/Washer Assembly  
72-1806S                      #8-32 x .37-Inch Cross-Recessed Pan-Head Machine Screw

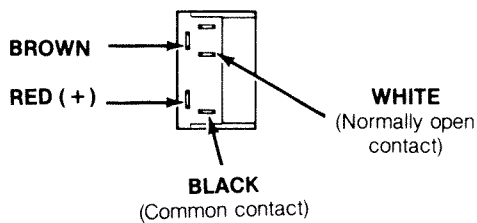
### **U.S.- and Ireland-Built Cabinets**

A039825-01                      Control Panel with Decal  
62-039                      SPDT Momentary Pushbutton Start Switch with Red Light-Emitting Diode  
75-9910N0                      3/8-Inch x 11 Stamped Nut  
75-5112B                      #10-24 x 3/4-Inch Black Carriage Bolt

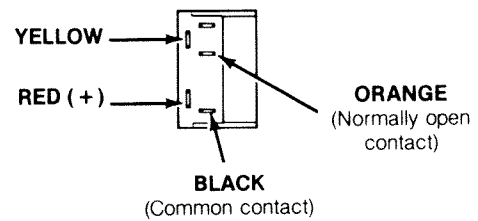
036895-01                      Black Molded Switch Bezel  
039826-01                      Control Panel  
039827-04                      Control Panel Decal *(not shown)*  
160013-001                      Leaf Switch and Button Holder *(leaf switch only is part no. 160012-001)*

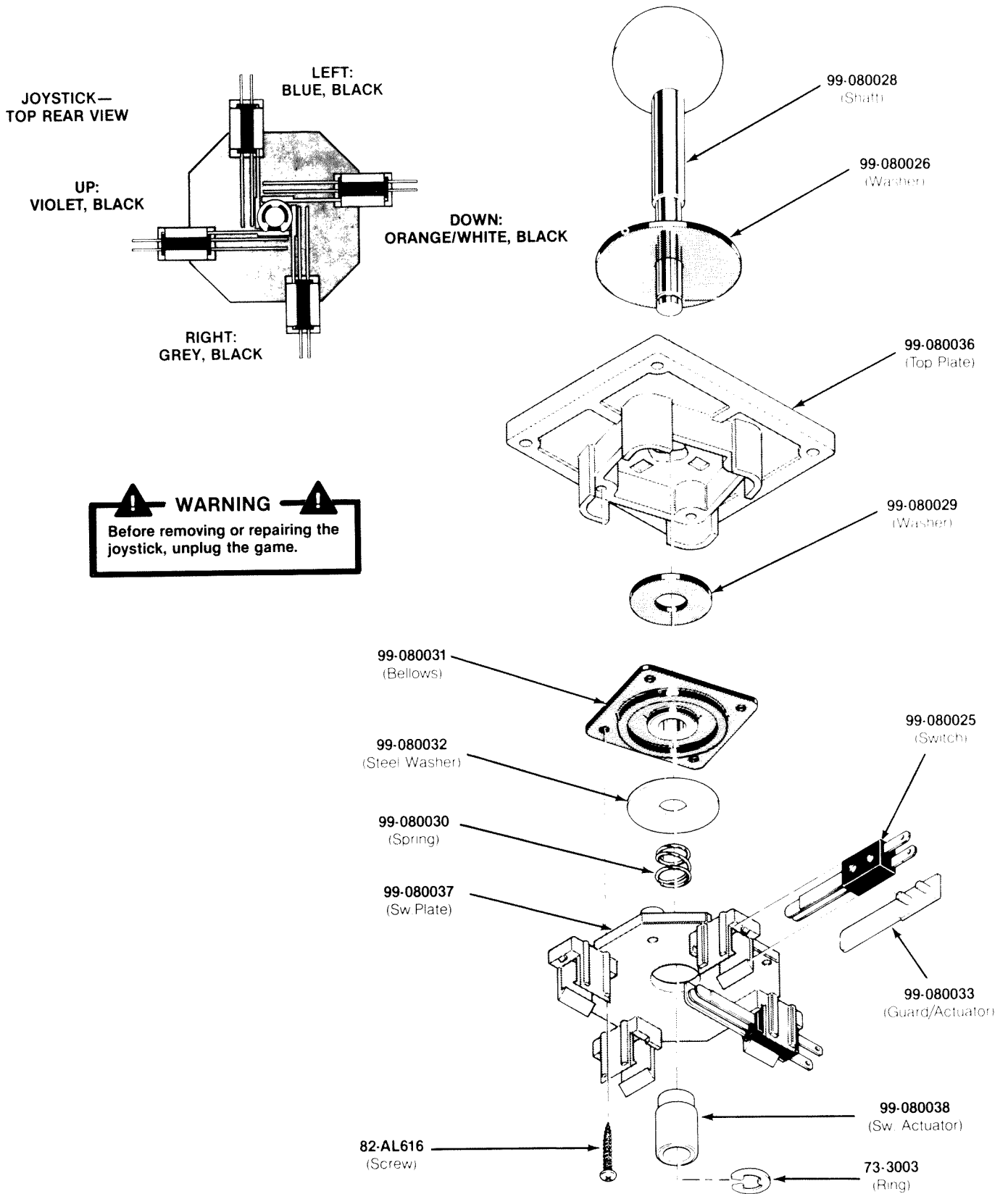
171021-001                      8-Position Joystick Assembly  
177010-240                      #10-24 Hex Locknut  
178030-001                      White Pushbutton Assembly

**1-PLAYER LED START SWITCH**



**2-PLAYER LED START SWITCH**





**Figure 3-4 8-Position Joystick Assembly  
171021-001**

**Figure 3-4 8-Position Joystick Assembly  
Parts List**

---

<i>Part No.</i>	<i>Description</i>
73-3003	Retaining Ring
82-AL616	#6 x 1-Inch Cross-Recessed Pan-Head Type BT Self-Tapping Steel Screw
99-080025	Leaf Switch
99-080026	2-Inch Black Plastic Washer
99-080028	Metal Shaft
99-080029	Nylon Washer
99-080030	Spring
99-080031	Bellows
99-080032	Flat Steel Washer
99-080033	Plastic Guard/Actuator
99-080036	Top Plate
99-080037	Switch Mounting Plate
99-080038	Nylon Switch Actuator

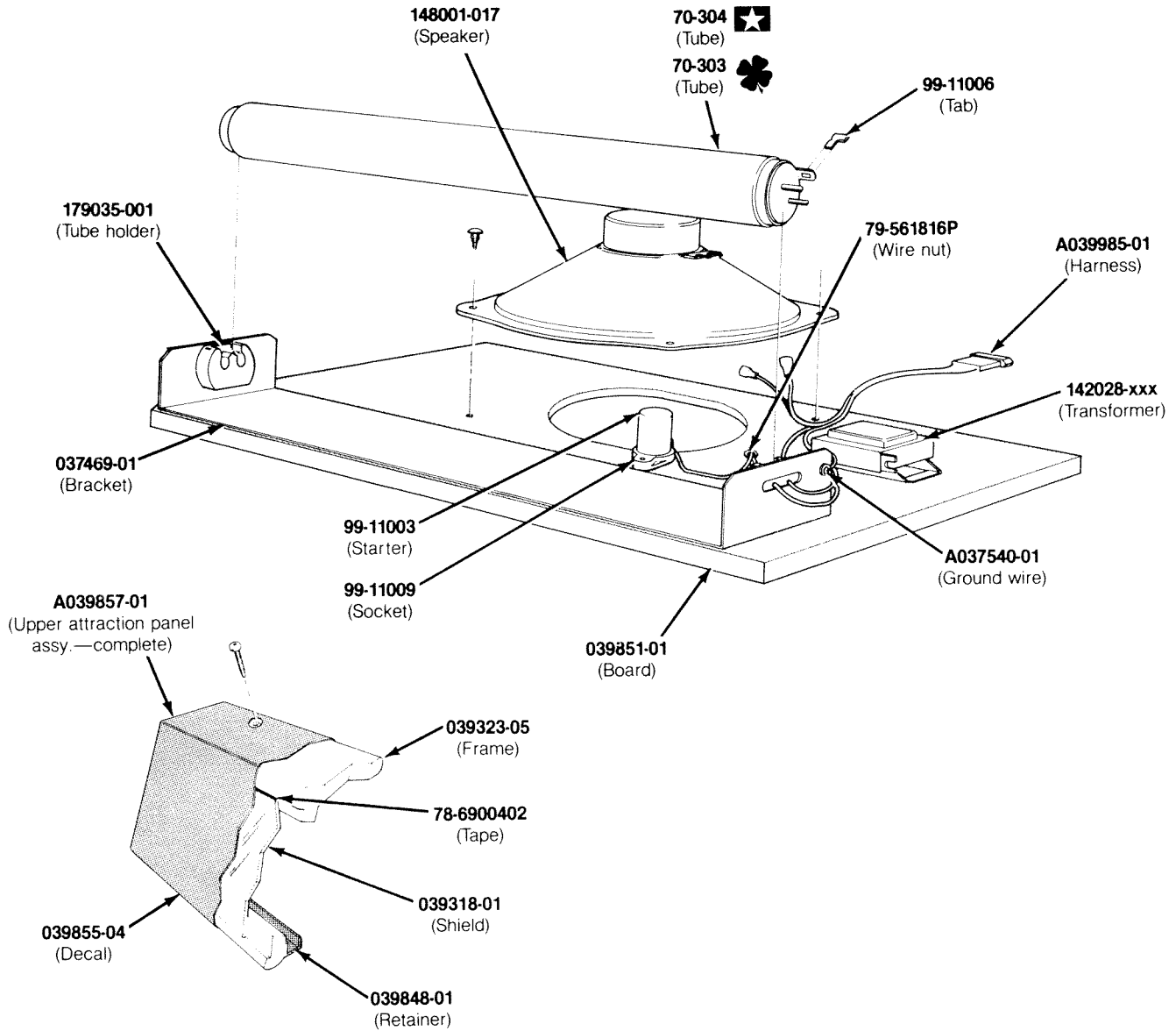
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# C. Upper Fluorescent Tube and Speaker Assemblies

**NOTE**

To ensure that the fluorescent tube starts, make sure the ground wire is firmly attached to both the transformer and the steel tube bracket. (The Ireland-built game does not have a tube bracket.)



**Figure 3-5 Upper Fluorescent Tube and Speaker Assemblies**  
**U.S.-Built A039852-01 A**  
**Ireland-Built A039852-02 A**

## Fluorescent Tube and Speaker Assembly Parts List

---

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

---

### ***U.S.-Built Cabinet***

A037540-01	Ground Wire with Ring Lug
70-304	18-Inch, 15-Watt, Cool White Fluorescent Tube
79-561816P	Spring-Connector Wire Nut for 16- to 18-Gauge Wires
99-11003	Fluorescent Tube Starter
99-11006	Fluorescent Tube Locking Tab <i>(consists of two pieces)</i>
99-11009	Starter Socket
037469-01	Steel Tube Bracket
142028-001	60 Hz, 118 V, Ballast Transformer <i>(used on A039852-01 assembly)</i>

### ***Ireland-Built Cabinet***

70-303	18-Inch, 15-Watt, Cool White Fluorescent Tube
99-11012	1 $\frac{1}{8}$ -Inch Fluorescent Tube Clamp <i>(not shown)</i>
035835-01	12-Inch Y-Lead Connector <i>(not shown)</i>
142028-002	50 Hz, 118 V, Ballast Transformer <i>(used on A039852-02 assembly)</i>

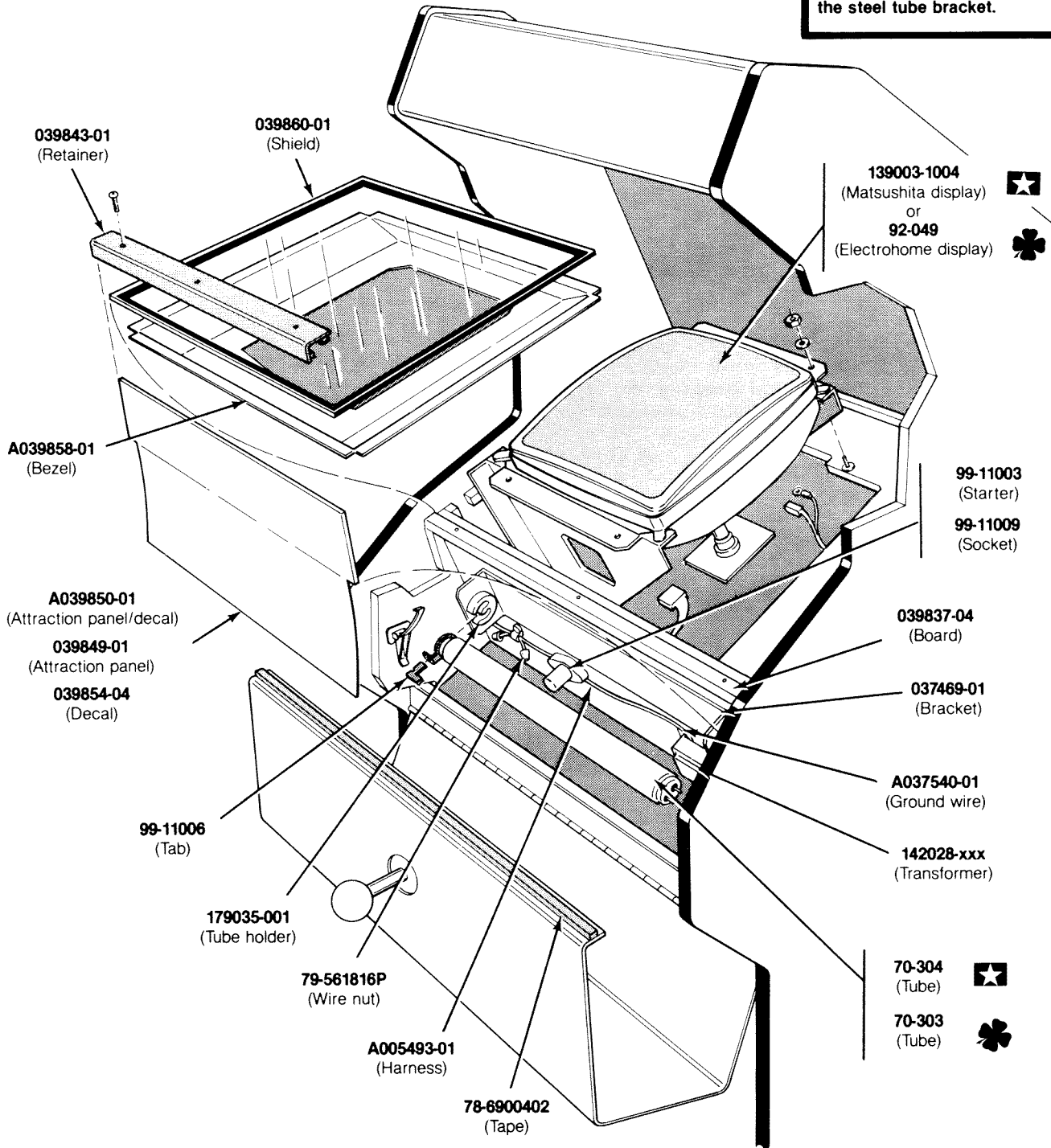
### ***For U.S.- and Ireland-Built Cabinets***

A039857-01	Upper Attraction Panel Assembly <i>(includes wood frame, decal, shield, and retainer)</i>
A039985-01	Tube and Speaker Harness Assembly
78-6900402	Vinyl Foam Single-Coated Adhesive Tape, $\frac{1}{4}$ -Inch Wide x $\frac{1}{8}$ -Inch Thick <i>(24 inches required)</i>
039144-01	Speaker Grille <i>(not shown)</i>
039318-01	Attraction Shield
039323-05	Wood Frame
039848-01	Upper Attraction Panel Retainer
039851-01	Tube and Speaker Board
039855-04	Decal
148001-017	6- x 9-Inch Oval, 8-Ohm, 6-Ounce, Shielded High-Fidelity Speaker
179035-001	2-Pin Fluorescent Tube holder

---

# D. Video Display and Lower Fluorescent Tube Assemblies

**NOTE**  
 To make sure that the fluorescent tube starts, check that the ground wire is firmly attached to both the ballast transformer and the steel tube bracket.



