

Namco-America, Inc.

FINAL LAP 3 TM

Sit Down

PRELIMINARY

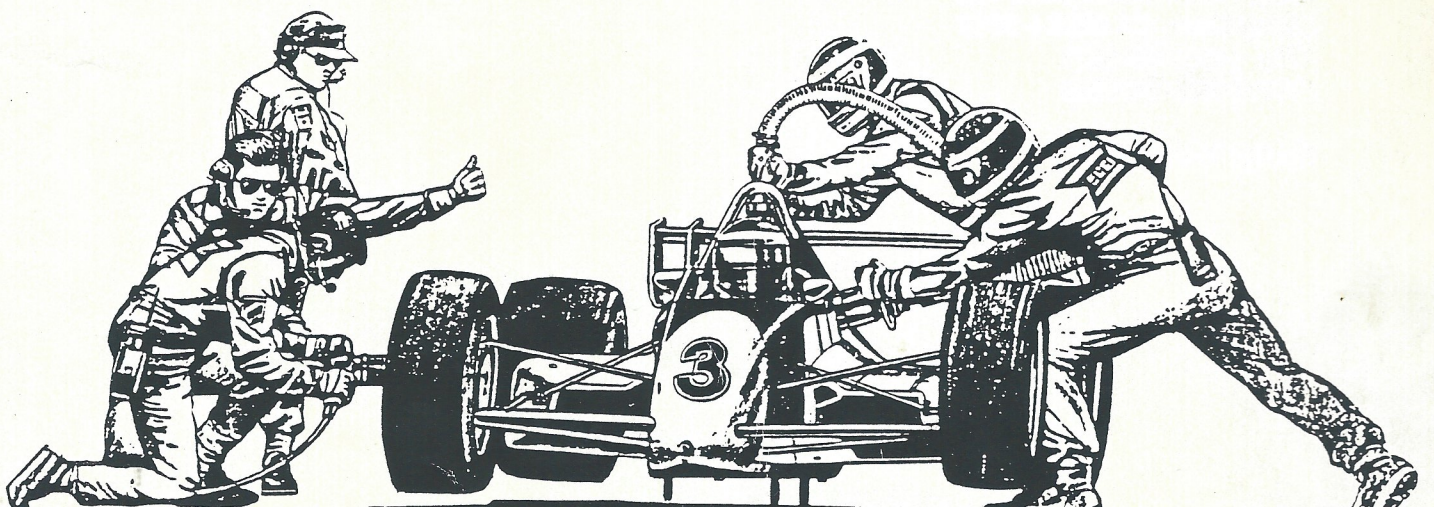
Operators Manual

FCC Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

namco[®]

FINAL LAP[™] 3 SIT DOWN Operators Manual



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11. LIST OF ILLUSTRATIONS

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FINAL LAP™ 3 – Sit Down

1. SPECIFICATIONS

POWER SUPPLY:	PC XT Type Switching Power Supply			
POWER CONSUMPTION:	Not to exceed 150W, 120VAC, 5.0 AMP			
DIMENSIONS:	Width	Depth	Height	
	53 3/4"	64 3/4" (with seats)	60 1/2"	
CRATED DIMENSIONS:	Width	Depth	Height	
	Monitor Cabinet Carton	55"	36"	66"
	Players Seats Carton	47"	21 1/2"	45"
SHIPPING WEIGHT:	650 lbs. (including seats)			
MONITORS:	2 each standard 25" Color Monitors with auto degause and remote adjustment board			
ACCESSORIES:	Keys: (Coin Box)	2		
	(Coin Door)	2		
	(Rear Door)	2		
	Security Wrench	1		
	Seat Bracket Bolts	4		
	Seat Leg Levelers	8		
	Link Cable	1		
	Instruction Manual	1		
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Note: Specifications may change without prior notice. Modification and/or alteration of the FINAL LAP™ 3 game with kits or parts not supplied by NAMCO may void the warranty.

2. PRECAUTIONS

2-1 CAUTION

This game is designed for indoor use only. The game must **NOT** be installed outdoors or under the following conditions:

- a. In areas directly exposed to sunlight, high humidity, direct water contact, dust, high heat or extreme cold.
- b. In locations that would present an obstacle in case of emergency, i.e. near fire equipment or emergency exits.
- c. On an unstable surface or subject to floor or other vibration.

2-2 Caution when handling

- a. Power **MUST** be turned off before replacing any parts or connecting/disconnecting the connectors.
- b. Do not subject game to physical shock when transporting or moving it.
- c. The power supply range is between 110-120V AC.
- d. The cabinet **MUST** be grounded with a securely connected ground plug.
- e. Electrical power **MUST** be removed from the game whenever inspecting or adjusting the game.
- f. When unplugging the game from an electrical outlet, grasp the plug, not the power cord.
- g. DO NOT attempt to repair the Printed Circuit Board (PCB) on site. It contains sensitive chips that could easily be damaged by even the small internal voltage of a multi-meter. Always return the PCB to your distributor for any repairs.

3. INSPECTION

The FINAL LAP 3 Game cartons should be carefully inspected upon receipt to insure that the game is complete and was delivered in good condition.

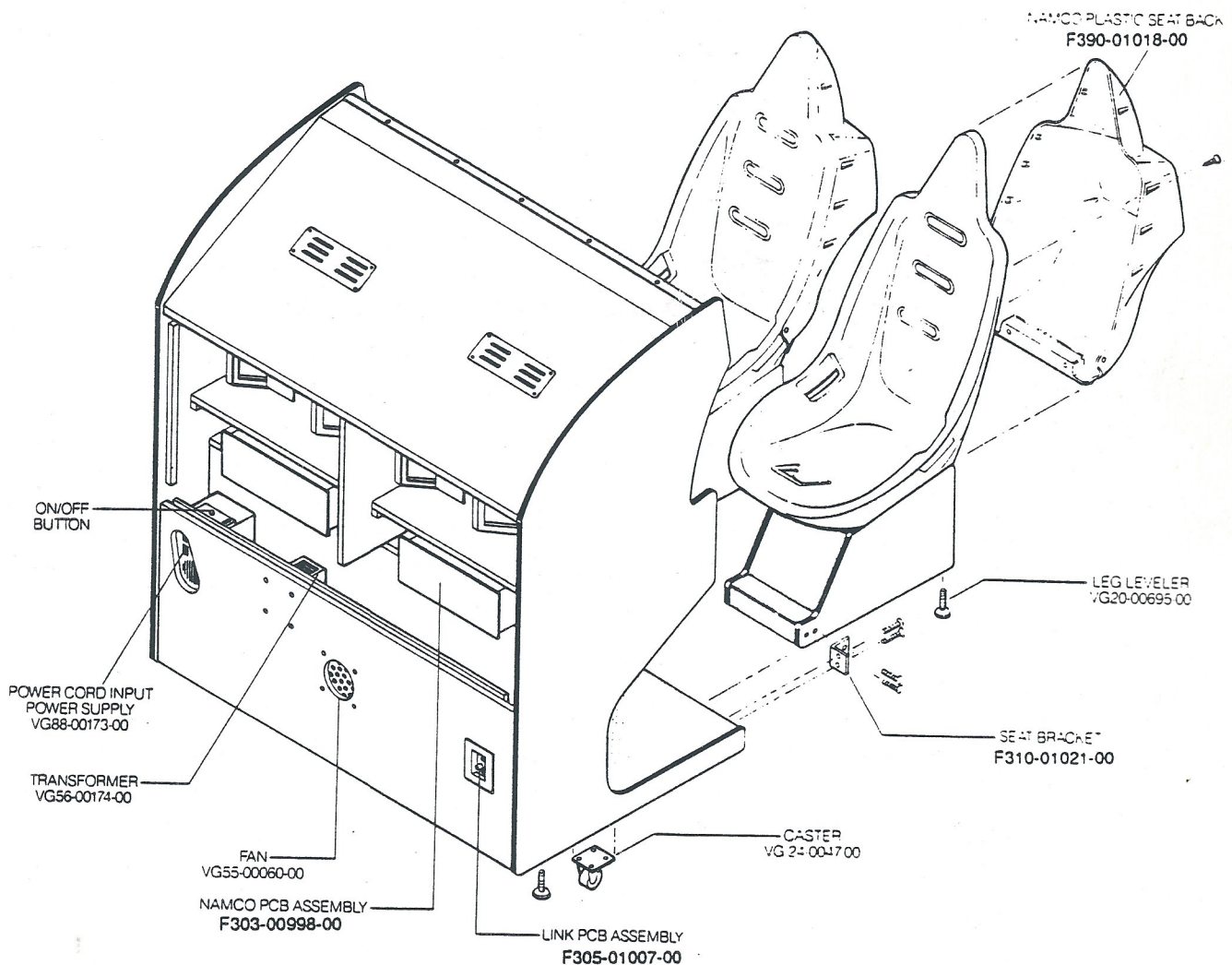
Inspect the game cabinet and seat assembly by doing the following:

