

# MOONPATROL

## INSTRUCTION MANUAL

- installation
- operation
- adjustment
- diagnostics
- parts

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# ROM SUMMARY

## CPU BOARD M52-A-C

ROM	PART NO.	DESCRIPTION
ROM 0	A-5343-09987	EPROM 4Kx8
ROM 1	A-5343-09988	EPROM 4Kx8
ROM 2	A-5343-09989	EPROM 4Kx8
ROM 3	A-5343-09990	EPROM 4Kx8

## CHARACTER BOARD M52-B-C

ROM 1	A-5343-09991	EPROM 4Kx8
ROM 2	A-5343-09992	EPROM 4Kx8
PROM 2N	A-5282-09983	PROM 32x8
PROM 2H	A-5282-09984	PROM 256x4

## SCROLLING VIDEO BOARD M52-E-C

ROM 1	A-5343-09993	EPROM 4Kx8
ROM 2	A-5343-09994	EPROM 4Kx8
ROM 3	A-5343-09995	EPROM 4Kx8
ROM 4	A-5343-09996	EPROM 4Kx8
ROM 5	A-5343-09997	EPROM 4Kx8
PROM 1M	A-5242-09985	PROM 32x8
PROM 2A	A-5242-09986	PROM 512x8

## SOUND BOARD M52-SOUND-C

ROM 1A	A-5343-09998	EPROM 4Kx8
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# INSTALLATION

## Upright Games

1. Move cabinet close to desired location and unlock upper rear door panel. Remove the panel and set it aside.
2. Open two trunk latches and swing open lower rear door.
3. Check that all fuses of the power supply board and the line fuse are securely installed in their clips.
4. Unlock the coin door. Reach through the coin door opening and open trunk latches to release control panel. Unhook the control panel safety chain and lower the control panel.
5. Check that the following connectors are firmly seated and that no wires are broken or termination pins are loose in any connector.
  - A. Coin door connector.
  - B. Control Panel connector.
  - C. Monitor control connector and monitor power connector.
  - D. Transformer connector by power panel.
  - E. Four connectors on Power Supply board.
  - F. CPU Board 44-Pin edge connector and CPU, Character, Scrolling Video, and Sound boards interconnection cable connectors.
6. Check that all socketed IC's on all circuit boards are firmly seated.
7. To check or change game adjustments, locate CPU board (M52-A-C) mounted with other boards on right side of cabinet (as viewed through coin door) and refer to Game Adjustment procedures which follow.
8. Extend line cord from game and insert it in slot in lower door frame.
9. Swing lower rear door closed and latch it.
10. Install and lock the upper rear door panel.
11. Reconnect the control panel safety chain and latch the control panel in position.

## Cocktail Table Games

1. Move game close to desired location and unlock and open tabletop.
2. Pull up on two slide latches and lower component door.
3. Check that all fuses of the power supply board and the line fuse are securely installed in their clips.
4. Check that the following connectors are firmly seated and that no wires are broken or termination pins are loose in any connector.
  - A. Coin door connector.
  - B. Control Panel connectors.
  - C. Monitor control connector and monitor power connector.
  - D. Transformer connector by power panel.
  - E. Four connectors on Power Supply board.
  - F. CPU Board 44-Pin edge connector and CPU, Character, Scrolling Video, and Sound boards interconnection cable connectors.
5. Check that all socketed IC's on all circuit boards are firmly seated.
6. To check for game adjustments locate M-52-A-C CPU Board on component door and refer to Game Adjustment procedures which follow.
7. Feed line cord through opening in bottom of the cabinet and pull it through to its full extension.
8. Raise component door and secure with slide latch.
9. Close and lock the tabletop.

## POWER TURN-ON

This game **MUST BE PLUGGED INTO A PROPERLY GROUNDED OUTLET** to **PREVENT SHOCK HAZARD** and to ensure **PROPER GAME OPERATION**. Do Not use a "cheater" plug to defeat the ground pin on the line cord, and **DO NOT** cut off the ground pin. The line voltage must agree with that specified on the back of the cabinet or serious damage to the machine could occur. For low-line voltage applications (105 VAC), refer to the power wiring diagram.

1. Plug the game in and turn it ON. The game should come up in the Attract Mode.
2. Insert coins, press 1 or 2 player start buttons and play a game to test control panel switches, sound, and general program functions. If any problems are encountered, refer to Troubleshooting.

## GAME OPERATION

Move the Patrol Car from letter A to letter Z (shown at bottom of screen). Control the speed using the joystick. As rocks or UFOs are encountered, press the control panel FIRE button to launch vertical and horizontal missiles to destroy the rock or UFO before you run into the rock or the UFO destroys your Patrol Car. As craters are encountered, press the JUMP button to jump your Patrol Car over them. Rocks can also be jumped. Land mines that appear must be jumped.

## SCORING

CHARACTER	REGULAR POINTS	DESTRUCTION POINTS
	JUMP POINTS	
Small crater	50	X
Large crater	100	X
Small rock	50	100
Medium rock	80	100
Large (Double) Rock	A. 100	Destroyed 200
	B. 100	Half Destroyed 100
	C. 100	Half Destroyed & Jumped 180
Rolling boulder	100	50
Space plant	100	100
Tank	100	200
Regular UFO	X	100
Crater UFO	X	200

CHARACTER	BONUS POINTS
	POINTS (Displayed on screen in Red)
UFO formation (3 UFOs)	500
(4 UFOs)	800
(5 UFOs)	1000
Enemy car from behind destroyed	500, 800, or 1,000 (Random)
Space Plant Destroyed	300, 500, or 800 (Random)

## SPECIAL POINTS

These points are awarded to players who complete sections of the course (Beginner or Champion) in less than average time. On the Beginner course, 1,000 plus 100 points for each "better-than-average" second are awarded. The Champion course awards 2,000 plus 100 points for each "better-than-average" second.