**Figure 3-6 Video Display and Lower Fluorescent Tube Assemblies**  
**U.S.-Built Cabinet A039853-01**  
**Ireland-Built Cabinet A039853-02**



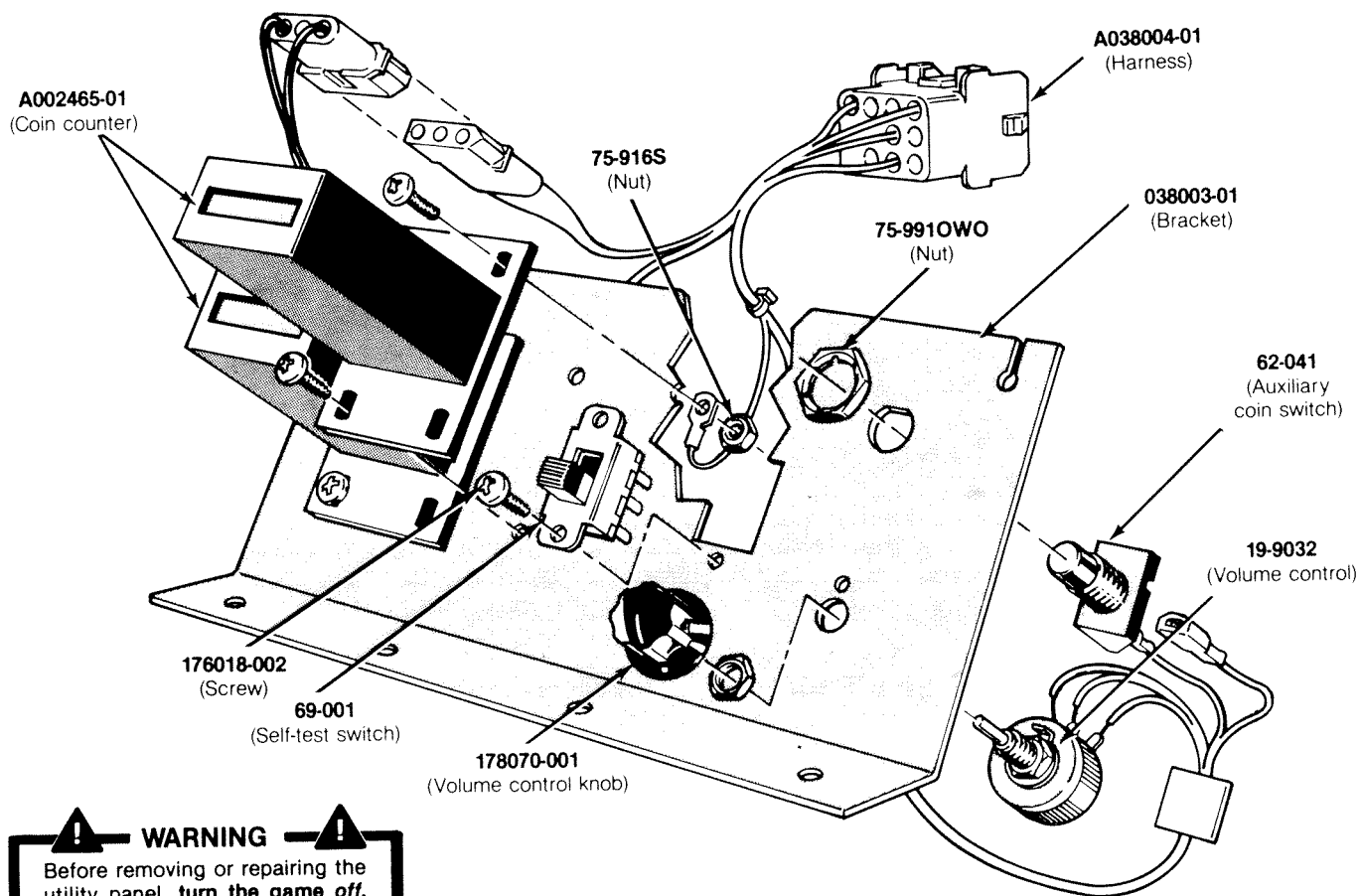
## Video Display U.S.- and Ireland-Built Cabinets Parts List

Part No.	Description
<b>For U.S.-Built Cabinet</b>	
139003-1004	19-Inch Matsushita Color Raster-Scan Display <i>Acceptable substitute is part no. 92-049</i>
<b>For Ireland-Built Cabinet</b>	
92-049	19-Inch Electrohome Color Raster-Scan Display <i>Acceptable substitute is part no. 139003-1004</i>
<b>For U.S.- and Ireland-Built Cabinets</b>	
039860-01	Display Shield
A039858-01	Display Bezel
039843-01	Display Shield and Lower Attraction Panel Retainer
78-6900402	Vinyl Foam Single-Coated Adhesive Tape, $\frac{3}{4}$ -Inch Wide x $\frac{1}{8}$ -Inch Thick <i>(48 inches required)</i>

## Lower Attraction Panel and Fluorescent Tube Assemblies Parts List

Part No.	Description
<b>U.S.-Built Cabinet</b>	
A037540-01	Ground Wire with Ring Lug
70-304	18-Inch, 15-Watt, Cool White Fluorescent Tube
99-11003	Fluorescent Tube Starter
99-11006	Fluorescent Tube Locking Tab <i>(consists of two pieces)</i>
99-11009	Starter Socket
037469-01	Steel Tube Bracket
142028-001	60 Hz, 118 V, Ballast Transformer <i>(used on A039852-01 assembly)</i>
<b>Ireland-Built Cabinet</b>	
70-303	18-Inch, 15-Watt, Cool White Fluorescent Tube
99-11012	$\frac{1}{8}$ -Inch Fluorescent Tube Clamp <i>(not shown)</i>
035835-01	12-Inch Y-Lead Connector <i>(not shown)</i>
142028-002	50 Hz, 118 V, Ballast Transformer <i>(not shown)</i>
<b>For U.S.- and Ireland-Built Cabinets</b>	
A005493-01	Fluorescent Tube Harness Assembly
A039850-01	Lower Attraction Panel with Decal
79-561816P	Spring-Connector Wire Nut for 16- to 18-Gauge Wires
039837-04	Tube and Attraction Panel Support Board
039849-01	Lower Attraction Panel <i>(does not include decal)</i>
039854-04	Lower Attraction Panel Decal
179035-001	2-Pin Fluorescent Tube Holder

# E. Utility Panel Assembly



**WARNING**

Before removing or repairing the utility panel, **turn the game off**. Players may receive an electrical shock if the utility panel is not properly grounded! After servicing any parts on the panel, make sure that the ground wire is firmly attached to the metal screw on the back of the coin counter.

**NOTE**

Only the Ireland-built cabinet has two coin counters.

**Figure 3-7 Utility Panel Assembly  
A038002-01 & -02 G  
Parts List**

Part No.	Description
A002465-01	6 V Coin Counter
A038004-01	Utility Panel Harness
19-9032	Volume Control
62-041	SPDT Momentary-Contact Pushbutton Auxiliary Coin Switch with Black Cap
69-001	DPDT Self-Test Switch
75-916S	#6-32 Standard Machine Nut
038003-01	Utility Panel
75-9910WO	1 1/2-32 Stamped Nut
176018-002	#6-32 x 1/2-Inch Pan Head Machine Screw
178070-001	Volume Control Knob

# F. Coin Door Assemblies

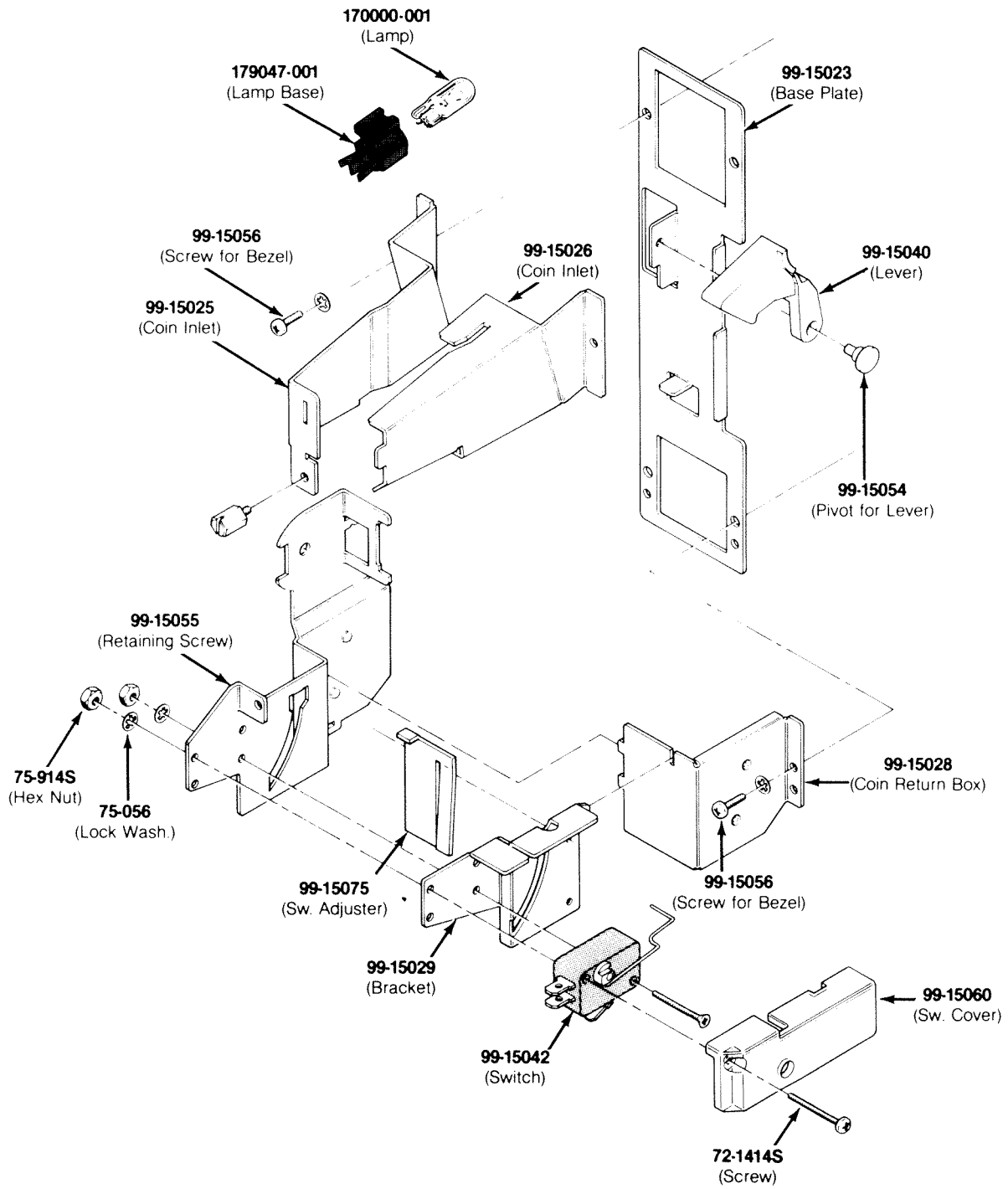
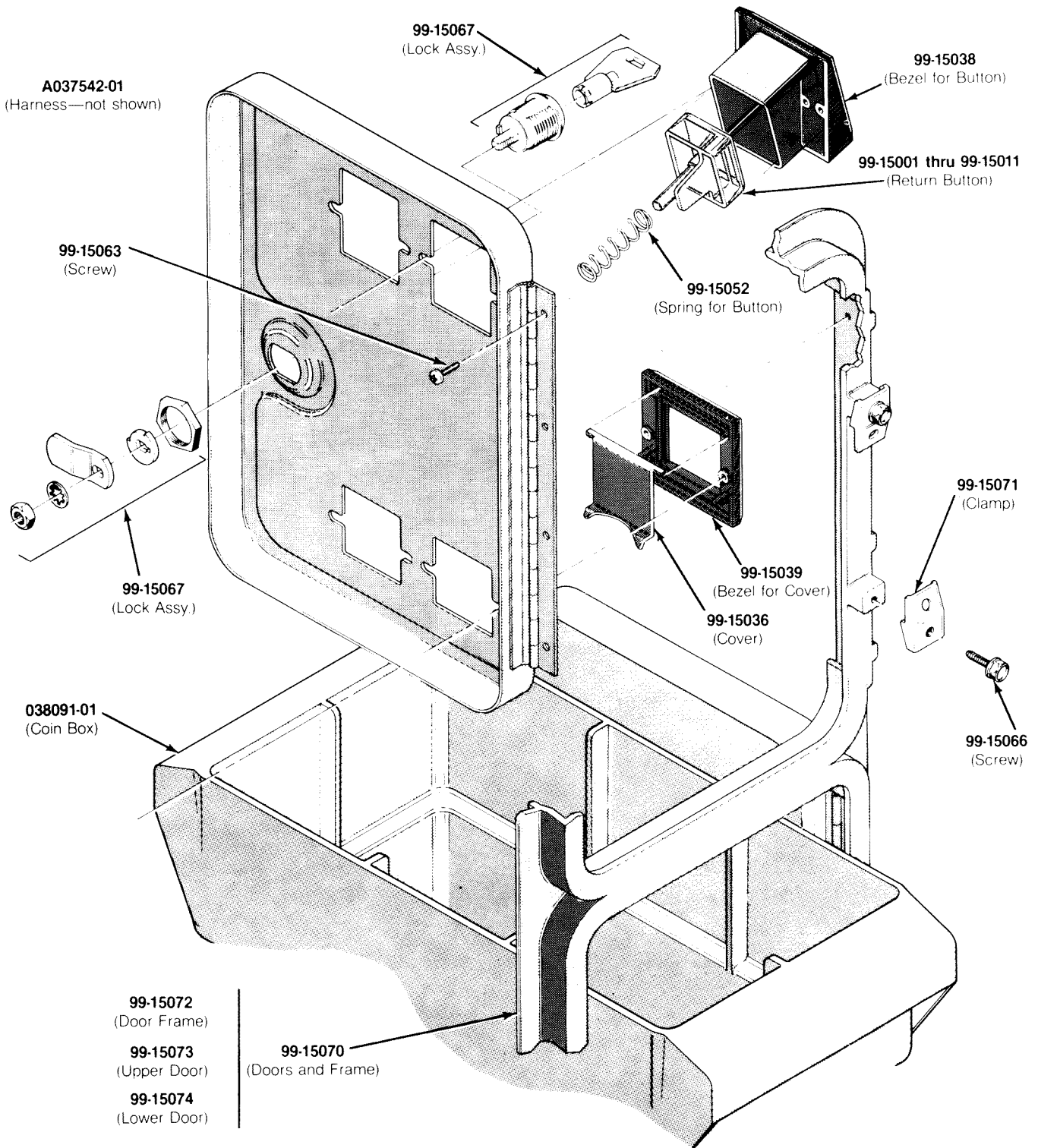