1. Examine the cabinet exterior for dents, chips, or broken parts.
2. Unlock and open the rear service door, and coin doors. Inspect the interior of the cabinet as follows:
 - a. Verify that all plug-in connectors (on the cabinet harnesses) are firmly plugged in. The connectors next to the PCB metal enclosure are for the car-color selection. Any one, or none, of the three connectors can be plugged into the harness connector. (For more information, Ref. 4-5, Choosing the Car-Color). DO NOT force connectors together. The connectors are keyed so they fit only in the proper orientation. A reversed edge connector can damage a PCB and will void your warranty.
 - b. Inspect the power cord to insure that there are no cuts or dents in the insulation.
 - c. Inspect the power supply connectors.
 - d. Inspect other major sub-assemblies, such as the video display monitors, PCBs, and speakers. Make sure that they are mounted securely and that all ground wires are firmly connected.

4. INSTALLATION

4-1 Attaching the Player's Seats to the Monitor Cabinet

- a. Each Player Seat Assembly has an "L" shaped metal flange pre-installed on the lower front corners of its base. Rotate the brackets and align the exposed holes of the flange with corresponding holes on the bottom front of the Monitor Cabinet Base, and insert and tighten all four bolts on each flange.
- b. Each Player Seat Assembly contains four (4) leveling/height adjusters. They should be rotated using a box wrench to align the chair assembly floor with the floor of the Monitor Cabinet. Also use these adjusters to compensate for any uneven floor surface.



4-2 Preparing the game for operation

If installing a **single** FINAL LAP 3, check the following:

- a. Be sure all power is disconnected before making any adjustments.
- b. Remove the monitor AC power cord, and plug it into the power supply.
- c. Note the position of the Link PCB Switch located in the recessed metal box opposite the power supply on the lower back panel of each Monitor Cabinet.
- d. Each FINAL LAP 3 is shipped with the connector switch set for a single cabinet operation, and should have the slide switch set in the "OUT" position. Check to make sure it is set to "OUT" (see below).

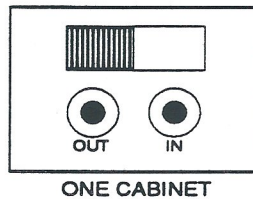


Illustration 4-2, LINK CONNECTION – ONE CABINET

4-3 Connecting two (2) or more FINAL LAP 3s

Up to four (4) FINAL LAP 3s can be interconnected (linked) to allow up to eight (8) players to participate in the same race. When linking two or more games, the following conditions must be met:

- a. Each FINAL LAP 3 game should be connected to a separate power outlet.
- b. Game difficulty and lap settings must be the same on all monitors in the linked group. (Ref. 5-3-(2))
- c. All connecting slide switches should be set to the "IN" setting.
- d. Install the link cables between the FINAL LAP 3s by connecting an "OUT" from one Monitor Cabinet to an "IN" of another game per the following diagrams. Be sure to seat each plug solidly in its jack.
- e. Perform the self-test by turning the power on to each game. Make sure that the connections are properly made between games. (Ref. 5-3-1, Self-Test)

(CAUTION)

- * Link Cables transmit electronic data between games and are subject to electronic interference.
- * Install the Link Cable as far from other room cables as possible.

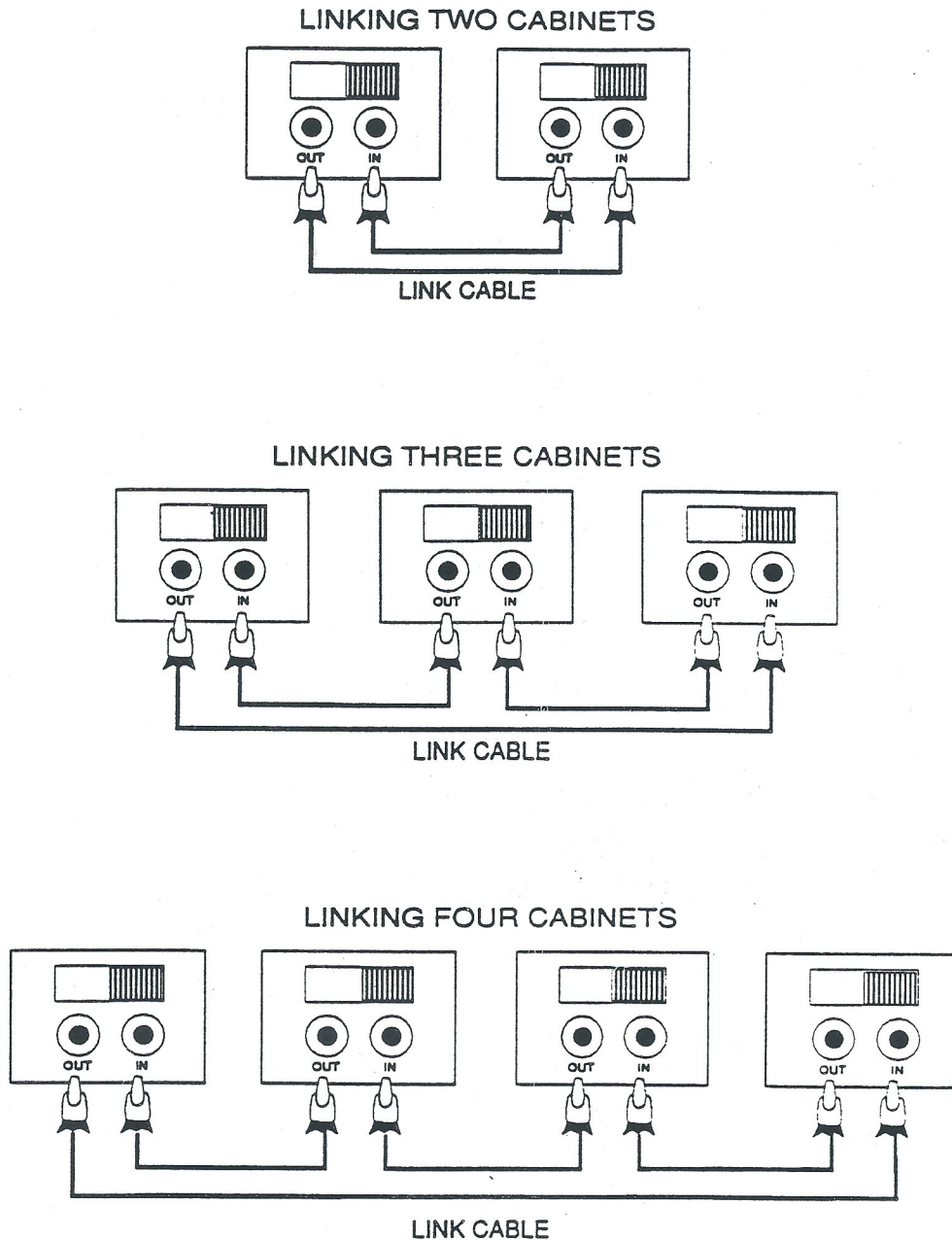


Illustration 4-3, LINK CONNECTIONS - 2, 3 and 4 CABINETS

4-4 Power On/Off Switch location

The power on/off switch is located on the top of the power supply inside the cabinet at the bottom left back of the cabinet.