## **GAME ADJUSTMENTS**

Game adjustments are made using switches contained in DIP Switch 1 and DIP Switch 2 (Table 1) on the CPU board (M52-A-C). Using a pen or small screwdriver, move switches to desired positions. Switches 5, 6, 7, and 8 of DIP Switch 1 determine pricing rates as shown. Switch 3 of DIP Switch 2 selects Coin Mode 1 or Coin Mode 2 to go with the settings of switches 5, 6, 7, and 8 of DIP Switch 1. Coin Mode 1 is used for coin doors with a single coin chute or a set of coin chutes of equal value. Coin Mode 2 is used for coin doors with two coin chutes of different values.

Refer to the table for other adjustments. Diagnostics test 01, DIP Switch test causes most adjustments to be displayed on the monitor and may be used while making game adjustments. Note that the sector-selection feature, not recommended as a factory setting, allows the player to start a game anywhere in the Beginner course or Champion course 1.

DIP SWITCH NO. 1

Table 1. Game Adjustments

ADJUSTMENT	OPTIONS	SWITCH NUMBER							
		1	2	3	4	5	6	7	8
*RECOMMENDED SETTINGS		ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
†COIN MODE 1	2 PLAYS/1 COIN 3 PLAYS/1 COIN 4 PLAYS/1 COIN					OFF ON OFF	OFF OFF ON	OFF OFF OFF	ON ON ON
	5 PLAYS/1 COIN 6 PLAYS/1 COIN *1 PLAY/1 COIN					ON OFF OFF	ON OFF OFF	OFF ON OFF	ON ON OFF
	1 PLAY/2 COINS 1 PLAY/3 COINS 1 PLAY/4 COINS					ON OFF ON	OFF ON ON	OFF OFF OFF	OFF OFF OFF
	1 PLAY/5 COINS 1 PLAY/6 COINS FREE PLAY					OFF ON ON	OFF OFF ON	ON ON ON	OFF OFF ON
†COIN MODE 2	1 PLAY/1 COIN 1 PLAY/2 COINS 1 PLAY/3 COINS					OFF ON OFF	OFF OFF ON		
	FREE PLAY					ON	ON		
	2 PLAYS/1 COIN 3 PLAYS/1 COIN 5 PLAYS/1 COIN 6 PLAYS/1 COIN							OFF ON OFF ON	OFF OFF ON ON
# PATROL CARS	5 PATROL CARS *4 PATROL CARS 3 PATROL CARS 2 PATROL CARS	OFF ON OFF ON	OFF OFF ON ON						
ADDITIONAL CAR AT:	*10,000/30,000/50,000 20,000/40,000/60,000 10,000 ONLY NO EXTENDED PLAY			OFF ON OFF ON	OFF OFF ON ON				

DIP SWITCH NO. 2

ADJUSTMENT	OPTIONS	SWITCH NUMBER							
		1	2	3	4	5	6	7	8
*RECOMMENDED SETTINGS		OFF	ON	†	OFF	OFF	OFF	OFF	OFF
FLIP PICTURE	NO YES	OFF ON							
**CABINET TYPE	TABLE UPRIGHT		OFF ON						
COIN MODE SETTINGS FOR DIP SWITCH 1	COIN MODE 1 COIN MODE 2			OFF ON					
FREEZE SCREEN	*NO YES					OFF ON			
SECTOR-SELECTION FEATURE	*NO YES						OFF ON		
DEMO MODE	*NO YES							OFF ON	
TEST MODE	*NO YES								OFF ON
SWITCH 4 (not used)					OFF				

\*recommended settings

\*\*For upright games, select ON for switch 2. Table games require OFF for switch 2.

†For games with a single coin selector or 2 selectors of the same value, S3 must be turned off. For games with selectors for 2 different coin values, S3 must be turned on.

## DIAGNOSTICS

Turn switch #8 of DIP switch #2 to the ON position and turn power ON. The MOON PATROL diagnostic program consists of 8 independent tests, 2 of which are automatic at turning power ON in diagnostic mode: RAM Test and ROM Test. After these two tests have been properly completed, pressing the 2-Player button brings an index of the other tests to the CRT display:

- 01 DIP SWITCH
- 02 I-O PORT\*
- 03 SOUNDS
- 04 CHARACTER
- 05 COLOR
- 06 CROSS HATCH PATTERN

\*Control Panel and Coin Door switches test.

Operate the joystick to position the cursor at the desired test. Press 1-Player Start to initiate the test.

As any test other than 02 is completed, pressing the 2-Player button returns the test index to the monitor display. When test 02 is completed, the joystick lever must be moved left while pressing the 2-Player button to return the test index. If no further testing is desired, turn power OFF and return switch #8 of DIP switch #2 to the OFF position.

### RAM Test

If checked to be OK, "RAM OK" appears on monitor. If not OK,

"RAM NG XXXX    YY                    ZZ" appears on monitor (without ROM test results).  
Faulty RAM address    RAM Input Data            RAM Output Data

If RAM is shown to be NG at address E000-E7FF, failure can have occurred in either 3B RAM or 2K decoder on M52-A-C CPU Board. If RAM is shown to be NG at address 8000-87FF failure can have occurred at RAM chip 3C or circuitry directly associated with the RAM chip--Chips 7J, 7K, 6A, 5D, 6D, 4A, 4B, 4C, and 4D on the M52-E-C Scrolling Video board or chip 5M on the M52-A-C CPU board. A faulty chip must be replaced to continue diagnostics.

### ROM Test

If checked to be OK, the display below appears on the monitor.