Figure 3-8 Vertically Mounted Coin Door  
171034-xxx A





171034-001 — U.S. 25¢/25¢ Coin Door  
 171034-003 — Canadian 25¢/25¢ Coin Door  
 171034-005 — U.K. 10 P/50 P Coin Door

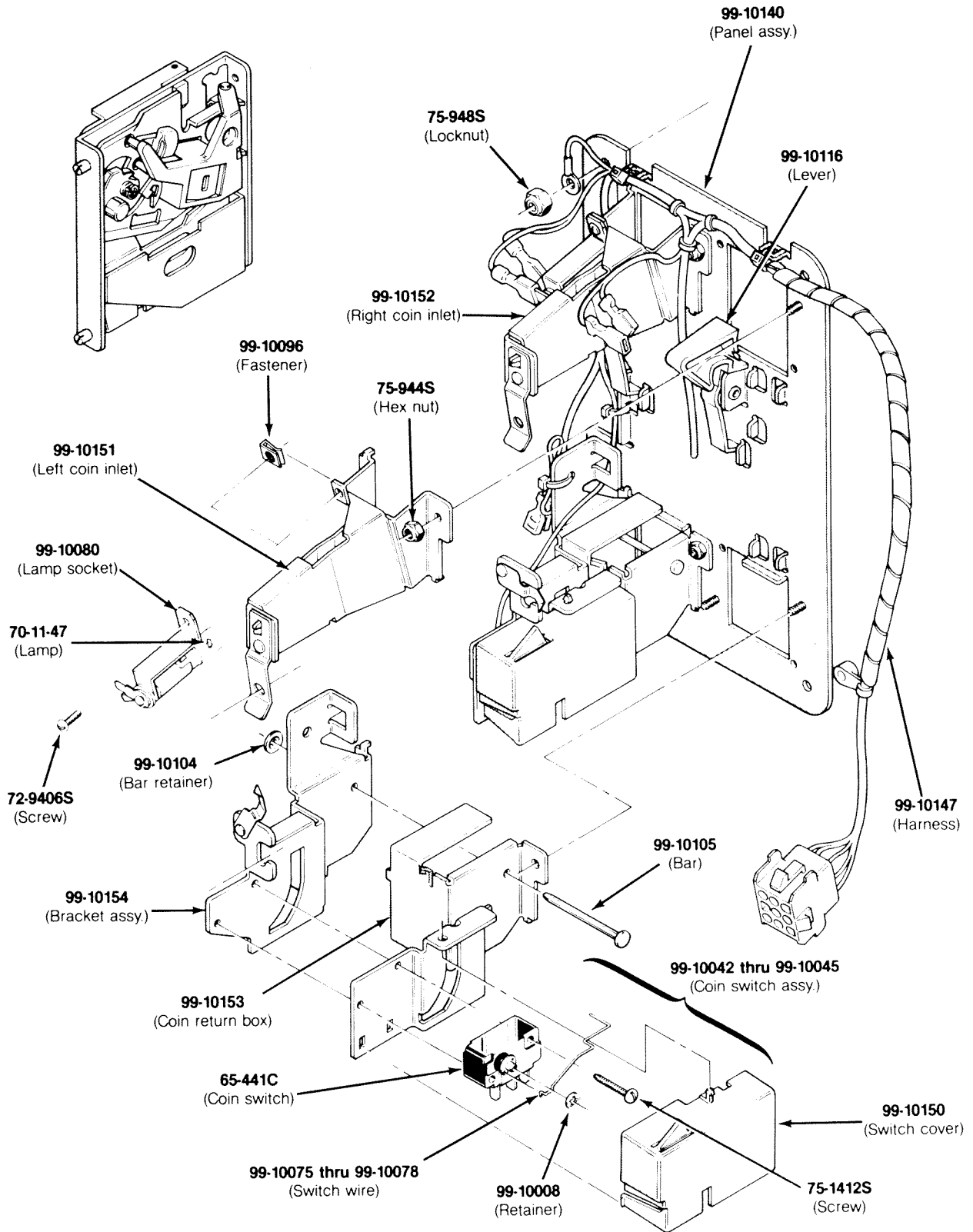
171034-006 — U.K. 20 P/50 P Coin Door  
 171034-009 — German 2 DM/1 DM Coin Door  
 171034-010 — German 2 DM/5 DM Coin Door

171034-011 — German 1 DM/5 DM Coin Door  
 171034-015 — French 2 Fr/1 Fr Coin Door

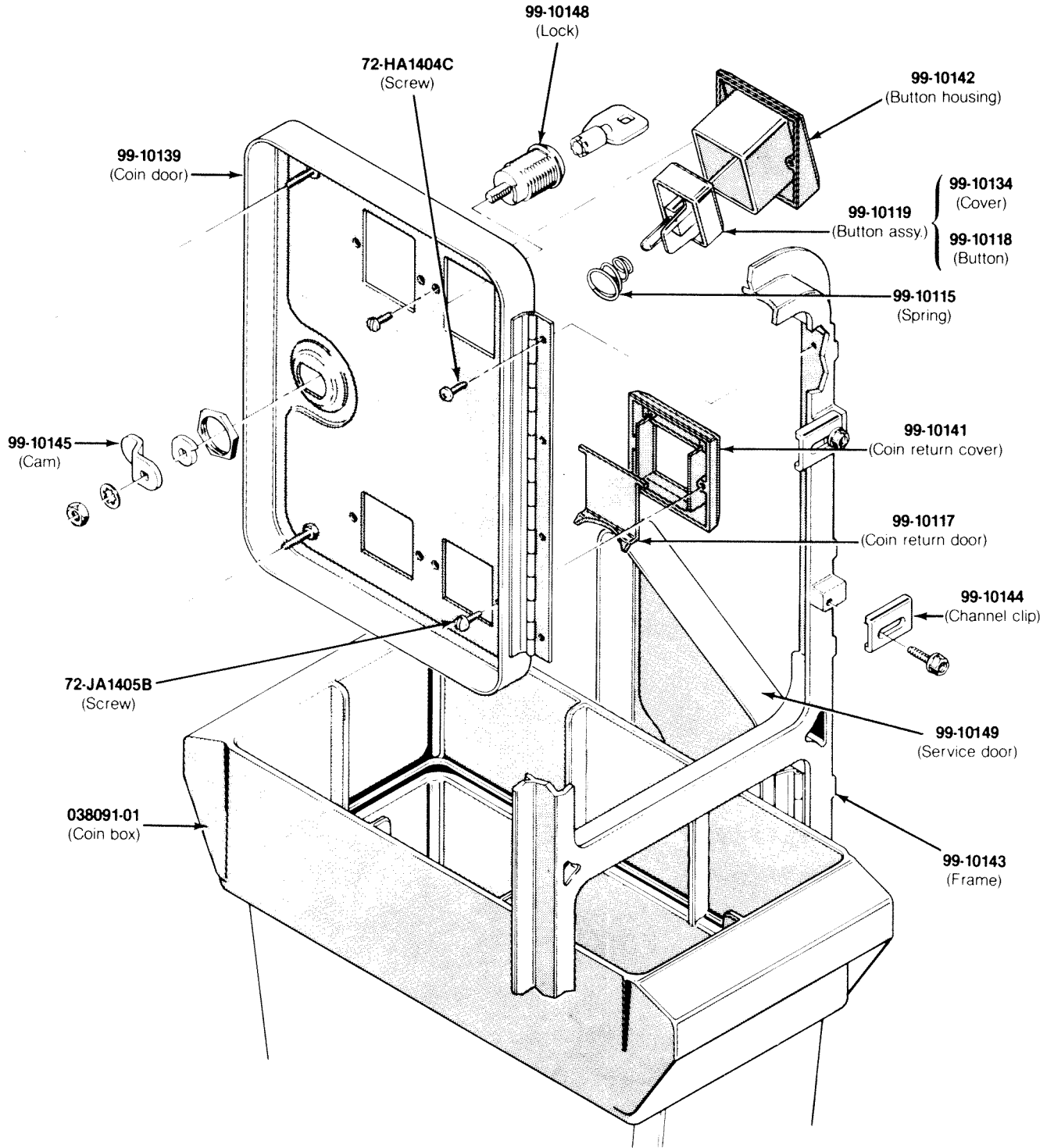
**Figure 3-8 Vertically Mounted Coin Door, continued**  
**171034-xxx A**

## Vertically Mounted Coin Door Parts List

<i>Part No.</i>	<i>Description</i>
A037542-01	Harness Assembly
72-1414S	#4-40 × 7/8-Inch Cross-Recessed Pan-Head Steel Machine Screw
75-056	#6 Internal-Tooth Zinc-Plated Steel Lock Washer
75-914S	#4-40 Steel Machine Hex Nut
75-3414S	#4-40 × 7/8-Inch 82° Cross-Recessed Flat-Head Steel Machine Screw
99-15001	Coin Return Button with U.S. 25¢ Price Plate
99-15002	Coin Return Button with U.S. \$1 Price Plate
99-15003	Coin Return Button with German 1 DM Price Plate
99-15004	Coin Return Button with German 2 DM Price Plate
99-15005	Coin Return Button with German 5 DM Price Plate
99-15006	Coin Return Button with Belgian 5 Fr Price Plate
99-15007	Coin Return Button with French 1 Fr Price Plate
99-15008	Coin Return Button with Japanese 100 Yen Price Plate
99-15009	Coin Return Button with British 10 Pence Price Plate
99-15010	Coin Return Button with Australian 20¢ Price Plate
99-15011	Coin Return Button with Italian 100 Lire Price Plate
99-15023	Base Plate
99-15025	Left Half of Coin Inlet
99-15026	Right Half of Coin Inlet
99-15027	Side Plate of Coin Return Box
99-15028	Base Plate of Coin Return Box
99-15029	Switch Bracket
99-15036	Metal Coin Return Cover
99-15038	Bezel for Coin Return Button
99-15039	Metal Bezel for Coin Return Cover
99-15040	Coin Return Lever
99-15042	Coin Switch for U.S. 25¢
99-15052	Spring for Coin Return Button
99-15054	Pivot for Coin Return Lever
99-15055	Retaining Screw
99-15056	#4-40 × 7/16-Inch Cross-Recessed Pan-Head Steel Machine Screw
99-15060	Switch Cover
99-15063	Screw for Hinge
99-15066	Screw for Clamp
99-15067	Lock Assembly
99-15070	Doors and Frame
99-15071	Clamp for Frame
99-15072	Door Frame
99-15073	Upper Door
99-15074	Lower Door
99-15075	Switch Adjuster
038091-01	Coin Box <i>(Not included in assembly) Acceptable substitute is part number A037491-01</i>
170000-001	6.3 V Miniature Wedge-Base Incandescent Lamp
171006-035	Metal Coin Mechanism
179047-001	Lamp Base



**Figure 3-9 American-Made Coin Door  
171027-001 A**



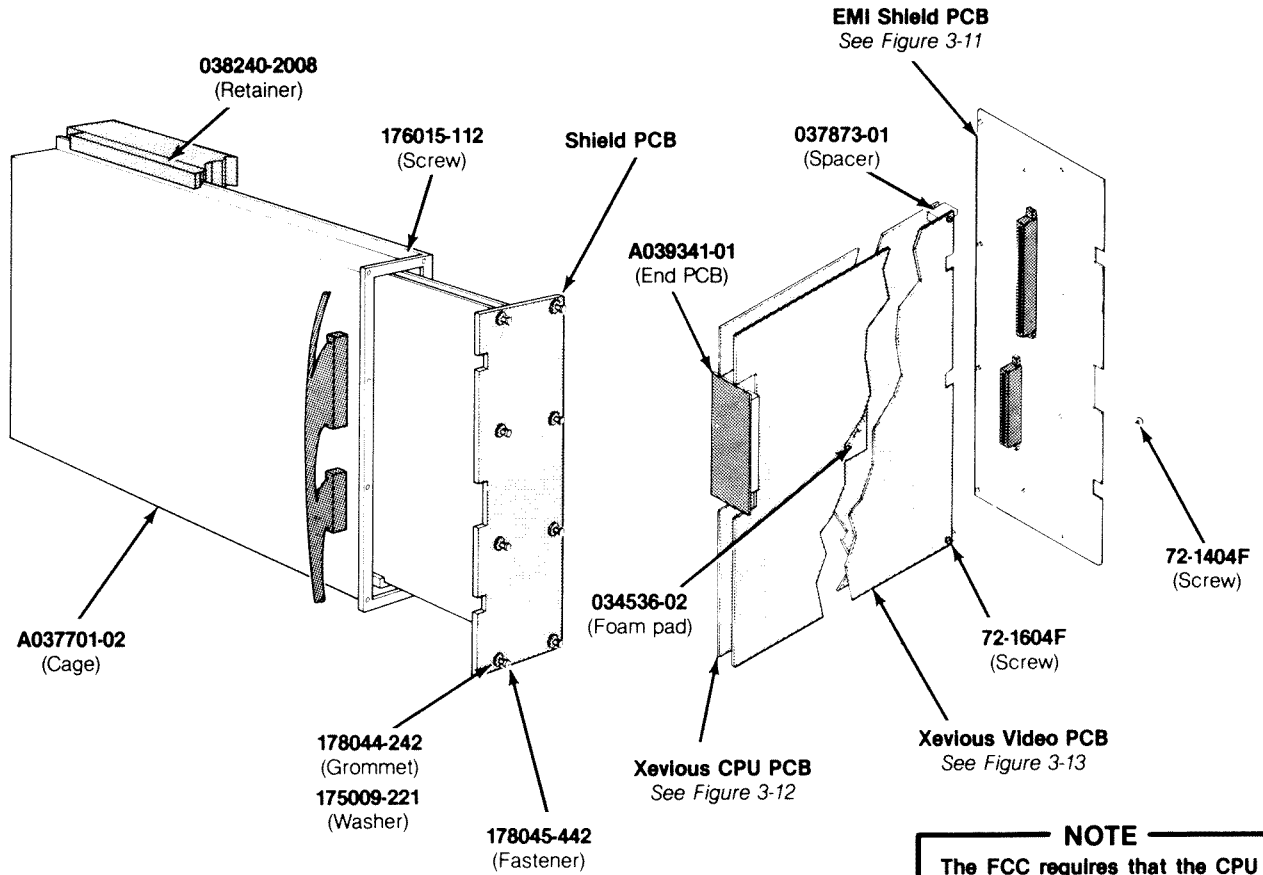
**Figure 3-9 American-Made Coin Door, continued**  
**171027-001 A**