The FINAL LAP 3 games are designed to be placed side by side in line, flush with each other, to be linked for multiple player competition. The ON/OFF switch is located inside the cabinet to allow for this arrangement.

4-5 Choosing the car color

Each player can select from one of four car colors. This is done by plugging in different connectors (included with the game) into the car-color connector located on the cabinet center wall between the PCB enclosures.

The game, as shipped, has one connector plugged into the car-color harness and the other two connectors attached to it.

The following are the car colors and their connectors:

- Blue car. Plug in the connector with wires at all 4 pins.
- Red and white car. Plug in the connector with wires at pins 2 and 4.
- White car. Use NO connector.
- Red car. Plug in the connector with wires at pins 1 and 3.

WHITE Car - USE NO CONNECTOR

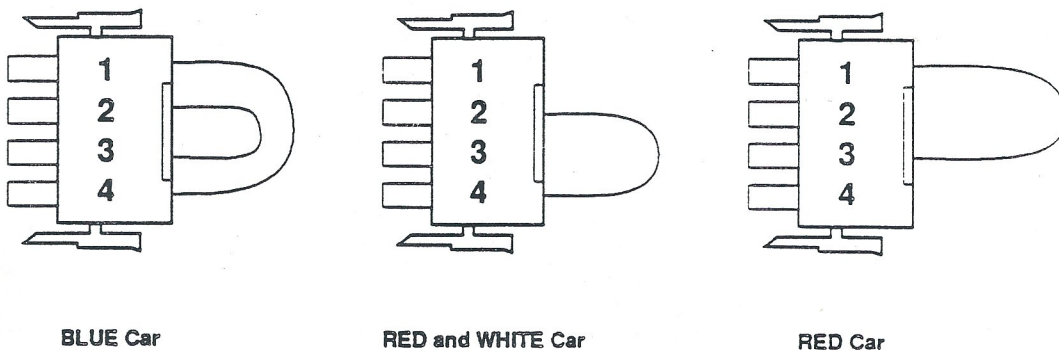


Illustration 4-4, CAR-COLOR CONNECTORS

5. ADJUSTMENTS

5-1 Power on

When installation is complete, connect power cord to outlet and turn power on.
(Ref. 4-4 - Power on/off Switch location)

5-2 Adjustment switches on the Service Panel

There are switches for adjustment inside the coin door. These should be adjusted separately for left and right player positions.

(1) Test Switch – Right Player, Left Player

Turning this switch “ON” enters the test mode for the player position indicated, and activates the Game Option Screen on the appropriate Player Monitor. This is where the self-tests are performed, and game variables (pricing, level of difficulty, number of laps per game etc.) are set/changed (Ref. 5-3-(2)). Turn the test switch to the “OFF” position at any time to return to The Game Screen.

(2) Sound Volume Control

Stereo left and right sound volume adjustment is made separately for left/right speakers by the sound volume controls for left and right players.

(3) Credit Switch

By pressing this switch, the number of credits can be increased without advancing the coin counter.

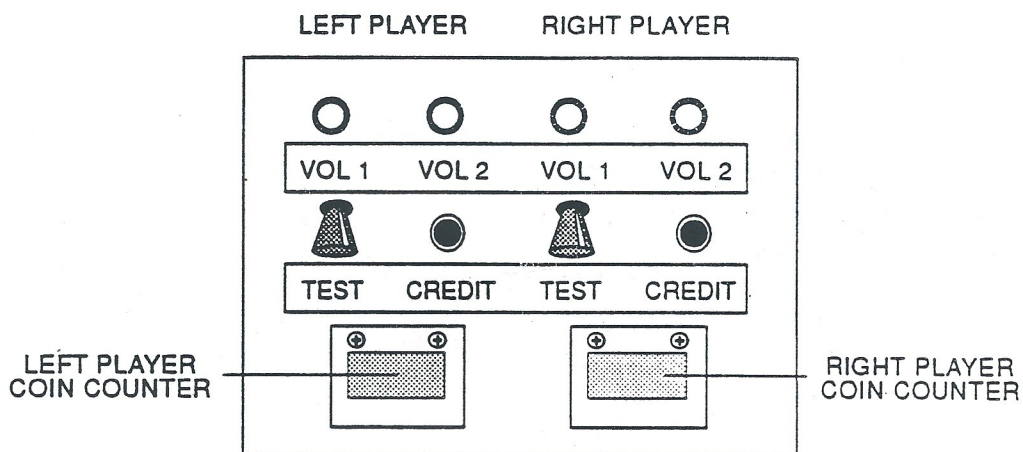


Illustration 5-1, SERVICE PANEL

5-3 Test Mode

The self-test function is activated by using the test switch. There are five (5) kinds of test mode screens where the game pricing is changed and where various tests for each control are performed.

(1) Self-test

Open the coin door and flip the test switch to the “ON” position. If the game Printed Circuit Board is operating properly, the “Game Option Screen” is displayed on the appropriate monitor. Pressing the credit switch while in the Game Option Screen causes the various Test Screens 1 through 5 (Switch Test Mode Screen, ADS (Bookkeeping) Mode Screen, Cross Hatch Pattern (2) and Color Bar Test Screen) to appear. (Ref. 5-3-(3), “Test Mode Screens”, for information regarding each screen).

(2) Changing the game settings (Game Option Screen)

Turning the Test Switch "ON" displays the Game Option Screen, allowing game pricing and other settings to be changed.

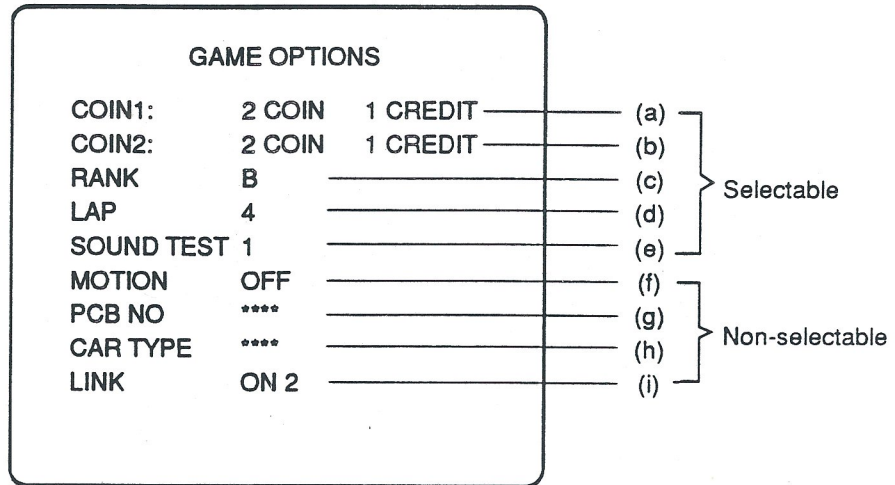


Illustration 5-2, GAME OPTION SCREEN

Select an item to be changed by turning the steering wheel until the desired item is illuminated in red letters. To change the content of the selected item, shift gears to "HIGH". Select the settings according to the TABLE OF GAME OPTION SETTINGS (below). After all desired changes have been made, press the Credit Switch, and various test screens will appear in sequence EACH TIME THE CREDIT SWITCH IS TOGGLED.