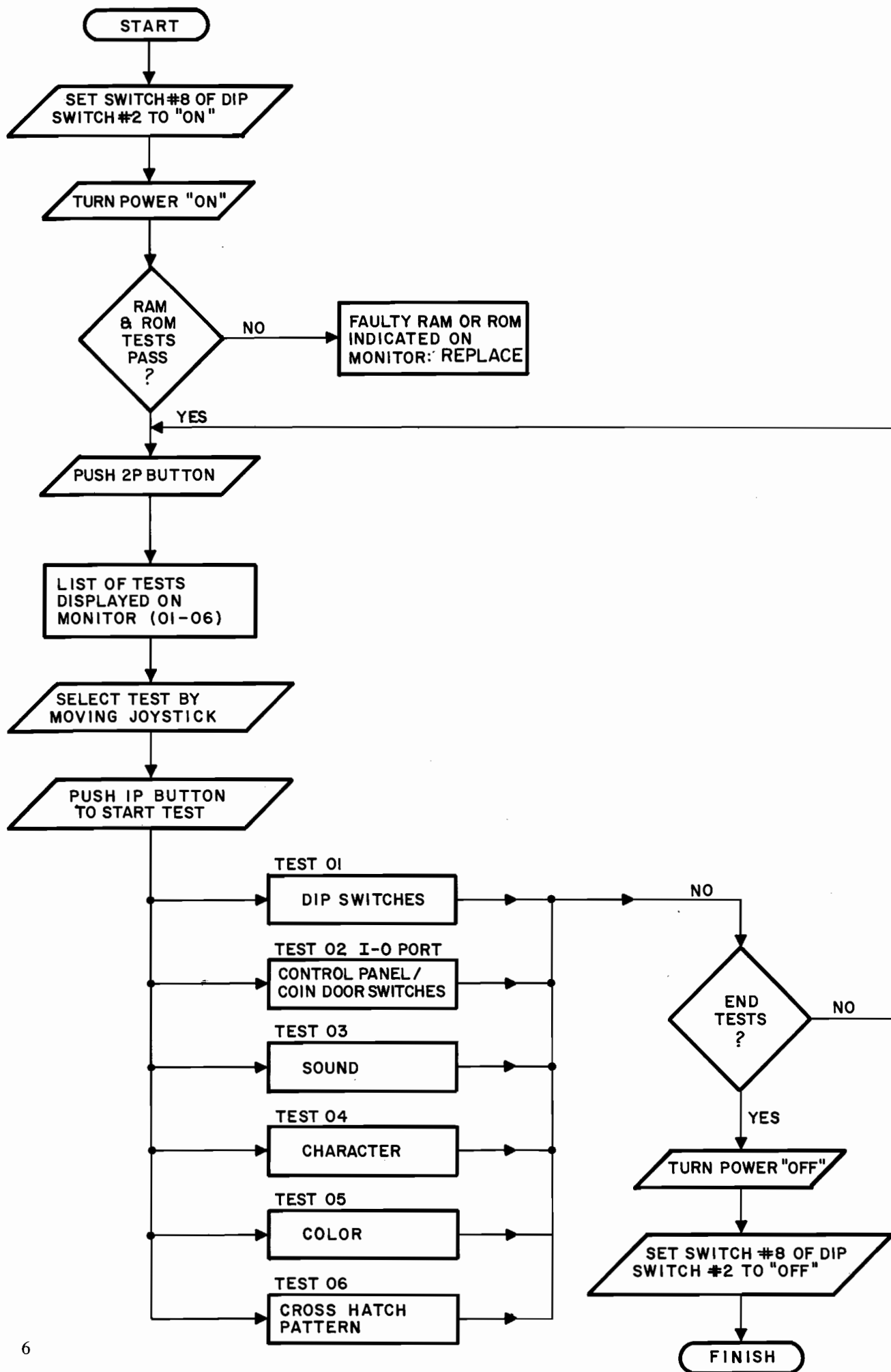
"RAM    OK"  
"ROM 0 OK FF"  
"ROM 1 OK FF"  
"ROM 2 OK FF"  
"ROM 3 OK FF"

If any are bad, for example ROM 1, this appears on monitor.

"RAM    OK"  
"ROM 0 OK FF"  
"ROM 1 NG FF"  
"ROM 2 OK FF"  
"ROM 3 OK FF"

A faulty ROM must be replaced to continue diagnostics.

Certain failure modes of ROMs 0 thru 3 on MP-A-C CPU Board and ROMs 3D and 3F on MP-E-C Scrolling Video Board prevent fault indications from appearing on the CRT.





## MP-A-C CPU Board

Green and Blue pattern with "9"s or "6"s - Replace ROM 0 (3M).

• *CRT locks up in power-up test pattern - remove ROMs 1 and 2 and repeat test.* • *If still locked up - replace ROM 3 (3J).* • *If not - re-insert ROMs 1 and 2 one at a time to determine faulty chip.*

## MP-E-C Scrolling Video Board

• *After power up tests, arabic numbers are missing from CRT - Replace ROM 3D.*

• *After power up tests, letters are missing from CRT - Replace ROM 3F.*

• *Games will power up in Game Over but CRT is blank after power up tests - Replace Color PROM 2A.*

Since ROMs 3H, 3K, and 3L produce the Scrolling Video, faults in these chips are more easily detected by playing a game.

ROM 3H - Cityscape  
ROM 3K - Near Mountains  
ROM 3C - Distant Mountains

## 01 DIP SWITCH TEST

Shows state of all switches contained in DIP switches #1 & #2 and the resulting game adjustments. With the monitor displaying the test index, position the cursor at 01 and depress 1-Player Start.

```
DIP SW 1 2 3 4 5 6 7 8
SW1 1 0 0 0 0 0 0 0
SW2 0 1 0 0 0 1 0 1
PATROL CARS 4
ADDITIONAL CARS
POINTS 10, 30, 50 THOUSAND

COIN MODE 1 COIN 2 PLAYS
BODY TYPE UPRIGHT
```

### *Troubleshooting*

**Game adjustments can be set and checked** using switches contained in DIP 1 and DIP 2. To make sure all switches are functioning properly, set switch 8 of DIP 2 to the ON position and select test 01 of the diagnostics test index. The video display of test 01 shows the state of every switch in DIP 1 and DIP 2, and the current game adjustments. A "1" ON, and "0" OFF for all switches.