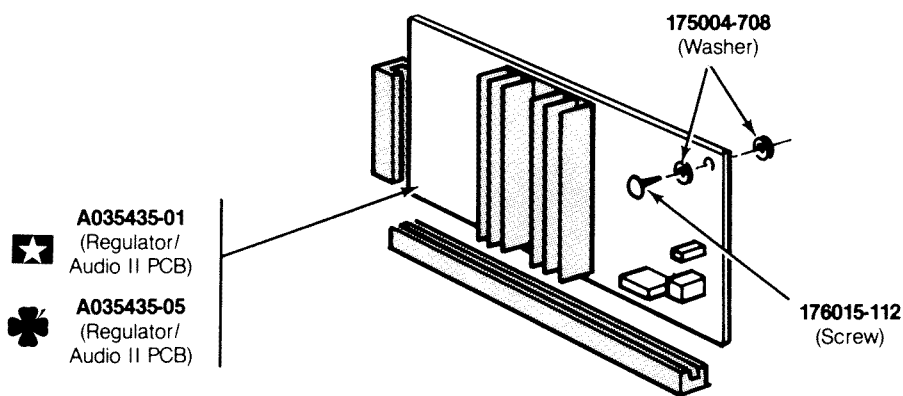
## American-Made Coin-Door Assembly Parts List

<i>Part No.</i>	<i>Description</i>
171006-035	Metal Coin Mechanism for U.S. \$.25
65-441C	Coin Switch
70-11-47	Miniature Bayonet Lamp
72-9406S	#4-40 x 3/8-Inch Truss-Head Screw
72-HA1404C	#4-40 x 1/4-Inch Pan-Head Screw
72-JA1405B	#4-40 x .31-Inch Pan-Head Screw
75-1412S	#4-40 x 3/4-Inch Pan-Head Screw
75-994S	#4-40 Lock Nut
99-10008	Retainer
99-10042	Coin Switch Assembly for Belgian 5 Fr and U.S. \$.25
99-10043	Coin Switch Assembly for German 1 DM, Japanese 100 Yen, Swiss 1 Fr
99-10044	Coin Switch Assembly for German 2 DM, Italian 100 L, U.S. \$1.00
99-10045	Coin Switch Assembly for Australian \$.20, German 5 DM, British 10 P
99-10068	Coin Return Chute
99-10075	Switch wire <i>(included in coin switch assembly)</i>
99-10076	Switch wire <i>(included in coin switch assembly)</i>
99-10077	Switch wire <i>(included in coin switch assembly)</i>
99-10078	Switch wire <i>(included in coin switch assembly)</i>
99-10080	Lamp socket
99-10081	Key holder
99-10096	Fastener
99-10104	Bar retainer
99-10105	Bar
99-10115	Spring
99-10116	Plastic Coin Return Lever
99-10117	Steel Coin Return Door
99-10118	Amber Coin Return Button
99-10119	Amber Coin Button for U.S. \$.25
99-10134	Coin Button Cover
99-10139	Coin Door
99-10140	Coin Door Inner-Panel Assembly
99-10141	Diecast Coin Return Cover
99-10142	Diecast Button Housing
99-10143	Coin Door Frame
99-10144	Coin Door Channel Clip
99-10145	Offset Cam <i>(includes 99-10148—Lock)</i>
99-10146	Coin Inlet Chute Assembly
99-10147	American-Made Coin Door Harness
99-10149	Service Door
99-10150	Switch Cover
99-10151	Left Coin Inlet
99-10152	Right Coin Inlet
99-10153	Coin Return Box
99-10154	Bracket Assembly

# G. Printed-Circuit Boards



**NOTE**  
The FCC requires that the CPU PCB and Video PCB be housed in the EMI cage with the Shield PCB attached.

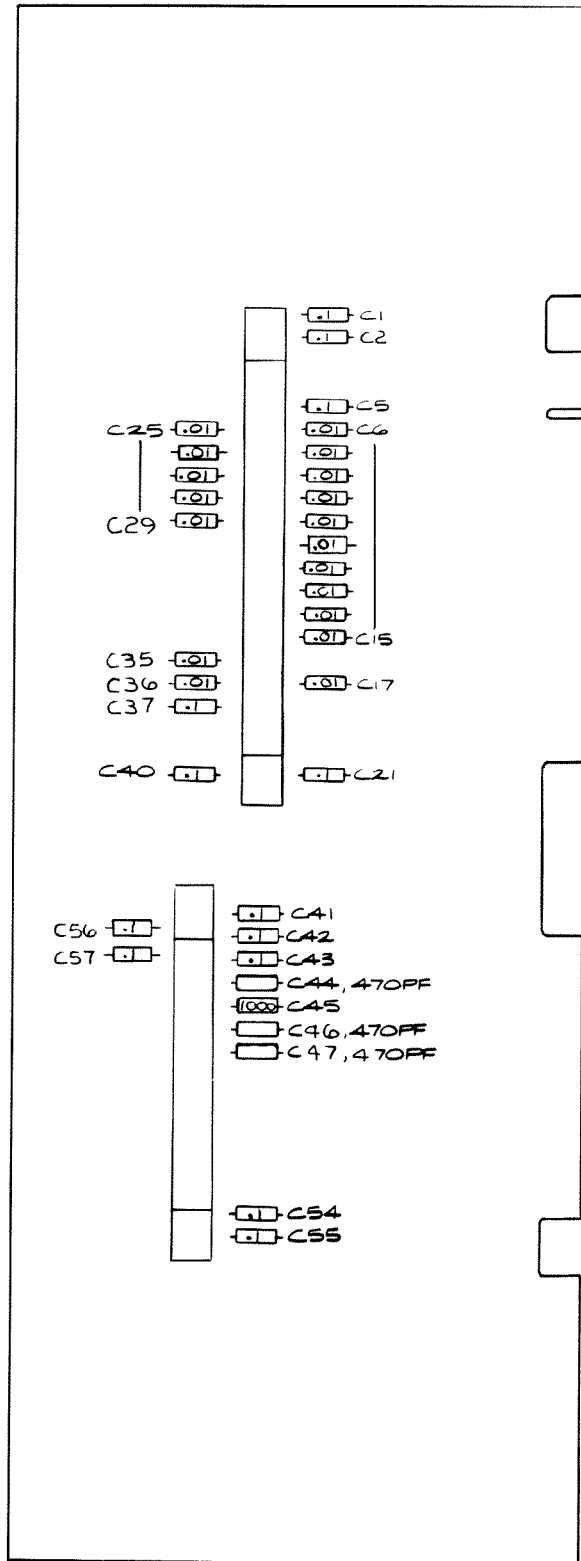


**Figure 3-10 Electromagnetic Interference (EMI) Cage Assembly and Printed-Circuit Board Mounting Hardware**

## EMI Cage Assembly and Printed-Circuit Board Mounting Hardware Parts List

<i>Part No.</i>	<i>Description</i>
<b><i>U.S.-Built Cabinet</i></b>	
A037701-01	EMI Cage <i>(includes guide)</i>
A037667-02	EMI Shield PCB
A039431-01	End PCB
72-1404F	#4-40 x ¼-Inch Cross-Recessed Steel Screw
72-1604F	#6-32 x ¼-Inch Cross-Recessed Steel Screw
034536-02	Foam Pad <i>(not shown)</i>
037873-01	Spacer
038240-2008	EMI Cage Retainer
175004-708	#8 Flat Fiber Washer
175009-221	Plastic Washer
176015-112	#10 x ¾-Inch Cross-Recessed Pan-Head Screw
178045-442	Snap-In Fastener
179125-001	Grounding Clip <i>(not shown)</i>
<b><i>Ireland -Built Cabinet</i></b>	
034536-02	Foam Pad <i>(not shown)</i>
175004-708	#8 Flat Fiber Washer
176015-112	#10 x ¾-Inch Cross-Recessed Pan-Head Screw

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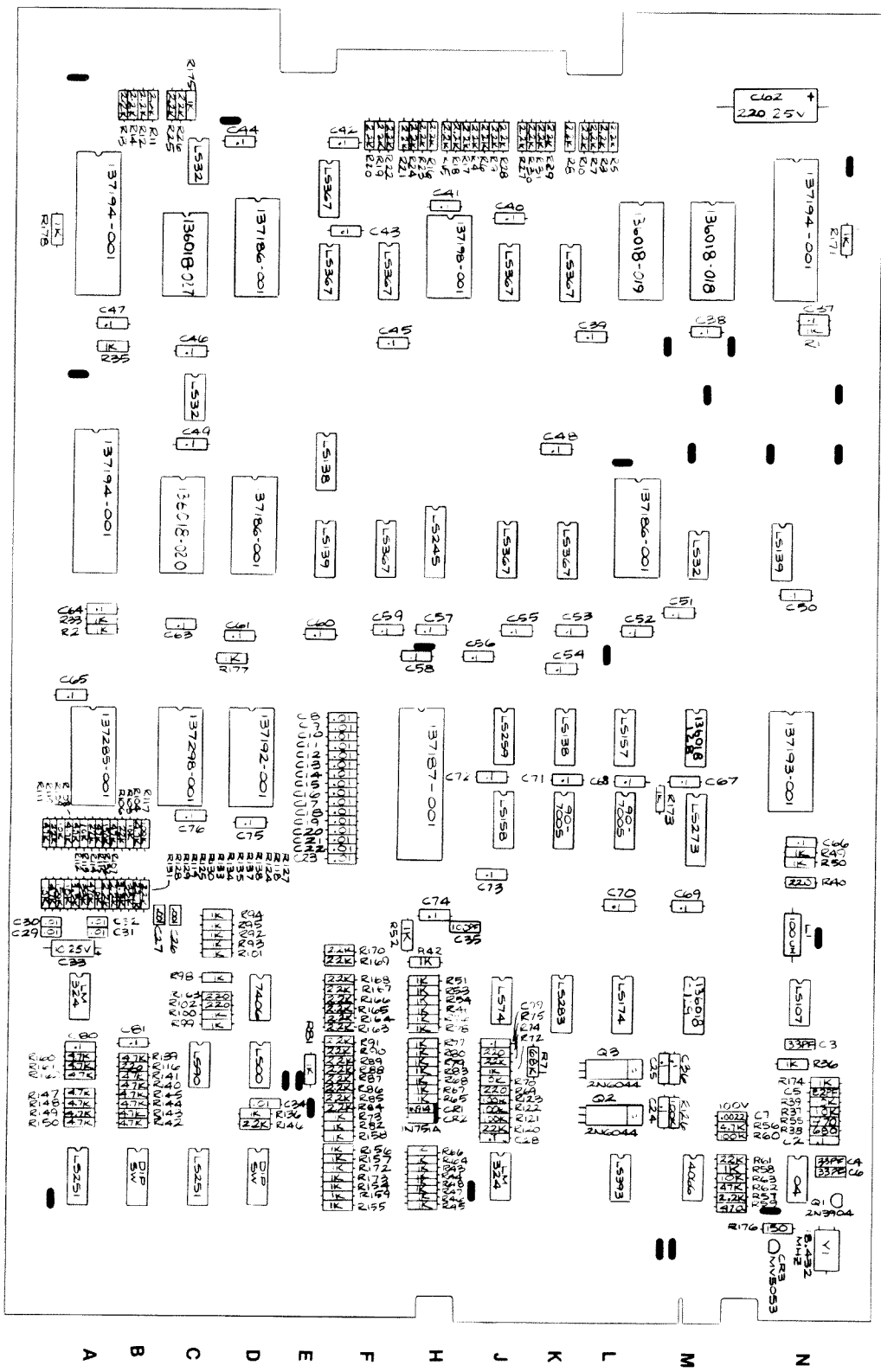
**Figure 3-11 EMI Shield PCB Assembly**  
**A037667-02 A**



## EMI Shield PCB Assembly Parts List

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
<b>Capacitors</b>		
C1, C2	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C5	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C6-C15	0.01 $\mu$ F, +80, -20%, 25 V Ceramic-Disk Axial-Lead Capacitor	122005-103
C17	0.01 $\mu$ F, +80, -20%, 25 V Ceramic-Disk Axial-Lead Capacitor	122005-103
C21	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C25-C29	0.01 $\mu$ F, +80, -20%, 25 V Ceramic-Disk Axial-Lead Capacitor	122005-103
C35, C36	0.01 $\mu$ F, +80, -20%, 25 V Ceramic-Disk Axial-Lead Capacitor	122005-103
C37	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C40	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C43	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C54	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C57	0.1 $\mu$ F, +80, -20%, 50 V Ceramic-Disk Capacitor	122002-104
C44	470 pF, 100 V, NPO Ceramic-Disk Axial-Lead Capacitor	122016-471
C45	1000 pF, $\pm$ 5%, 100 V, NPO Ceramic-Disk Axial-Lead Capacitor	122016-102
C46, C47	470 pF, 100 V, NPO Ceramic-Disk Axial-Lead Capacitor	122016-471
<b>Connectors</b>		
P19	30-Pin Card-Edge Connector <i>Acceptable substitute is part no. 179046-030</i>	179073-030
P20	44-Pin Card-Edge Connector <i>Acceptable substitute is part no. 179046-044</i>	179073-044

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Figure 3-12 Xevious CPU Printed-Circuit Board Assembly (ATARI)  
A039785-21 A