TABLE OF GAME OPTION SETTINGS (< standard setting)

ITEM	CONTENT	
(a) Game Fees (coin 1)	Coin(s)	1-9 (original setting is 2 <)
	Credit(s)	1-9 (original setting is 1 <)
(b) Game Fees (coin 2)	Coin(s)	1-9 (original setting is 2 <)
	Credit(s)	1-9 (original setting is 1 <)
(c) Rank (game difficulty)	A (easy) D (difficult) (original setting is B <)	
(d) Lap	3 - 6 (original setting is 4 <)	
(e) Sound Test	Various sound effects can be tested.	
(f) Motion	This should always be OFF. (unchangeable)	
(g) PCB - NO.	OK when it is shown.	
(h) Type of My Car	OK when it is shown.	
(i) Communication function test	Normal when it is ON. The number of game machines connected is indicated.	

Illustration 5-3, TABLE OF GAME OPTION SETTINGS

(3) Test Mode Screens

1. Switch Test Screen

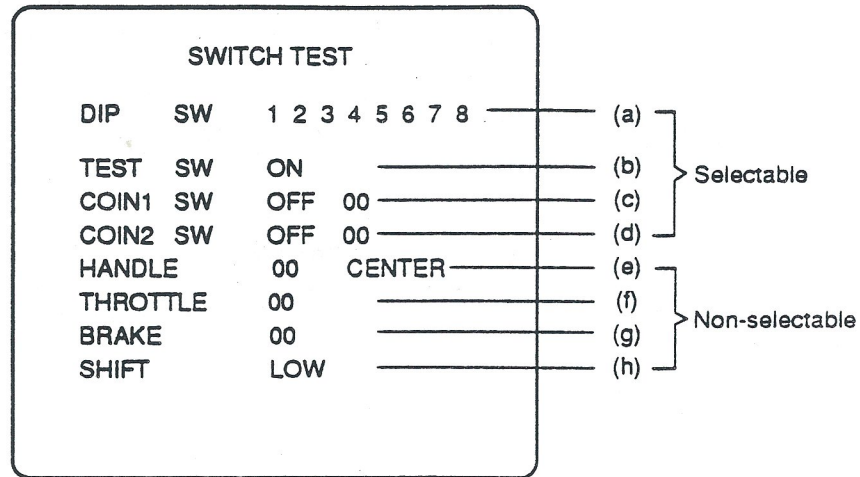


Illustration 5-4, SWITCH TEST SCREEN

- (a) The status of the option switches on the game PCB (CPU-PCB) is indicated by this display. Any number opposite DIP SW (switch) that is lighted red indicates that it is turned on.
- (b) A lighted red "ON" opposite TEST SW (switch) indicates a normal condition.
- (c) When the coin 1 switch is closed, a lighted red "ON" appears indicating proper operation. The number displayed indicates the number of times the switch has been triggered. The coin counter will also advance.
- (d) When the coin 2 switch is closed, a lighted red "ON" appears indicating proper operation. The number displayed indicates the number of times the switch has been triggered. The coin counter will also advance.
- (e) Under normal conditions, the following displays result from operating the steering wheel.
 - 1) "00 CENTER" is shown with hands off the steering wheel.
 - 2) When the wheel is turned to the left, the word "LEFT" and decreasing numbers indicating degree of turn are shown.
 - 3) When the wheel is turned to the right, the word "RIGHT" and increasing numbers indicating degree of turn are shown.
- (f) Pressing the gas pedal down gradually increases the number and "OK" will be displayed if all is normal. "00" should be displayed when the pedal is not depressed.
- (g) Pressing the brake pedal down gradually increases the number and "OK" will be displayed if all is normal. "00" should be displayed when the pedal is not depressed.
- (h) Moving the position of the shift lever from High to Low should produce a

2. ADS Mode Screen (Bookkeeping for FINAL LAP 3)

The ADS screen denotes the four race tracks. The ADS keeps count of the number of times the particular track was selected and played, and the number of laps completed on that track. This provides an operator the ability to keep track of the most played tracks. To clear the system (reset count to all 0's) shift gears from LOW to HIGH. The "ADS CLEAR?" question should read "YES". Exiting the test screen will reset all the counters.

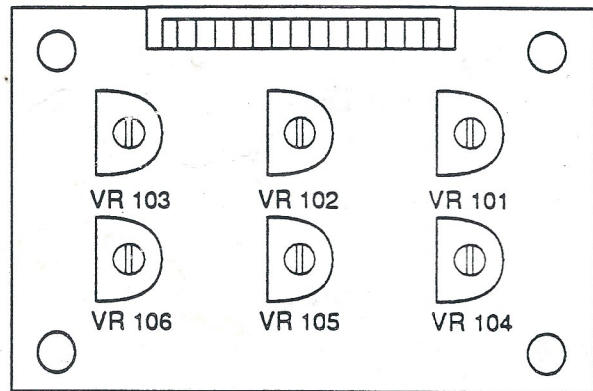
3. Cross Hatch Pattern Screen. (Ref. 5-4-1)

4. Cross Hatch Pattern Screen with White Block Adjustment. (Ref. 5-4-2)

5. Color Bar Test Screen. (Ref. 5-4-3)

5-4 Monitor Adjustments

The monitor remote adjustment control is located inside the control panel so that one person may adjust the monitor while in the player's seated position.



TOP ROW - LEFT TO RIGHT
VR 103 - VERTICAL POSITION
VR 102 - BLACK LEVEL
VR 101 - CONTRAST
BOTTOM ROW - LEFT TO RIGHT
VR 106 - HORIZONTAL POSITION
VR 105 - VERTICAL HOLD
VR 104 - VERTICAL SIZE

Illustration 5-5, MONITOR REMOTE ADJUSTMENT BOARD

5-4-1 Cross Hatch Pattern

To center cross hatch pattern:

- Use VR 103 (V-POS) to adjust cross hatch UP or DOWN.
- Use VR 106 (H-POS) to adjust cross hatch LEFT or RIGHT.

5-4-2 Cross Hatch Pattern with White Block Adjust

White block adjustment should not be necessary – just insure that block is centered in the cross hatch, and is white. If it is not, call a qualified Service Technician.

5-4-3 Color Bar Test

WARNING - HIGH VOLTAGE

Color should not need adjusting, but if the white fade test (the bottom white bar) is tinted an off color, adjustment can be made with the appropriate color gun adjustment on the CRT neck board, i.e. RED - VR202, GREEN - VR204, BLUE - VR206, or by a qualified Service Technician.

5-5 Initializing Controls

When replacing the game PCB, the ROM, the Steering Assembly, the Gas/Brake Pedal Assembly, or the potentiometer, be sure to follow the procedures below.

- (1) Open the coin door.
- (2) Remove hands and feet from the steering wheel, the gas and the brake pedals.
- (3) While in the game screen, hold the credit switch and turn the test switch on at the same time.
- (4) "INITIALIZE COMPLETED" will be shown on the monitor display (see below), and the adjustment is finished.
- (5) Turn the test switch "OFF" to return to the game screen.

		SWITCH TEST							
DIP	SW	1	2	3	4	5	6	7	8
TEST	SW	ON							
COIN1	SW	OFF	00						
COIN2	SW	OFF	00						
HANDLE		00	CENTER						
THROTTLE		00							
BRAKE		00							
SHIFT		LOW							
INITIALIZE COMPLETED									

Illustration 5-6, SWITCH TEST SCREEN

6. HOW TO PLAY

- FINAL LAP 3 is a race game that allows one to eight players to compete against time and/or each other. Four sets of games can be connected, and up to eight (8) players can race simultaneously.
- Each player manipulates his/her car independently by using the steering wheel, gas pedal, brake and shifter, trying to cross the finish line first while staying within the course and avoiding a crash with opponents vehicles and/or computer-controlled cars.
- After inserting the proper coin(s), a player starts the game by stepping on a pedal.
- Once a player starts a game, he/she is asked to select a course to race on. The screens in front of any empty seats display a message urging others to enter. Additional players can enter the race by inserting the proper coin(s) and depressing a pedal within 15 seconds. If a race has already begun, others can enter and enjoy another race together. One person can always play if no others enter that particular race.
- FINAL LAP 3 offers four (4) different race courses from which players select one for each race. A player has 15 seconds to select a course by turning the steering wheel, and confirm their selection by stepping on a pedal. If players select different courses, one course is decided by majority vote. In the event of a tie, one of the selected courses is randomly chosen by the computer.
- Once all the players have selected their courses, or if 15 seconds passes, the timer counts down to "3-2-1" and the race starts with a "GO" sign.
- The race continues until the timer runs out. The first player to complete a lap will extend the game time for all players in the same race.
- After completing the preset number of laps (operator adjustable), players reach the finish line and the thrill of the checkered flag.
- When players reach the finish line or time runs out, racing statistics, including the player's ranking and lap times, are shown.
- When a player wins a race in which two or more persons are entered, a Championship Celebration is shown on the monitor.
- Players can enter their scores with their initials onto the screen by using the steering wheel and stepping on the gas pedal to set.
- Any initials entered are reset once the game's power is turned off.