Switch functions listed below:

### DIP SWITCH 1

Switch	Function
1 & 2	<b>Determine the number of patrol cars</b> (2-5) allowed per player per game. If these switches fail, measure resistance between pin 1 and pins 2 & 3 of RA5, or replace chip 1F.
3 & 4	<b>Determine the point level</b> (in thousands; 10/30/50, 20/40/60, 10 only, & NO EXTENDED PLAY) where additional cars are earned. For failure of these switches measure resistance between pin 1 and pins 4 & 5 of RA5, or replace chip 1F.
5, 6, 7 & 8	<b>Determine the pricing</b> for coin modes 1 & 2. For failure of these switches, measure resistance between pin 1 and pins 6, 7, 8, & 9 of RA5, or replace chip 1E.

**If all switches of DIP switch 1 fail**, first check voltage at pin 1 on RA5 for Vcc, then check switches and associated chips and circuitry.

## DIP SWITCH 2

Switch	Function
1	<b>Flips picture</b> vertically when in the ON position to accomodate different monitors. Set it to OFF for all Moon Patrol games. If the picture is flipped anyway, check pins 11, 12, & 13 of chip 6K; measure resistance between pins 1 & 2 of RA6, or replace chip 6K.
2	<b>Defines the game type.</b> Upright games require it to be ON and cocktail table games require it to be OFF. For failure of this switch, measure resistance between pins 1 and 3 of RA6, or replace chip 1H.
3	<b>Determines coin mode</b> 1 (OFF) or coin mode 2 (ON). Failure of this switch requires measurement of resistance from pin 1 to pin 4 of RA6, or replacement of chip 1H.
4	NOT USED
5	<b>Allows selection of Freeze-Screen</b> test feature. Freeze-Screen feature allows the 1-Player Start to <b>start</b> motion of the game and the 2-Player Start to <b>stop</b> motion of the game. Failure of this switch requires measurement of resistance from pin 1 to pin 6 of RA6, or replacement of chip 1F.
6	<b>Permits Sector-Selection</b> programming feature. Failure of this switch requires measurement of resistance from pin 1 to pin 7 of RA6, or replacement of chip 1F.
7	<b>Permits "Demo" mode</b> (allows viewing of entire courses in game play since patrol car is never destroyed). Failure of this switch requires measurement of resistance from pin 1 to pin 8 of RA6, or replacement of chip 1H.
8	<b>Permits Diagnostics mode.</b> Failure of this switch requires measurement of resistance from pin 1 to pin 9 of RA6, or replacement of chip 1H.

If all switches of DIP Switch 2 fail, first check voltage at pin 1 on RA6 for Vcc, then check switches and associated chips and circuitry.

## 02 I-O PORT (Control Panel/Coin Door Switch) TEST

Shows if all controls and coin mechanisms are functioning properly by displaying a matrix composed of the states of switches on the Control Panel and Coin Door. With the monitor displaying the test index, position the cursor at 02 and depress 1-Player Start.

	1	2	3	4	5	6	7	8
KEY	0	0	0	0	0	0	0	0
KEY	1	0	0	0	0	0	0	0
KEY	2	0	0	0	0	0	0	0

## TIMING 0000

The TIMING number starts at 0000 and adds one count approximately every second.

If any Control Panel or Coin Door switch is closed a "1" will appear in the above matrix as follows:

1-Player Start Button	KEY0-1
2-Player Start Button	KEY0-2
Coin Switch A	KEY0-4
P1 FASTER (Joystick Right)	KEY1-1
P1 SLOWER (Joystick Left)	KEY1-2
P1 JUMP	KEY1-6
P1 FIRE	KEY1-8
P2 FASTER (Joystick Right)	KEY2-1
P2 SLOWER (Joystick Left)	KEY2-2
Coin Switch B	KEY2-5
P2 JUMP	KEY2-6
P2 FIRE	KEY2-8

**Coin Switch B** is present only in games with coin doors that accept coins of two different values. The P2 switches are used in cocktail table games only. To end this test and return to test index: move joystick lever left while pressing the 2-Player Start Button.

### Troubleshooting

All control panel and coin door switches can be checked (see below) with diagnostics test 02. Also, the display includes a TIMING check which should advance about one count per second.

#### I-O PORT LAYOUT

	1	2	3	4	5	6	7	8
KEY 0	1-P START	2-P START	SERVICE*	COIN A				
KEY 1	P1 FAST	P1 SLOW				P1 JUMP		P1 FIRE
KEY 2**	P2 FAST	P2 SLOW			COIN B	P2 JUMP		P2 FIRE

TIMING 0000

\* Service switch not provided.

\*\* Player 2 switches on cocktail table games only.

PORT	PULLUP RESISTOR	CHIP
KEY 0-1	RA3-5	1E
KEY 0-2	RA3-3	1E
KEY 0-3	RA3-2	1E
KEY 0-4	RA3-4	1E
KEY 1-1	RA2-9	1D
KEY 1-2	RA2-5	1D
KEY 1-6	RA2-6	1D
KEY 1-8	RA2-8	1D
KEY 2-1	RA1-9	1C
KEY 2-2	RA1-5	1C
KEY 2-5	RA1-4	1C
KEY 2-6	RA1-6	1C
KEY 2-8	RA1-8	1C

### 03 SOUNDS Test

A list of sounds normally produced by the game appears as shown below on the monitor. With the monitor displaying the test index, position the cursor at 03 and depress 1-Player Start. Position the cursor with the joystick to select a sound and press the 1-Player start button for repetition of the sound.