## Xevious CPU Printed-Circuit Board Assembly (ATARI) Parts List

Designator	Description	Part No.
<b>Capacitors</b>		
C2	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
C3, C4	33 pF, 100 V Minimum, Dipped, Fixed-Mica Capacitor	128002-330
C5	82 pF, $\pm$ 5%, 100 V, NPO Axial-Lead Ceramic Capacitor	122016-820
C6	33 pF, 100 V Minimum, Dipped, Fixed-Mica Capacitor	128002-330
C7	2200 pF, $\pm$ 10%, 50 V Minimum, Radial-Lead Ceramic Capacitor	121015-222
C8-C23	0.01 $\mu$ F, 50 V Ceramic Capacitor	27-500103
C24, C25	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
C26, C27	0.001 $\mu$ F, $\pm$ 10%, 100 V, Axial-Lead Mylar-Film Capacitor	125001-102
C28	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
C29-C32	0.01 $\mu$ F, $\pm$ 10%, 100 V, Axial-Lead Mylar-Film Capacitor	125000-103
C33	10 $\mu$ F, 25 V Aluminum Electrolytic Axial-Lead Capacitor	24-250106
C34	0.01 $\mu$ F, 50 V Ceramic Capacitor	27-500103
C35	100 pF, $\pm$ 10%, 50 V Minimum, Radial-Lead Ceramic Capacitor	121015-101
C36	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
C37-C61	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
C62	220 $\mu$ F, 25 V Aluminum Electrolytic Axial-Lead Capacitor	24-250227
C63-C76	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
C79-C81	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
C83	0.1 $\mu$ F, +80, -20%, 50 V, Ceramic Capacitor	122002-104
<b>Diodes</b>		
CR1	Type-1N914, 250 mW, 100 V Switching Diode	31-1N914
CR2	Type-1N751A, 500 mW, 5.1 V Zener Diode	32-1N751A
CR3	Type-MV5053 Light-Emitting Diode	38-MV5053
<b>Inductor</b>		
L1	100 $\mu$ H, $\pm$ 10% Inductor	141002-001
<b>Integrated Circuits</b>		
1A	Microprocessor Integrated Circuit	137194-001
4A	Microprocessor Integrated Circuit	137194-001
6A	3-Channel Multiplexer Integrated Circuit	137285-001
8A	Type-LM324 Integrated Circuit	37-LM324
10A	Type-74LS251 Integrated Circuit	37-74LS251
1C	Type-74LS32 Integrated Circuit	37-74LS32
3C	Type-74LS32 Integrated Circuit	37-74LS32
6C	Sound Sequencer Integrated Circuit	137298-001
9C	Type-74LS90 Integrated Circuit	37-74LS90
10C	Type-74LS251 Integrated Circuit	37-74LS251
1D	Controller Integrated Circuit	137186-001
4D	Controller Integrated Circuit	137186-001
6D	Controller Integrated Circuit	137192-001
8D	Type-7406 Integrated Circuit	37-7406
9D	Type-74LS00 Integrated Circuit	37-74LS00
1E, 2E	Type-74LS367 Integrated Circuit	37-74LS367

(Continued on next page)

## Xevious CPU Printed-Circuit Board Assembly (ATARI) Parts List, continued

Designator	Description	Part No.
4E	Type-74LS138 Integrated Circuit	137177-001
5E	Type-74LS139 Integrated Circuit	37-74LS139
2F	Type-74LS367 Integrated Circuit	37-74LS367
5F	Type-74LS367 Integrated Circuit	37-74LS367
5H	Type-74LS245 Integrated Circuit	37-74LS245
6H	Controller Integrated Circuit	137187-001
2J	Type-74LS367 Integrated Circuit	37-74LS367
5J	Type-74LS367 Integrated Circuit	37-74LS367
6J	Type-74LS259 Integrated Circuit	37-74LS259
7J	Type-74LS158 Integrated Circuit	137203-001
8J	Type-74LS74 Integrated Circuit	37-74LS74
10J	Type-LM324 Integrated Circuit	37-LM324
2K	Type-74LS367 Integrated Circuit	37-74LS367
5K	Type-74LS367 Integrated Circuit	37-74LS367
6K	Type-74LS138 Integrated Circuit	137177-001
8K	Type-74LS283 Integrated Circuit	137204-001
4L	Controller Integrated Circuit	137186-001
6L	Type-74LS157 Integrated Circuit	37-74LS157
8L	Type-74LS174 Integrated Circuit	37-74LS174
10L	Type-74LS393 Integrated Circuit	37-74LS393
5M	Type-74LS32 Integrated Circuit	37-74LS32
7M	Type-74LS273 Integrated Circuit	37-74LS273
10M	Type-4066 Integrated Circuit	37-4066
1N	Microprocessor Integrated Circuit	137194-001
5N	Type-74LS139 Integrated Circuit	37-74LS139
6N	Sync Generator Integrated Circuit	137193-001
8N	Type-74LS107 Integrated Circuit	137169-001
10N	Type-7404 Integrated Circuit	37-7404
<b>Miscellaneous</b>		
Q2, Q3	Nylon Snap-In Fastener	81-4302
Y1	Test Point <i>Acceptable substitute is part no. 020670-01</i>	179051-002
10B	18.432 MHz Crystal	144000-002
10D	8-Station Single-Throw Dual-Inline Package Bit Switch	66-118P1T
	8-Station Single-Throw Dual-Inline Package Bit Switch	66-118P1T
<b>Programmable Read-Only Memories</b>		
2C	Erasable Programmable Read-Only Memory (137205-001)	136018-127
4C	Erasable Programmable Read-Only Memory (137276-450)	136018-120
1L	Erasable Programmable Read-Only Memory (137276-450)	136018-119
1M	Erasable Programmable Read-Only Memory (137276-450)	136018-118
6M	Programmable Read-Only Memory (37-82S129)	136018-128
8M	Programmable Read-Only Memory (37-82S129)	136018-129
<b>Random-Access Memory</b>		
1H	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
<b>Resistors</b>		
R1, R2	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R3-R31	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R33-R36	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R37	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103

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## Xevious CPU Printed-Circuit Board Assembly (ATARI) Parts List, continued

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
R38	680 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-681
R39	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R40	220 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-221
R41-R54	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R55	470 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-471
R56	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R57	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R58	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R59	470 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-471
R60	100 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-104
R61	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R62	47 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-473
R63	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R64-R68	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R69	220 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-221
R70	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R71	68 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-683
R72, R73	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R74	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R75	220 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-221
R76-R83	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R84-R91	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R92-R95	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R98-R101	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R102	220 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-221
R103	220 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-221
R104	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R105	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R106	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R107	47 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-473
R108	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R109	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R110	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R111	47 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-473
R112	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R113	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R114	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R115	47 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-473
R116	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R117	100 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-104
R118	220 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-224
R119	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R120	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R121-R123	100 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-104

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## Xevious CPU Printed-Circuit Board Assembly (ATARI) Parts List, continued

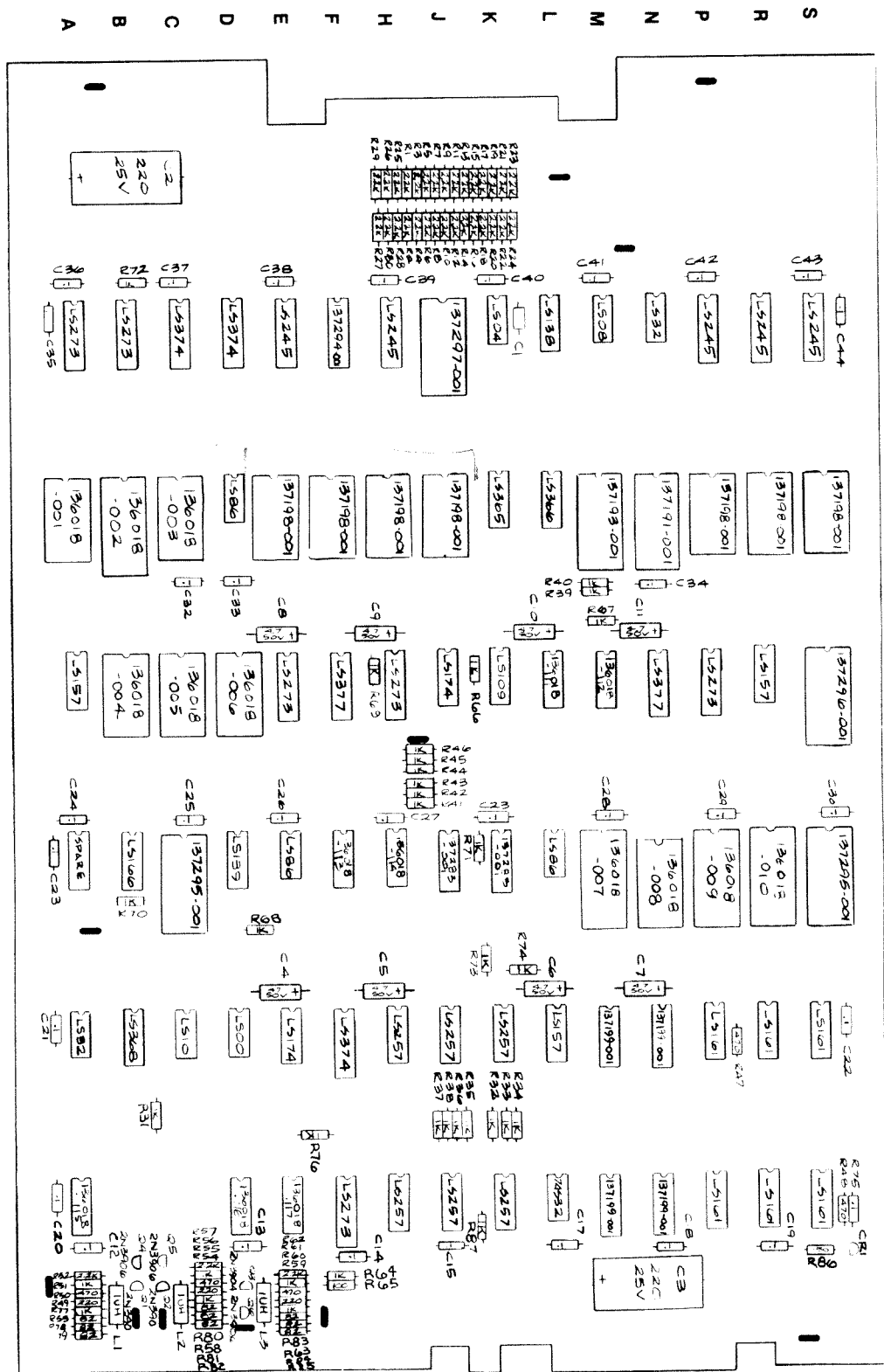
Designator	Description	Part No.
R124	33 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-333
R125	3.3 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-332
R126	100 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-104
R127	22 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-223
R128	47 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-473
R129	150 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-154
R130	33 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-333
R131	10 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-103
R132	150 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-154
R133	470 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-474
R134	10 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-103
R135	22 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-223
R136	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R137	2.2 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-222
R138	3.3 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-332
R139-R145	4.7 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-472
R146	2.2 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-222
R147-R150	4.7 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-472
R154-R159	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R160-R162	4.7 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-472
R163-R170	2.2 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-222
R171-R175	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R176	150 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-151
R177, R178	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102

### Sockets

1A	40-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C40
4A	40-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C40
6A	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
2C	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
4C	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
6C	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
1D	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4D	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
6D	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
1H	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
6H	42-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C42
1L	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4L	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
1M	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
1N	40-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C40
6N	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28

### Transistors

Q1	Type-2N3904, 350 mW, 60 V NPN Transistor	34-2N3904
Q2, Q3	Type-2N6044, 8 A, 80 V NPN Transistor	34-2N6044



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Figure 3-13 Xevious Video Printed-Circuit Board Assembly (ATARI)  
 A039787-21 A

## Xevious Video Printed-Circuit Board Assembly (ATARI) Parts List

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
<b>Capacitors</b>		
C2, C3	220 $\mu$ F 25 V Aluminum Electrolytic Axial-Lead Capacitor	24-250227
C4-C11	4.7 $\mu$ F 50 V Aluminum Electrolytic Axial-Lead Capacitor	24-500475
C12-C15	0.1 $\mu$ F, $\pm$ 10%, 25 V Ceramic Capacitor	122006-104
C17-C44	0.1 $\mu$ F, $\pm$ 10%, 25 V Ceramic Capacitor	122006-104
<b>Diode</b>		
CR1	Type-MV5053 Light-Emitting Diode	38-MV5053
<b>Erasable Programmable Read-Only Memories</b>		
2A	Erasable Programmable Read-Only Memory (137205-001)	136018-101
2B	Erasable Programmable Read-Only Memory (137276-450)	136018-102
2C	Erasable Programmable Read-Only Memory (137205-001)	136018-103
3B	Erasable Programmable Read-Only Memory (137205-001)	136018-104
3C	Erasable Programmable Read-Only Memory (137205-001)	136018-105
3D	Erasable Programmable Read-Only Memory (137205-001)	136018-106
4M	Erasable Programmable Read-Only Memory (137276-450)	136018-107
4N	Erasable Programmable Read-Only Memory (137205-001)	136018-108
4P	Erasable Programmable Read-Only Memory (137276-450)	136018-109
4R	Erasable Programmable Read-Only Memory (137276-450)	136018-110
<b>Inductor</b>		
L1-L3	1 $\mu$ H, $\pm$ 10% Inductor	141007-001
<b>Integrated Circuits</b>		
1A	Type-74LS273 Integrated Circuit	37-74LS273
1B	Type-74LS273 Integrated Circuit	37-74LS273
1C	Type-74LS374 Integrated Circuit	37-74LS374
1D	Type-74LS374 Integrated Circuit	37-74LS374
1E	Type-74LS245 Integrated Circuit	37-74LS245
1H	Type-74LS245 Integrated Circuit	37-74LS245
1J	Horizontal Scroll Integrated Circuit	137297-001
1K	Type-74LS04 Integrated Circuit	37-74LS04
1L	Type-74LS138 Integrated Circuit	137177-001
1M	Type-74LS08 Integrated Circuit	37-74LS08
1N	Type-74LS32 Integrated Circuit	37-74LS32
1P	Type-74LS245 Integrated Circuit	37-74LS245
1R	Type-74LS245 Integrated Circuit	37-74LS245
1S	Type-74LS245 Integrated Circuit	37-74LS245
2D	Type-74LS86 Integrated Circuit	37-74LS86
2K	Type-74LS365 Integrated Circuit	137200-001
2L	Type-74LS366 Integrated Circuit	137300-001
2M	Sync Generator Integrated Circuit	137193-001
2N	Controller Integrated Circuit	137191-001
3A	Type-74LS157 Integrated Circuit	37-74LS157
3E	Type-74LS273 Integrated Circuit	37-74LS273
3F	Type-74LS377 Integrated Circuit	37-74LS377
3H	Type-74LS273 Integrated Circuit	37-74LS273
3J	Type-74LS174 Integrated Circuit	37-74LS174

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## Xevious Video Printed-Circuit Board Assembly (ATARI) Parts List, continued