7. MAINTENANCE

Be sure to turn the power off before conducting any maintenance procedures.

7-1 Control Panel (Shift Assembly, Steering Assembly)

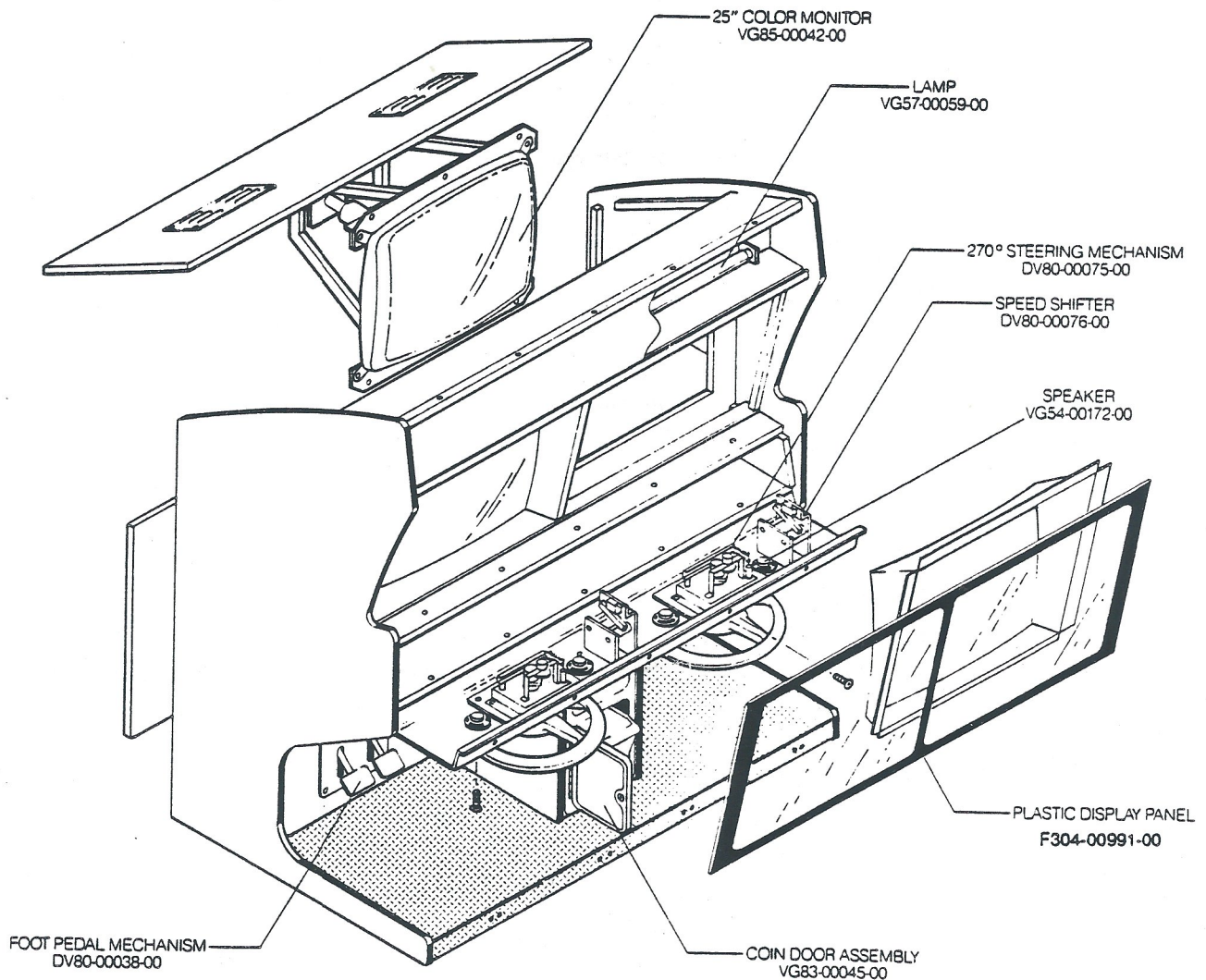


Illustration 7-1, 3/4 FRONT VIEW OF GAME

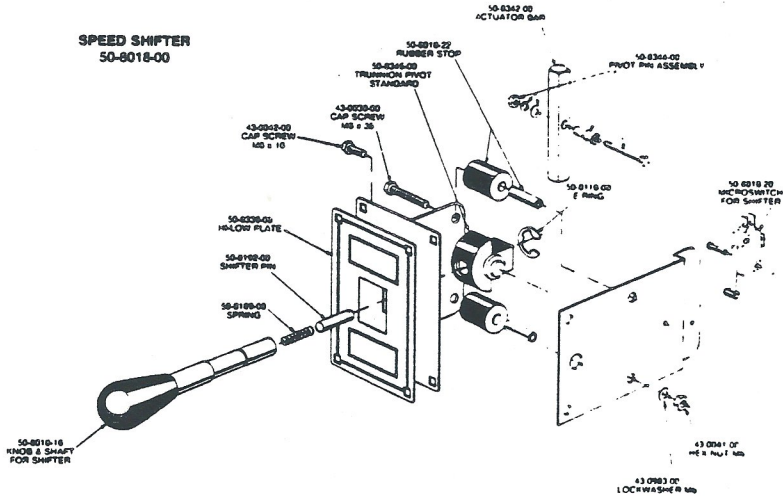
7-1-1 Opening the Control Panel

Remove the upper six (6) security bolts with the wrench provided.

Pivot the control panel open on the bottom control panel hinge. The

Control Panel is heavy, OPEN WITH CAUTION.

7-1-2 Happ Controls Shift Assembly

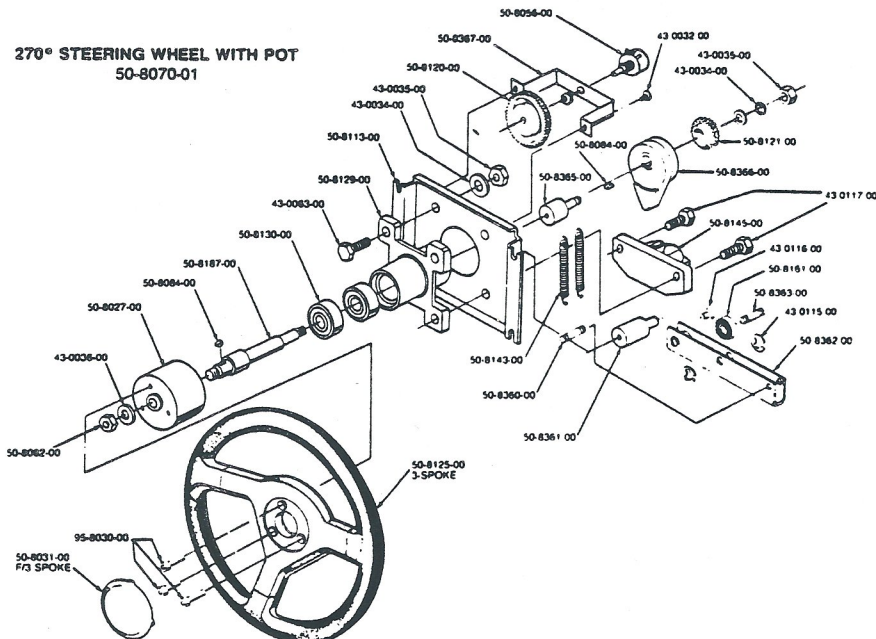


NOTE: Numbers shown are Happ Controls Part Numbers.