- 01 EXPLOSION (ROCK)
- 02 PASSING ONE POINT
- 03 UFO EXPLOSION
- 04 MISSILE FROM CAR
- 05 COIN
- 06 CAR JUMP
- 07 SPACE PLANT
- 08 UFO FLYING
- 09 BACK GROUND MUSIC
- 10 ENDING MUSIC
- 11 OPENING MUSIC
- 12 REACHING GOAL
- 13 CONGRATULATION
- 14 CAR EXPLOSION

## Troubleshooting

### NO SOUND

#### CHECK

GND, +5V, +12V, and Speaker connections.

Rotate Volume Control VR1 on Sound Board and listen for scratching sound in speaker.

Touch 3M-3 with one end of an unterminated test lead for speaker clicking sound.

Check that chip 3D-3 remains low for 1 second after power up.

CPU Board chip 1K-12 for low pulse each time 1-Player Start is pushed.

Check that chip 3E-8 and -10 are low, and 3E-9 is high when 3D-3 goes high. (This powers up MPU 3E in proper mode.)

Interchange socketed chips 3F and 3J.

Across each crystal for AC voltage.

#### REMEDY OR ADJUSTMENT

Fix as needed.

If none, chip 2M or associated circuit on Sound Board faulty.

If none, chip 3M or associated circuit on Sound board faulty.

If not chip 3D on associated circuit on Sound Board faulty.

If no pulse, disconnect Sound Board from CPU and recheck. If still not pulsing, chip 1K on CPU Board is faulty. If it now pulses, chips 1F or 3J on Sound Board faulty. If pulse present originally, replace plug-in chips on Sound Board one at a time.

If not 2K, associated capacitors, or 3E on Sound Board faulty.

If some sounds are now produced the chip **now in 3F socket** is faulty.

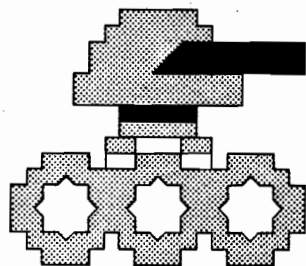
If none, crystal or associated capacitors faulty.

SYMPTOM	POSSIBLE CAUSE	TEST POINTS	
		SOUND BOARD	CPU BOARD
Sound 1 not produced	D0 and D1 shorted together	3J-19 and-20	1K-9 & -6
Sounds 1 & 3 same	D4 stuck low	3J-17	1K-19
Sounds 1 & 3 same & only sounds produced	D4 stuck high	3J-17	1K-19
Sound 4 not produced	D3 stuck high	3J-18	1K-2
Sound 6 not produced	D0 stuck high	3J-21	1K-9
Sound 7 not produced	D2 stuck high	3J-19	1K-5
Sound 9 not produced	D1 stuck high	3J-20	1K-6
Sound 10 not produced	D0 or D1 stuck low	3J-20 & -21	1K-6 & -9
Sound 12 not produced	D2 or D3 stuck low	3J-18 & -19	1K-2 & -5
Sounds 10 and 12 not produced	D1 and D2 shorted together	3J-19 & -20	1K-5 & -6

Sounds 2 thru 6 not produced chip 1F faulty. Any other sounds missing or duplicated - Chip 1J or 1F faulty.

**04 CHARACTER Test**

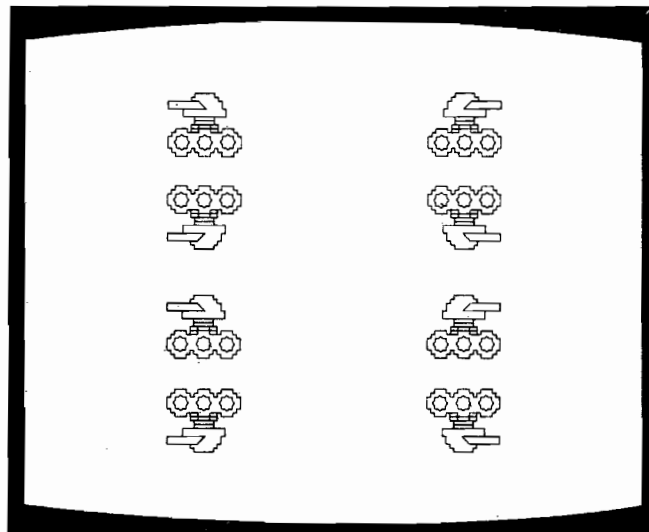
With the monitor displaying the test index, position the cursor at 03 and depress 1-Player Start. A display composed of 8 tanks vertically and horizontally flipped as shown below appears on monitor.



■ = GREEN—TANK—TREADS

■ = RED—GUN

□ = VIOLET—TREAD WHEELS



**Troubleshooting**

Faults in chips on M-52-B-C Character Board result in symptoms as follows;