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
3K	Type-74LS109 Integrated Circuit	37-74LS109
3N	Type-74LS377 Integrated Circuit	37-74LS377
3P	Type-74LS273 Integrated Circuit	37-74LS273
3R	Type-74LS157 Integrated Circuit	37-74LS157
3S	Vertical Position Integrated Circuit	137296-001
4B	Type-74LS166 Integrated Circuit	37-74LS166
4C	Playfield Resistor Integrated Circuit	137295-001
4D	Type-74LS139 Integrated Circuit	37-74LS139
4E	Type-74LS86 Integrated Circuit	37-74LS86
4J	Custom Buffer Playfield Picture Integrated Circuit	137283-001
4K	Custom Buffer Playfield Picture Integrated Circuit	137283-001
4L	Type-74LS86 Integrated Circuit	37-74LS86
4S	Playfield Resistor Integrated Circuit	137295-001
5A	Type-74LS32 Integrated Circuit	37-74LS32
5B	Type-74LS368 Integrated Circuit	137168-001
5C	Type-74LS10 Integrated Circuit	37-74LS10
5D	Type-74LS00 Integrated Circuit	37-74LS00
5E	Type-74LS174 Integrated Circuit	37-74LS174
5F	Type-74LS374 Integrated Circuit	37-74LS374
5H	Type-74LS257 Integrated Circuit	37-74LS257
5J	Type-74LS257 Integrated Circuit	37-74LS257
5K	Type-74LS257 Integrated Circuit	37-74LS257
5L	Type-74LS157 Integrated Circuit	37-74LS157
5P	Type-74LS161 Integrated Circuit	37-74LS161
5R	Type-74LS161 Integrated Circuit	37-74LS161
5S	Type-74LS161 Integrated Circuit	37-74LS161
6F	Type-74LS273 Integrated Circuit	37-74LS273
6H	Type-74LS257 Integrated Circuit	37-74LS257
6J	Type-74LS257 Integrated Circuit	37-74LS257
6K	Type-74LS257 Integrated Circuit	37-74LS257
6L	Type-74S32 Integrated Circuit	37-74S32
6P	Type-74LS161 Integrated Circuit	37-74LS161
6R	Type-74LS161 Integrated Circuit	37-74LS161
6S	Type-74LS161 Integrated Circuit	37-74LS161
<b>Miscellaneous</b>		
	Test Point <i>Acceptable substitute is part no. 020670-01</i>	179051-002
<b>Programmable Read-Only Memories</b>		
3L	Programmable Read-Only Memory	136018-111
3M	Programmable Read-Only Memory	136018-112
4F	Programmable Read-Only Memory	136018-113
4H	Programmable Read-Only Memory	136018-114
6A	Programmable Read-Only Memory	136018-115
6D	Programmable Read-Only Memory	136018-116
6E	Programmable Read-Only Memory	136018-117

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## Xevious Video Printed-Circuit Board Assembly (ATARI) Parts List, continued

Designator	Description	Part No.
<b>Random-Access Memory</b>		
2E	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2F	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2H	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2J	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2P	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2R	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2S	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
5M	Random-Access Memory	137199-001
5N	Random-Access Memory	137199-001
6M	Random-Access Memory	137199-001
6N	Random-Access Memory	137199-001
<b>Read-Only Memory</b>		
1F	Read-Only Memory (Programmed Logic Array)	137294-001
<b>Resistors</b>		
R1-R30	2.2 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-222
R31-R46	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R47, R48	470 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-471
R49	220 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-221
R50	470 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-471
R51	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R52	2.2 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-222
R54	220 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-221
R55	470 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-471
R56	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R57	2.2 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-222
R59	220 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-221
R60	470 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-471
R61	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R62	2.2 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-222
R64	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R65	100 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-101
R66-R77	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R78, R79	82 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-820
R80	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R81, R82	82 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-820
R83	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R84, R85	82 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-820
R86	150 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-151
<b>Sockets</b>		
4J	18-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C18
4K	18-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C18
2A	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2C	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24

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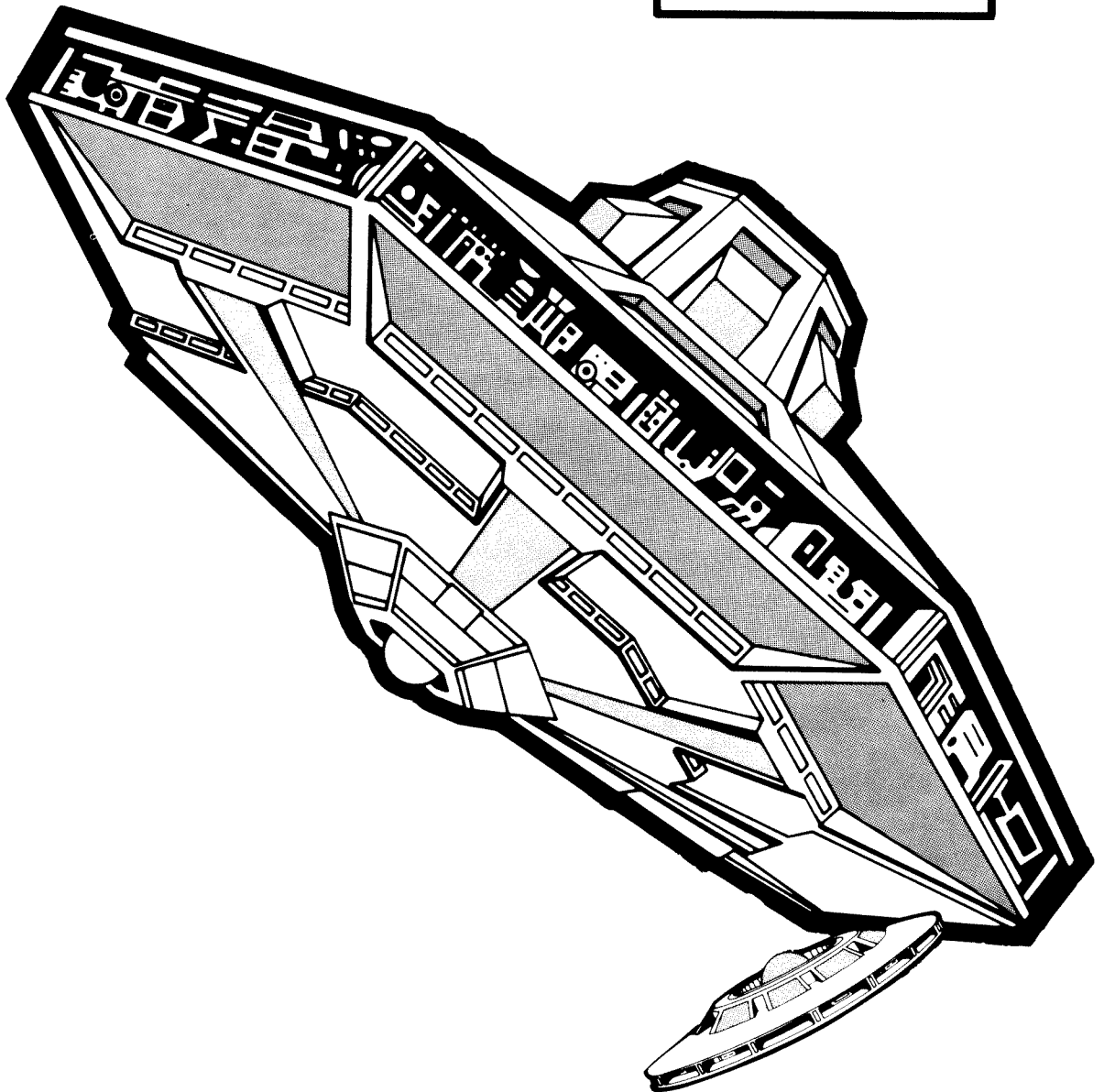
## Xevious Video Printed-Circuit Board Assembly (ATARI) Parts List, continued

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
2E	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2F	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2H	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2J	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2P	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2R	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2S	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
3B-3D	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
4N	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
1J	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
2B	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
2M	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
2N	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
3S	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4C	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4M	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4P	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4R	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4S	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
<b><i>Transistors</i></b>		
Q1-Q3	Type-2N3904, 350 mW, 60 V NPN Transistor	34-2N3904
Q4-Q6	Type-2N3906, 1 W, 40 V PNP Transistor	33-2N3906



**NOTE**

The NAMCO CPU and Video printed-circuit boards are not illustrated. Their parts lists start on the following page.



**Xevious CPU Printed-Circuit Board Assembly (NAMCO)**  
**99-090117**  
**Parts List**

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
<b>Capacitors</b>		
C1	220 $\mu$ F, 10 V, Aluminum Electrolytic Axial-Lead Capacitor	24-100227
C2-C17	0.01 $\mu$ F, 50 V, Ceramic Capacitor	27-500103
C18	0.1 $\mu$ F, 50 V Minimum, $\pm$ 10%, Radial-Lead Ceramic Capacitor	121015-104
C19	0.01 $\mu$ F, 50 V, Ceramic Capacitor	27-500103
C20	22 $\mu$ F, 10 V, Aluminum Electrolytic Axial-Lead Capacitor	99-090113
C21	220 $\mu$ F, 10 V, Aluminum Electrolytic Axial-Lead Capacitor	24-100227
C22	100 $\mu$ F, 16 V, Aluminum Electrolytic Axial-Lead Capacitor	24-160107
C23, C24	0.15 $\mu$ F, 25 V, $\pm$ 20%, Solid Tantalum Radial-Lead Ceramic Capacitor	99-090114
C25	10 $\mu$ F, 10 V, Aluminum Electrolytic Axial-Lead Capacitor	99-090112
C26-C29	0.01 $\mu$ F, 100 V, Radial-Lead Mylar Capacitor	21-101103
C30, C31	0.001 $\mu$ F, 100 V, Radial-Lead Mylar Capacitor	21-101102
C32-C42	0.01 $\mu$ F, 50 V, Ceramic Capacitor	27-500103
C43	2200 pF, 50 V, Radial-Lead Ceramic Capacitor	99-090115
C44	10 $\mu$ F, 10 V, Aluminum Electrolytic Axial-Lead Capacitor	99-090112
C45, C46	100 pF, 100 V Minimum, Dipped, Fixed-Mica Capacitor	128002-101
C47	33 pF, 100 V, Dipped, Fixed-Mica Capacitor	128002-330
C48	220 $\mu$ F, 10 V, Aluminum Electrolytic Axial-Lead Capacitor	24-100227
C49-C61	0.1 $\mu$ F, 50 V Minimum, $\pm$ 10%, Radial-Lead Ceramic Capacitor	121015-104
C62-C67	4.7 $\mu$ F, 16 V, $\pm$ 20%, Solid Tantalum Radial-Lead Ceramic Capacitor	121014-475
C68	0.1 $\mu$ F, 50 V Minimum, $\pm$ 10%, Radial-Lead Ceramic Capacitor	121015-104
C71	0.1 $\mu$ F, 50 V Minimum, $\pm$ 10%, Radial-Lead Ceramic Capacitor	121015-104
C73, C74	0.1 $\mu$ F, 50 V Minimum, $\pm$ 10%, Radial-Lead Ceramic Capacitor	121015-104
C76	4.7 $\mu$ F, 16 V, $\pm$ 20%, Solid Tantalum Radial-Lead Ceramic Capacitor	121014-475
C78-C80	4.7 $\mu$ F, 16 V, $\pm$ 20%, Solid Tantalum Radial-Lead Ceramic Capacitor	121014-475
C81-C101	0.1 $\mu$ F, 50 V Minimum, $\pm$ 10%, Radial-Lead Ceramic Capacitor	121015-104
C102	33 pF, 100 V, Dipped, Fixed-Mica Capacitor	128002-330
C104	100 pF, 100 V Minimum, Dipped, Fixed-Mica Capacitor	128002-101
<b>Diodes</b>		
D1	Type-1N914, 250 mW, 100 V, Switching Diode	31-1N914
D5	Type-1N751A, 500 mW, 5.1 V, Zener Diode	99-090111
<b>Erasable Programmable Read-Only Memories</b>		
2C	Erasable Programmable Read-Only Memory	136018-027
2L	Erasable Programmable Read-Only Memory	136018-024
2M	Erasable Programmable Read-Only Memory	136018-023
3F	Erasable Programmable Read-Only Memory	136018-025
3J	Erasable Programmable Read-Only Memory	136018-026
3M	Erasable Programmable Read-Only Memory	136018-022
3P	Erasable Programmable Read-Only Memory	136018-021
<b>Integrated Circuits</b>		
1A	Microprocessor Integrated Circuit	137194-001
1C	Type-74LS139 Integrated Circuit	37-74LS139
1D	Type-74LS32 Integrated Circuit	37-74LS32
1E, 1F	Type-74LS367 Integrated Circuit	37-74LS367

*(Continued on next page)*

## Xevious CPU Printed-Circuit Board Assembly (NAMCO) Parts List, continued

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
1J, 1K	Type-74LS367 Integrated Circuit	37-74LS367
1L	Type-74LS32 Integrated Circuit	37-74LS32
1M	Type-74LS139 Integrated Circuit	37-74LS139
1P	Microprocessor Integrated Circuit	137194-001
2E, 2F	Type-74LS367 Integrated Circuit	37-74LS367
2J, 2K	Type-74LS367 Integrated Circuit	37-74LS367
3A	Microprocessor Integrated Circuit	137194-001
4C, 4D	Controller Integrated Circuit	137186-001
4E	Type-74LS139 Integrated Circuit	37-74LS139
4H	Type-74LS245 Integrated Circuit	37-74LS245
4K	Type-74LS138 Integrated Circuit	137177-001
4L	Controller Integrated Circuit	137186-001
5A	3-Channel Multiplexer Integrated Circuit	137285-001
5C	Sound Sequencer Integrated Circuit	137298-001
5F	Controller Integrated Circuit	137187-001
5J	Controller Integrated Circuit	137192-001
5K	Type-74LS259 Integrated Circuit	37-74LS259
5L	Type-74LS138 Integrated Circuit	137177-001
5M	Type-74LS157 Integrated Circuit	37-74LS157
5P	Sync Generator Integrated Circuit	137193-001
6K	Type-74LS153 Integrated Circuit	37-74LS153
6L, 6M	Type-74S189 Integrated Circuit	37-74S189
6N	Type-74LS273 Integrated Circuit	37-74LS273
6P	Type-74LS107 Integrated Circuit	137169-001
7B	Op-Amp Integrated Circuit	37-LM324
7E	Type-74LS251 Integrated Circuit	37-74LS251
7J	Transistor Array Integrated Circuit	137213-001
7K	Type-74LS74 Integrated Circuit	37-74LS74
7L	Type-74LS283 Integrated Circuit	137204-001
7M	Type-74LS174 Integrated Circuit	37-74LS174
7P	Type-7404 Integrated Circuit	37-7404
8A	Custom Sound Integrated Circuit	137215-001
8E	Type-74LS251 Integrated Circuit	37-74LS251
8L	Type-74128 Integrated Circuit	137202-001
8M	Type-74LS393 Integrated Circuit	37-74LS393
8N	Type-4066 Integrated Circuit	37-4066
<b>Miscellaneous</b>		
J1	Spacer Complete Cable Assembly <i>(consisting of two connector receptacles and one ribbon cable)</i>	178050-010 99-090116
J1	50-Circuit Header Connector	99-090108
J2	3-Circuit Header Connector	79-58243
X1	18.432 MHz Crystal	144000-002
7D, 8D	8-Station Single-Throw Dual-Inline Package Bit Switch	66-118P1T