Illustration 7-2, HAPP SHIFT ASSEMBLY

- (1) Open the control panel. (Ref. 7-1-1)
- (2) Disconnect the wires from the shift assembly.
- (3) Remove the four (4) sets of nuts which hold the shift assembly, then the assembly can be removed toward the front. (When reassembling, be sure to set "LOW" at the upper side).

7-1-3 Happ Controls Steering Assembly



NOTE: Numbers shown are Happ Controls Part Numbers.

Illustration 7-3, HAPP STEERING ASSEMBLY

8. TROUBLESHOOTING – GENERAL

If you suspect the game may be malfunctioning, the following steps should be taken before you make a service request.

- (1) The power supply should be between 110-120 Volts AC. However, when some other equipment (air conditioner, multiple pinball games, air compressors, etc.) are connected to the same power outlet, the voltage may change beyond this range and cause game trouble or improper operation. Each Cabinet should be connected to its own dedicated power outlet.
- (2) When the game does not work with the power turned on, turn the power off, wait 5 seconds then reapply power. This may restart the game. If it still does not work, inspect the fuses.
- (3) When the game PCB, the ROMs, the Steering Assembly, the Gas/Brake Pedal Assembly, or the Potentiometers are replaced, it will be necessary to recalibrate these items prior to game play. Make appropriate adjustments referring to 5-5.
- (4) Check all wiring connections as malfunctions can be caused by loose connections.
- (5) Foreign substances on the game PCB or on the monitor PCB, or dust may cause malfunctions or improper operation. Check that the PCBs are clean.
- (6) When you make electrical checks, use the wiring diagrams for reference.
 - * If the above suggestions are not applicable, or no improvement is observed, contact your distributor or the service office printed on the back cover of this manual.
 - * **DO NOT ATTEMPT TO REPAIR THE GAME PCB YOURSELF.** Instead, return the board to your distributor for any repairs. This PCB contains sensitive chips that could be destroyed even by the internal voltage of a multi-meter.
 - * When sending parts to be repaired, make sure to pack them firmly with a complete explanation of the problem. When sending PCBs, package them in anti-static foam or bubble wrap, and pack them in cardboard boxes to protect against impact damage during shipment. To ship monitors, pack them in wooden frames so that CRTs and PCBs are protected against excess load.

8-1 TROUBLESHOOTING - POWER UP

SYMPTOM	RELATIVE PROBLEM	SOLUTION
NO POWER (Check that game is plugged in)	BLOWN FUSE	CHECK FUSE ON POWER SUPPLY AND REPLACE IF NEEDED.
	POWER SWITCH NOT FUNCTIONING	VERIFY THAT SWITCH IS ON AND NOT BROKEN.
	OPEN CIRCUIT	VERIFY PLUG IS SECURELY MATED TO MACHINE.
	BAD POWER SUPPLY	WITH A VOLTMETER, CHECK TO INSURE 110 VOLT INPUT TO P/S AND ALL APPROPRIATE VOLTAGES ARE BEING OUTPUT. REPLACE P/S IF NEEDED.

POWER ON - NO VIDEO	POWER SUPPLY VOLTAGE	VERIFY FAN IS RUNNING AND APPROPRIATE VOLTAGE IS GOING TO CRT. IF SO, THEN CHECK FUSE ON CRT VIDEO CARD AND REPLACE IF NEEDED.
	NO RASTER or RASTER-NO VIDEO	VERIFY ALL CONNECTORS ARE ON AND SECURE. VERIFY VIDEO CONNECTOR TO CRT VIDEO CARD IS ON CORRECTLY. VERIFY POWER CONNECTOR TO CRT IS SECURE, AND CHECK THAT VOLTAGE TO CRT IS 110-117 VOLTS. POWER DOWN AND SWAP PCB SETS RIGHT TO LEFT AND NOTE IF PROBLEM FOLLOWS CARD SET. IF IT DOES, THEN REPLACE THE CARD SET. IF THE PROBLEM DOES NOT FOLLOW CARD SET, THEN CALL A QUALIFIED SERVICE TECHNICIAN.
	BAD or OFF-CENTER PICTURE	REFER TO SECTION 5-4 FOR ADJUSTMENTS. SWAP PCB CARD SET RIGHT TO LEFT. IF PROBLEM FOLLOWS CARD SET, REPLACE CARD SET. IF THE PROBLEM DOES NOT FOLLOW CARD SET, THEN CALL A QUALIFIED SERVICE TECHNICIAN.

NOTE: FINAL LAP 3 uses either NAMCO or Happ Controls pedal mechanisms. The Happ Control is illustrated.

- (1) Open the rear door and remove the connector to the pedal assembly.
- (2) The Pedal Assembly may now be removed from the front.
- (3) Using the security wrench included, remove the four (4) security bolts that mount the pedal assembly to the cabinet, then the pedal assembly can be taken out from the front.

7-2-1 Replacing the Pedal Potentiometer

- (1) Remove the pedal assy. (Ref. 7-2-1)
- (2) Remove two (2) cap bolts that hold the potentiometer bracket.
- (3) Pull out the whole bracket with gears from the hole.
- * When replacing the potentiometer for the brake pedal, remove four (4) nuts, remove the brake unit, then follow procedures (2) and (3) above.

NOTES: * Since the potentiometer has a built-in stop, be sure that the stop won't over travel when reassembled.

* Set the potentiometer range to approximately 650 to 1300 Ohms.

* When the potentiometer and the pedal assembly are replaced, initialization is needed. (Ref. 5-5)

7-3 Removing the game PCB

- (1) Open the back door of the Monitor Cabinet.
- (2) Turn the game power OFF.
- (3) Remove six (6) screws that hold the steel end panel on the PCB enclosure.
- (4) Carefully remove all the connectors from the game PCB to be taken out.
- (5) Carefully slide out the game PCB to remove.

7-4 Removing the Monitor(s)

DANGER HIGH VOLTAGE
THE MONITOR CONTAINS LETHAL HIGH VOLTAGE. THE MONITOR IS
TO BE SERVICED BY A QUALIFIED SERVICE TECHNICIAN ONLY.

- (1) Open the back door.
- (2) Turn the game power OFF.
- (3) Using the supplied security wrench, unbolt the top panel by removing the four (4) security bolts as shown in Illustration 7-1.
- (4) Disconnect the monitor from the main harness.
- (5) Disconnect the monitor from the Remote Monitor Adjustment PCB harness.
- (6) Reaching in from the back of the game, unbolt the three (3) top bolts and the two (2) bottom bolts from the front monitor frame.
- (7) Lift the monitor UP and OUT of the cabinet.

8-1 TROUBLESHOOTING - POWER UP (Cont.)