**SYMPTOM**

Blank Screen

8 green squares

Colors of tank incorrect OR details of tank missing

8 green squares with red wheel hubs, & red tank guns

8 magenta squares with red wheel hubs, red tanks & red tank guns

Colors of tank assembly correct with GREEN OR MAGENTA vertical lines present

**CAUSE**

Chip 1F

Chip 2H

Chip 1F or 2H

Chip 3N

Chip 3M

Chip 3N or 3M

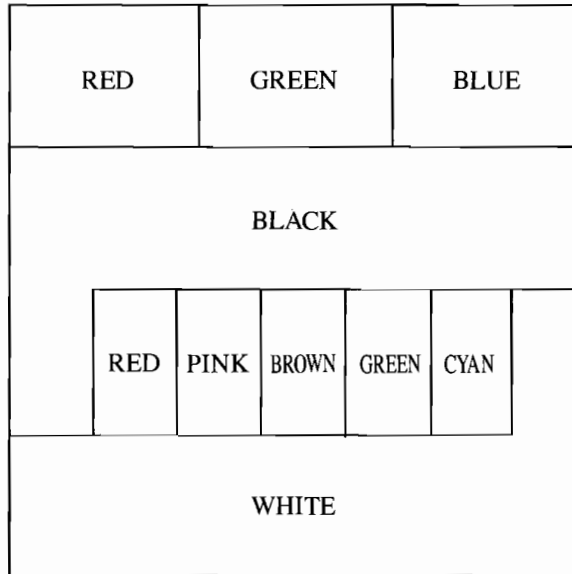
**05 COLOR Test**

Position the cursor at 05 and depress 1-Player Start. This test consists of 5 independent steps (advanced by depressing 1-Player Start) as follows:

1. An alphanumeric display is shown as below over a row of numbers 0 thru 9, letters blue and numbers white.

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
0123456789

2. A color pattern is displayed as shown:

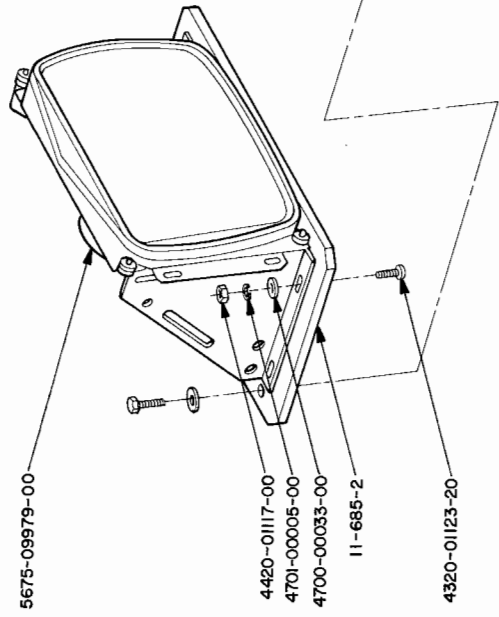
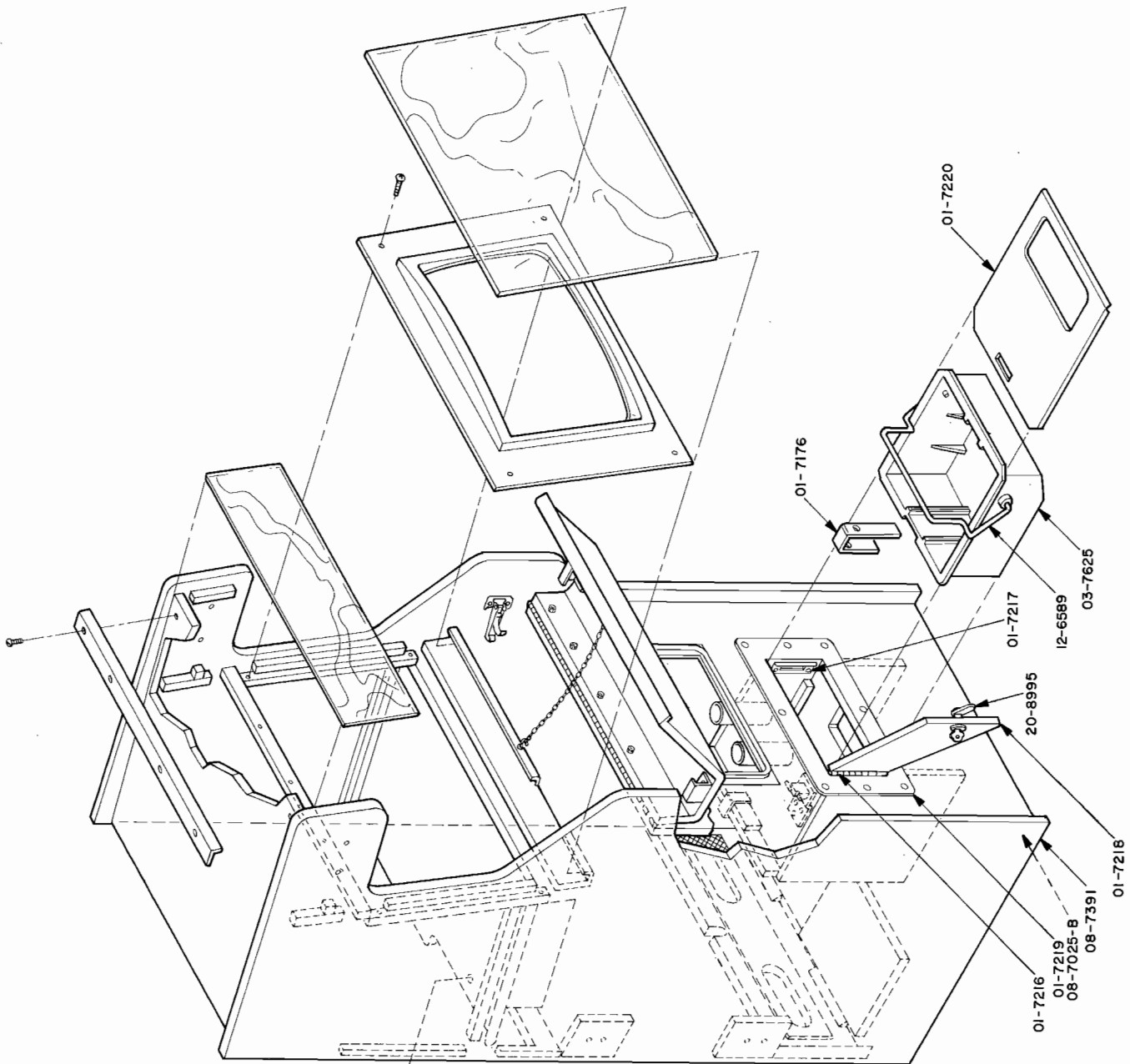