(Continued on next page)

## Xevious CPU Printed-Circuit Board Assembly (NAMCO) Parts List, continued

Designator	Description	Part No.
<b>Programmable Read-Only Memories</b>		
5N	Programmable Read-Only Memory	136018-028
7N	Programmable Read-Only Memory	136018-029
<b>Random-Access Memory</b>		
1H	Random-Access Memory	137198-001
<b>Resistors</b>		
R1, R2	330 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-331
R5	100 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-101
R6	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R7, R8	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R10	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R11	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R12	47 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-473
R13	100 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-104
R15	470 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-471
R16	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R17	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R18	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R19	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R20	3.3 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-332
R21	33 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-333
R22	220 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-224
R23	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R24	100 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-104
R25	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R26	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R27	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R28	47 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-473
R29	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472
R30	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R31	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R32, R33	47 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-473
R34	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R35	150 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-154
R36	33 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-333
R37	10 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-103
R38	3.3 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-332
R39	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R40	470 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-474
R41	22 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-223
R42	150 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-154
R43	4.7 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-472

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## Xevious CPU Printed-Circuit Board Assembly (NAMCO) Parts List, continued

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
R44	10 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-103
R45	22 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-223
R46	47 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-473
R47, R48	470 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-471
R51	10 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-103
R52-R54	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R55	10 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-103
R60	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R62	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R65	4.7 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-472
R66	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R70-R74	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
RM1-RM5	1 k $\Omega$ SIP Resistor Network	118001-102
RM6-RM8	1 k $\Omega$ SIP Resistor Network	118002-102
RM9	1 k $\Omega$ SIP Resistor Network	118001-102
RM10-RM13	2.2 k $\Omega$ SIP Resistor Network	118000-222
RM14-RM16	220 $\Omega$ SIP Resistor Network	118000-221
RM17-RM19	2.2 k $\Omega$ SIP Resistor Network	118002-222
RM20	2.2 k $\Omega$ SIP Resistor Network	118001-222
RM21, RM22	4.7 k $\Omega$ SIP Resistor Network	118002-472
RM23	2.2 k $\Omega$ SIP Resistor Network	118001-222
RM24	1 k $\Omega$ SIP Resistor Network	118001-102
VR1	1 k $\Omega$ Horizontal Mount Variable Resistor	99-090117
<b>Sockets</b>		
1A	40-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C40
1H	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
1P	40-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C40
2C, 2D	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2L, 2M	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
3A	40-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C40
3F	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
3J	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
3M	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
3P	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
4C, 4D	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4L	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
5A	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
5C	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
5F	42-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C42
5J	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
5N	16-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C16
5P	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
7N	16-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C16
<b>Transistors</b>		
Q1	Type-2N3904, 350 mW, 60 V, NPN Transistor	34-2N3904
Q2	1 W 40 V, PNP Transistor	33-2N3906

**Xevious Video Printed-Circuit Board Assembly (NAMCO)**  
**99-090118**  
**Parts List**

<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
<b>Capacitors</b>		
C1, C2	220 $\mu$ F 6.3 V Aluminum Electrolytic Axial-Lead Capacitor	24-100227
C3-C10	4.7 $\mu$ F, $\pm$ 20%, 16 V Solid Tantalum Radial-Lead Capacitor	121014-475
PC1-PC30	0.1 $\mu$ F, $\pm$ 10%, 50 V Minimum Ceramic Radial-Lead Capacitor	121015-104
<b>Erasable Programmable Read-Only Memories</b>		
2A	Erasable Programmable Read-Only Memory	136018-001
2B	Erasable Programmable Read-Only Memory	136018-002
2C	Erasable Programmable Read-Only Memory	136018-003
3B	Erasable Programmable Read-Only Memory	136018-004
3C	Erasable Programmable Read-Only Memory	136018-005
3D	Erasable Programmable Read-Only Memory	136018-006
4M	Erasable Programmable Read-Only Memory	136018-007
4N	Erasable Programmable Read-Only Memory	136018-008
4P	Erasable Programmable Read-Only Memory	136018-009
4R	Erasable Programmable Read-Only Memory	136018-010
<b>Integrated Circuits</b>		
1A, 1B	Type-74LS273 Integrated Circuit	37-74LS273
1C, 1D	Type-74LS374 Integrated Circuit	37-74LS374
1E	Type-74LS245 Integrated Circuit	37-74LS245
1F	Custom Integrated Circuit	137294-001
1H	Type-74LS245 Integrated Circuit	37-74LS245
1J	Custom Integrated Circuit	137297-001
1K	Type-7404 Integrated Circuit	37-74LS04
1L	Type-74LS138 Integrated Circuit	137177-001
1M	Type-7408 Integrated Circuit	37-74LS08
1N	Type-74LS32 Integrated Circuit	37-74LS32
1P	Type-74LS245 Integrated Circuit	37-74LS245
1R, 1S	Type-74LS245 Integrated Circuit	37-74LS245
2D	Type-74LS86 Integrated Circuit	37-74LS86
2K	Type-74LS365 Integrated Circuit	137200-001
2L	Type-74LS366 Integrated Circuit	137300-001
2M	Custom Integrated Circuit	137193-001
2N	Custom Integrated Circuit	137191-001
3A	Type-74LS157 Integrated Circuit	37-74LS157
3E	Type-74LS273 Integrated Circuit	37-74LS273
3F	Type-74LS377 Integrated Circuit	37-74LS377
3H	Type-74LS273 Integrated Circuit	37-74LS273
3J	Type-74LS174 Integrated Circuit	37-74LS174
3K	Type-74LS109 Integrated Circuit	37-74LS109
3N	Type-74LS377 Integrated Circuit	37-74LS377
3P	Type-74LS273 Integrated Circuit	37-74LS273
3R	Type-74LS157 Integrated Circuit	37-74LS157
3S	Custom Integrated Circuit	137296-001
4B	Type-74LS166 Integrated Circuit	37-74LS166

(Continued on next page)

## Xevious Video Printed-Circuit Board Assembly (NAMCO) Parts List, continued

Designator	Description	Part No.
4C	Custom Integrated Circuit	137295-001
4D	Type-74LS139 Integrated Circuit	37-74LS139
4E	Type-74LS86 Integrated Circuit	37-74LS86
4J, 4K	Custom Integrated Circuit	137283-001
4L	Type-74LS86 Integrated Circuit	37-74LS86
4S	Custom Integrated Circuit	137295-001
5A	Type-74LS32 Integrated Circuit	37-74LS32
5B	Type-74LS368 Integrated Circuit	137168-001
5C	Type-74LS10 Integrated Circuit	37-74LS10
5D	Type-74LS00 Integrated Circuit	37-74LS00
5E	Type-74LS74 Integrated Circuit	37-74LS74
5F	Type-74LS374 Integrated Circuit	37-74LS374
5H, 5J, 5K	Type-74LS257 Integrated Circuit	37-74LS257
5L	Type-74LS157 Integrated Circuit	37-74LS157
6H, 6J, 6K	Type-74LS257 Integrated Circuit	37-74LS257
5P, 5R, 5S	Type-74LS161 Integrated Circuit	37-74LS161
6F	Type-74LS273 Integrated Circuit	37-74LS273
6P, 6R, 6S	Type-74LS161 Integrated Circuit	37-74LS161
<b>Miscellaneous</b>		
J1	50-Circuit Header Connector	99-090108
J1	50-Circuit Connector Receptacle	99-090109
J1	Flat Cable	99-090110
J2	6-Circuit Header Connector	79-58123
<b>Programmable Read-Only Memories</b>		
3L	Programmable Read-Only Memory	136018-111
3M	Programmable Read-Only Memory	136018-112
4F	Programmable Read-Only Memory	136018-113
4H	Programmable Read-Only Memory	136018-114
6A	Programmable Read-Only Memory	136018-115
6D	Programmable Read-Only Memory	136018-116
6E	Programmable Read-Only Memory	136018-117
<b>Random-Access Memory</b>		
2E, 2F	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2H, 2J	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2P	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
2R, 2S	Random-Access Memory <i>Acceptable substitute is part no. 137211-001</i>	137198-001
5M, 5N	Random-Access Memory	137199-001
6M, 6N	Random-Access Memory	137199-001
<b>Resistors</b>		
R1-R7	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
R8	220 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-221
R9	470 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-471
R10	220 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-221

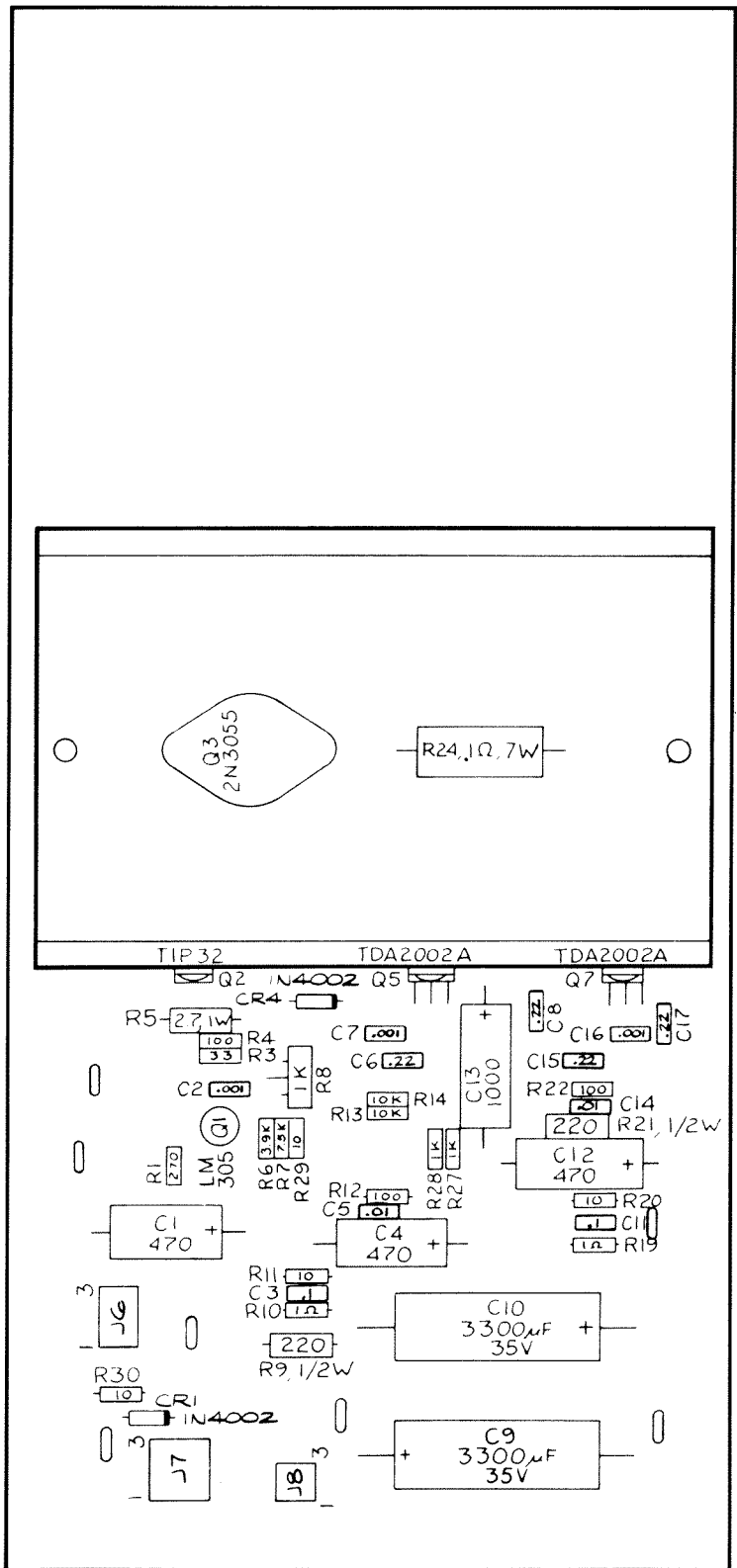
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## Xevious Video Printed-Circuit Board Assembly (NAMCO) Parts List, continued