SYMPTOM	RELATIVE PROBLEM	SOLUTION
<p>POWER ON- NO AUDIO</p>	<p>BAD VOLUME CONTROL</p>	<p>CHECK VOLUME CONTROL ON SERVICE PANEL. IF NO VOLUME, CHECK POTENTIOMETER WITH AN OHM METER.</p> <p>VERIFY CONNECTORS ARE ON AND SECURE.</p>
	<p>BOARD POTENTIOMETER</p>	<p>CHECK VOLUME RESISTOR ON PCB SET AND ADJUST.</p> <p>CHECK AND INSURE THAT THERE IS A JUMPER IN THE STEREO POSITION OF J1.</p> <p>SWAP PCB SETS RIGHT TO LEFT AND SEE IF PROBLEM FOLLOWS CARD SET. IF IT DOES, REPLACE CARD SET.</p>
<p>NO CONTROL RESPONSE</p>	<p>NO CAR MOVEMENT OR ACCELERATION</p>	<p>VERIFY ALL CONNECTORS ARE ON AND SECURE</p> <p>SWAP PCB CARD SETS RIGHT TO LEFT AND SEE IF PROBLEM FOLLOWS CARD SET. IF SO, REPLACE CARD SET.</p> <p>IF NOT, THEN USE AN OHM METER AND "OHM OUT" THE APPROPRIATE POTENTIOMETERS, INSURING THAT THEY ARE GOOD.</p> <p>CALL SERVICE TECHNICIAN.</p>

Parts List

9. PARTS LIST

SHIPPING ASSEMBLY		
ITEM	DESCRIPTION	PART NO.
1	Monitor Cabinet Top Assembly	F302-00975-00
2	Seat Cabinet Top Assembly	F302-00976-00
3	Power Cord	VG51-00027-00
4	Link Cable 6'	F351-00977-00
5	Link PCB Assembly	F305-00978-00
6	Manual	F345-00979-00
7	Final Lap 3 Schematics	F345-00980-00
8	FCC Notice	VG46-00031-00
9	Serial Number Label	F346-00981-00
10	Label, FBI	VG44-00150-00
11	Label, Shipping	VG44-00151-00
12	Shipping Box, Main	F360-00982-00
13	Shipping Box, Seat	F360-00983-00
14	Bag Poly, 9 x 12 .002 Kits	VG60-00098-00
15	Bag, 2 Ply 55x45x85	VG60-00152-00

GRAPHICS KIT ASSEMBLY F341-00984-00		
ITEM	DESCRIPTION	PART NO.
1	Decal, Cabinet Right Side	F340-00985-00
2	Decal, Cabinet Left Side	F340-00986-00
3	Decal, Head Rest	F340-00987-00
4	Wrap, Control Panel	F340-00988-00
5	Bezel, Monitor Left	F340-00989-00
6	Bezel, Monitor Right	F340-00990-00
7	Panel, Plastic Display	F340-00991-00
8	Plex, Marquee	F340-00992-00

CONTROL PANEL ASSEMBLY/HAPP F305-00993-00 CONTROL PANEL ASSEMBLY/NAMCO F305-00994-01		
ITEM	DESCRIPTION	PART NO.
1	Metal Control Panel	F310-00995-00
2	ABS Molded Dashboard	F390-00996-00
3	270 Steering Mechanism	DV80-00075-00
4	Speed Shifter Mechanism	DV80-00076-00
5	Kep Nut	VG20-00077-00
6	Tamper Proof Screw	VG20-00078-00
7	Speaker, 8 Ohm, 10 Watt	VG54-00172-00

MONITOR CABINET ASSEMBLY F302-00997-00		
ITEM	DESCRIPTION	PART NO.
1	Namco PCB Kit	F303-00998-00
2	EMI Cage	S210-00037-00
3	EMI Lid	F310-00999-00
4	EMI Cover Plate	F310-01000-00
5	Nylon Guide 4" 120-400	VG90-00155-00
6	Nylon Guide 7" 120-700	VG90-00156-00
7	Foot Pedal Mechanism	DV80-00038-00
8	Final Lap 3 Monitor Cabinet	F363-01001-00
9	Graphics Kit Assembly	F341-01002-00
10	25" Standard Resolution Color Monitor	VG85-00042-00
11	Plastic Display Panel	F395-01003-00
12	Coin Door Assembly	VG83-00045-00
13	Control Panel Assembly	F305-01004-00
14	Caster	VG24-00047-00
15	Harness Assembly	F350-01005-00
16	Service (Utility) Panel Assembly	F305-01006-00
17	Link (Relay) Panel Assembly	F305-01007-00
18	Diamond Plate Cabinet Flooring	F310-01008-00
19	Tamper Proof Key 1/4"	VG81-00057-00
20	Tamper Proof Key 10/24	VG81-00157-00
21	Fixture Fluorescent, 18" LK-1B	VG57-00058-00
22	Lamp F15T8GW	VG57-00059-00
23	4" Fan 80 CFM	VG55-00060-00
24	4" Fan Guard	VG55-00061-00
25	Speaker	VG54-00062-00
26	Power Supply Assembly	VG88-00080-00
27	Cover, Louvered Vent	VG10-00066-00
28	Bracket, Cabinet Floor	F310-01009-00
29	Nut Plate (Levelers)	F310-01010-00
30	Bracket, Top Panel	F310-01011-00
31	Bracket, Acrylic Top	F310-01012-00
32	Door Lock Plate	F310-01013-00
33	Bracket Header Top	F310-01014-00
34	Bracket Header Bottom	F310-01015-00
35	Leg Leveler	VG20-00095-00
36	Lock 2255	VG83-00165-00
37	Coin Counter	VG83-00166-00
38	Edge, T 25/32 Green	VG90-00167-00

9. PARTS LIST (cont.)

POWER SUPPLY ASSEMBLY VG88-00080-00		
ITEM	DESCRIPTION	PART NO.
1	Power Supply XT-150	VG88-00173-00
2	Transformer 3P888	VG56-00174-00

COIN DOOR ASSEMBLY VG83-00045-00		
ITEM	DESCRIPTION	PART NO.
1	Double Frame Mini Door	VG83-00045-00
2	Coin Harness	VG83-00087-00
3	Cash Box	VG83-00088-00
4	USA Coinage Decal 2/25	VG83-00089-00
5	Coin Counter	VG83-00090-00

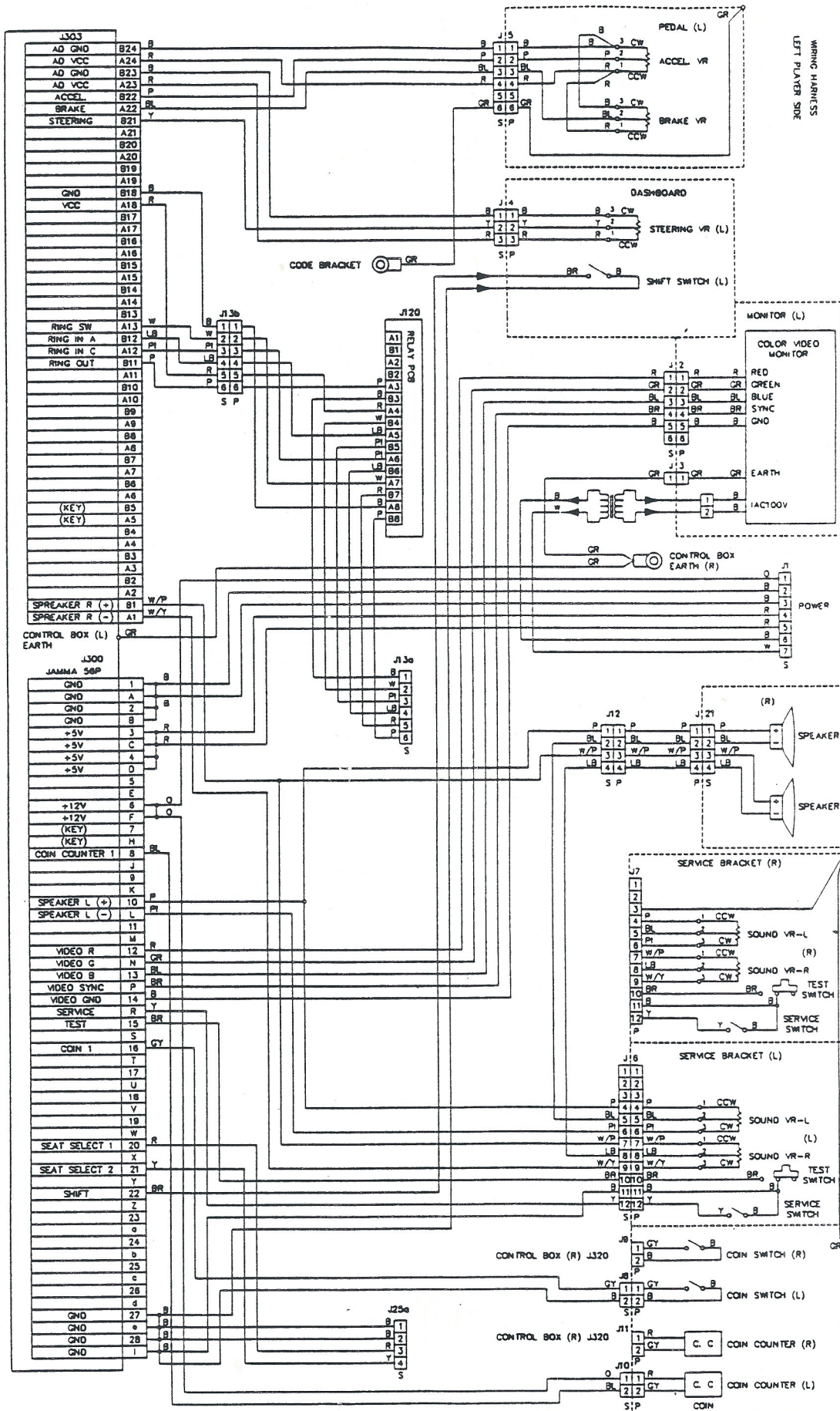
SEAT CABINET ASSEMBLY F302-01016-00		
ITEM	DESCRIPTION	PART NO.
1	Seat Cabinet	F363-01017-00
2	Molded Seat	DV90-00092-00
3	Namco Plastic Seat Back	F390-01018-00
4	Seat Platform Bracket	F310-01019-00
5	Leg Leveler	VG20-00095-00
6	Diamond Plate Seat Flooring	F310-01020-00
7	Nut Plate (Levelers)	VG10-00175-00
8	Bracket, Seat	F310-01021-00