3. A field of red is displayed.
4. A field of green is displayed.
5. A field of blue is displayed.

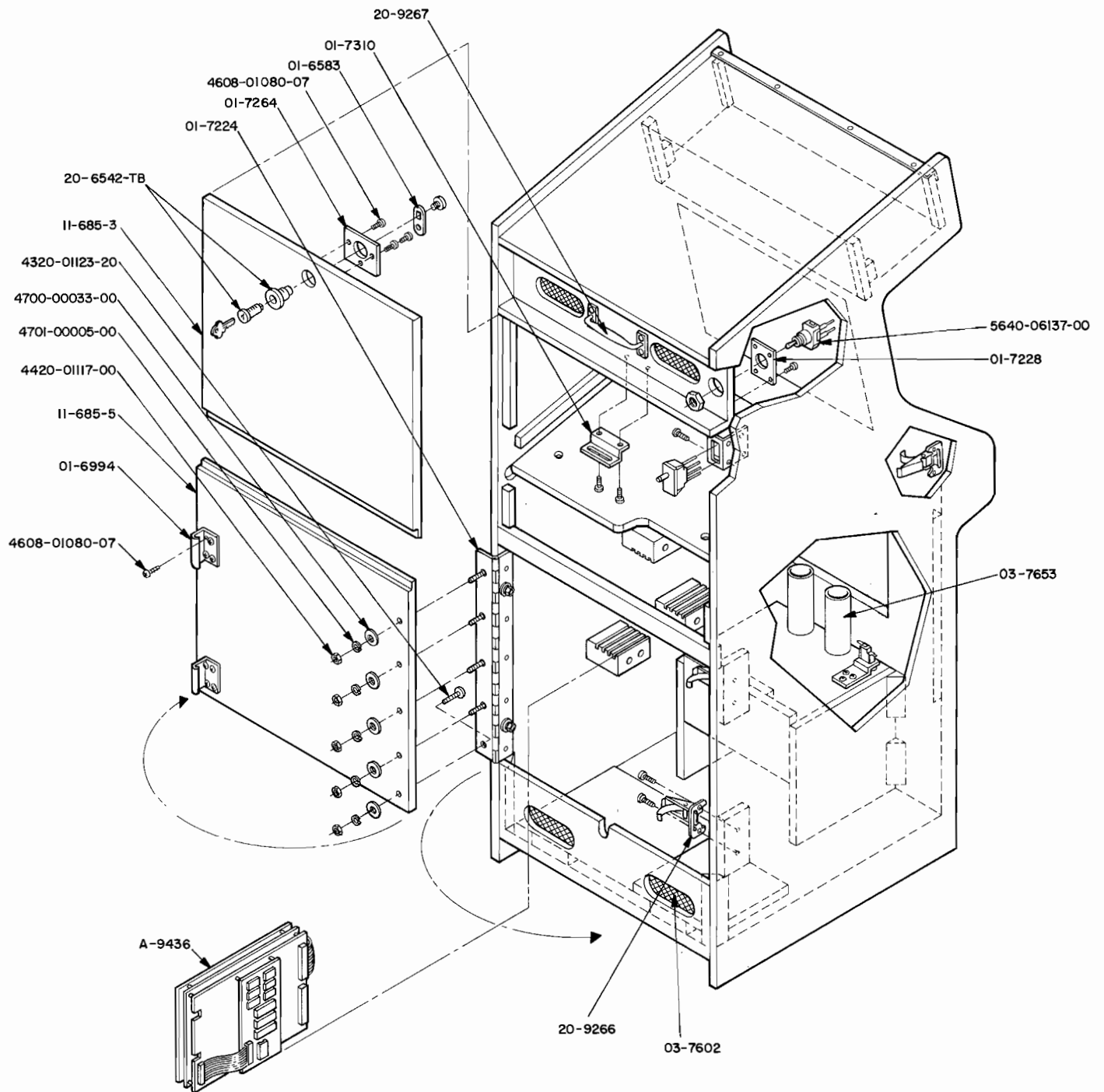
Each independent step of this COLOR test can be advanced through by pressing the 1 Player start button.