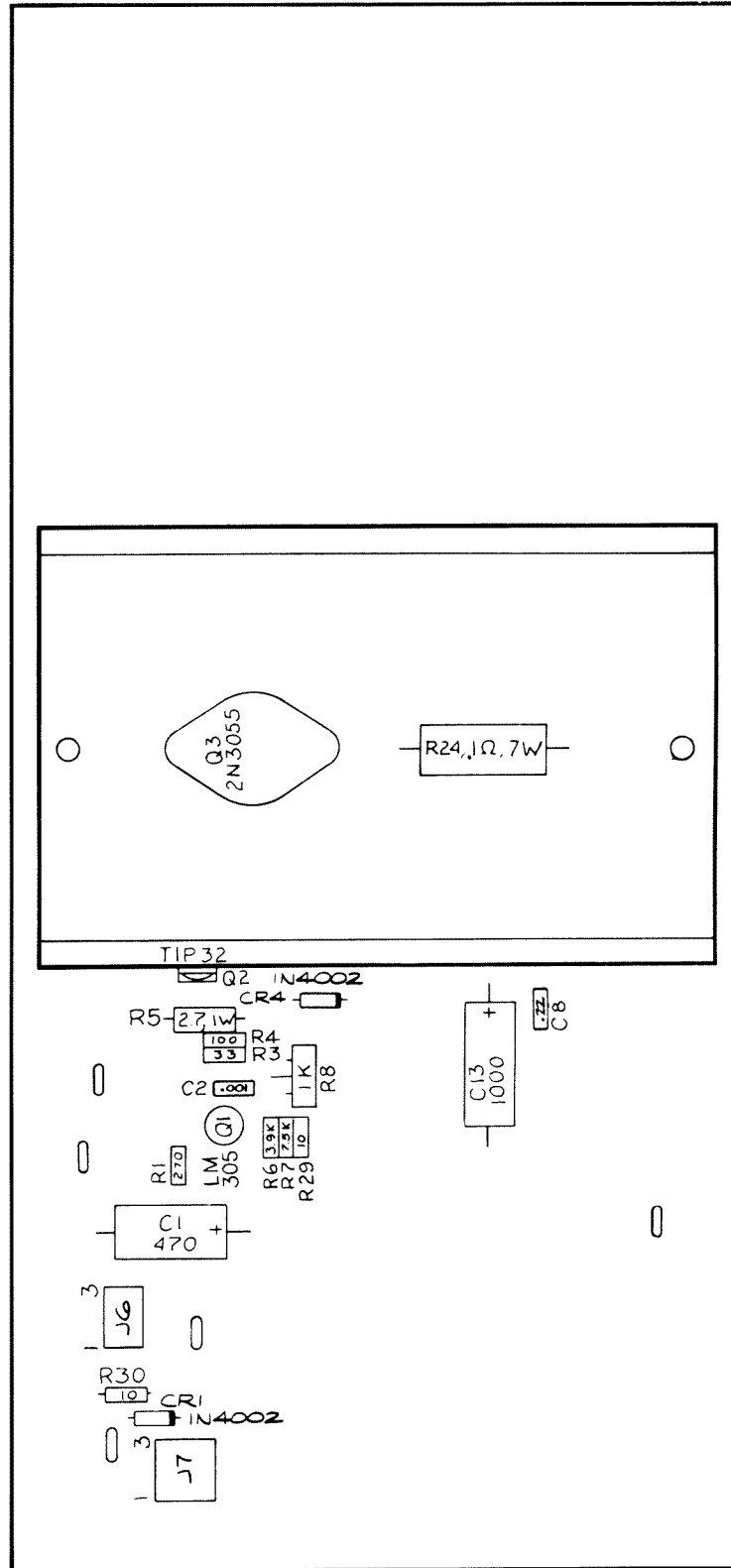
<i>Designator</i>	<i>Description</i>	<i>Part No.</i>
R11	470 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-471
R12	220 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-221
R13	470 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-471
R14	100 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-101
R15, R16	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R17	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R18	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R19	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R20	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R21	2.2 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-222
R22	1 k $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-102
R23, R24	470 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-471
RM1-RM4	2.2 k $\Omega$ SIP Resistor Network	118002-222
RM5, RM6	1 k $\Omega$ SIP Resistor Network	118002-102
<b>Sockets</b>		
IJ	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
2A	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2B	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
2C	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2E, 2F	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2H, 2J	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2M, 2N	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
2P	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
2R, 2S	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
3B, 3C, 3D	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
3L, 3M	16-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C16
3S	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4C	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4F	16-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C16
4H	16-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C16
4J, 4K	18-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C18
4M	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4N	24-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C24
4P	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
4R, 4S	28-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C28
6A	16-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C16
6D, 6E	16-Contact Medium-Insertion-Force Integrated Circuit Socket	79-42C16

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**Figure 3-14 Regulator/Audio II PCB Assembly**  
**U.S.-Built Cabinet A035435-01 G**

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**Figure 3-15 Regulator/Audio II PCB Assembly**  
**Ireland-Built Cabinet A035435-05 A**

## Regulator/Audio II PCB Assembly Parts List

Assemblies and components in the following parts list are shown in Figures 3-14 and 3-15.

Designator	Description	Part No.
<b>Capacitors</b>		
<i>For -01* and -05** versions</i>		
C1	470 $\mu$ F, 25 V, Aluminum Electrolytic Fixed Axial-Lead Capacitor	24-250477
C2	0.001 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	122002-102
C8	0.22 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	122004-224
C13	1000 $\mu$ F, 25 V, Aluminum Electrolytic Fixed Axial-Lead Capacitor	24-250108
<i>For -01 version</i>		
C3	0.1 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	29-088
C4	470 $\mu$ F, 25 V, Aluminum Electrolytic Fixed Axial-Lead Capacitor	24-250477
C5	0.01 $\mu$ F, 25 V Minimum, Ceramic-Disc Axial-Lead Capacitor <i>Acceptable substitute is part no. 122005-103</i>	100015-103
C6	0.22 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	122004-224
C7	0.001 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	122002-102
C9, C10	3300 $\mu$ F, 35 V, Aluminum Electrolytic Fixed Axial-Lead Capacitor	24-350338
C11	0.1 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	29-088
C12	470 $\mu$ F, 25 V, Aluminum Electrolytic Fixed Axial-Lead Capacitor	24-250477
C14	0.01 $\mu$ F, 25 V Minimum, Ceramic-Disc Axial-Lead Capacitor <i>Acceptable substitute is part no. 122005-103</i>	100015-103
C15	0.22 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	122004-224
C16	0.001 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	122002-102
C17	0.22 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	122004-224
C18, C19	3300 $\mu$ F, 35 V, Aluminum Electrolytic Fixed Axial-Lead Capacitor	24-350338
C20, C21	0.1 $\mu$ F, 25 V, Ceramic-Disc Axial-Lead Capacitor	29-088
C22, C23	1 $\mu$ F, 50 V, Aluminum Electrolytic Fixed Axial-Lead Capacitor	24-500105
<b>Diodes</b>		
<i>For -01 and -05 versions</i>		
CR1	Type-1N4002, 1 A, 100 V Silicon Rectifier Diode	31-1N4002
CR4	Type-1N4002, 1 A, 100 V Silicon Rectifier Diode	31-1N4002
<b>Integrated Circuits</b>		
<i>For -01 and -05 versions</i>		
Q1	Type-LM305, 5 V, Linear Voltage Regulator	37-LM305
<i>For -01 version</i>		
Q5	Type-TDA2002A, 8 W, Linear Audio Amplifier Integrated Circuit	137151-002
Q7	Type-TDA2002A, 8 W, Linear Audio Amplifier Integrated Circuit	137151-002
<b>Resistors</b>		
<i>For -01 and -05 versions</i>		
R1	270 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-271
R3	33 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-330
R4	100 $\Omega$ , $\pm 5\%$ , $\frac{1}{4}$ W Resistor	110000-101
R5	2.7 $\Omega$ , $\pm 5\%$ , 1 W Resistor	110009-027

(Continued on next page)

## Regulator/Audio II PCB Assembly Parts List, continued

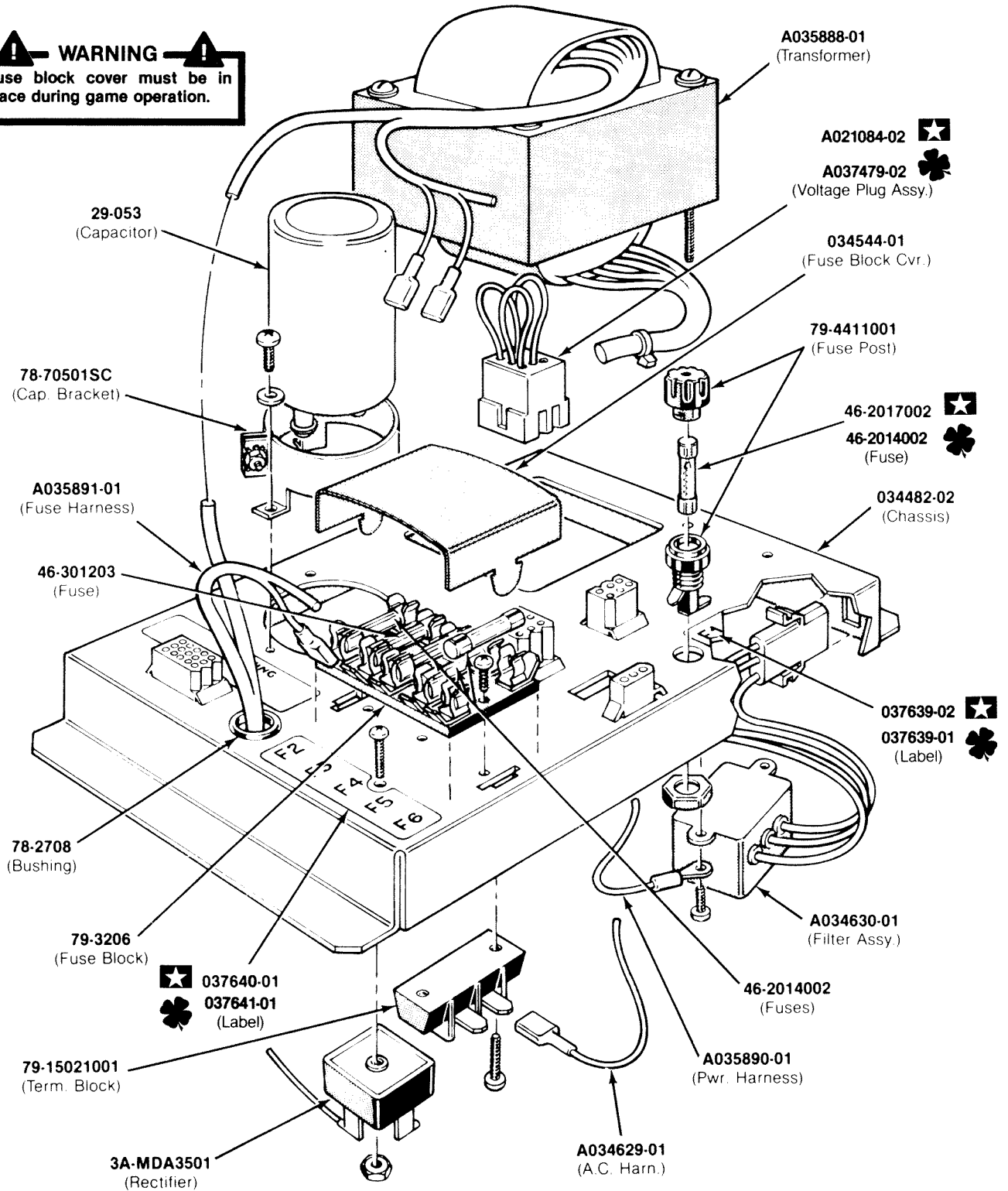
Designator	Description	Part No.
R6	3.9 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-392
R7	7.5 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-752
R8	1 k $\Omega$ Vertical PCB-Mounting Cermet Potentiometer <i>Acceptable substitute is part no. 119002-102</i>	19-315102
R24	0.1 $\Omega$ , $\pm$ 3%, 7 W Wirewound Resistor	19-100P1015
R29, R30	10 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-100
<i>For -01 version</i>		
R9	220 $\Omega$ , $\pm$ 5%, 1/2 W Resistor	110001-221
R10	1 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-010
R11	10 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-100
R12	100 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-101
R13, R14	10 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-103
R19	1 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-010
R20	10 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-100
R21	220 $\Omega$ , $\pm$ 5%, 1/2 W Resistor	110001-221
R22	100 $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-101
R27, R28	1 k $\Omega$ , $\pm$ 5%, 1/4 W Resistor	110000-102
<b>Transistors</b>		
<i>For -01 and -05 versions</i>		
Q2	Type-TIP32 PNP Power Transistor	33-TIP32
Q3	Type-2N3055 NPN Silicon Transistor	34-2N3055
<b>Mechanical Parts</b>		
<i>For -01 and -05 versions</i>		
J6	6-Position Connector Receptacle	79-58306
J7	9-Position Connector Receptacle	79-58308
Q3	#6-32 x 1/2-Inch Cross-Recessed Pan-Head Corrosion-Resistant Steel Machine Screw	72-1608C
Q2, Q3	#6-32 Nut/Washer Assembly	75-99516
Q2	Thermally Conductive Silicon Insulator	78-16014
Q3	Thermally Conductive Silicon Insulator	78-16008
Q5	#6-32 x 1/4-Inch Binder-Head Nylon Screw	75-F60405
	Heat Sink	034531-01
	Test Point <i>Acceptable substitute is part no. 020670-01</i>	179051-001
<i>For -01 version</i>		
J8	4-Position Connector Receptacle	79-58354
Q8	#6 x 1/8-Inch Cross-Recessed Pan-Head Thread-Forming Type-AB Zinc-Plated-Steel Screw	72-66065

\*Acceptable substitutes are A035435-02 or -04.

\*\*Acceptable substitutes are A035435-01 through -06.

# H. Power Supply Assembly

**WARNING**  
 Fuse block cover must be in place during game operation.



**Figure 3-16 Power Supply Assembly**  
 U.S.-Built Cabinet A037671-07 G  
 Ireland-Built Cabinet A037671-09 G

## Power Supply Assembly Parts List

Part No.	Description
<b>For -07 Version</b>	
A021084-02	Voltage Plug for 120 V (100–135 VAC) <i>yellow wire color—plugs into J3</i>
46-2017002	7 A, 250 V Slow-Blow Glass Cartridge-Type Fuse <b>(F1, F2, F4–F6)</b>
037639-02	Label for Fuse Value <b>(F1)</b>
037640-01	Label for Fuse Values <b>(F2–F6)</b>
<b>For -09 Version</b>	
A037479-02	Voltage Block Assembly for 220 V (200–240 VAC) <i>blue wire color; and 240 V (220–260 VAC) brown wire color—plugs into J3</i>
46-2014002	4 A, 250 V, 3AG Slow-Blow Glass Cartridge-Type Fuse <b>(F1, F2, F4–F6)</b>
037641-01	Label for Fuse Values <b>(F2–F6)</b>
<b>For -07 and -09 Versions</b>	
A034629-01	AC Harness Assembly <b>(J4A)</b>
A034630-01	RFI Filter Assembly <b>(FL1—designation not marked)</b>
A035888-01	Transformer Assembly <b>(T1—designation covered)</b> <i>Acceptable substitute is part no. A035888-02</i>
A035890-01	Power Harness Assembly <b>(J2)</b>
A035891-02	Fuse Harness Assembly
29-053	27,000 $\mu$ F, 15 VDC Electrolytic Capacitor <b>(C1)</b>
3A-MDA3501	Type-MDA 3501 Bridge Rectifier <b>(CR1)</b>
46-301203	20 A, 32 V, 3AG Slow-Blow Glass Cartridge-Type Fuse <b>(F3)</b>
78-2708	Nylon Type 6/6 Hole Bushing with $\frac{3}{8}$ -Inch Inside Diameter x $\frac{3}{4}$ -Inch Outside Diameter x $\frac{1}{4}$ -Inch Thick
78-70501SC	2-Inch Diameter Capacitor Mounting Bracket <b>(C1)</b>
79-3206	5-Position 3AG Fuse Block with $\frac{1}{4}$ -Inch Quick-Disconnect Terminals <b>(F2–F6)</b>
79-441101	Panel-Mounting Non-Indicating 3AG Cartridge-Type Fuse Post <b>(F1)</b>
79-15021001	2-Circuit Single-Row Terminal Block <i>(located under F4)</i>
034482-02	Power Supply Chassis Base
034544-01	Fuse Block Cover <b>(F2–F6)</b>



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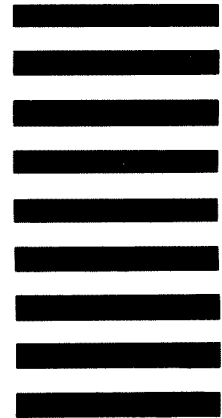
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