LINK (RELAY) PANEL ASSEMBLY F305-01022-00		
ITEM	DESCRIPTION	PART NO.
1	Link (Relay) Panel Bracket	F310-01023-00
2	Link (Relay) PCB Assembly	F303-01024-00
3	Fastner	F320-01025-00

SERVICE (UTILITY) PANEL ASSEMBLY F305-01026-00		
ITEM	DESCRIPTION	PART NO.
1	Service (Utility) Panel	VG10-00102-00
2	Volume Potentiometer	VG75-00103-00
3	Volume Knob	VG64-00104-00
4	Test Slide Switch	VG53-00105-00
5	Service Harness Assembly	VG50-00106-00
6	Fastner, Self Thread Screw	VG20-00107-00

HARNES ASSEMBLY F350-01027-00		
ITEM	DESCRIPTION	PART NO.
1	Main Harness Assembly	F350-01028-00
2	Wire Harness, IBM ISO A/C	F350-01029-00
3	A.C. Power Harness	F350-01030-00
4	IBM/ISO	F350-01031-00
5	Harness #6 Spade EXT	F350-01032-00
6	EXT, AC/Brake	F350-01033-00
7	Car Color Select	F350-01034-00
8	TSA Harness & Bracket	F350-01035-00
9	AC SW	F350-01036-00
10	Pedals, 26° GRD	F350-01037-00
11	Door 40° GND Coin	F350-01038-00
12	Monitor 45° GND	F350-01039-00
13	Panel, Cont 45° GRD	F350-01040-00
14	Coin Door	F350-01041-00
15	EXT Coin Door	F350-01042-00
16	DC Power	F350-01043-00
17	Harness Link	F350-01044-00
18	Pigtail Lamp	F350-01045-00

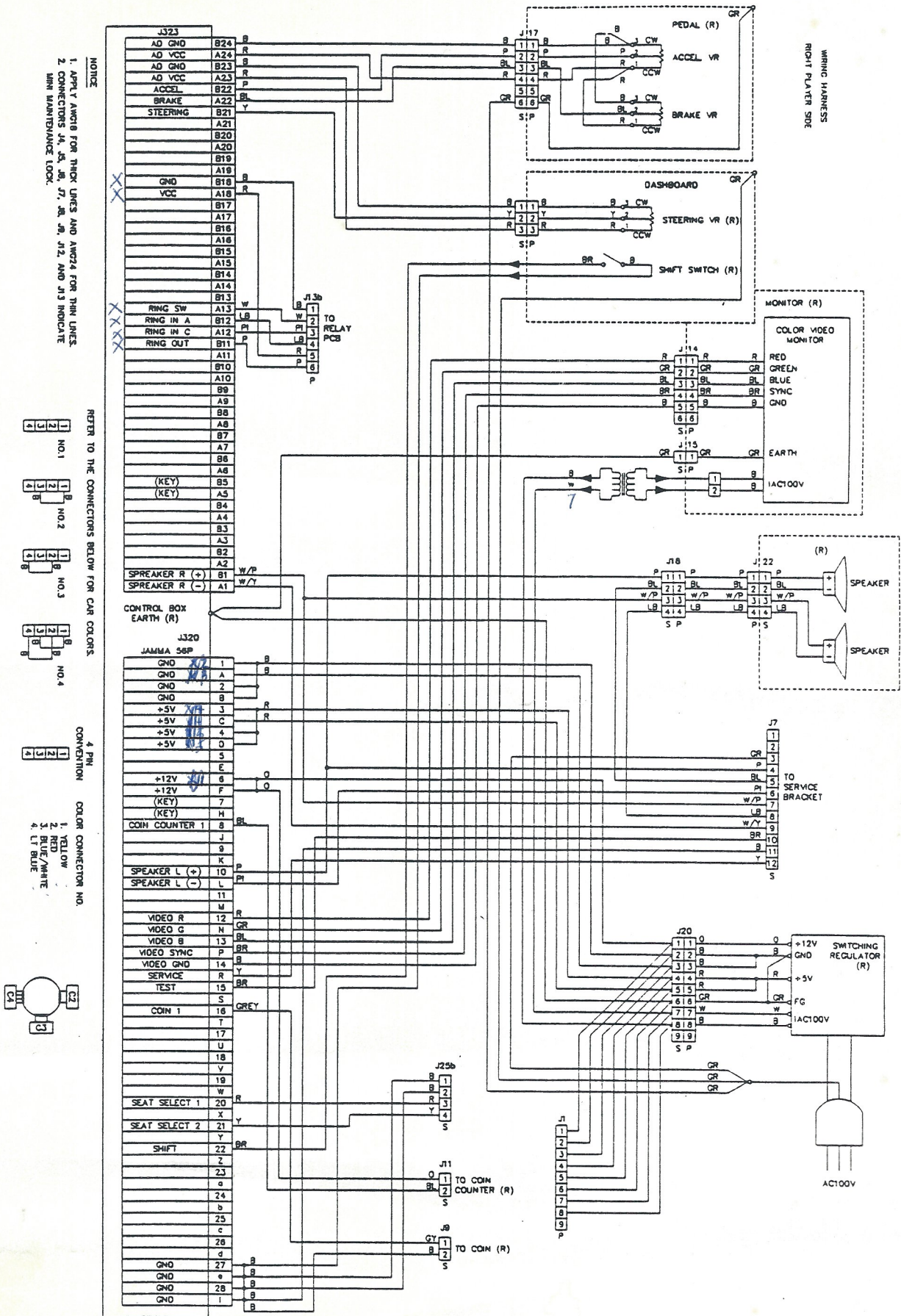
Wiring Harness Diagrams



NOTICE

1. APPLY ANG18 FOR THICK LINES AND ANG24 FOR THIN LINES
2. CONNECTORS J1, J5, J6, J7, J8, J9, J12, AND J13 INDICATE
3. APPLY PS CONNECTOR FOR J20

namco FINAL LAP 3™ SIT DOWN - Wiring Harness Diagram



namco FINAL LAP 3™ SIT DOWN - Wiring Harness Diagram

Warranty

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

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

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

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

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