**06 CROSS HATCH PATTERN TEST**

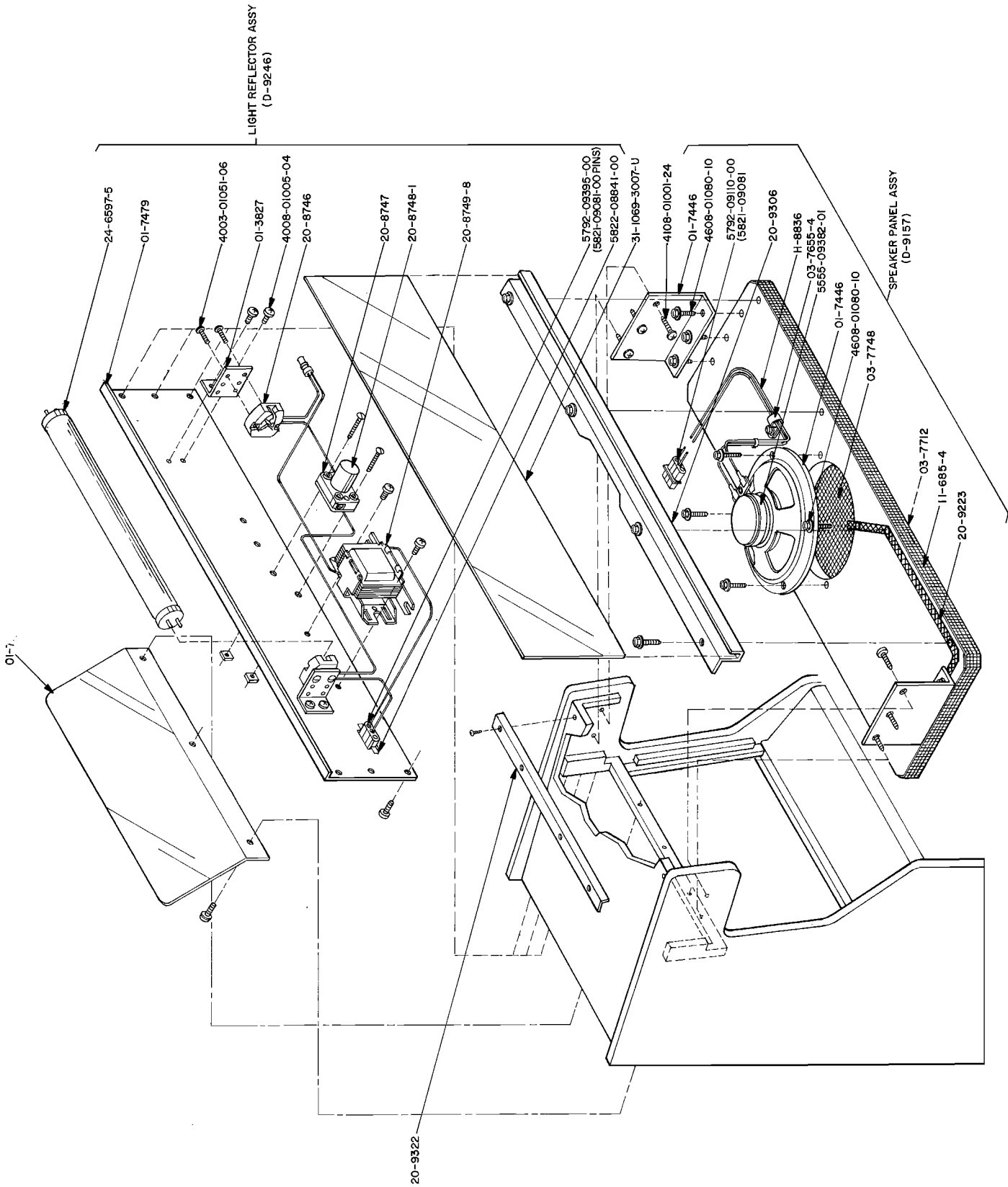
Position the cursor at 06 and depress 1-Player Start. A white line matrix 16 lines vertical x 16 lines horizontal is displayed.



- |                        |                |
|------------------------|----------------|
| Control Panel          | R-9430         |
| Red Button Assembly    | C-92 14-4      |
| White Button Assembly  | C-92 14-5      |
| Yellow Button Assembly | C-92 14-6      |
| Joy Stick              | 20-9254        |
| Trunk Latch Bracket    | 01-6994        |
| Trunk Latch            | 20-9266        |
| Control Panel Hinge    | 20-9447        |
| Control Panel Overlay  | 31-1067-3007-U |







MOON PATROL - COCKTAIL

FRELIMINARY PARTS LIST

DESCRIPTION	PART NO.
Cash Box Assembly	D-8603
Glide with Screw	20-9261
Monitor/Supports Assembly	B-9237-1
Cocktail CRT Support - L	11-679-3-L
Cocktail CRT Support - R	11-679-3-R
19" Monitor 19K4903	5675-09979-00
Line Voltage Cable Assembly	D-8613
Power Pack System 3 "T"	D-9188-3007
Heat Sink Assembly	C-8809
P.S. PCB Assembly	D-8784-3007-T
Power Pack-T Sub Assembly	D-9275
Transformer Assembly	C-8609
PCB Plate Sub Assembly	C-9265
Power Supply Mounting Board	
Clamp & Gasket Assembly - Table Top	B-8692
Cocktail Brace Assembly	B-9276
Stud-Shoulder Hinge	02-4122
Cocktail Top Brace	20-9262
Mask w/Instruction Cards	D-9240-3007
Cabinet Top Hinge Cocktail	01-7105
Top Lock Catch Bracket	01-7190
Top Lock Catch	02-4039
CRT Bezel *	03-7731
CRT Filter	03-7732
Cocktail Glass Blank	08-7384
Cocktail Top	11-679-4
Control Panel	D-9432
Red Button Assembly	C-9214-4
Yellow Button Assembly	C-9214-5
Joy Stick	20-9254
Control Panel Cover	31-1070-3007-T

MOON PATROL - COCKTAIL

PRELIMINARY PARTS LIST (Continued)

DESCRIPTION	PART NO.
Component Door	D-9451
PCB's Assembly	A-9436
Lock Bracket - Cocktail	01-7102
Door Kick Plate	01-7115
Speaker Grill-T	03-7622
PCB Mounting Block	11-689-2
PCB Mounting/Stop Block	11-689-3
Component Door	11-690-2
Speaker	5555-09626-00
Coin Door Assembly	D-9452
Light Socket Assembly	A-8639
Lock Link & Stud Assembly	A-8650
Red Button Assembly	A-8654
Terminal Strip & Diode	A-9103
Lock Link/Stud Assembly	B-8651
Coin Door Lock Guide	01-7099
Coin Door Hinge	01-7103
Coin Door Kick Plate	01-7117
Guide Bracket	01-7131
Guide Strip	01-7133
Lock Link / Lower	01-7134
Lock Mech Guide	02-4029
Coin Mech - Quarter	09-11000
Cocktail Coin Door	11-679-5
Cam Lock - Coin Door	20-6542-TB
Cocktail Coin Door Cover	31-1057-3005-T

**Warning**—This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions 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 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 is likely to cause interference in which case the user at his own expense will be required to correct the interference.

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